14

Transportation

This chapter assesses the potential for the Proposed Project to result in significant adverse impacts on traffic operations and mobility, public transportation facilities and services, pedestrian elements and flow, as well as the potential effects on parking, and the safety of all roadway users (pedestrians, cyclists, transit users, and motorists).

Introduction

The Proposed Project would result in the redevelopment of approximately 78 acres of underutilized, largely asphalt surface parking areas adjacent to Citi Field located west of Seaver Way and adjacent to Citi Field (see **Figure 14-1**) with a major mixed-use development (the Queens Future Project, or the Proposed Project). The Proposed Project is anticipated to comprise up to approximately 3.7 million square feet (sf) of new construction, with destination entertainment that includes a music hall, hotel, a gaming facility,[1] convention and meeting space, restaurant and retail space, and community facility space. The Proposed Project would also include public park space—at least 20 acres of the Development Site would be improved with landscaping and other amenities for public recreation—and other public realm improvements as well as structured parking facilities to accommodate up to 13,750 spaces. See **Chapter 1, Project Description**, for the proposed program and city and state approvals being sought.

The development of up to approximately 3.7 million gross square feet (gsf) would be located in two areas within the Development Site, Area of Development A and Area of Development B. Area of Development A located on the western portion of the Development Site would be improved with a development including a hotel with up to 2,300 rooms, gaming, retail, restaurants, amenities for the hotel and gaming facility (e.g., pool, gym, spa, and entertainment space), a music hall, and

[1] The inclusion of a gaming facility is contingent upon receiving a gaming license from the New York State Gaming Commission. See Required Approvals section below.

convention and meeting space. The first two levels would include parking for cars and buses. Just south of Citi Field, Area of Development B is proposed to contain uses geared towards Mets fans and local visitors. It would contain restaurant, retail, including a local food hall and local retail, community facility space (analyzed as non-profit office for trip generation purposes), and administrative office space (ancillary offices to support the Area of Development B and stadium uses). **Table 14-1** shows the uses and component sizes of the proposed development. These two developments would be accommodated on the existing underutilized surface parking areas adjacent to Citi Field and would require relocating parking from the existing surface lots to new garage structures. These structures would be located south of Roosevelt Avenue at the Southfield parking structure[2] (Area of Development C), north of Citi Field at the Northfield parking structure (Area of Development D), and at Area of Development B.

[2] Access to the Southfield parking structure would be provided via a new roadway south of the parking structure, adjacent to the existing Stengel bus depot. Implementation and operation of the roadway would be coordinated between New York City Transit (NYCT) and the Applicant.

Figure 14-1 Project Location

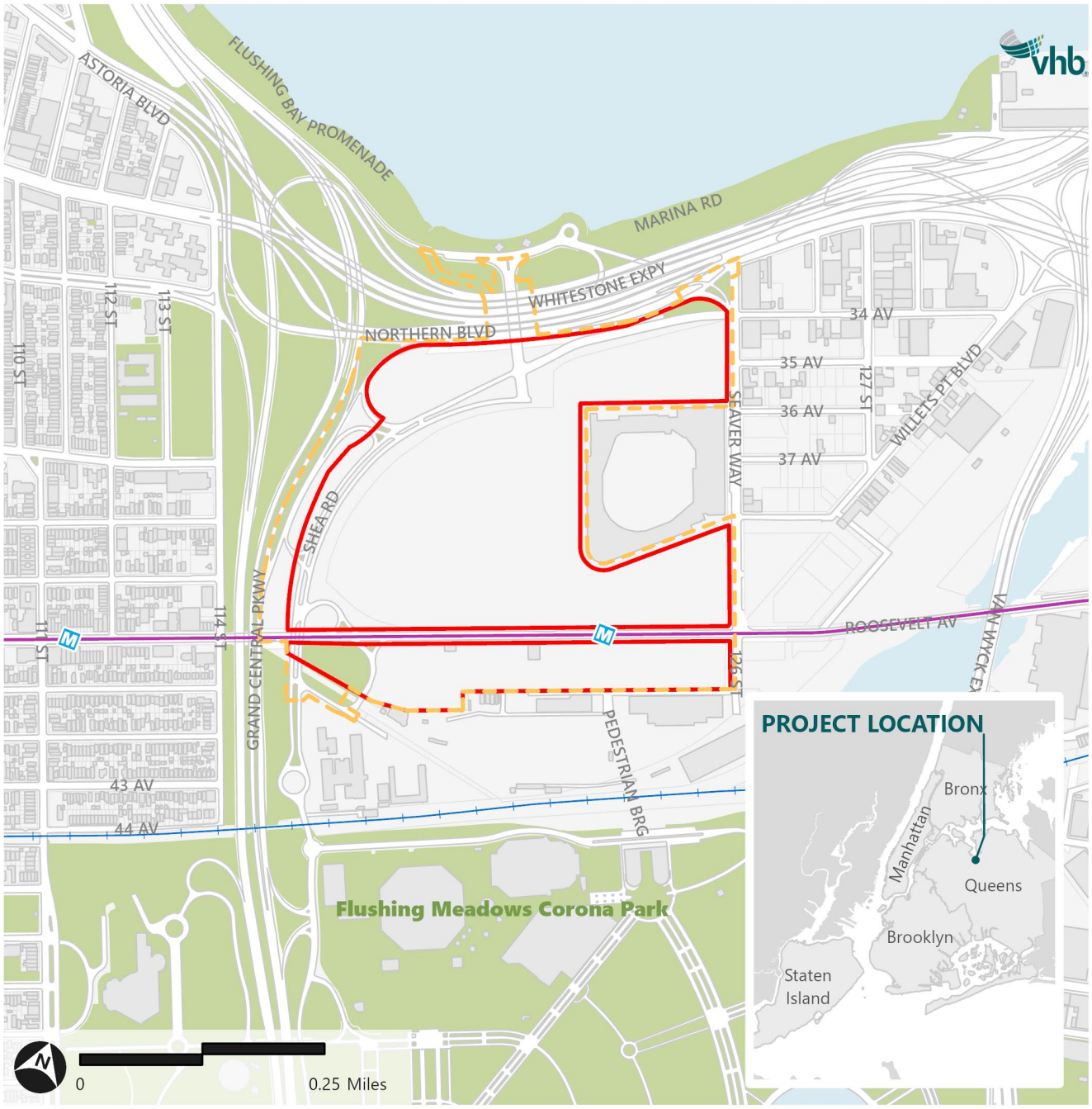


Table 14-1 Development Increment for Analysis

Area of Development	Use	With-Action Condition Development Increment (Up to SF)	Notes
Area A	Hotel[1]	2,118,000	Up to 2,300 hotel rooms
	Convention and Meeting Space[1]	150,000	
	Gaming Facility[1]	445,000	Up to 8,700 gaming positions
	Music Hall[1]	290,610	Up to 5,655 seats
	Local Retail	102,330	
	Restaurants	198,790	
	Amenities[2]	149,270	Including spa, gym, pool, and entertainment spaces
	Area A Total	**3,454,000**	
Area B	Restaurants	118,000	
	Local Retail	32,000	
	Office	37,000	
	Non-Profit Office (Community Use)	25,000	
	Area B Total	**212,000**	
Parking	**Area A Total**	-	**Up to 5,500 parking spaces**
	Area B Total	-	**Up to 899 parking spaces**
	Area C Total	-	**Up to 3,151 parking spaces**
	Area D Total	-	**Up to 4,200 parking spaces**
Commercial Total		**3,666,000**	
Parking/Loading/Mechanical		6,726,785	Up to 13,750 parking spaces[3] and central utility facility
Publicly Accessible At-Grade Open Space			20 acres

[1] Includes associated back of house space

[2] Amenities including the spa, gym, pool, and entertainment spaces would not generate external trips and would be for the exclusive use of gaming facility and hotel visitors.

[3] There are currently 7,210 parking spaces within the existing Development Site parking lots and therefore there would be a net increase of 6,540 parking spaces.

Transit access to the development site would be provided at the No. 7 subway station along Roosevelt Avenue immediately adjacent to the site, as well as at local bus stops in the vicinity of the project area. Vehicular trips destined for Area A would follow wayfinding signage and use garage parking spaces within the development and would access the area via Shea Road. Vehicular trips destined for the Area B development would following wayfinding signage and use garage parking

accessed from 126th Street/Seaver Way. Improvements to the No. 7 subway station are included as part of the Proposed Project. These improvements would enhance the attractiveness and accessibility of the subway station and are expected to increase the proportion of visitors and employees who would take transit to the site.

In order to improve pedestrian and bicycle safety for the surrounding neighborhood, as well as provide better connectivity for active transportation uses, the Proposed Project would include sidewalk, streetscape, and crosswalk improvements, and connect new bicycle and shared-use paths to the surrounding neighborhood. Sidewalks would be added along Shea Road and widened along Roosevelt Avenue. The mid-block crosswalks connecting the north and south sides of Roosevelt Avenue at the Mets-Willets Point No. 7 subway station would be widened and enhanced. In addition, a new crosswalk would be added across Roosevelt Avenue at Stadium Place South. A pedestrian bridge[3] would be provided over Shea Road and connect to a protected bike and pedestrian way underneath the Whitestone Expressway on the eastern side of Boat Basin Place. In addition, a new pedestrian/bike bridge over the highway ramps would replace the existing at-grade crosswalk at the ramp from the westbound Grand Central Parkway to the eastbound Whitestone Expressway, enhancing pedestrian and cycling safety. This bridge would enhance the connection between the Development Site and the pathways along the waterfront and the North Corona neighborhood to the west and connect to the existing bicycle paths at 34th Avenue. Improvements to the crosswalks would also enhance safety and would accommodate the higher number of expected pedestrian crossings at these locations due to the Proposed Project.

Bicycle lanes would be included along Roosevelt Avenue, Shea Road, near Stadium Place North and under the Whitestone Expressway to create a protected bike lane connection along the northern, western, and southern edges of the Development Site. A shared bike path is proposed from Boat Basin Place to 126th Street/Seaver Way within the northeastern portion of the Development Site to connect to the proposed bike lanes in the Willets Point neighborhood. At major intersections and high-traffic areas within the development, dedicated bike signals would ensure that cyclists can navigate the streets safely and without interruption. Bicycle parking would also be provided throughout the Development Site to encourage cycling.

A series of roadway improvements to the local roadways and highway ramps have been proposed as part of the Proposed Project. These improvements would enhance the capacity of roadway and ramp elements providing connections to the regional highway system and regional arterials, in order to minimize the amount of new traffic generated by the development that would travel on local neighborhood roadways. Additional locations where operational and safety improvements could be made to the local roadway network are also included as part of the project. Roadway improvements proposed as part of the Proposed Project include:

- Reconfiguration of eastbound right turn from Northern Boulevard onto 126th Street/Seaver Way to eliminate the stop-control at the conflict from the exit from Whitestone Expressway. Instead, this turn would be incorporated as a protected phase at the signal at Northern Boulevard and 126th Street/Seaver Way To receive this traffic, 126th Street/Seaver Way would be converted from one-way northbound between 34th Avenue and Northern Boulevard to two-way traffic. This enhancement would eliminate an existing condition (controlled by a Stop sign) on one of

[3] Parkspace improvements within the Development Site, including the proposed pedestrian/bike bridge, would have continued coordination between New York City Department of Parks and Recreation (NYC DPR) and the Applicant.

the ramps and would enhance the overall capacity of traffic accessing the site from both the eastbound offramp and eastbound Northern Boulevard.

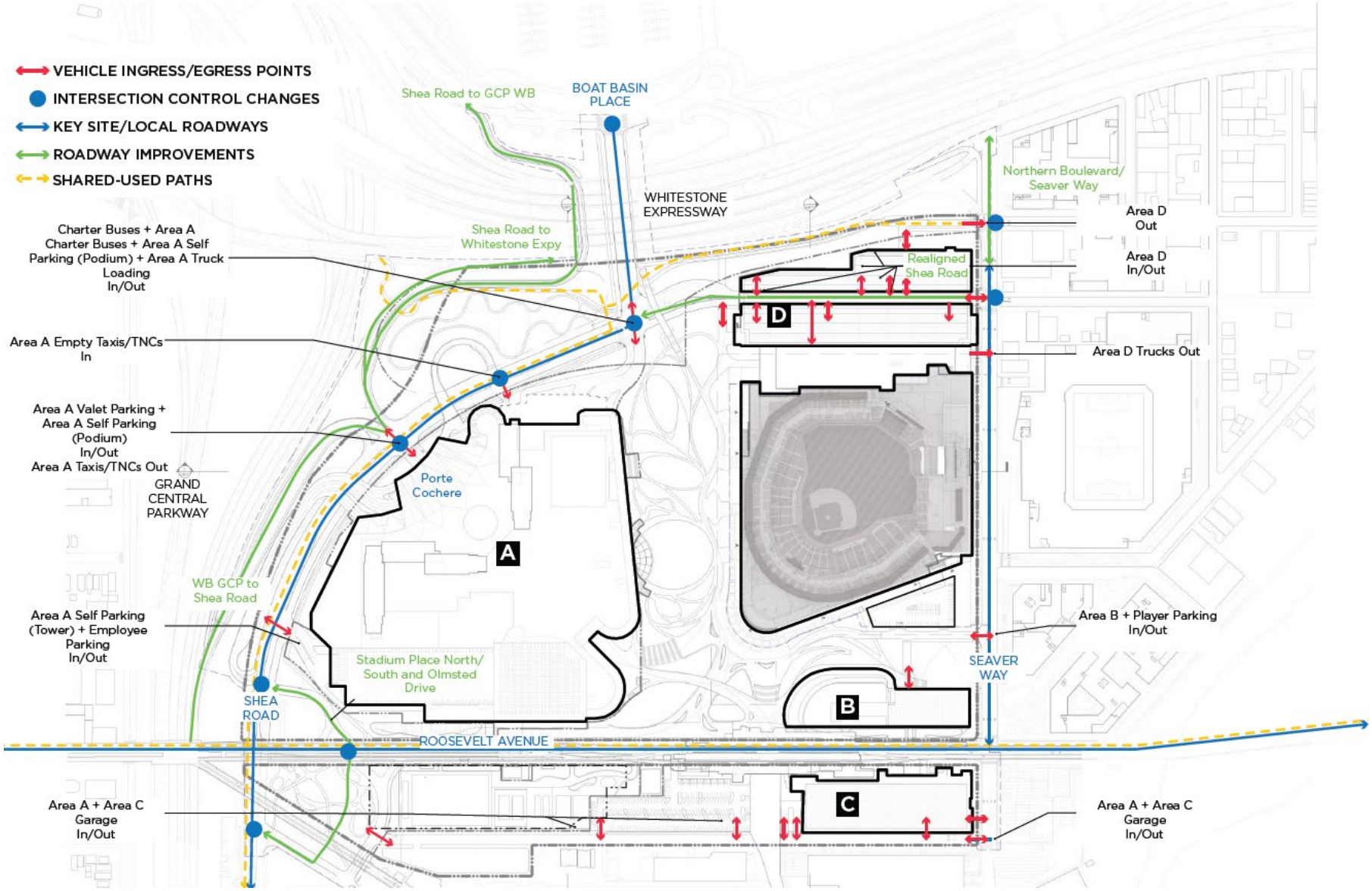
- Realignment of Shea Road to intersect at 35th Avenue to accommodate the Northfield parking structure and to improve parking access. This realignment would also allow for operational improvements to the intersection of 126th Street/Seaver Way and 34th Avenue.
- Shifting the onramp from Shea Road to the westbound Grand Central Parkway to north of the offramp from westbound Grand Central Parkway to Shea Road. By making these ramp improvements, a weaving condition would be eliminated, enhancing the overall capacity of the ramp system, while also maintaining the existing connection to the westbound Grand Central Parkway by routing under the Whitestone Expressway to the existing onramp at Marina Road.
- A reconfigured Stadium Place South and Olmsted Drive would provide enhanced access from Shea Road to the Southfield parking structure. This direct connection would help leverage the capacity of Shea Road, Meridian Road, and the associated highway ramps and minimize the amount of gameday traffic introduced to Roosevelt Avenue and other neighborhood surface streets.

Figure 14-2 below shows the study area proposed roadway improvements, shared-use paths, and vehicle ingress and egress points. In addition, the highway ramp modifications being proposed are subject to review as part of an Access Modification Report (AMR) by NYSDOT. The AMR is reviewed by NYSDOT to ensure that all the proposed changes meet required standards per the NYSDOT Highway Design Manual, as well as meeting current and future traffic needs. Upon review and approval of the AMR, a Highway Work Permit is issued by NYSDOT to allow for implementation of the proposed changes to the highway network.

In addition to the geometric and operational roadway improvements listed above, Queens Future plans to implement travel demand management (TDM) strategies to reduce the share of auto travel by both visitors to the Proposed Project and Mets fans traveling to Citi Field. Queens Future will engage with MTA on when and how to provide additional service during and deploy operational staff to assist with travel through the subway station at peak times. Queens Future will also engage in marketing strategies and education campaigns to promote transit use. Queens Future will also further discussions with the New York Mets regarding potential promotions and game-time programming to further promote transit among Mets fans.

The build year for the Proposed Project would be 2030.

Figure 14-2 Project Features



This chapter identifies the potential significant adverse impacts of the Proposed Project on specific components of the local street and highway networks, the utilization of public transportation services (subway and bus services), the adequacy of parking to be provided, pedestrian circulation within the surrounding area, and vehicular and pedestrian safety at the intersections analyzed. Vehicular access to the Development Site would be primarily via the regional highway network, with access to and from the Grand Central Parkway, Whitestone Expressway, Van Wyck Expressway, and major regional arterials such as Northern Boulevard and Astoria Boulevard. Special consideration in this analysis has been made for the interaction between new trips generated by the Proposed Project as well as the existing traffic attracted to the site by Mets games at Citi Field, which would use the new parking structures at Northfield, Southfield, and Area B on gamedays.

A separate analysis of transportation during the construction of the Proposed Project is provided in **Chapter 20, Construction.**

Where significant adverse impacts are identified, the ability to mitigate those impacts is addressed in **Chapter 21**, **Mitigation.**

Principal Conclusions

Transportation analyses documented in the Transportation chapter were prepared for nine peak hours: four analysis peak hours on days without Mets games at Citi Field, and five analysis peak hours on days with Mets games at Citi Field. Weekday AM (8 AM-9 AM), midday (1 PM-2 PM), PM (5 PM-6 PM), and Saturday PM (7 PM-8 PM) peak hours were considered on days without a scheduled Mets game at Citi Field. Weekday PM (5 PM-6 PM), Saturday PM Pre Game (6 PM-7 PM), Saturday PM Post Game (6:30 PM-7:30 PM), Sunday midday (1 PM-2 PM) and Sunday PM (5 PM-6 PM) peak hours were considered on days for which a Mets game is scheduled and would represent a worst-case scenario with patrons arriving for or departing from Mets games.

Traffic

Local Roadway Network

The Proposed Project would generate a total of 1,330 vehicles per hour (vph) (899 "ins" and 431 "outs") during the non-gameday weekday AM peak hour; 3,441 vph (1,861 "ins" and 1,580 "outs") during the non-gameday weekday midday peak hour; 4,233 vph (2,226 "ins" and 2,007 "outs) during the non-gameday weekday PM peak hour; 4,082 vph (2,194 "ins" and 1,888 "outs") during the non-gameday Saturday PM peak hour; 4,217 vph (2,217 "ins" and 2,000 "outs") during the gameday weekday PM peak hour; 4,379 vph (2,217 "ins" and 2,162 "outs) during the gameday Saturday PM Pre-game peak hour; 4,079vph (2,201 "ins" and 1,878 "outs") during the gameday Saturday PM Post Game peak hour; 2,987 vph (1,621 "ins" and 1,366 "outs") during the gameday Sunday midday peak hour; and 3,846 vph (2,157 "ins" and 1,689 "outs) during the gameday Sunday PM peak hour.

Of the 48 intersections analyzed in the With-Action condition, the Proposed Project would result in significant adverse traffic impacts at 11 intersections during the non-gameday weekday AM peak hour; 11 intersections during the non-gameday weekday midday peak hour; 18 intersections during the non-gameday weekday PM peak hour; 10 intersections during the non-gameday Saturday PM peak hour; 17 intersections during the gameday weekday PM peak hour; 18 intersections during the gameday Saturday PM Pre-game peak hour; 13 intersections during the gameday Saturday PM Post

Game peak hour; 13 intersections during the gameday Sunday midday peak hour, and 14 intersections during the gameday Sunday PM peak hour (see **Table 14-2**). The identification and evaluation of traffic capacity improvements needed to mitigate potential significant adverse traffic impacts created by the Proposed Projected are presented in **Chapter 21, Mitigation**.

Table 14-2 2030 With-Action Condition Significant Impacts Summary

	Non-Gameday				Gameday				
	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Saturday PM Peak Hour	Weekday PM Peak Hour	Saturday PM Pre-game Peak Hour	Saturday PM Post Game Peak Hour	Sunday Midday Peak Hour	Sunday PM Peak Hour
Astoria Boulevard at 108th Street/ 31st Drive						X	X		
Northern Boulevard at 108th Street	X	X	X	X	X	X		X	X
Northern Boulevard at 114th Street		X	X	X	X	X		X	X
Northern Boulevard at Union Street	X		X	X	X		X	X	
Northern Boulevard at Parsons Boulevard		X	X		X	X	X	X	
Roosevelt Avenue at 108th Street	X	X	X	X	X	X	X	X	X
Roosevelt Avenue at 111th Street	X		X	X	X	X	X	X	X
Roosevelt Avenue at 114th Street	X	X	X	X	X	X	X	X	X
Roosevelt Avenue at 126th Street/Seaver Way	X	X	X	X	X	X	X	X	X
Roosevelt Avenue westbound at College Point Boulevard	X	X	X		X	X		X	

Table 14-2 2030 With-Action Condition Significant Impacts Summary

	Non-Gameday				Gameday				
	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Saturday PM Peak Hour	Weekday PM Peak Hour	Saturday PM Pre-game Peak Hour	Saturday PM Post Game Peak Hour	Sunday Midday Peak Hour	Sunday PM Peak Hour
Roosevelt Avenue eastbound at College Point Boulevard						X			
Roosevelt Avenue at Prince Street			X		X	X	X	X	X
Roosevelt Avenue at Main Street			X		X				
Roosevelt Avenue at Union Street	X	X	X	X	X	X	X	X	X
Roosevelt Avenue at Parsons Boulevard	X	X	X		X	X		X	X
34th Avenue at 126th Street/Seaver Way						X	X		
35th Avenue at 126th Street/ Seaver Way								X	
Grand Central Parkway westbound exit ramp/Podium Parking West Access at Shea Road			X	X	X	X			
Shea Road at Tower Parking Access					X				
Shea Road at Stadium Place North					X	X			
Marina Road at Boat Basin Place	X	X			X	X	X		X

Table 14-2 2030 With-Action Condition Significant Impacts Summary

	Non-Gameday				Gameday				
	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Saturday PM Peak Hour	Weekday PM Peak Hour	Saturday PM Pre-game Peak Hour	Saturday PM Post Game Peak Hour	Sunday Midday Peak Hour	Sunday PM Peak Hour
Shea Road at Northfield Parking Structure North Access 2									X
Shea Road at Meridian Road			X						X
Shea Road at Grand Central Parkway westbound exit ramp (9P)	X	X	X	X					
Shea Road at New York Avenue			X			X	X		X
New York Avenue at United Nations Avenue North			X				X		X
Number of significantly impacted intersections	11	11	18	10	17	18	13	13	14

Note: "X" denotes an analysis peak hour where one or more traffic lane groups would be significantly impacted in the 2030 With-Action condition

Highway Network

Of the 76 highway segments (including, basic, merging, diverging, and weaving segments) analyzed along the Grand Central Parkway west of the site, the Van Wyck and Whitestone Expressways north and east of the site, the Proposed Project would result in significant adverse traffic impacts to 23 highway segments during the weekday AM peak hour; 16 highway segments during the non-gameday weekday midday peak hour; 23 highway segments during the non-gameday weekday PM peak hour; 14 highway segments during the non-gameday Saturday PM peak hour; 17 highway segment during the gameday weekday PM peak hour; 20 highway segments during the gameday Saturday PM Pre-game peak hour; 22 highway segments during the gameday Saturday PM Post Game peak hour; 12 highway segments during the gameday Sunday midday peak hour, and 24 highway segments during the gameday Sunday PM peak hour (see **Table 14-3**).

Table 14-3 Summary of Highway Segment Impacts

	Non-Gameday				Gameday			
	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Saturday PM Peak Hour	Weekday PM Peak Hour	Saturday PM Pre-game Peak Hour	Sunday Midday Peak Hour	Sunday PM Peak Hour
Basic	11	7	10	7	8	12	7	11
Merge	3	4	7	4	5	4	4	4
Diverge	7	3	4	3	3	4	0	7
Weave	2	2	2	0	1	2	1	2
Total	**23**	**16**	**23**	**14**	**17**	**22**	**12**	**24**

Parking

When completed, the Proposed Project would provide approximately 13,750 parking spaces between Area A Northfield parking structure, Southfield parking structure and surface lot, and Area B (including the player lot) as shown in **Figure 14-2.** On non-gamedays, the Proposed Project would provide enough spaces to accommodate project-generated parking demand. On gamedays, parking for Mets Patrons would be accommodated at the Northfield and Southfield parking structures, with Mets VIP parking at the Area B parking structure. In addition, Mets Patrons would be able to continue parking at the Stadium View East, Marina East, and Marina West surface parking lots to the north of the stadium, which are outside of the Development Site and are also utilized under Existing Conditions. Gameday trips destined for Area B would be fully accommodated between the Area A podium and tower parking structures on gamedays. Wayfinding signage would be provided in order to facilitate vehicle flow at the various parking facilities. As a result, all project-generated and Mets patron parking would be fully accommodated on both gamedays and non-gamedays, and no parking shortfalls are expected as a result of the Proposed Project. Therefore, there is no anticipated impact to the local area's parking supply under the With-Action condition.

Subways

The Mets-Willets Point subway station was analyzed during the weekday AM and PM peak commuter peak periods, as well as weekday game ingress, Saturday game ingress, and Saturday game egress conditions to address worst-case conditions that occur on gamedays. A Baseline Scenario without modifications to the station, as well as a With Improvements Scenario with proposed station enhancements were considered for the With-Action condition. The analysis determined that under the Baseline Scenario without modifications, all subway station elements would operate at acceptable levels of service during the non-gameday weekday AM, gameday weekday PM, Saturday PM Pre-game, and Saturday PM Post Game peak hours. One element, the Mezzanine Outside Fare Zone Passageway, would be significantly impacted during the non-gameday weekday PM peak hour. Under the With Improvements Scenario, all station elements would operate at acceptable levels of service during the analysis peak hours. Additionally, the With Improvements Scenario would add ADA accessibility to the station, including access to all platforms.

A subway line-haul analysis was conducted for the No. 7 subway line and determined that the subway line would operate at over-capacity conditions during the Saturday PM peak hour. However, the project would result in an increase of 4.60 passengers per car in the Flushing-bound direction

during this peak hour, which is below the five subway passengers per car threshold that is considered a significant impact per the *2021 CEQR Technical Manual* criteria. Therefore, significant subway line-haul impacts are not expected as a result of the project.

Buses

Bus line-haul analyses were conducted for three bus routes in the vicinity of the Development Site (Q19, Q48, and Q66) based on the *CEQR Technical Manual's* screening assessment. The With-Action condition analysis determined that there would be adequate supply for the Proposed Project's projected demand for the Q19 and Q66 bus routes in both the eastbound and westbound directions, as well as the Q48 bus route in both the eastbound and westbound directions during the weekday AM peak hour. However, the Proposed Project would result in a capacity shortfall for the Q48 bus route in the eastbound and westbound directions during the weekday PM and Saturday PM peak hours; this bus route would be significantly impacted.

The identification and evaluation of bus service improvements needed to mitigate potential significant adverse bus impacts created by the Proposed Projected are presented in **Chapter 21, Mitigation**.

Pedestrians

Pedestrian analyses were performed for 16 sidewalk elements, 16 crosswalk elements, and nine corner elements at key intersections for the non-gameday weekday AM, midday, PM, Saturday PM, and gameday weekday PM, Saturday PM Pre-game, Saturday PM Post Game, Sunday midday, and Sunday PM peak hours. Of the 41 pedestrian elements analyzed, the Proposed Project would result in significant impacts at:

- Two pedestrian elements (two crosswalks) during the non-gameday weekday midday, PM and Saturday PM peak hours
- Three pedestrian elements (one sidewalk, two crosswalks) during the gameday weekday PM hour
- Five pedestrian elements (two sidewalks, two crosswalks, and one corner) during the gameday Saturday PM Pre-game peak hour
- Six pedestrian elements (two sidewalks, two crosswalks, and two corners) during the gameday Saturday PM Post Game peak hour
- Three pedestrian elements (one sidewalk, one crosswalk, one corner) during the gameday Sunday midday peak hour
- Eight pedestrian elements (three sidewalks, three crosswalks, and two corners) during the gameday Sunday PM peak hour

Mitigation measures that could be implemented to mitigate these significant adverse pedestrian impacts are discussed in **Chapter 21, Mitigation**.

Vehicular and Pedestrian Safety

Eleven of the 48 traffic analysis locations have been identified as high-crash locations according to New York City Department of Transportation (NYC DOT) criteria. These intersections are considered Vision Zero priority intersections or have had at least five pedestrian/bicyclist injury crashes within a consecutive 12-month period. In addition, five traffic analysis locations are located along Vision Zero priority corridors and have had at least three pedestrian/bicyclist injury crashes within a consecutive

12-month period. Therefore, a total of 16 intersections are identified for a street user safety assessment. This assessment evaluates the number of crashes, prevailing contributing factors of the crashes, existing safety conditions and potential measures to improve pedestrian and bicyclist safety at these intersections.

Methodology

According to the *CEQR Technical Manual* procedures for transportation analysis, a two-tiered screening process is undertaken to determine whether a quantified analysis is necessary. The first step, the Level 1 (Trip Generation) screening, determines whether the volume of peak hour person and vehicle trips generated by the Proposed Project would remain below the minimum thresholds for further study. These thresholds are:

- 50 peak hour vehicle trip ends;
- 200 peak hour subway/rail or bus transit riders; and
- 200 peak hour pedestrian trips.

If the Proposed Project results in increments that would exceed any of these thresholds, a Level 2 (Trip Assignment) screening assessment is performed. Under this assessment, project-generated trips that exceed Level 1 thresholds are assigned to and from the site through their respective networks (streets, bus and subway lines, sidewalks, etc.) based on expected origin-destination patterns and travel routes.

Level 1 Screening Assessment

Weekday, Saturday, and Sunday travel demand estimates were prepared for the proposed uses and were developed based on a combination of the *CEQR Technical Manual*, American Community Survey (ACS) reverse journey-to-work data, information provided by New York City Department of Transportation (NYCDOT), information provided by the proposed gaming facility operator, and information obtained from other previously approved projects. The trip estimates were prepared for eight peak hours: four analysis hours on days without Mets games at Citi Field, and five analysis hours on days with Mets games at Citi Field. Weekday AM (8 AM-9 AM), midday (1 PM-2 PM), PM (5 PM-6 PM), and Saturday PM (7 PM-8 PM) peak hours were considered on days without a scheduled Mets game at Citi Field. Weekday PM (5 PM-6 PM), Saturday PM Pre-game for a 7:10 PM game start (6 PM-7 PM), Saturday PM Post Game for a 4:10 PM game start (6:30 PM-7:30 PM), Sunday midday (1 PM-2 PM) and Sunday PM (5 PM-6 PM) peak hours were considered on days for which a Mets game is scheduled and would represent a worst-case scenario with patrons arriving for or departing from Mets games. **Table 14-4** provides the travel demand assumptions used for the weekday peak hours and **Table 14-5** provides the travel demand assumptions used for the weekend peak hours. Following the tables, a description of the trip generating characteristics of each of the land uses is provided.

Table 14-4 Weekday Travel Demand Characteristics

Rates	Hotel	Convention Space	Gaming Facility Visitors	Gaming Facility Employees	Music Hall
Person Trip Gen Rate (Weekday)	10.9[1]	46.2[5]	10.87[7]	1.11[7]	2.00[13]
	per room	per 1,000 SF	per position	per position	per seat
Linked Trip Credit (Non-Gameday/Gameday)	75%/75%[12]	0%/0%	0%/0%	0%/0%	25%/25%[7]
Temporal Distribution					
Weekday AM Peak	7.5%[1]	5.5%[5]	1.2%[10]	8.0%[8]	0%[3]
Weekday Midday Peak	6.0%[1]	10.5%[5]	5.1%[10]	0.0[8]	0%[3]
Weekday PM Peak	8.0%[1]	12.7%[5]	5.6%[10]	24.9%[8]	0%[3]
Weekday PM Peak (Gameday)	8.0%[1]	12.7%[5]	5.6%[10]	24.9%[8]	0%[3]
Modal Split					
Auto	16%[2]	68%[5]	50%[5,9]	49%[11]	46.8%[14]
Taxi/TNC	39%[2]	8%[5]	15%[5,9]	1%[11]	15%[14]
Charter Bus	-	-	5%[5,9]	-	-
Subway/Train	32%[2]	12%[5]	20%[5,9]	20%[11]	35%[14]
Bus	1%[2]	2%[5]	5%[5,9]	15%[11]	0.2%[14]
Walk	12%[2]	10%[5]	5%[5,9]	14%[11]	3%[14]
Bike	0%[2]	-	-	1%[11]	-
Vehicle Occupancy					
Auto	1.60[5]	2.30[5]	2.06[10]	2.06[10]	2.75[14]
Taxi	1.40[5]	1.80[5]	1.42[10]	1.42[10]	2.75[14]
Directional Split (In/Out)					
Weekday AM Peak	31%/69%[1]	-	71.4%/28.6%[10]	100%/0%[8]	50%/50%[3]
Weekday Midday Peak	36%/64%[1]	100%/0%[5]	55.2%/44.8%[10]	-	50%/50%[3]
Weekday PM Peak	52%/48%[1]	46%/54%[5]	59.4%/40.6%[10]	67.9%/32.1%[8]	50%/50%[3]
Weekday PM Peak (Gameday)	52%/48%[1]	3%/97%[5]	59.4%/40.6%[10]	67.9%/32.1%[8]	50%/50%[3]
Delivery Trip Gen Rate (Weekday)	0.24[5]	0.70[5]	-	0.24[5]	0.02[5]
	per room	per 1,000 SF	per position	per room	per seat
Delivery Temporal Distribution					
Weekday AM Peak	12%[5]	7.9%[5]	-	-	12%[5,15]
Weekday Midday Peak	9%[5]	14.7%[5]	-	-	11%[5,15]
Weekday PM Peak	0%[5]	1.1%[5]	-	-	1%[5,15]
Weekday PM Peak (Gameday)	0%[5]	1.1%[5]	-	-	1%[5,15]
Delivery Trip Directional Split (In/Out) - 50%/50%					

Rates	Local Retail	Restaurant	Area B Office	Area B Community Facility (Non-Profit Office[4]	Active Open Space	Passive Open Space
Person Trip Gen Rate (Weekday)	329[1]	246[1]	18.0[1]	18.0[1]	139[1]	44[1]
	per 1,000 SF	per 1,000 SF	per 1,000 SF	per 1,000 SF	per acre	per acre
Linked Trip Credit (Non-Gameday/Gameday)	100%/100%[6]	75%/75%[6,12]	0%/0%	0%/0%	0%/100%[18]	0%/100%[18]

Table 14-4 Weekday Travel Demand Characteristics

Rates	Local Retail	Restaurant	Area B Office	Area B Community Facility (Non-Profit Office[4]	Active Open Space	Passive Open Space
Temporal Distribution						
Weekday AM Peak	4.8%[1]	1.0%[1]	12.4%[1]	12.4%[1]	3.0%[1]	3.0%[1]
Weekday Midday Peak	8.0%[1]	10.8%[1]	11%[1]	11.0%[1]	14.0%[1]	14.0%[1]
Weekday PM Peak	10.9%[1]	10.6%[1]	10.5%[1]	10.5%[1]	14.0%[1]	14.0%[1]
Weekday PM Peak (Gameday)	10.9%[1]	10.6%[1]	10.5%[1]	10.5%[1]	14.0%[1]	14.0%[1]
Modal Split						
Auto	11%[2]	46.8%[14]	49%[11]	49%[11]	20%[17]	20%[17]
Taxi/TNC	0%[2]	15%[14]	1%[11]	1%[11]	1%[17]	1%[17]
Charter Bus	-	-	-	-	-	-
Subway/Train	4%[2]	35%[14]	20%[11]	20%[11]	12%[17]	12%[17]
Bus	3%[2]	0.2%[14]	15%[11]	15%[11]	11%[17]	11%[17]
Walk	82%[2]	3%[14]	14%[11]	14%[11]	56%[17,18]	56%[17,18]
Bike	0%[2]	-	1%[11]	1%[11]	-	-
Vehicle Occupancy						
Auto	2.00[5]	2.75[16]	1.14[5]	1.14[5]	2.90[17]	2.90[17]
Taxi	2.00[5]	2.75[16]	1.14[5]	1.14[5]	3.00[17]	3.00[17]
Directional Split (In/Out)						
Weekday AM Peak	52%/48%[1]	64%/36%[1]	86%/14%[1]	86%/14%[1]	59%/41%[1]	59%/41%[1]
Weekday Midday Peak	50%/50%[1]	62%/38%[1]	52%/48%[1]	52%/48%[1]	55%/45%[1]	55%/45%[1]
Weekday PM Peak	50%/50%[1]	53%/47%[1]	16%/84%[1]	16%/84%[1]	55%/45%[1]	55%/45%[1]
Weekday PM Peak (Gameday)	50%/50%[1]	53%/47%[1]	16%/84%[1]	16%/84%[1]	55%/45%[1]	55%/45%[1]
Delivery Trip Gen Rate (Weekday)	0.35[1] per 1,000 SF	0.35[5] per 1,000 SF	0.32[1] per 1,000 SF	0.32[1] per 1,000 SF	3.48[5] per acre	3.48[5] per acre
Delivery Temporal Distribution						
Weekday AM Peak	8%[1]	8%[1]	10%[1]	10%[1]	12%[5]	12%[5]
Weekday Midday Peak	11%[1]	11%[1]	11%[1]	11%[1]	9%[5]	9%[5]
Weekday PM Peak	2%[1]	2%[1]	2%[1]	2%[1]	2%[5]	2%[5]
Weekday PM Peak (Gameday)	2%[1]	2%[1]	2%[1]	2%[1]	2%[5]	2%[5]
Delivery Trip Directional Split (In/Out) - 50%/50%						

Source:

1 *2021 CEQR Technical Manual*

2 New York City Department of Transportation mode choice surveys in Queens transit zones

3 *Belmont Park Redevelopment Civic and Land Use Improvement Project FEIS*

4 Community Facility (Non-Profit Office) trip generation rates, temporal distributions, modal splits, vehicle occupancy, and directional splits are based on office land use

5 *2013 Willets Point FSEIS*

6 Local Retail and Restaurant land uses associated with Area B do not take a linked trip credit

7 Trip generation and linked trip information provided by proposed gaming operator

8 Proposed casino operator employer shift projections

9 Gaming facility visitor modal splits are based on the Hote use obtained from the *2013 Willets Points FSEIS*, adjusted using data obtained from the proposed gaming facility operator

10 Resorts Worls Casino Expanded EA, 2017

11 U.S. Census Bureau, American Community Survey 2012-2016 Five-year estimates. Special Tabulation: Census Transportation Planning resverse journey-to-work data for Queens census tracts 381, 383.01, 383.02, 399, 401, 403, 415, 849, 869, 871

12 Linked trip credit provided by the New York City Department of Transportation

13 Atlantic Yards Arena and Redevelopment Project FEIS

14 Music Hall and Restaurant modal splits, and Music Hall weekday vehicle occupancies are based on the *Shea Stadium FEIS* (modified to incorporate taxi/TNC mode splits)

15 Music Hall delivery temporal distributions are based on the Movie Theater Use from the *2013 Willets Point FSEIS*

16 Information provided by New York City Department of Transportation in April 2022; Restaurant uses are based on the Sit Down High Turnover Restaurant

17 *300 Huntington EAS (2019)* for Passive Open Space use

18 Walk trips associated with the Active and Passive Open Space land uses do not take a linked trip credit on gamedays

Table 14-5 Weekend Travel Demand Characteristics

Rates	Hotel	Convention Space	Gaming Facility Visitors	Gaming Facility Employees	Music Hall
Person Trip Gen Rate (Saturday/Sunday)	12.7[1] per room	46.2[5] per 1,000 SF	13.71/10.68[7] per position	1.48/1.15[7] per position	2.00[13] per seat
Linked Trip Credit (Non-Gameday/Gameday)	75%/75%[12]	0%/0%	0%/0%	0%/0%	25%/25%[7]
Temporal Distribution					
Saturday PM Peak (Non-Gameday)	6.6%[16]	0%[5]	5.8%[10]	0.0%[8]	22.5%[3]
Saturday PM Pre-Game Peak (Gameday)	6.1%[16]	2%[5]	5.5%[10]	0.0%[8]	12.5%[3]
Saturday PM Post-game Peak (Gameday)	6.6%[16]	0%[5]	5.8%[10]	0.0%[8]	22.5%[3]
Sunday Midday Peak (Gameday)	4.1%[16]	14.4%[5]	4.4%[10]	0.0%[8]	0%[3]
Sunday PM Peak (Gameday)	5.8%[16]	5%[5]	5.5%[10]	23.3%[8]	0%[3]
Modal Split					
Auto	20%[2]	70%[5]	50%[5,9]	49%[11]	46.8%[14]
Taxi/TNC	35%[2]	6%[5]	15%[5,9]	1%[11]	15%[14]
Charter Bus	-	-	5%[5,9]	-	-
Subway/Train	29%[2]	12%[5]	20%[5,9]	20%[11]	35%[14]
Bus	2%[2]	2%[5]	5%[5,9]	15%[11]	0.2%[14]
Walk	14%[2]	10%[5]	5%[5,9]	14%[11]	3%[14]
Bike	0%[2]	-	-	1%[11]	-
Vehicle Occupancy					
Auto	1.60[5]	2.60[5]	2.13[10]	2.13[10]	3.00[3]
Taxi	1.40[5]	1.70[5]	1.55[10]	1.55[10]	3.00[3]
Directional Split (In/Out)					
Saturday PM Peak (Non-Gameday)	52%/48%[16]	0%/100%[5]	52.5%/47.5%[10]	-	100%/0%[3]
Saturday PM Pre-Game Peak (Gameday)	51%/49%[16]	0%/100%[5]	50%/50%[10]	-	100%/0%[3]
Saturday PM Post-game Peak (Gameday)	52%/48%[16]	0%/100%[5]	52.5%/47.5%[10]	-	100%/0%[3]
Sunday Midday Peak (Gameday)	50%/50%[16]	50%/50%[5]	60%/40%[10]	-	50%/50%[3]
Sunday PM Peak (Gameday)	54%/46%[16]	4%/96%[5]	57.9%/42.1%[10]	67.9%/32.1%[8]	50%/50%[3]
Delivery Trip Gen Rate (Saturday/Sunday)	0.08[5] per room	0.04[5] per 1,000 SF	- per position	- per position	0.00[5] per seat
Delivery Temporal Distribution					
Saturday PM Peak (Non-Gameday)	0%[5]	1.1%[5]	-	-	-
Saturday PM Pre-Game Peak (Gameday)	2%[5]	1.1%[5]	-	-	-
Saturday PM Post-game Peak (Gameday)	0%[5]	1.1%[5]	-	-	-
Sunday Midday Peak (Gameday)	8%[5]	14.7%[5]	-	-	-
Sunday PM Peak (Gameday)	2%[5]	1.0%[5]	-	-	-
Delivery Trip Directional Split (In/Out) - 50%/50%					

Table 14-5 Weekend Travel Demand Characteristics

Rates	Local Retail	Restaurant	Area B Office	Area B Community Facility (Non-Profit Office)[4]	Active Open Space	Passive Open Space
Person Trip Gen Rate (Saturday/Sunday)	358[1] per 1,000 SF	358[1] per 1,000 SF	3.9[1] per 1,000 SF	3.9[1] per 1,000 SF	196[1] per acre	62[1] per acre
Linked Trip Credit (Non-Gameday/Gameday)	100%/100%[6]	75%/75%[6,12]	0%/0%	0%/0%	0%/100%[18]	0%/100%[18]
Temporal Distribution						
Saturday PM Peak (Non-Gameday)	6.6%[16]	7.9%[16]	2.8%[16]	2.8%[16]	5.0%[5]	5.0%[5]
Saturday PM Pre-Game Peak (Gameday)	7.9%[16]	13%[16]	2.5%[16]	2.5%[16]	7.0%[5]	7.0%[5]
Saturday PM Post-game Peak (Gameday)	6.6%[16]	7.9%[16]	2.8%[16]	2.8%[16]	5.0%[5]	5.0%[5]
Sunday Midday Peak (Gameday)	8.1%[16]	8.4%[16]	8.5%[16]	8.5%[16]	12.6%[5]	12.6%[5]
Sunday PM Peak (Gameday)	11.7%[16]	8.7%[16]	4.2%[16]	4.2%[16]	9.0%[5]	9.0%[5]
Modal Split						
Auto	8%[2]	46.8%[14]	49%[11]	49%[11]	20%[17]	20%[17]
Taxi/TNC	0%[2]	15%[14]	1%[11]	1%[11]	1%[17]	1%[17]
Charter Bus	-	-	-	-	-	-
Subway/Train	7%[2]	35%[14]	20%[11]	20%[11]	12%[17]	12%[17]
Bus	4%[2]	0.2%[14]	15%[11]	15%[11]	11%[17]	11%[17]
Walk	81%[2]	3%[14]	14%[11]	14%[11]	56%[17,18]	56%[17,18]
Bike	0%[2]	-	1%[11]	1%[11]	-	-
Vehicle Occupancy						
Auto	2.00[5]	3.00[3]	1.14[5]	1.14[5]	2.90[17]	2.90[17]
Taxi	2.00[5]	3.00[3]	1.14[5]	1.14[5]	3.00[17]	3.00[17]
Directional Split (In/Out)						
Saturday PM Peak (Non-Gameday)	48%/52%[16]	45%/55%[16]	45%/55%[16]	45%/55%[16]	45%/55%[5]	45%/55%[5]
Saturday PM Pre-Game Peak (Gameday)	49%/51%[16]	47%/53%[16]	39%/61%[16]	39%/61%[16]	45%/55%[5]	45%/55%[5]
Saturday PM Post-game Peak (Gameday)	48%/52%[16]	45%/55%[16]	45%/55%[16]	45%/55%[16]	45%/55%[5]	45%/55%[5]
Sunday Midday Peak (Gameday)	50%/50%[16]	54%/46%[16]	45%/55%[16]	45%/55%[16]	58%/42%[5]	58%/42%[5]
Sunday PM Peak (Gameday)	50%/50%[16]	60%/40%[16]	31%/69%[16]	31%/69%[16]	45%/55%[5]	45%/55%[5]
Delivery Trip Gen Rate (Saturday/Sunday)	0.04[1] per 1,000 SF	0.04[5] per 1,000 SF	0.01[1] per 1,000 SF	0.01[1] per 1,000 SF	1.74[5] per acre	1.74[5] per acre

Table 14-5 Weekend Travel Demand Characteristics

Delivery Temporal Distribution						
Saturday PM Peak (Non-Gameday)	1%[5]	1%[5]	1%[5]	1%[1]	1%[5]	1%[5]
Saturday PM Pre-Game Peak (Gameday)	2%[5]	2%[5]	2%[5]	2%[1]	1%[5]	1%[5]
Saturday PM Post-game Peak (Gameday)	1%[5]	1%[5]	1%[5]	1%[1]	1%[5]	1%[5]
Sunday Midday Peak (Gameday)	10%[5]	11%[5]	11%[5]	11%[1]	9%[5]	9%[5]
Sunday PM Peak (Gameday)	2%[5]	2%[5]	2%[5]	2%[1]	2%[5]	2%[5]
Delivery Trip Directional Split (In/Out) - 50%/50%						

Source:
1 *2021 CEQR Technical Manual*
2 New York City Department of Transportation mode choice surveys in Queens transit zones
3 *Belmont Park Redevelopment Civic and Land Use Improvement Project FEIS*
4 Community Facility (*N*on-Profit Office) trip generation rates, temporal distributions, modal splits, vehicle occupancy, and directional splits are based on office land use
5 *2013 Willets Point FSEIS*
6 Local Retail and Restaurant land uses associated with Area B do not take a linked trip credit
7 Trip generation and linked trip information provided by proposed gaming operator
8 Proposed casino operator employer shift projections
9 Gaming facility visitor modal splits are based on the Hote use obtained from the *2013 Willets Points FSEIS*
10 Resorts Worls Casino Expanded EA, 2017
11 U.S. Census Bureau, American Community Survey 2012-2016 Five-year estimates. Special Tabulation: Census Transportation Planning reverse journey-to-work data for Queens census tracts 381, 383.01, 383.02, 399, 401, 403, 415, 849, 869, 871
12 Linked trip credit provided by the New York City Department of Transportation
13 Atlantic Yards Arena and Redevelopment Project FEIS
14 Music Hall and Restaurant modal splits, and Music Hall weekday vehicle occupancies are based on the *Shea Stadium FEIS* (modified to incorporate taxi/TNC mode splits)
15 Music Hall delivery temporal distributions are based on the Movie Theater Use from the *2013 Willets Point FSEIS*
16 Information provided by New York City Department of Transportation in April 2022; Restaurant uses are based on the Sit Down High Turnover Restaurant
17 *300 Huntington EAS (2019)* for Passive Open Space use
18 Walk trips associated with the Active and Passive Open Space land uses do not take a linked trip credit on gamedays

Hotel

For the hotel use, trip generation rates of 10.9 daily person trips per room for the weekday and 12.7 person trips per room for the weekend were obtained from *CEQR Technical Manual*. A linked trip credit of 75 percent was assumed for this use based on guidance provided by the New York City Department of Transportation. In order to be conservative, the linked trip credits for both non-gameday and gameday conditions are assumed to be the same; no link trip credit is associated with Mets patrons under gameday conditions.

Temporal and directional distributions for the weekday peak hours were based on the *CEQR Technical Manual*. Temporal and directional distributions for the weekend peak hours were based on information provided by NYCDOT. Modal splits of 16 percent by auto, 39 percent by taxi/TNC, 1 percent by bus, 32 percent by subway/train,12 percent by walk and 0 percent by bike were used for the weekday, and modal splits of 20 percent by auto, 35 percent by taxi/TNC, 2 percent by bus, 29 percent by subway/train,14 percent by walk and 0 percent by bike were used for the weekend. These are based on NYCDOT mode choice surveys in Queens transit zones. Vehicle occupancies of 1.60 per auto and 1.40 per taxi were obtained from the *2013 Willets Point FSEIS*.

For hotel delivery trips, truck trip generation rates of 0.24 daily delivery trips per room for the weekday and 0.08 daily delivery trips per room for the weekend were based on the *2013 Willets Point FSEIS*. Delivery temporal distributions for the weekday and weekend were also obtained from the *2013 Willets Point FSEIS*.

Convention and Meeting Space

For the convention and meeting space use, a trip generation rate of 46.2 daily person trips per 1,000 sf for the weekday and weekend was obtained from the *2013 Willets Point FSEIS*. In order to be

conservative, the linked trip credits for both non-gameday and gameday conditions are assumed to be the same; no link trip credit is associated with Mets patrons under gameday conditions.

Temporal and directional distributions for the weekday and weekend were obtained from the *2013 Willets Point FSEIS*. Weekday modal splits of 68 percent by auto, 8 percent by taxi/TNC, 2 percent by bus, 12 percent by subway/train, and 10 percent by walk and bike, and vehicle occupancies of 2.30 by auto and 1.80 by taxi were based on the *2013 Willets Point FSEIS*. Weekend modal splits of 70 percent by auto, 6 percent by taxi, 2 percent by bus, 12 percent by subway/train, and 10 percent by walk and bike, and vehicle occupancies of 2.60 by auto and 1.70 by taxi were also based on the *2013 Willets Point FSEIS*.

For convention space delivery trips, truck trip generation rates of 0.70 daily delivery trips per 1,000 sf for the weekday and 0.04 daily delivery trips per 1,000 sf for the weekend were based on the *2013 Willets Point FSEIS* Delivery temporal distributions for the weekday and weekend were also obtained from the *2013 Willets Point FSEIS*.

Gaming Facility- Visitors

Trip generation rates of 10.87 daily visitor person trips per gaming position for the weekday, 13.71 daily visitor person trips per gaming position for Saturday and 10.68 daily visitor person trips per gaming position for Sunday were based on information provided by the gaming facility operator. These trip generation rates were compared against trip generation rates obtained from other EIS documents for *Foxwoods Casino* and the *Mohegan Sun Casino* in Connecticut,[4] and the *Live! Casino & Hotel* in Philadelphia,[5] and found to be in line with data from these locations. In order to be conservative, the linked trip credits for both non-gameday and gameday conditions are assumed to be the same; no link trip credit is associated with Mets patrons under gameday conditions.

Temporal and directional distributions for the weekday and weekend visitor ingress/egress were obtained from the *Resorts World Casino Expanded EA*. Modal splits of 50 percent by auto, 15 percent by taxi/TNC, 5 percent by charter bus, 20 percent by subway/train, 5 percent by bus, and 5 percent by walk and bike were based on hotel use obtained from the *2013 Willets Point FSEIS,* were adjusted using mode choice survey data provided by the gaming facility operator. Vehicle occupancies of 2.06 per auto and 1.42 per taxi were used for the weekday; vehicle occupancies of 2.13 per auto and 1.55 per taxi were used for the weekend. All vehicle occupancies were based on the *Resorts World Casino Expanded EA*. No delivery trips are associated with this use, as the delivery trip generation rates for the associated hotel, convention space, local retail, and restaurant spaces are assumed to cover all delivery trips to Area A.

Gaming Facility- Employees

Trip generation rates of 1.11 daily employee person trips per gaming position for the weekday, 1.48 daily employee person trips per gaming position for Saturday and 1.15 daily employee person trips per gaming position for Sunday were based on information provided by the gaming facility operator. Temporal and directional distributions for the weekday and weekend employee ingress/egress were based on proposed casino operator employee shift projections. Modal splits of 49 percent by auto, 1 percent by taxi/TNC, 20 percent by subway/train, 15 percent by bus, 14 percent by walk and 1 percent by bike were based on American Community Survey reverse journey-to-work census data for

[4] *Nevele Casino, Resort & Spa Traffic Impact Study, Appendix A,* 2014, page 167

[5] *Live! Casino & Hotel Traffic Impact Study, Appendix Exhibit 7,* 2014, page 33

Queens census tracts within approximately a half-mile from the proposed development. Vehicle occupancies of 2.06 per auto and 1.42 per taxi were used for the weekday; vehicle occupancies of 2.13 per auto and 1.55 per taxi were used for the weekend. All vehicle occupancies were based on the *Resorts World Casino Expanded EA*.

Music Hall

A trip generation rate of 2.00 daily person trips per seat for the weekday and weekend was obtained from the *Atlantic Yards Arena and Redevelopment Project FEIS*. A linked trip credit of 25 percent was assumed for both non-gamedays and gamedays for this use-based information provided by the gaming facility operator. Temporal and directional distributions for the weekday and weekend were obtained from the *Belmont Park Redevelopment Civic and Land Use Improvement Project FEIS,* which assumed an arrival and departure distribution of concert attendees based on an 8 PM concert time, which would be typical for the proposed venue. Since no in or out trips associated with the Music Hall are expected to occur more than two hours before an 8 PM concert time, temporal distributions for the weekday, Sunday midday, and Sunday PM peak hours are 0 percent. Modal splits of 46.8 percent by auto, 15 percent by Taxi/TNC, 0.2 percent by bus, 35 percent by subway/train, and 3 percent by walk and bike were based on the *Shea Stadium FEIS*. Vehicle occupancies of 2.75 by auto and taxi for the weekday are based on the *Shea Stadium FEIS*. Vehicle occupancies of 3.00 by auto and taxi for the weekend were based on the *Belmont Park Redevelopment Civic and Land Use Improvement Project FEIS*. Mode split and vehicle occupancy assumptions for the Music Hall land use were taken from the *Shea Stadium FEIS* because access patterns for music hall patrons that are not making a linked trip with the gaming facility are anticipated to be broadly similar to patrons of Citi Field, which was analyzed as part of that EIS.

For music hall delivery trips, truck trip generation rates of 0.02 daily delivery trips per seat for the weekday were obtained from the *2013 Willets Point FSEIS* using the movie theater land use; no delivery trips are expected on the weekend. Weekday delivery temporal distributions were based on the movie theater use in the *2013 Willets Point FSEIS*.

Local Retail

Trip generation rates of 329 daily person trips per 1,000 sf for the weekday and 358 daily person trips per 1,000 sf for the weekend were obtained from the *CEQR Technical Manual*. A linked trip credit of 100 percent was assumed for the local retail use on both non-gamedays and gamedays within Area A; no linked trip credit was assumed for the local retail use within the Area B development. Temporal and directional distributions for the weekday peak hours were based on the *CEQR Technical Manual*. Temporal and directional distributions for the weekend peak hours were based on information provided by NYCDOT. Modal splits of 11 percent by auto, 3 percent by bus, 4 percent by subway/train ,82 percent by walk, and 0 percent by bike were used for the weekday, and modal splits of 8 percent by auto, 4 percent by bus, 7 percent by subway/train,81 percent by walk, and 0 percent by bike were used for the weekend. These were based on NYCDOT mode choice surveys in Queens transit zones. Vehicle occupancies of 2.00 by auto were also based on NYCDOT mode choice surveys in Queens transit zones.

For local retail delivery trips, truck trip generation rates of 0.35 daily delivery trips per 1,000 sf for the weekday and 0.04 daily delivery trips per 1,000 sf for the weekend were obtained from the *CEQR Technical Manual*. Delivery temporal distributions for the weekday were also obtained from the *CEQR*

Technical Manual. Delivery temporal distributions for the weekend were obtained from the *2013 Willets Point FSEIS*.

Restaurant

Trip generation rates of 246 daily person trips per 1,000 sf for the weekday and 358 daily person trips per 1,000 sf for the weekend were obtained from the *CEQR Technical Manual.* A linked trip credit of 75 percent was assumed for the restaurant use on both non-gamedays and gamedays within Area A; no linked trip credit was assumed for the restaurant use within the Area B development. Temporal and directional distributions for the weekday peak hours were based on the *CEQR Technical Manual*. Temporal and directional distributions for the weekend peak hours were based on information for the Sit Down High Turnover Restaurant use provided by NYCDOT. Weekday and weekend modal splits and vehicle occupancies are based on those used for the Music Hall use, based on guidance provided by NYCDOT.

For restaurant delivery trips, truck trip generation rates of 0.35 daily delivery trips per 1,000 sf for the weekday and 0.04 daily delivery trips per 1,000 sf for the weekend were obtained from the *2013 Willets Point FSEIS.* Delivery temporal distributions for the weekday were obtained from the *CEQR Technical Manual* for the local retail use. Delivery temporal distributions for the weekend were obtained from the *2013 Willets Point FSEIS*.

Office

For the office use, trip generation rates of 18 daily person trips per 1,000 sf for the weekday and 3.9 person trips per 1,000 sf for the weekend were obtained from the *CEQR Technical Manual*. Temporal and directional distributions for the weekday peak hours were also obtained from the *CEQR Technical Manual*. Temporal and directional distributions for the weekend peak hours were based on information provided by NYCDOT. Modal splits of 49 percent by auto, 1 percent by taxi/TNC,[6] 20 percent by subway/train, 15 percent by bus, 14 percent by walk and 1 percent by bike were based on American Community Survey reverse journey-to-work census data for Queens census tracts within approximately a half-mile from the proposed development. Vehicle occupancies of 1.14 per auto and taxi were used for the weekday and weekend were obtained from the *2013 Willets Point FSEIS*.

For office delivery trips, trip generation rates of 0.32 and 0.01 daily delivery trips per 1,000 sf for the weekday and weekend peak hours, respectively were obtained from the *CEQR Technical Manual*. Delivery temporal distributions were also obtained from the *CEQR Technical Manual*.

Community Facility (Non-Profit Office)

For the non-profit office use, trip generation rates of 18 daily person trips per 1,000 sf for the weekday and 3.9 person trips per 1,000 sf for the weekend were obtained from the *CEQR Technical Manual*. Temporal and directional distributions for the weekday peak hours were based on the *CEQR Technical Manual* for the office use. Temporal and directional distributions for the weekend peak hours were based on information provided by NYCDOT. Modal splits of 49 percent by auto, 1 percent by taxi/TNC,[7] 20 percent by subway/train, 15 percent by bus, 14 percent by walk and 1 percent by bike were based on American Community Survey reverse journey-to-work census data for

[6] Trips provided by Transportation Network Companies (TNCs), such as Uber or Lyft, fall in the same category as trips by Taxi.

[7] Trips provided by Transportation Network Companies (TNCs), such as Uber or Lyft, fall in the same category as trips by Taxi.

Queens census tracts within approximately a half-mile from the proposed development. Vehicle occupancies of 1.14 per auto and taxi were used for the weekday and weekend were obtained from the *2013 Willets Point FSEIS*.

For office delivery trips, trip generation rates of 0.32 and 0.01 daily delivery trips per 1,000 sf for the weekday and weekend peak hours, respectively were obtained from the *CEQR Technical* Manual. Delivery temporal distributions were also obtained from the *CEQR Technical Manual*.

Active and Passive Open Space

For trip generation purposes, it is conservatively assumed that the publicly accessible open space use consists of 40 percent active open space and 60 percent passive open space. For the active open space use, trip generation rates of 139 daily person trips per acre for the weekday and 196 daily person trips per acre for the weekend were obtained from the *CEQR Technical Manual*. For the passive open space use, trip generation rates of 44 daily person trips per acre for the weekday and 62 daily person trips per acre for the weekend were also obtained from the *CEQR Technical Manual*. A linked trip credit of 100 percent was assumed for this use for gamedays, because it is assumed that the open space would be enjoyed primarily by Mets game ticket holders already traveling to the site and would not generate new trips on these days. No linked trip credit was assumed for walk trips generated by these uses on gamedays. Weekday temporal and directional distributions were obtained from the *CEQR Technical Manual*. Weekend temporal and directional distributions were obtained from the *2013 Willets Point FSEIS*. Weekday and weekend modal splits and vehicle occupancies were based on the *300 Huntington EAS*. The modal splits assumed were 20 percent by auto, 1 percent by taxi/TNC, 11 percent by bus, 12 percent by subway/train, and 56 percent by walk and bike. Vehicle occupancies of 2.90 persons per auto and 3.00 persons per taxi were assumed.

For both the active and passive open space delivery trips, trip generation rate of 3.48 daily trucks per acre for the weekday and 1.74 daily trucks per acre for the weekend were obtained from *2013 Willets Point FSEIS*. Delivery temporal distributions for the weekday and weekend were also based on the *2013 Willets Point FSEIS*.

Level 1 Screening Results

Because the Proposed Project is a mixed-use development which includes retail land uses, a projection of internal capture and primary trips have been developed. Internal capture trips are those associated with linked trip credits, as shown in the Level 1 screening assessment. These are trips that both begin and end within the development (for example, a hotel guest who makes a trip to an on-site restaurant). Primary trips are the net number of new trips to the site as a result of the Proposed Project. The number of primary and internal capture trips generated by the Proposed Project for each land use is provided in **Table 14-6.**

Table 14-6 Trip Generation Summary by Land Use – Primary and Internal Capture Trips

	Non-Gameday								Gameday									
	Weekday AM		Weekday Midday		Weekday PM		Saturday PM		Weekday PM		Saturday PM Pre-game		Saturday PM Post Game		Sunday Midday		Sunday PM	
Land Use	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Total Person Trips																		
Hotel	580	1,296	540	964	1,044	964	1,004	924	1,044	964	912	872	1,004	924	596	596	916	780
Convention Space	381	0	335	392	27	853	0	0	27	853	0	139	0	0	499	499	17	330
Gaming Facility Visitors	833	334	2,662	2,164	3,161	2,164	3,652	3,302	3,161	2,164	3,302	3,302	3,652	3,302	2,437	1,624	2,979	2,165
Gamily Facility Employees	772	0	0	0	1,632	772	0	0	1,632	772	0	0	0	0	0	0	1,586	752
Music Hall	0	0	0	0	0	0	2,385	0	0	0	1,325	0	2,386	0	0	0	0	0
Local Retail – Area A	840	775	1,346	1,346	1,835	1,835	1,160	1,257	1,835	1,835	1,418	1,476	1,160	1,257	1,484	1,484	2,143	2,143
Restaurant – Area A	312	176	3,280	2,008	2,744	2,432	2,528	3,096	2,744	2,432	4,348	4,904	2,552	3,076	3,228	2,752	3,716	2,480
Local Retail – Area B	263	243	421	421	573	573	363	393	573	573	443	461	364	393	464	464	671	671
Restaurant – Area B	186	105	1,944	1,192	1,631	1,446	728	889	1,631	1,446	1,253	1,411	747	871	929	792	1,068	711
Office	72	12	38	34	11	60	1	1	11	60	1	1	1	1	6	6	1	5
Community Facility	48	8	26	24	8	39	1	1	8	39	0	1	1	1	5	5	1	2
Open Space	28	19	126	103	126	103	52	65	126	103	74	90	52	65	170	122	93	115
Subtotal	**4,315**	**2,968**	**10,718**	**8,648**	**12,792**	**11,241**	**11,874**	**9,928**	**12,792**	**11,241**	**13,076**	**12,657**	**11,919**	**9,890**	**9,818**	**8,344**	**13,191**	**10,154**
Internal Capture Trip Credit																		
Hotel	435	972	405	723	783	723	753	693	783	723	684	654	753	693	447	447	687	585

Table 14-6 Trip Generation Summary by Land Use – Primary and Internal Capture Trips

	Non-Gameday								Gameday									
	Weekday AM		Weekday Midday		Weekday PM		Saturday PM		Weekday PM		Saturday PM Pre-game		Saturday PM Post Game		Sunday Midday		Sunday PM	
Land Use	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**
Convention Space	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gaming Facility Visitors	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gamily Facility Employees	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Music Hall	0	0	0	0	0	0	477	0	0	0	265	0	477	0	0	0	0	0
Local Retail – Area A	840	775	1,346	1,346	1,835	1,835	1,160	1,257	1,835	1,835	1,418	1,476	1,160	1,257	1,484	1,484	2,143	2,143
Restaurant – Area A	234	132	2,460	1,506	2,058	1,824	1,896	2,322	2,058	1,824	3,261	3,678	1,914	2,307	2,421	2,064	2,787	1,860
Local Retail – Area B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Restaurant – Area B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Office	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Community Facility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Open Space	0	0	0	0	0	0	0	0	55	45	33	40	23	29	75	53	41	51
Subtotal	**1,509**	**1,879**	**4,211**	**3,575**	**4,676**	**4,382**	**4,286**	**4,272**	**4,731**	**4,427**	**5,661**	**5,848**	**4,327**	**4,286**	**4,427**	**4,048**	**5,658**	**4,639**
Primary Trips																		
Hotel	145	324	135	241	261	241	251	231	261	241	228	218	251	231	149	149	229	195
Convention Space	381	0	335	392	27	853	0	0	27	853	0	139	0	0	499	499	17	330

Table 14-6 Trip Generation Summary by Land Use – Primary and Internal Capture Trips

	Non-Gameday								Gameday									
	Weekday AM		Weekday Midday		Weekday PM		Saturday PM		Weekday PM		Saturday PM Pre-game		Saturday PM Post Game		Sunday Midday		Sunday PM	
Land Use	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**
Gaming Facility Visitors	833	334	2,662	2,164	3,161	2,164	3,652	3,302	3,161	2,164	3,302	3,302	3,652	3,302	2,437	1,624	2,979	2,165
Gamily Facility Employees	772	0	0	0	1,632	772	0	0	1,632	772	0	0	0	0	0	0	1,586	752
Music Hall	0	0	0	0	0	0	1,908	0	0	0	1,060	0	1,909	0	0	0	0	0
Local Retail – Area A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Restaurant – Area A	78	44	820	502	686	608	632	774	686	608	1,087	1,226	638	769	807	688	929	620
Local Retail – Area B	263	243	421	421	573	573	363	393	573	573	443	461	364	393	464	464	671	671
Restaurant – Area B	186	105	1,944	1,192	1,631	1,446	728	889	1,631	1,446	1,253	1,411	747	871	929	792	1,068	711
Office	72	12	38	34	11	60	1	1	11	60	1	1	1	1	6	6	1	5
Community Facility	48	8	26	24	8	39	1	1	8	39	0	1	1	1	5	5	1	2
Open Space	28	19	126	103	126	103	52	65	71	58	41	50	29	36	95	69	52	64
Total	**2,806**	**1,089**	**6,507**	**5,073**	**8,116**	**6,859**	**7,588**	**5,656**	**8,061**	**6,814**	**7,415**	**6,809**	**7,592**	**5,604**	**5,391**	**4,296**	**7,533**	**5,515**

Transit and Pedestrians

The total number of person-trips by travel mode generated by the Proposed Project are provided in **Table 14-7** and would be expected to exceed the *CEQR Technical Manual* Level 1 screening thresholds for vehicles, transit, and pedestrians. Since the number of peak hour bus, subway/train, and pedestrian trips expected to be generated by the Proposed Project exceed the CEQR thresholds of 200 person trips per hour, a Level 2 trip assignment is needed to determine the scope of the detailed pedestrian and transit analyses.

Table 14-7 With-Action Condition Trip Generation Summary – Person Trips

	Weekday AM			Weekday Midday			Weekday PM (NGD)		
Mode	**In**	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
Auto	1,294	329	1,623	2,977	2,277	5,254	3,622	3,174	6,796
Taxi	261	199	460	895	705	1,600	943	805	1,748
Charter Bus	42	17	59	133	108	241	158	108	266
Subway/Train	543	239	782	1,628	1,191	2,819	1,897	1,540	3,437
Bus	196	32	228	184	154	338	445	290	735
Walk	461	273	734	690	638	1,328	1,035	933	1,968
Bike	9	0	9	0	0	0	16	9	25
Total	**2,806**	**1,089**	**3,895**	**6,507**	**5,073**	**11,580**	**8,116**	**6,859**	**14,975**
	Saturday PM (NGD)			**Weekday PM (GD)**			**Saturday PM Pre-game(GD)**		
Mode	**In**	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
Auto	3,446	2,521	5,967	3,597	3,153	6,750	3,323	3,065	6,388
Taxi	1,127	826	1,953	942	804	1,746	1,085	975	2,060
Charter Bus	183	165	348	158	108	266	165	165	330
Subway/Train	1,978	1,346	3,324	1,882	1,528	3,410	1,947	1,696	3,643
Bus	215	197	412	431	279	710	195	195	390
Walk	639	601	1,240	1,035	933	1,968	700	713	1,413
Bike	0	0	0	16	9	25	0	0	0
Total	**7,588**	**5,656**	**13,244**	**8,061**	**6,814**	**14,875**	**7,415**	**6,809**	**14,224**
	Saturday PM Post Game (GD)			**Sunday Midday (GD)**			**Sunday PM (GD)**		
Mode	**In**	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
Auto	3,449	2,497	5,946	2,452	1,925	4,377	3,315	2,400	5,715
Taxi	1,130	821	1,951	708	548	1,256	843	621	1,464
Charter Bus	183	165	348	122	81	203	149	108	257
Subway/Train	1,980	1,331	3,311	1,231	980	2,211	1,727	1,195	2,922
Bus	209	190	399	160	118	278	423	262	685
Walk	641	600	1,241	718	644	1,362	1,060	921	1,981
Bike	0	0	0	0	0	0	16	8	24
Total	**7,592**	**5,604**	**13,196**	**5,391**	**4,296**	**9,687**	**7,533**	**5,515**	**13,048**

Note: NGD=Non-gameday, GD=Gameday

Traffic and Parking

Table 14-8 and **Table 14-9** summarize the total peak hour vehicular volumes increments ("ins" plus "outs") for the Proposed Project under the With-Action condition for non-gameday and game-day scenarios. As shown in these tables, the majority of vehicle trips generated by the Proposed Project would be from the gaming facility uses and the Area B restaurant use, particularly during the midday and afternoon periods. For a non-gameday scenario, the hourly vehicle trips generated by the Proposed Project would be 1,330 vehicles per hour (vph) during the weekday AM peak hour, 3,441

vph in the weekday midday peak hour, 4,233 vph in weekday PM peak hour, and 4,082 vph in the Saturday PM peak hour. For a gameday scenario, the hourly vehicle trips generated by the Proposed Project would be 4,217 vph in the weekday PM peak hour, 4,379 vph in the Saturday PM Pre-game peak hour, 4,079 vph in the Saturday PM Post Game peak hour, 2,987 vph in the Sunday midday peak hour, and 3,846 vph in the Sunday PM peak hour. Since the volume of vehicle trips generated by the Proposed Project would exceed the 50-vehicle trip threshold during all peak hours, a Level 2 trip assignment is needed to determine the scope of the detailed traffic analysis.

Table 14-8 Non-Gameday Trip Generation Summary by Land Use – Vehicle Trips

	Hotel		Convention Space		Gaming Facility Visitors		Gaming Facility Employees		Music Hall		Local Retail – Area A		Restaurant – Area A		Local Retail – Area B		Restaurant – Area B		Office		Community Facility (Non-Profit Office)		Open Space	
Vehicle Type	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**
Weekday AM Peak Hour																								
Auto	15	32	113	0	202	81	184	0	0	0	0	0	13	7	14	13	32	18	31	5	21	3	2	1
Taxi	90	90	17	17	88	88	5	5	0	0	0	0	4	4	0	0	10	10	1	1	0	0	0	0
Charter Bus	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delivery	33	33	4	4	0	0	0	0	7	7	1	1	3	3	0	0	2	2	1	1	0	0	4	4
Total	**138**	**155**	**134**	**21**	**292**	**170**	**189**	**5**	**7**	**7**	**1**	**1**	**20**	**14**	**14**	**13**	**44**	**30**	**33**	**7**	**21**	**3**	**6**	**5**
Weekday Midday Peak Hour																								
Auto	14	24	99	116	646	525	0	0	0	0	0	0	139	85	23	23	331	203	16	15	11	10	9	7
Taxi	67	67	17	17	281	281	0	0	0	0	0	0	45	45	0	0	106	106	0	0	0	0	0	0
Charter Bus	0	0	0	0	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delivery	25	25	8	8	0	0	0	0	6	6	2	2	4	4	1	1	2	2	1	1	0	0	3	3
Total	**106**	**116**	**124**	**141**	**932**	**810**	**0**	**0**	**6**	**6**	**2**	**2**	**188**	**134**	**24**	**24**	**439**	**311**	**17**	**16**	**11**	**10**	**12**	**10**
Weekday PM Peak Hour																								
Auto	26	24	8	252	767	525	388	184	0	0	0	0	117	104	32	32	278	246	5	25	3	17	9	7
Taxi	73	73	38	38	334	334	11	11	0	0	0	0	37	37	0	0	89	89	1	1	0	0	0	0
Charter Bus	0	0	0	0	6	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delivery	0	0	1	1	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	1	1
Total	**99**	**97**	**47**	**291**	**1,107**	**863**	**399**	**195**	**1**	**1**	**0**	**0**	**155**	**142**	**32**	**32**	**367**	**335**	**6**	**26**	**3**	**17**	**10**	**8**

Table 14-8 Non-Gameday Trip Generation Summary by Land Use – Vehicle Trips

Vehicle Type	Hotel		Convention Space		Gaming Facility Visitors		Gaming Facility Employees		Music Hall		Local Retail – Area A		Restaurant – Area A		Local Retail – Area B		Restaurant – Area B		Office		Community Facility (Non-Profit Office)		Open Space	
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Saturday PM Peak Hour																								
Auto	31	29	0	0	857	775	0	0	298	0	0	0	99	121	20	22	234	286	1	1	1	1	4	4
Taxi	63	63	0	0	353	353	0	0	95	95	0	0	39	39	0	0	92	92	0	0	0	0	0	0
Charter Bus	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delivery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**94**	**92**	**0**	**0**	**1,217**	**1,135**	**0**	**0**	**393**	**95**	**0**	**0**	**138**	**160**	**20**	**22**	**326**	**378**	**1**	**1**	**1**	**1**	**4**	**4**

Table 14-9 Gameday Trip Generation Summary by Land Use – Vehicle Trips

	Hotel		Convention Space		Gaming Facility Visitors		Gaming Facility Employees		Music Hall		Local Retail – Area A		Restaurant – Area A		Local Retail – Area B		Restaurant – Area B		Office		Community Facility (Non-Profit Office)		Open Space	
Vehicle Type	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**
Weekday PM Peak Hour																								
Auto	26	24	8	252	767	525	388	184	0	0	0	0	117	104	32	32	278	246	5	25	3	17	0	0
Taxi	73	73	38	38	334	334	11	11	0	0	0	0	37	37	0	0	89	89	1	1	0	0	0	0
Charter Bus	0	0	0	0	6	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delivery	0	0	1	1	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	1	1
Total	**99**	**97**	**47**	**291**	**1,107**	**863**	**399**	**195**	**1**	**1**	**0**	**0**	**155**	**142**	**32**	**32**	**367**	**335**	**6**	**26**	**3**	**17**	**1**	**1**
Saturday PM Pre-game Peak Hour																								
Auto	28	27	0	37	775	775	0	0	165	0	0	0	170	191	24	25	403	454	1	1	0	1	0	0
Taxi	57	57	5	5	320	320	0	0	53	53	0	0	61	61	0	0	146	146	0	0	0	0	0	0
Charter Bus	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delivery	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**87**	**86**	**5**	**42**	**1,102**	**1,102**	**0**	**0**	**218**	**53**	**0**	**0**	**231**	**252**	**24**	**25**	**549**	**600**	**1**	**1**	**0**	**1**	**0**	**0**
Saturday PM Post Game Peak Hour																								
Auto	**31**	**29**	**0**	**0**	**860**	**775**	**0**	**0**	**298**	**0**	**0**	**0**	**101**	**120**	**21**	**22**	**239**	**281**	**1**	**1**	**1**	**1**	**0**	**0**
Taxi	**63**	**63**	**0**	**0**	**353**	**353**	**0**	**0**	**95**	**95**	**0**	**0**	**39**	**39**	**0**	**0**	**92**	**92**	**0**	**0**	**0**	**0**	**0**	**0**
Charter Bus	**0**	**0**	**0**	**0**	**7**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Delivery	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total	**94**	**92**	**0**	**0**	**1,220**	**1,135**	**0**	**0**	**393**	**95**	**0**	**0**	**140**	**159**	**21**	**22**	**331**	**373**	**1**	**1**	**1**	**1**	**0**	**0**

Table 14-9 Gameday Trip Generation Summary by Land Use – Vehicle Trips

	Hotel		Convention Space		Gaming Facility Visitors		Gaming Facility Employees		Music Hall		Local Retail – Area A		Restaurant – Area A		Local Retail – Area B		Restaurant – Area B		Office		Community Facility (Non-Profit Office)		Open Space	
Vehicle Type	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**
Sunday Midday Peak Hour																								
Auto	19	19	134	134	572	381	0	0	0	0	0	0	126	107	26	26	299	255	2	3	2	2	0	0
Taxi	37	37	18	18	236	236	0	0	0	0	0	0	40	40	0	0	96	96	0	0	0	0	0	0
Charter Bus	0	0	0	0	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delivery	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Total	**63**	**63**	**152**	**152**	**813**	**620**	**0**	**0**	**0**	**0**	**0**	**0**	**166**	**147**	**26**	**26**	**395**	**351**	**2**	**3**	**2**	**2**	**2**	**2**
Sunday PM Peak Hour																								
Auto	29	24	5	89	699	508	365	173	0	0	0	0	145	97	37	37	344	229	1	2	1	1	0	0
Taxi	57	57	12	12	288	288	10	10	0	0	0	0	46	46	0	0	110	110	0	0	0	0	0	0
Charter Bus	0	0	0	0	6	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delivery	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**88**	**83**	**17**	**101**	**993**	**800**	**375**	**183**	**0**	**0**	**0**	**0**	**191**	**143**	**37**	**37**	**454**	**339**	**1**	**2**	**1**	**1**	**0**	**0**

Level 2 Screening Assessment (Trip Assignment)

As shown above, the number of trips generated by the Proposed Project would exceed the *CEQR Technical Manual* Level 1 screening thresholds for vehicle, transit, and pedestrian trips during the peak hours analyzed. Project generated trips were assigned through the surrounding street network based on expected routes to and from the Development Site. The Development Site is bordered by Roosevelt Avenue to the south, 126th Street/Seaver Way to the east, and Northern Boulevard to the north.

Transit and Pedestrians

Transit and pedestrian trips were assigned through the pedestrian network based on logical and direct travel routes to and from the Development Site from neighborhood attractions, subway stations and/or bus stops, to determine if the number of additional pedestrian trips generated by the Proposed Project would exceed 200 peak hour pedestrian trips at key pedestrian elements (e.g. crosswalks, sidewalks, corner reservoir areas) approaching the site – the threshold for detailed pedestrian analysis. This threshold is also used to assess the need for detailed transit analysis including analysis at station interior locations (such as stairways to platforms) or line-haul analyses.

Bus transit options within the Development Site vicinity include the Q19, Q48, and Q66 bus routes. The Q48 has stops located along Roosevelt Avenue at 126th Street/Seaver Way and at the No. 7 train station at Mets-Willets Point. The Q19 and Q66 have a stop located at Northern Boulevard and 126th Street/Seaver Way to the north of the Development Site; however, this stop only provides access to eastbound buses. All three of these bus routes provide access to major bus transfer locations within downtown Flushing to the east of the site. In addition, the Q19 provides access to western destinations along Astoria Boulevard, the Q48 provides direct access to LaGuardia Airport, and the Q66 provides direct access to destinations along western Northern Boulevard. Because the Q48 stop on Roosevelt Avenue is most convenient to the Development Site, and because the Q48 allows for direct transfers to the westbound Q19 and Q66 as the Q48 crosses Astoria Boulevard and Northern Boulevard, respectively, 80 percent of bus transit trips are assigned to the Q48, 10 percent of bus transit trips are assigned to the Q19, and 10 percent to the Q66.

Direct subway access to the site is provided at the Mets-Willets Point subway station, which is served by the No. 7 line. This station has a direct stairway connection to the site, which currently accesses Mets Plaza within the site. In addition, part-time Long Island Rail Road (LIRR) service is available at Mets-Willets Point during Mets games and special events, which is served by the Port Washington line. Rail trips would access the site via the Passerelle connection from the LIRR station at Mets-Willets Point. On gamedays, Mets patrons parking in the Southfield parking structure would be assigned to pedestrian elements at the street level to account for their travel to Citi Field. As part of the Proposed Project, the open space at Mets Plaza would be enhanced, and the access to the subway station, Southfield parking structure, and to the LIRR station to the south would be improved as part of proposed station improvements to the No. 7 train station. These station improvements would not only enhance access to No. 7 train service (including adding ADA accessibility to the station) but would facilitate through-trips over Roosevelt Avenue to the amenities south of the Development Site, including the LIRR station and Flushing Meadows Corona Park. Analysis for transit station elements has been conducted with two scenarios. The analysis evaluated a Baseline Scenario which would include the existing station configuration with proposed With-Action volumes, as well as a Station Improvements Scenario with proposed station element enhancements. Transit assignments at the subway station have been reassigned under the Station Improvements Scenario

to reflect the changes in geometry that would accompany the station improvements. In order to provide a conservative pedestrian analysis, no reduction credit of Mets patrons parking in the Southfield parking structure would be assumed on street-level pedestrian elements under the Station Improvements Scenario.

Local pedestrian walk trips were assigned to sidewalks heading east/west into Flushing or Corona via Roosevelt Avenue.

Traffic

The Proposed Project is expected to be both a local and regional destination and is expected to generate a significant amount of vehicular traffic. In order to estimate the volume project-generated traffic at individual intersection and roadway segment locations, the vehicular traffic generated by the individual land use components of the Proposed Project as shown in **Table 14-8** and **Table 14-9** was assigned to the surrounding roadway network. This assignment was performed using origin and destination (O-D) data specific to each land use to assign the expected trips to the surrounding roadway network.

Trips generated by gaming facility visitors, the hotel, the convention and meeting space, the music hall, and the local retail and restaurant components within Area A were assigned using O-D data obtained via a market study performed by the proposed gaming facility operator, summarized in **Appendix D-10**. Trips generated by gaming facility employees, the office component and the non-profit office component for the Area B were assigned using O-D data from the American Community Survey reverse journey-to-work data for Queens,[8] summarized in **Appendix D-11**. The restaurant and local retail components for Area B, and open space were assigned using O-D data from the American Community Survey census population data for the same census tracts, as shown in **Appendix D-12**. Delivery trips to the site made by trucks were assigned using O-D data from the Destination Retail land use found in the *2013 Willets Point FSEIS*, summarized in **Appendix D-13**.

Using these O-D data, trips were assigned from portals around the edge of the study area to locations in the network specific to the parking and loading facilities for each land use. For example, trips to Area B were assigned to parking accessed via 126th Street/Seaver Way. Trips to Area A were assigned to garage entrances along Shea Road, providing access to garage spaces within Area A. Delivery trips were assigned to curb cuts in the proposed development providing direct access to loading docks, along available official NYC truck routes.

This information was then used to create incremental traffic volume flow maps for each peak hour, which showed the expected flow of traffic to and from the Development Site. Based on these maps, intersections and roadway segments with greater than incremental 50 vehicle trips in any peak hour were selected for detailed traffic analysis.

The detailed incremental traffic volume flow maps for each of the nine peak hours can be found in **Appendix D**.

[8] U.S. Census Bureau, American Community Survey 2012-2016 Five-year estimates. Special Tabulation: Census Transportation Planning reverse journey-to-work data for Queens census tracts 381, 383.01, 383.02, 399, 401, 403, 415, 849, 869, and 871,

Reassignment of Mets Patrons and Background Traffic

As part of the Proposed Project, Mets patron parking would be relocated from the current on-site surface lots to new parking structures located south of Roosevelt Avenue (Southfield parking structure) and north of Citi Field (Northfield parking structure), with Mets VIP parking at Area B (at the location of the former Lot G). With this shift in travel patterns, it is assumed that vehicles would be directed to either Northfield or Southfield parking structures based on their origin to minimize overlapping with Proposed Project-generated trips and other background traffic. VIP parking would continue to use the same curb-cut, which provides access to Lot G under Existing Conditions, and would provide access to the Area B parking structure under With-Action Condition.

Mets patrons arriving by car currently park in a variety of surface lots surrounding Citi Field. The majority of vehicles park in Lots B, C, D, E, and F to the west of Citi Field. Lots A and G are directly north and south of Citi Field and are used for employee/VIP parking, respectively. North of Shea Road and Citi Field, the Stadium Views and Marina East lots are available for parking. South of Roosevelt Avenue and Citi Field, the Southfield Lot is available for parking.

Under the Proposed Project, observed traffic volumes for Mets parking ingress and egress points were reassigned based on tracing the origins/destinations of trips in the Existing Conditions on Gamedays, and reassigning these trips based on logical garage entrances/exits. Traffic was also split between the Northfield and Southfield parking structures based on geographic origin/destination using the earlier stated assumption to minimize overlapping traffic routes. Under the Proposed Project, VIP parking demand for the Mets, which currently parks at Lot G directly to the south of the stadium, would park in the Area B parking structure. Because these trips would be destined to the same location in the network and use the same curb cut on 126th Street/Seaver Way to access the Area B parking as they do under Existing Conditions to access Lot G, there is no need to reassign this portion of Mets Patron traffic under With-Action Conditions.

Ingress Traffic

Under Existing Conditions, inbound Mets traffic from the Grand Central Parkway eastbound (from Points West), Astoria Boulevard, and Northern Boulevard (from Points West) exit the freeway network at the intersection of Shea Road and 126th Street/Seaver Way/34th Avenue. Traffic can access either the main parking area via Shea Road or Lots A or G via 126th Street/Seaver Way. Traffic from the Grand Central Parkway westbound (from Points South or Points East/West via Long Island Expressway) have two main routes. If destined for Southfield Lot, they can use Exit 9P to Meridian Road and enter Southfield Lot from Olmsted Drive/Stadium Place South. If destined for the main parking area or Lots A or G, they can use Exit 9E to Shea Road. Inbound traffic coming from east of Citi Field via Northern Boulevard (from Points East), Whitestone Expressway, or the Van Wyck Expressway can exit the freeway network onto Marina Road. Traffic can then turn left onto Boat Basin Place, then access any parking area via Shea Road or 126th Street/Seaver Way. Local traffic from Roosevelt Avenue can access Southfield Lot using Stadium Place North and South, or other parking areas via 126th Street/Seaver Way and Shea Road.

With the Proposed Project, Mets traffic would be directed to either the Northfield or Southfield parking structures, or to Area B for Mets VIP patrons, based on their geographic origin. Traffic from the Grand Central Parkway eastbound (from Points West), Astoria Boulevard, and Northern Boulevard (from Points West) would exit the freeway network into the modified intersection of 34th Avenue and 126th Street/Seaver Way. With Shea Road relocated one block south, 126th Street/Seaver Way would be converted from one-way northbound between 34th Avenue and Northern Boulevard to two-way

traffic. Mets ingress traffic would travel this one block southbound, then turn right onto relocated Shea Road to access the Northfield parking structure. Inbound traffic coming from east of Citi Field via Northern Boulevard (from Points East), Whitestone Expressway, or the Van Wyck Expressway would exit the freeway network onto Marina Road and turn left onto Boat Basin Place, same as the existing condition. Traffic would then turn left onto Shea Road to access the Northfield parking structure.

Traffic from the Grand Central Parkway westbound (from Points South or Points East/West via Long Island Expressway) and the local roadway network via Roosevelt Avenue would be directed to the Southfield parking structure. Grand Central Parkway westbound traffic would use Exit 9P to Meridian Road and enter Southfield Lot from Olmsted Drive/Stadium Place South, similar to existing conditions. Traffic from Roosevelt Avenue can either use a realigned Stadium Place South or 126th Street/Seaver Way.

Egress Traffic

Under Existing Conditions, Mets traffic bound for the Grand Central Parkway westbound (to Points West) has multiple potential routes from the main parking areas. This traffic can either use Shea Road to the on-ramp south of Exit 9E, Boat Basin Place to the on-ramp from Marina Road, or can travel to the end of Shea Road, turn onto 126th Street/Seaver Way, and then use Marina Road and its on-ramp to the freeway. Traffic destined for Astoria Boulevard and Northern Boulevard (to points West) would exit onto Boat Basin Place, then turn right at Marina Road to access the on-ramp. Traffic egressing to Northern Boulevard (to Points East) would travel to the end of Shea Road, turn onto 126th Street/Seaver Way, and then turn right directly onto Northern Boulevard. Whitestone Expressway and Van Wyck Expressway traffic exit onto Shea Road, where there are two potential on-ramps they can use to access the freeway.

Currently, traffic bound for the Grand Central Parkway westbound (to Points South or Points East/West via Long Island Expressway) can exit the Southfield Lot onto southbound Meridian Road, then pass over the Grand Central Parkway on the Hall of Science Bridge to access the freeway on-ramp. Local traffic to Roosevelt Avenue exiting the Southfield Lot either uses Stadium Place North and South or exits directly from the lot onto Roosevelt Avenue.

With the Proposed Project, due to the configuration of the circulation ramps in the Northfield parking structure, some traffic would be forced to either turn southbound right or northbound left onto Shea Road westbound, however, vehicles can still access their desired destination from either movement. Traffic bound for Grand Central Parkway westbound (to Points West) has multiple potential routes. This traffic can either use Shea Road to Boat Basin Place to the on-ramp from Marina Road, Shea Road, turn onto 126th Street/Seaver Way, and then use Marina Road and its on-ramp to the freeway, or the direct garage egress to 126th Street/Seaver Way to Marina Road and the freeway on-ramp. Traffic destined for Astoria Boulevard and Northern Boulevard (to points West) would exit onto Shea Road, turn onto Boat Basin Place, then turn right at Marina Road to access the on-ramp. Traffic egressing to Northern Boulevard (to Points East) can either exit onto Shea Road and turn onto 126th Street/Seaver Way, or exit directly onto 126th Street/Seaver Way, and then turn right directly onto Northern Boulevard. Whitestone Expressway and Van Wyck Expressway traffic would exit onto Shea Road to access the on-ramp to the freeway, which would be relocated slightly south of the current location.

Egress from the Southfield parking structure would be similar to existing condition. Traffic bound for the Grand Central Parkway westbound (to Points South or Points East/West via Long Island

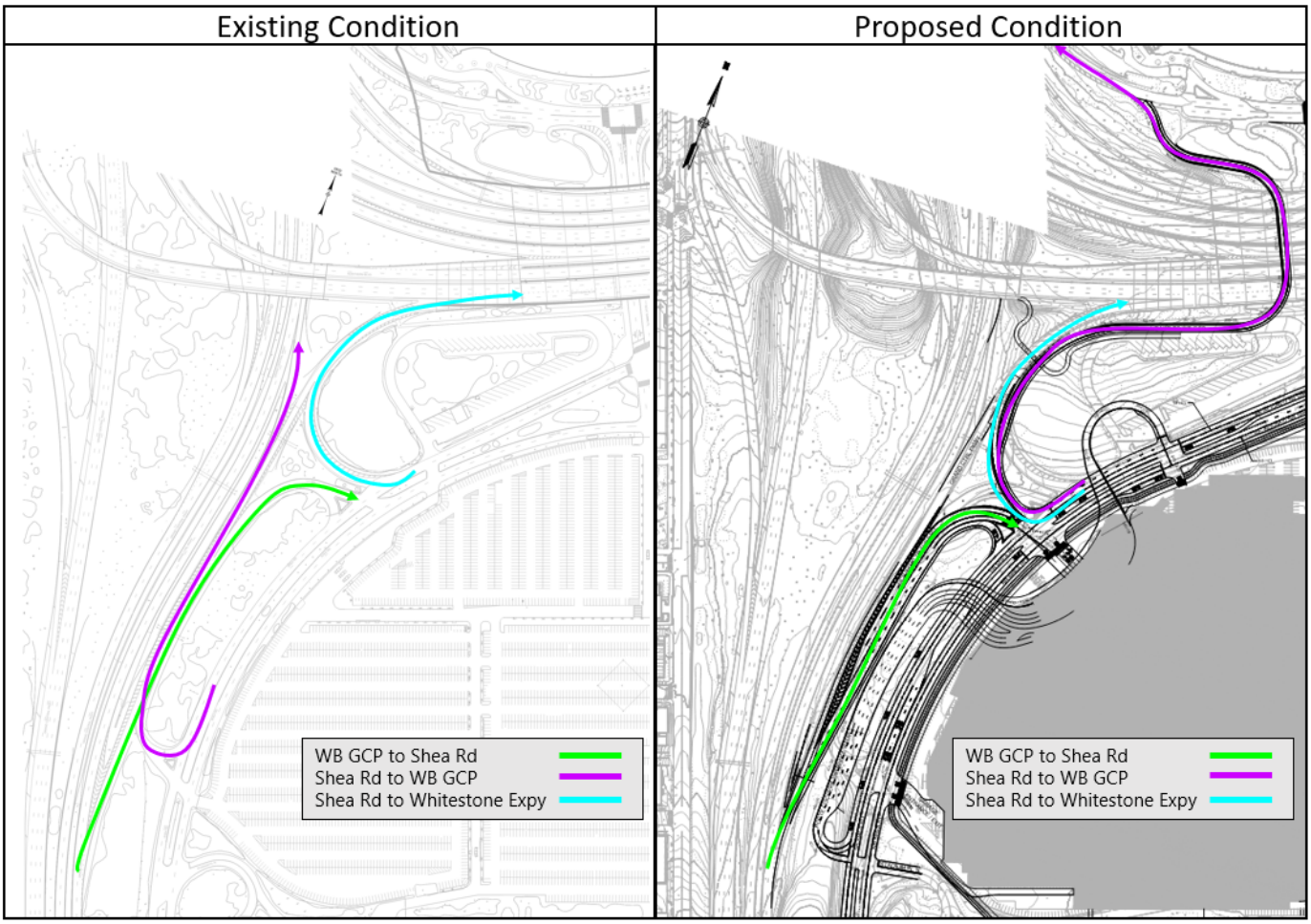
Expressway) can exit the Southfield parking structure onto southbound Meridian Road, then pass over the Grand Central Parkway on the Hall of Science Bridge to access the freeway on-ramp. Local traffic to Roosevelt Avenue exiting the Southfield parking structure would either use Stadium Place South or 126th Street/Seaver Way.

Diversion flow maps for Mets Patrons during the gameday peak hours can be found in **Appendix D.**

On-Ramp Diversions

As discussed above, the proposed reconfigured on-ramp from Shea Road to the westbound Grand Central Parkway would be shifted to north of the off-ramp from westbound Grand Central Parkway to Shea Road. This shift eliminates the weaving segment between these two existing ramps and would improve overall access for this site and for the surrounding areas. Connections to and from the freeway network would be maintained as noted below. Background traffic, trips from the Proposed Project, and Mets game ingress and egress traffic were all reassigned as needed based on these updated ramp configurations, as shown in **Figure 14-3.**

Figure 14-3 Proposed Shea Road On-Ramp Diversion



Level 2 Screening Results

Traffic

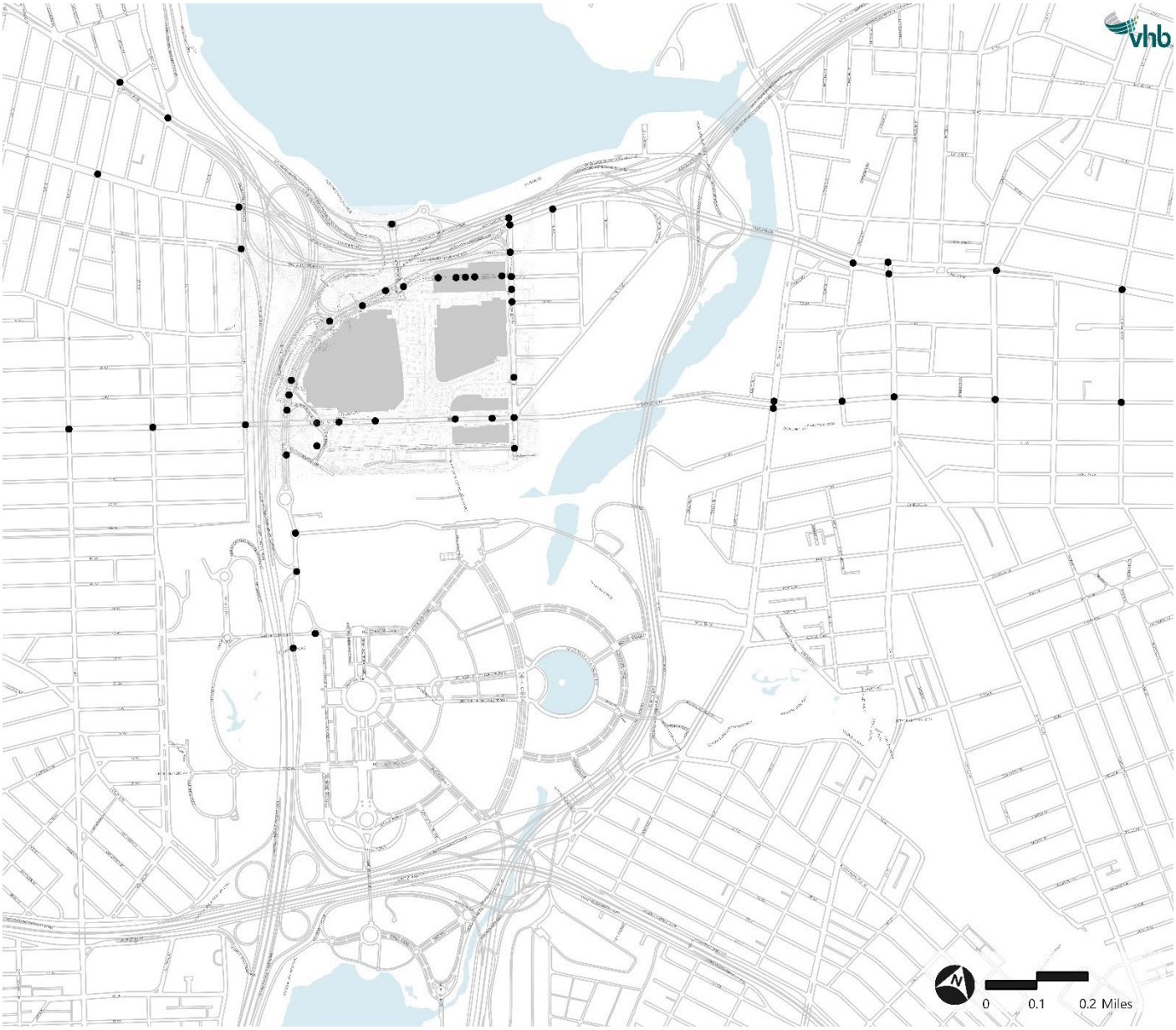
Local Roadway Network

Using the vehicular assignment process described above, balanced traffic increment flow maps were developed for each of the nine peak hours. Across each of the nine peak hours, 54 intersections have been selected for detailed traffic analysis. Intersections denoted in **bold** are new intersections along Shea Road providing direct access to the Proposed Project or are existing intersections that have been reconfigured to incorporate changes to the network along Shea Road to accommodate the Proposed Project. In addition to detailed intersection analysis, at intersections where initial analysis determines an intersection should be newly signalized, signal warrant studies will also be performed. The locations of these study area intersections are shown in **Figure 14-4**.

- Astoria Boulevard at 108th Street/ 31st Drive
- Astoria Boulevard at Ditmars Boulevard/111th Street
- Northern Boulevard at 108th Street
- Northern Boulevard at 114th Street
- Northern Boulevard westbound at 126th Street/Seaver Way
- Northern Boulevard eastbound at 126th Street/Seaver Way
- Northern Boulevard eastbound at 126th Place
- Northern Boulevard at Prince Street
- Northern Boulevard westbound at Main Street
- Northern Boulevard eastbound at Main Street
- Northern Boulevard at Union Street
- Northern Boulevard at Parsons Boulevard
- 34th Avenue at 114th Street
- **34th Avenue/Shea Road at 126th Street/Seaver Way**
- **35th Avenue/Shea Road at 126th Street/Seaver Way**
- 36th Avenue at 126th Street/Seaver Way/Seaver Way
- Roosevelt Avenue at 108th Street
- Roosevelt Avenue at 111th Street
- Roosevelt Avenue at 114th Street
- Roosevelt Avenue at 126th Street/Seaver Way
- Roosevelt Avenue westbound at College Point Boulevard
- Roosevelt Avenue eastbound at College Point Boulevard
- Roosevelt Avenue at Prince Street
- Roosevelt Avenue at Main Street
- Roosevelt Avenue at Union Street
- Roosevelt Avenue at Parsons Boulevard

- Shea Road at Boat Basin Place
- **Shea Road at Porte Cochere Exit Ramp**
- Marina Road at Boat Basin Place
- Shea Road/ Citi Field Entrance 8 at Boat Basin Place
- **Grand Central Parkway westbound exit ramp at West Park Loop/ Shea Road**
- 126th Street/Seaver Way at Citi Field Entrance 11
- **126th Street/Seaver Way at Citi Field Entrance 1**
- Roosevelt Avenue at Southfield Parking Lot
- Roosevelt Avenue at Citi Field Entrance 3
- **Shea Road at Northfield Parking Structure North Access 1**
- **Shea Road at Northfield Parking Structure North Access 2**
- **Shea Road at Northfield Parking Structure South/North Access 3**
- **Shea Road at Mets Truck Loading**
- Stadium Place South at Southfield Parking Lot
- **126th Street/Seaver Way at Southfield Parking Lot**
- **Grand Central Parkway westbound Entrance Ramp at Shea Road/Citi Field Entrance 4**
- Shea Road at Citi Field Entrance 6 and 7
- Shea Road at Citi Field Entrance 10
- **Shea Road at Stadium Place North**
- Roosevelt Avenue at Stadium Place South
- Roosevelt Avenue at Stadium Place
- Roosevelt Avenue at Stadium Place North
- Shea Road at Olmsted Drive
- Stadium Plaza South at Olmsted Drive
- Shea Road at Meridian Road
- Shea Road at Grand Central Parkway westbound exit ramp (9P)
- Shea Road at New York Avenue
- New York Avenue at United Nations Avenue North

Figure 14-4 Study Area Intersections Selected for Detailed Traffic Analysis



Highway Network

Using the vehicular assignment process described above, balanced traffic increment flow maps were developed for each of the nine peak hours. Across each of the nine peak hours, 76 highway & ramp segments have been selected for detailed traffic analysis along the Grand Central Parkway, Van Wyck Expressway, and Whitestone Expressway. In the With-Action condition, these would also include new ramps, and reconfigured existing ramps as part of the roadway improvements discussed above. The locations of these study area highway and ramp segments are shown in **Table 14-10** and **Figure 14-5** , and are described as basic, merge, diverge, or weaving segments according to their function.

Table 14-10 Study Area Highway Segments Selected for Detailed Traffic Analysis

Location #	Mainline	Direction	Name	Facility Type
1	GCP	WB	GCP WB north of ramp from LIE	Merge
2	GCP	WB	GCP WB south of Hall of Science Bridge overpass	Basic
3	GCP	WB	GCP WB south of Exit 9P	Diverge
4	GCP	WB	GCP WB Inner north of Inner/Outer split	Basic
5	GCP	WB	GCP WB Inner south of Exit 9W	Diverge
6	GCP	WB	GCP WB Inner north of Exit 9W	Basic
7	GCP	WB	GCP WB Outer north of Inner/Outer split	Basic
8	GCP	WB	GCP WB Outer north of ramp from Meridian Road	Merge
9	GCP	WB	GCP WB Outer at Roosevelt Avenue overpass	Basic
10	GCP	WB	GCP WB Outer south of Exit 9E	Diverge
11	GCP	WB	GCP WB Outer north of Exit 9E	Basic
12	GCP	WB	GCP WB Outer north of ramp from Shea Road	Merge
13	GCP	WB	GCP WB Outer south of ramp from Marina Road	Basic
14	GCP	WB	GCP WB Outer north of ramp from Marina Road	Basic
15	GCP	WB	GCP WB north of Inner/Outer merge	Basic
16	GCP	WB	GCP WB at Marina Pedestrian Overpass	Basic
17	GCP	WB	GCP WB at Exit 9E Weave/Shea Road	Weave
18	GCP	WB	GCP WB exit 9E ramp to Whitestone Expressway EB Outer	Merge
19	GCP	EB	GCP EB east of Exit 8	Basic
20	GCP	EB	GCP EB west of Exit 9E	Diverge
21	GCP	EB	GCP EB south of Exit 9E	Basic

Table 14-10 Study Area Highway Segments Selected for Detailed Traffic Analysis

Location #	Mainline	Direction	Name	Facility Type
22	GCP	EB	GCP EB south of Exit 9E and ramp from Whitestone Expressway WB	Merge
23	GCP	EB	GCP EB north of ramp from Astoria Boulevard and 34th Avenue	Basic
24	GCP	EB	GCP EB south of ramp from Astoria Boulevard and 34th Avenue	Merge
25	GCP	EB	GCP EB north of ramp from Hall of Science	Basic
26	GCP	EB	GCP EB south of ramp from Hall of Science	Merge
27	GCP	EB	GCP EB south of Hall of Science Bridge overpass	Basic
28	GCP	EB	GCP EB north of ramp to LIE	Diverge
29	GCP	EB	GCP EB ramp to Whitestone Expressway EB Outer (Exit 9E)	Basic
30	VWE	NB	VWE NB north of ramp from College Point Boulevard	Basic
31	VWE	NB	VWE NB south of Exit 13	Diverge
32	VWE	NB	VWE NB north of Exit 13	Basic
33	VWE	NB	VWE NB ramp to Northern Boulevard and Whitestone Expressway WB (exit 13)	Diverge
34	VWE	NB	VWE NB south of Exit 14	Diverge
35	VWE	NB	VWE NB ramp to Whitestone Expressway EB	Basic
36	VWE	SB	VWE SB ramp from Whitestone Expressway WB	Basic
37	VWE	SB	VWE SB ramp from Whitestone Expressway EB and Northern Boulevard WB	Merge
38	VWE	SB	VWE SB south of ramps from Whitestone Expressway and Northern Boulevard	Merge
39	VWE	SB	VWE SB north of ramp to College Point Boulevard	Basic
40	Whitestone Exp	EB	Astoria Boulevard EB ramp to Whitestone Expressway EB Inner	Basic

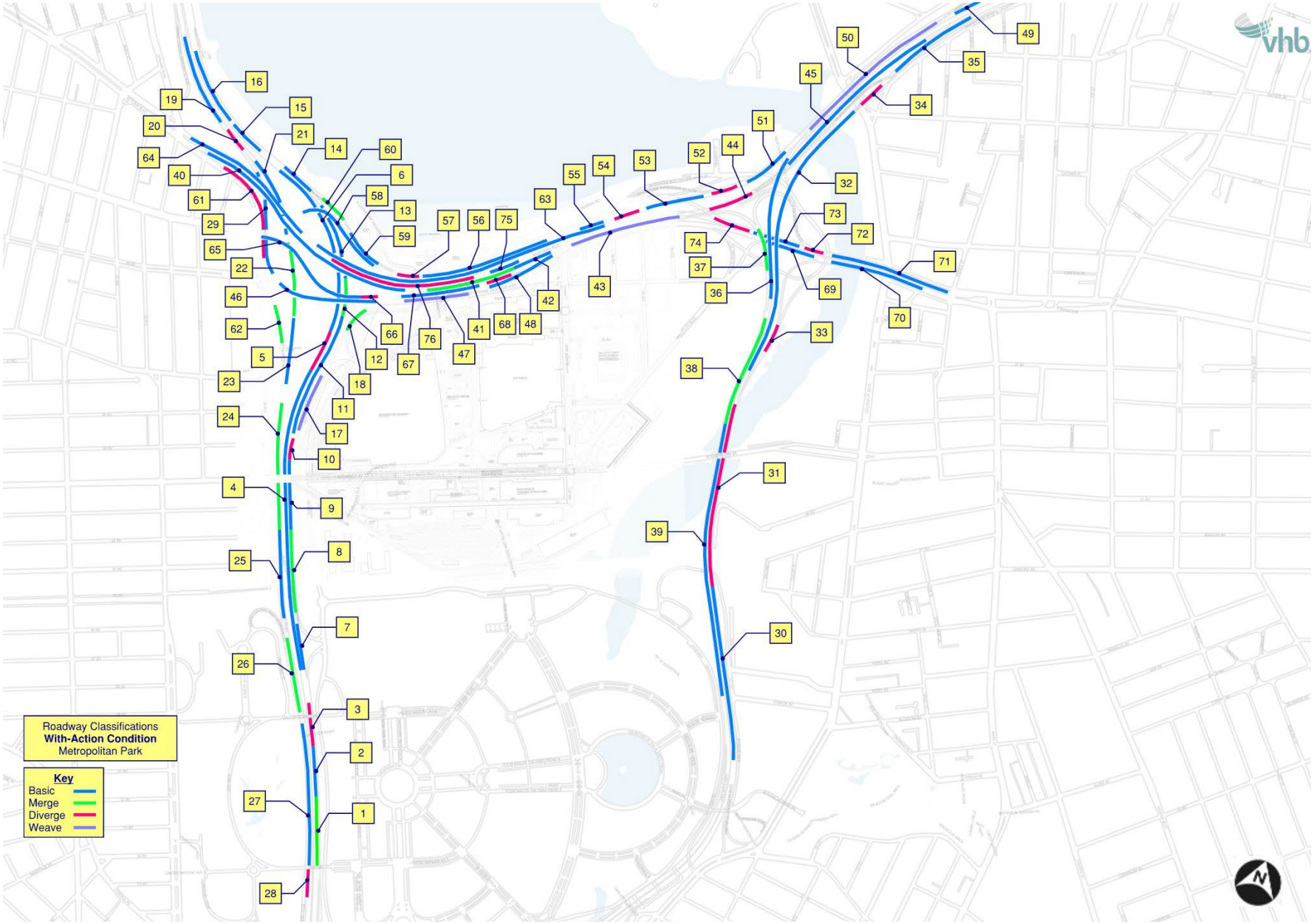
Table 14-10 Study Area Highway Segments Selected for Detailed Traffic Analysis

Location #	Mainline	Direction	Name	Facility Type
41	Whitestone Exp	EB	Whitestone Expressway EB Inner east of ramps from Astoria Boulevard and Northern Boulevard	Merge
42	Whitestone Exp	EB	Whitestone Expressway EB Inner west of ramp from Whitestone Expressway EB Outer	Basic
43	Whitestone Exp	EB	Whitestone Expressway EB west of ramp to VWE SB	Weave
44	Whitestone Exp	EB	Whitestone Expressway EB south of Exit 14	Diverge
45	Whitestone Exp	EB	Whitestone Expressway EB south of ramp from VWE NB	Basic
46	Whitestone Exp	EB	Astoria Boulevard EB and GCP EB ramp to Whitestone Expressway EB Outer	Basic
47	Whitestone Exp	EB	Whitestone Expressway EB Outer west of split to Inner/Northern Boulevard EB	Weave
48	Whitestone Exp	EB	Whitestone Expressway EB Outer ramp to Whitestone Expressway EB	Basic
49	Whitestone Exp	WB	Whitestone Expressway WB north of ramp from Service Road/Linden Place	Basic
50	Whitestone Exp	WB	Whitestone Expressway WB north of ramp to VWE SB	Weave
51	Whitestone Exp	WB	Whitestone Expressway WB south of ramp to VWE SB	Basic
52	Whitestone Exp	WB	Whitestone Expressway WB north of Exit 13D	Diverge
53	Whitestone Exp	WB	Whitestone Expressway WB south of Exit 13D	Basic
54	Whitestone Exp	WB	Whitestone Expressway WB east of Exit 13A/13B-C Split	Diverge
55	Whitestone Exp	WB	Whitestone Expressway WB Exit 13B-C Ramp	Basic
56	Whitestone Exp	WB	Whitestone Expressway WB west of ramp from Northern Boulevard/VWE NB	Basic
57	Whitestone Exp	WB	Whitestone Expressway WB east of GCP EB/WB Split	Diverge
58	Whitestone Exp	WB	Whitestone Expressway WB ramp to GCP EB	Basic
59	Whitestone Exp	WB	Whitestone Expressway WB ramp to GCP WB	Basic

Table 14-10 Study Area Highway Segments Selected for Detailed Traffic Analysis

Location #	Mainline	Direction	Name	Facility Type
60	Whitestone Exp	WB	GCP WB Outer ramp from Whitestone Expressway WB and Marina Road	Merge
61	Astoria Blvd	EB	Astoria Boulevard ramp to GCP EB and Whitestone Expressway EB Outer	Diverge
62	Astoria Blvd	EB	Astoria Boulevard and 34th Avenue ramp to GCP EB	Merge
63	Astoria Blvd	WB	Whitestone Expressway WB ramp to Astoria Boulevard (exit 13A)	Basic
64	Astoria Blvd	WB	Whitestone Expressway WB and Northern Boulevard WB ramp to Astoria Boulevard	Basic
65	Northern Blvd	EB	Northern Boulevard EB east of 114th Street	Basic
66	Northern Blvd	EB	Northern Boulevard EB west of ramp to Whitestone Expressway EB	Diverge
67	Northern Blvd	EB	Northern Boulevard EB east of ramp to Whitestone Expressway EB	Basic
68	Northern Blvd	EB	Northern Boulevard EB west of ramp to 126th Street/Seaver Way	Diverge
69	Northern Blvd	EB	Northern Boulevard EB west of ramp from VWE NB	Basic
70	Northern Blvd	EB	Northern Boulevard EB east of ramp from VWE NB	Basic
71	Northern Blvd	WB	Northern Boulevard WB west of Prince Street	Basic
72	Northern Blvd	WB	Northern Boulevard WB east of ramp to VWE SB and Whitestone Expressway WB	Diverge
73	Northern Blvd	WB	Northern Boulevard WB west of ramp to VWE SB and Whitestone Expressway WB	Basic
74	Northern Blvd	WB	Northern Boulevard WB east of off-ramp to Whitestone Expressway WB	Diverge
75	Northern Blvd	WB	Northern Boulevard WB west of ramp to Marina Road	Basic
76	Northern Blvd	WB	Northern Boulevard WB west of ramp from Marina Road	Diverge

Figure 14-5 Study Area Highway Segments Selected for Detailed Traffic Analysis



Subway

Based on the subway transit assignments, a subway station analysis was performed at the Mets – Willets Point subway station. The analysis evaluated a Baseline Scenario which would include the existing station configuration, as well as a Station Improvements Scenario with proposed station element enhancements. Additionally, line-haul analyses have been performed for the No. 7 subway line. These were conducted for non-gameday weekday AM and PM peak hours, the gameday weekday PM peak hour, the gameday Saturday PM Pre-game peak hour, and the gameday Saturday PM Post Game peak hour.

Buses

As shown in **Table 14-11**, one bus route, the Q48 , serves the Proposed Project study area and is expected to experience 50 or more new passenger trips in one direction in at least one peak hour, as a result of project-generated bus trips and therefore required further analysis. An additional two bus routes, the Q19 and Q66, also serve the Proposed Project study area and have been included for further analysis. The bus line-haul analysis was conducted for commuter weekday AM and PM peak periods, as well as a Saturday PM peak period.

Table 14-11 Project-Generated Bus Trips By Route

		Weekday AM Peak Hour			Weekday PM Peak Hour			Saturday PM Peak Hour		
Bus Route	**Direction**	**In**	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
Q19	EB	5	0	5	18	0	18	11	0	11
	WB	0	0	0	0	0	0	0	0	0
Q48	EB	61	19	80	140	169	309	68	115	183
	WB	128	12	140	289	101	390	140	70	210
Q66	EB	5	0	5	18	0	18	11	0	11
	WB	0	0	0	0	0	0	0	0	0

Note: Highlighted cells denote 50 or more incremental trips per direction

Pedestrians

Based on the pedestrian assignments described above, detailed pedestrian level of service analyses are needed at the following 38 pedestrian elements (crosswalks, corners, and sidewalks). An additional three pedestrian elements have been evaluated at intersections that would be reconfigured as part of the Proposed Project roadway improvements described above. The elements include:

Crosswalk and Corners

- 126th Street/Seaver Way and 34th Avenue (east, south, and west crosswalks, southeast and southwest corners)
- 126th Street/Seaver Way and Roosevelt Avenue (all crosswalks and corners)
- Roosevelt Avenue and Subway Station (north, east, and west)
- Roosevelt Avenue and 114th Street (all crosswalks, northwest and southwest corners)
- Roosevelt Avenue and Stadium Place (south crosswalk, With-Action only)

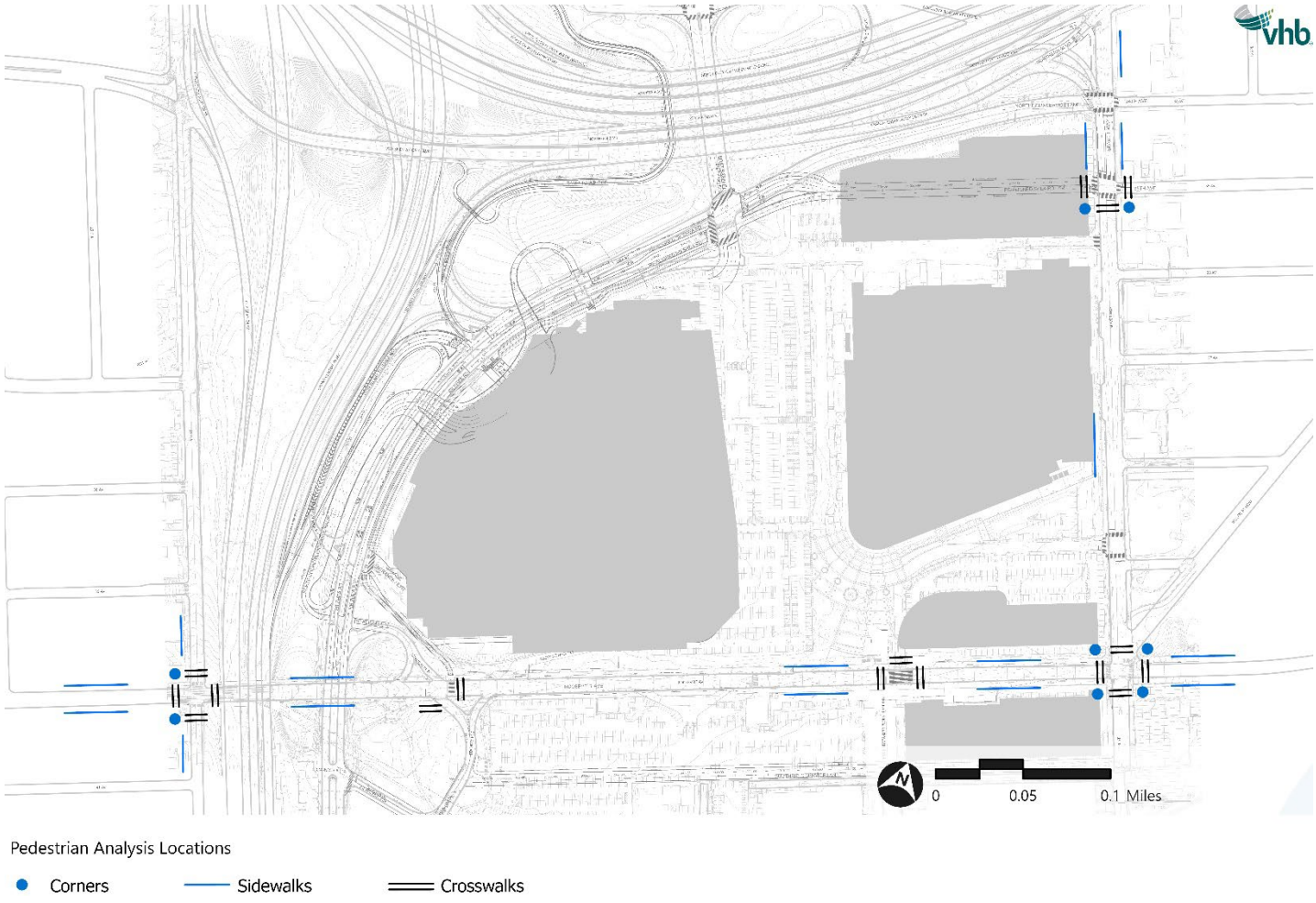
Sidewalks

- 114th Street between 39th Avenue and Roosevelt Avenue (west side)
- 114th Street between Roosevelt Avenue and 41st Avenue (west side)
- 126th Street/Seaver Way between Northern Boulevard and 34th Avenue (east side)
- 126th Street/Seaver Way between 34th Avenue and 35th Avenue (east side)
- 126th Street/Seaver Way between 34th Avenue and Citi Field Entrance 11 (west side)
- 126th Street/Seaver Way between 36th Avenue and Citi Field Entrance 1 (west side)
- Roosevelt Avenue between 112th Street and 114th Street (north side)
- Roosevelt Avenue between 112th Street and 114th Street (south side)
- Roosevelt Avenue between 114th Street and Shea Road (north side)
- Roosevelt Avenue between 114th Street and Shea Road (south side)
- Roosevelt Avenue between Shea Road and Subway Station (north side)
- Roosevelt Avenue between Shea Road and Subway Station (south side)
- Roosevelt Avenue between Subway Station and 126th Street/Seaver Way (north side)
- Roosevelt Avenue between Subway Station and 126th Street/Seaver Way (south side)
- Roosevelt Avenue between 126th Street/Seaver Way and Flushing Creek (north side)
- Roosevelt Avenue between 126th Street/Seaver Way and Flushing Creek (south side)

These locations were selected as they serve as key links between the Development Site and the surrounding street system and would be used by concentrations of project-generated pedestrian demand linked to other modes (i.e. en route to and from bus stops, the Southfield parking structure, etc).

The pedestrian study area is shown **Figure 14-6**. Pedestrian analyses for these elements was conducted for non-gameday weekday AM, midday, PM peak hours, the non-gameday Saturday PM peak hour, the gameday weekday PM peak hour, the gameday Saturday PM Pre-game peak hour, Saturday PM Post Game peak hour, and the gameday Sunday midday and PM peak hours.

Figure 14-6 Pedestrian Analysis Locations



Detailed Analysis Methodology

This section describes the methodology used for the detailed traffic, subway, and pedestrian analyses.

Traffic

Local Street Network

The local street network traffic analyses were coordinated with NYCDOT and take into account other nearby projects based on NYCDOT guidance.

The operation of all signalized and unsignalized intersection analysis locations were assessed using Synchro software which are based on methodologies presented in the *Highway Capacity Manual (HCM)*. The HCM procedures evaluate the levels of service (LOS) for signalized and unsignalized intersections using average stop control delay, in seconds per vehicle, as described below.

- LOS A describes operations with very low delays, i.e., 10.0 seconds or less per vehicle. This occurs when signal progression is extremely favorable, and most vehicles arrive during the green phase. Most vehicles do not stop at all.
- LOS B describes operations with delays in excess of 10.0 seconds up to 20.0 seconds per vehicle. This generally occurs with good progression and/or short cycle lengths. Again, most vehicles do not stop at the intersection.
- LOS C describes operations with delays in excess of 20.0 seconds up to 35.0 seconds per vehicle. These higher delays may result from fair progression and/or longer cycle lengths. The number of vehicles stopping is noticeable at this level, although many still pass through the intersection without stopping.
- LOS D describes operations with delays in excess of 35.0 seconds up to 55.0 seconds per vehicle. At LOS D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume-to-capacity (v/c) ratios. Many vehicles stop, and the proportion of vehicles not stopping declines.
- LOS E describes operations with delays in excess of 55.0 seconds up to 80.0 seconds per vehicle. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios.
- LOS F describes operations with delays in excess of 80.0 seconds per vehicle. This is considered to be unacceptable to most drivers. This condition often occurs with oversaturation, i.e., when arrival flow rates exceed the capacity of the intersection. It may also occur at high v/c ratios with cycle failures. Poor progression and long cycle lengths may also contribute to such delays. Often, vehicles do not pass through the intersection in one signal cycle.

Based on the *CEQR Technical Manual* guidelines, LOS A, B, and C are considered clearly acceptable conditions, LOS D is generally considered tolerably acceptable in dense urban environments, and LOS E and F indicate congestion. These guidelines are applicable to individual traffic movements and overall intersection levels of service.

For unsignalized intersections, delay is defined as the total elapsed time from when a vehicle stops at the end of the queue until the vehicle departs from the stop line: LOS A describes operations with very low delay, i.e., 10.0 seconds or less per vehicle; LOS B describes operations with delays in excess of 10.0 seconds up to 15.0 seconds; LOS C has delays in excess of 15.0 seconds up to 25.0 seconds; LOS D, excess of 25.0 seconds up to 35.0 seconds per vehicle; and LOS E, excess of 35.0 seconds up to 50.0 seconds per vehicle, which is considered to be the limit of acceptable delay. LOS F describes operation with delays in excess of 50.0 seconds per vehicle, which is considered unacceptable to most drivers. This condition exists when there are insufficient gaps of suitable size in a major vehicular traffic stream to allow side street traffic to cross safely. Based on *CEQR Technical Manual* guidelines, LOS A, B, C, and D are considered acceptable for unsignalized intersections.

Significant Impact Criteria

The assessment of potential significant traffic impacts of a proposed project is based on significant impact criteria defined in the *CEQR Technical Manual*. If a lane group in the future With-Action condition is within acceptable LOS A, B, C, or D, the impact is not considered significant.

For a lane group at With-Action LOS E, an increase in projected delay of 5.0 or more seconds compared to the No-Action condition is considered a significant impact. For a lane group at With-Action LOS F, an increase in projected delay of 4.0 seconds compared to the No-Action condition is

considered a significant impact. For unsignalized intersections, for the minor street to generate a significant impact, 90 passenger car equivalents (PCEs) must be identified in the With-Action condition in any peak hour.

Highway Network

Highway segments are categorized as a basic, merge, diverge, or weave segment based on *Highway Capacity Manual* (*HCM*) criteria. The operation of all study area highway segments are assessed using a Vissim micro-simulation model, because this software is able to replicate the influence that entrance and exit ramps serving the Proposed Project have on the immediately adjacent segments of the Grand Central Parkway, Van Wyck Expressway, and Whitestone Expressway, particularly when modeling traffic conditions before and after Mets games. The software also provides the capability to model complex interchange configurations that other traditional software packages are not able to properly analyze.

The Vissim model reports the average speed of each segment being analyzed and its density in passenger cats per mile per lane (lc/mi/ln). The 2000 *Highway Capacity Manual* defines levels of service thresholds using density for basic freeway segments, freeway weaving, merge, and diverge segments, and weaving segments on collector-distributor roadways; these thresholds have been used for the assessment of vehicular traffic on the highway network. The levels of service are described qualitatively below:

- LOS A describes operations with very low densities and high free flow speeds.
- LOS B describes operations with fairly low densities and moderate to high free flow speeds.
- LOS C describes operations with moderate densities and moderate free flow speeds.
- LOS D describes operations with moderate to high densities and moderate to low free flow speeds. A mid-LOS D density (i.e. 30.5 pc/mi/ln for basic freeway segments, and 31.5 pc/mi/ln for freeway weaving, merge, and diverge segments) is considered the high range of acceptable density. Densities greater than mid-LOS D are unacceptable but are commonplace in New York City.
- LOS E describes operations with high densities and low free flow speeds. A maximum of 45 pc/mi/ln is considered the maximum density for sustained flows at capacity on a typical base freeway segment. Queueing can begin at densities higher than this.
- LOS F describes operations with very high densities and very low free flow speeds. Queueing is common within LOS F, which leads to failure conditions and congestions.

Density thresholds for each level of service in terms of passenger cars per mile per lane are defined in **Table 14-12**.

Table 14-12 Level of Service Criteria for Highway Network Segments

	Density (pc/mi/ln)			
LOS	**Basic Freeway Segment**	**Freeway Weaving Segment**	**Freeway Merge/Diverge Areas**	**Collector-Distributor Weaving Segment**
A	≤11	≤10	≤10	≤12
B	>11-18	>10-20	>10-20	>12-24
C	>18-26	>20-28	>20-28	>24-32
D	>26-35	>28-35	>28-35	>32-36
E	>35-45	>35-43	>35	>36-40
F	>45	>43	Demand exceeds capacity	>40

Source: Transportation Research Board. *Highway Capacity Manual,* 2000.

Significant Impact Criteria

According to the *CEQR Technical Manual,* the determination of significant adverse impacts for freeway facilities is based on a deterioration of density in pc/mi/ln.

Basic Freeway Segments

- If the level of service under the No-Action condition is LOS D, an increase in the projected density of five or more passenger cars per mile per lane (pc/mi/ln) under the With-Action condition should be considered a significant impact
- If the level of service under the No-Action condition is LOS E, an increase in the projected density of four or more passenger cars per mile per lane (pc/mi/ln) under the With-Action condition should be considered a significant impact
- If the level of service under the No-Action condition is LOS F, an increase in the projected density of three or more passenger cars per mile per lane (pc/mi/ln) under the With-Action condition should be considered a significant impact

Freeway Weaving and Freeway Merge and Diverge Segments

- If the level of service under the No-Action condition is LOS D, an increase in the projected density of four or more passenger cars per mile per lane (pc/mi/ln) under the With-Action condition should be considered a significant impact
- If the level of service under the No-Action condition is LOS E, an increase in the projected density of three or more passenger cars per mile per lane (pc/mi/ln) under the With-Action condition should be considered a significant impact
- If the level of service under the No-Action condition is LOS F, an increase in the projected density of two or more passenger cars per mile per lane (pc/mi/ln) under the With-Action condition should be considered a significant impact

Parking

The parking analysis identifies the extent to which off-street parking is available and utilized under existing and future conditions. It takes into consideration anticipated changes in area parking supply

and provides a comparison of parking needs versus availability to determine if a parking shortfall is likely to result from additional demand generated by the Proposed Project. This analysis typically encompasses a study area within a quarter mile of the Development Site. If the analysis concludes that there would be a shortfall in parking within the quarter-mile study area, the study area may be extended to a half-mile to identify additional parking supply.

For proposed projects located in Manhattan or other CBD areas, the inability of the proposed project or the surrounding area (on-street and off-street) to accommodate the project's future parking demand is considered a parking shortfall but is generally not considered significant due to the magnitude of available alternative modes of transportation. For other areas in New York City, a parking shortfall that exceeds more than half the available on-street and off-street parking spaces within a quarter mile of the Development Site may be considered significant. Additional factors, such as the availability and extent of transit in the area and the patterns of automobile usage by area residents, could be considered to determine the significance of the identified parking shortfall. If there is an adequate parking supply within a half-mile of the Development Site, the projected parking shortfall may not be considered significant.

Transit

The *CEQR Technical Manual* provides methodologies to assess several components of transit operations including the line-haul capacities of bus and subways lines, and the capacity of subway station circulation elements including stairways, escalators, passageway, and fare controls (turnstiles, high entry/exit turnstiles [HEETs], and high exit turnstiles [HXTs]).

Subway Station Elements

Subway station elements are assessed based on the ratio of passenger volume and the capacity of the element (the v/c ratio). The v/c ratio criteria are used to determine the levels of service which are shown in **Table 14-13**. LOS A and LOS B depict free flow and fluid flow conditions, respectively, at a subway station element. Station elements operating at LOS C still exhibit fluid flow but pedestrian activities begin to become somewhat restricted. When conditions become crowded and there is restriction to walking speeds, the station element is considered to be operating at LOS D. At LOS E the station element is considered to be congested. There is shuffling and frequent interactions between pedestrians which result in some queueing. Severe congestion with constant queuing signifies that a station element is operating at LOS F.

Table 14-13 Level of Service Criteria for Subway Station Elements

LOS	v/c Ratio
A	0.00 to 0.45
B	0.45 to 0.70
C	0.70 to 1.00
D	1.00 to 1.33
E	1.33 to 1.67
F	Above 1.67

Source: *2021 CEQR Technical Manual*

Stairways and passageways are analyzed based on the width of the station element and the 15-minute pedestrian flow passing through. These analyses also take into account pedestrian surging resulting from an arriving train or platooning volumes from a major attraction such as a stadium or school (the effect of surging can reduce capacity by up to 25 percent) and friction from pedestrian interactions (the effect of friction can reduce capacity by up to 10 percent). Other station elements including escalators and turnstiles are measured against the operational capacities designated by New York City Transit (NYCT).

Significant Impact Criteria

Significant impacts to stairs and passageways are determined by the width increment threshold (WIT) between the No-Action and With-Action conditions for elements operating at v/c ratios greater than 1.0 in the With-Action condition. The WIT for significant impacts is detailed in **Table 14-14** below. If a stairway or passageway is significantly impacted, mitigation measures identified would need to restore the levels of service back to the No-Action levels of service or to a v/c ratio of 1.0. For escalators and turnstile elements, a With-Action v/c ratio of 1.0 or greater when the No-Action v/c ratio was less than 1.0 is considered a significant impact. For these elements where the No-Action v/c ratio is already in excess of 1.0, an incremental change in the v/c ratio of 0.01 would be considered a significant impact.

Table 14-14 Significant Impact Guidance for Stairs and Passageways

No-Action v/c Ratio	Width Increment Threshold (WIT) for Significant Impacts (Inches)	
	Stairway	Passageway
1.00 to 1.09	8.0	13.0
1.10 to 1.19	7.0	11.5
1.20 to 1.29	6.0	10.0
1.30 to 1.39	5.0	8.5
1.40 to 1.49	4.0	6.0
1.50 to 1.59	3.0	4.5
1.60 and up	2.0	3.0

Source: *2021* CEQR Technical Manual

Subway Line-Haul Capacity

Line-haul capacity analyses address the ability of a subway line to accommodate passenger loads at the maximum load point, or the point where the addition of project-generated passengers would be the highest. These analyses are needed when the With-Action increase in passengers surpasses the *CEQR Technical Manual* threshold. For subway cars, the threshold is five or more passengers per subway train car.

NYCT operates six different types of subway train cars with maximum peak period loading capacities ranging from 110 passengers to 175 passengers per car. The capacity of each car assumes full occupancy of all seats and approximately 3 square feet of standing room per passenger.

Buses

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 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

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, considering fiscal and operational constraints.

Pedestrians

Pedestrian level of service standards are determined on the basis of walking speed, pedestrian spacing, and probabilities of pedestrian and vehicular conflict, and are assessed based on the methodologies presented in the *2010 Highway Capacity Manual* and the *CEQR Technical Manual*. These standards are primarily based on the space needs of people involved in various activities and are widely used for planning and design of facilities for pedestrians. Analysis of crosswalks, street corners, and sidewalks along key walking paths to and from the Development Site were performed to assess the adequacy of these pedestrian elements.

To evaluate sidewalks, the pedestrian flow per unit width (p/ft/min) is calculated based on the pedestrian flow and the effective walkway width.[9] The analysis of sidewalk conditions should consider "platoon" flow as is considered more representative of pedestrian activities within New York City. Platooning occurs when pedestrians move in groups or "platoons" as a result of pedestrian metering from a traffic signal, or from attractions such as subway stations or bus stops. The ratio of the walking speed[10] over the pedestrian flow per unit width determines the average pedestrian space (sf/p).

Crosswalk conditions are expressed as a measurement of the area available (the area consists of the crosswalk width multiplied by the crossing distance) and available pedestrian crossing time. The pedestrian flow is compared to the "time-space" available to determine the crosswalk level of service which is expressed as square feet per pedestrian (sf/p). This analysis also takes account of pedestrian conflicts in the crosswalk with turning vehicles.

Similar to crosswalks, street corners must provide sufficient space for a mix of standing pedestrians (queued to cross a street) and circulating pedestrians (crossing the other street or passing around the corner). The analysis applies a measure of time and space availability based on the area of the

[9] The effective walkway width is the space along the walkway that pedestrians could use that is free of obstruction. This width also takes account of the "shy distance" (the space between pedestrians and the obstacle such as a wall or building façade).

[10] The typical average pedestrian walking speed specified in the *2021 CEQR Technical Manual* is 3.5 feet per second (ft/s). For intersections with school crosswalks or that are located within the Senior Pedestrian Focus Areas, an average pedestrian walking speed of 3.0 ft/s is used.

corner reservoir, pedestrian crossing time available, and the estimated time used by circulating pedestrians.

The level of service standards for pedestrian elements are based on the time and space available per pedestrian during the analysis period. Level of service 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 14-15** defines the level of service criteria for crosswalks, corner area, and sidewalk conditions, as per the *2010 HCM*. The *CEQR Technical Manual* identifies acceptable levels of service in non-Central Business District (CBD) areas (such as the area in this study) as LOS C or better, and mid-LOS D or better for CBD areas. The pedestrian analysis study area includes both CBD and non-CBD areas.

Table 14-15 Level-of-Service Criteria for Pedestrian Elements

	Sidewalks	Corner Reservoirs and Crosswalks
LOS	**Platoon Flow**	
A	> 530 sf/p	> 60 sf/p
B	> 90 and ≤ 530 sf/p	> 40 and ≤ 60 sf/p
C	> 40 and ≤ 90 sf/p	> 24 and ≤ 40 sf/p
D	> 23 and ≤ 40 sf/p	> 15 and ≤ 24 sf/p
E	> 11 and ≤ 23 sf/p	> 8 and ≤ 15 sf/p
F	≤ 11 sf/p	≤ 8 sf/p

Significant Impact Criteria

The identification of significant pedestrian impacts is dependent on the area type (CBD or non-CBD) and is determined by the decrease of time and space available for pedestrians between the No-Action and With-Action conditions. Based on guidance provided by NYC DOT, the Project Area analysis locations west of 114th Street are classified as being located in a CBD area. East of 114th Street, the Project Area analysis locations are classified as being located in a non-CBD area. The *CEQR Technical Manual* identifies significant impacts for the pedestrian sidewalk, crosswalk, and corner elements on a sliding scale detailed below. With-Action pedestrian level of service that is considered acceptable (LOS C or better in non-CBD areas, and mid-LOS D or better in CBD areas) would not have a potential for significant impacts.

For sidewalks, the assessment of potential significant impacts is based on a sliding-scale formula provided in the *CEQR Technical Manual*. Consideration as to whether the sidewalk being analyzed is in a CBD or non-CBD condition is necessary.

For sidewalks, the formula to determine if the decrease in pedestrian space would trigger a significant impact is $Y \geq X / (9.5 - 0.321)$, where Y is the decrease in pedestrian space (sf/p) to be considered a potential significant impact and X is the No-Action pedestrian space (sf/p). If the decrease in pedestrian space is greater than Y and the With-Action level of service is considered to be unacceptable, the sidewalk is considered to be significantly impacted. **Table 14-16** and **Table 14-17** provides a summary of the sliding-scale guidelines provided in the *CEQR Technical Manual*.

For corners and crosswalks, the assessment of potential significant impacts is also based on a sliding-scale formula provided in the *CEQR Technical Manual*. The formula used to determine the decrease in pedestrian space from the No-Action to With-Action condition that would trigger a significant

impact is Y ≥ (X / 9.0) – 0.31, where Y is the decrease in pedestrian space (sf/p) to be considered a potential significant impact and X is the No-Action pedestrian space (sf/p). If the decrease in pedestrian space is greater than Y and the With-Action level of service is considered to be unacceptable, the corner or crosswalk is considered to be significantly impacted. **Table 14-18** and **Table 14-19** provides a summary of the sliding-scale guidelines provided in the *CEQR Technical Manual*.

Table 14-16 Significant Impact Criteria for Sidewalks – Non-CBD Areas

No-Action Ped Space (sf/p)	With-Action Ped Space Reduction (sf/p)	No-Action Ped Space (sf/p)	With-Action Ped Space Reduction (sf/p)
≥ 44.3	With-Action Condition ≤40.0	24.5 to 25.3	≥ 2.3
43.5 to 44.2	≥ 4.3	23.5 to 24.4	≥ 2.2
42.5 to 43.4	≥ 4.2	22.6 to 23.4	≥ 2.1
41.6 to 42.4	≥ 4.1	21.6 to 22.5	≥ 2.0
40.6 to 41.5	≥ 4.0	20.7 to 21.5	≥ 1.9
39.7 to 40.5	≥ 3.9	19.7 to 20.6	≥ 1.8
38.7 to 39.6	≥ 3.8	18.8 to 19.6	≥ 1.7
37.8 to 38.6	≥ 3.7	17.8 to 18.7	≥ 1.6
36.8 to 37.7	≥ 3.6	16.9 to 17.7	≥ 1.5
35.9 to 36.7	≥ 3.5	15.9 to 16.8	≥ 1.4
34.9 to 35.8	≥ 3.4	15.0 to 15.8	≥ 1.3
34.0 to 34.8	≥ 3.3	14.0 to 14.9	≥ 1.2
33.0 to 33.9	≥ 3.2	13.1 to 13.9	≥ 1.1
32.1 to 32.9	≥ 3.1	12.1 to 13.0	≥ 1.0
31.1 to 32.0	≥ 3.0	11.2 to 12.0	≥ 0.9
30.2 to 31.0	≥ 2.9	10.2 to 11.1	≥ 0.8
29.2 to 30.1	≥ 2.8	9.3 to 10.1	≥ 0.7
28.3 to 29.1	≥ 2.7	8.3 to 9.2	≥ 0.6
27.3 to 28.2	≥ 2.6	7.4 to 8.2	≥ 0.5
26.4 to 27.2	≥ 2.5	6.4 to 7.3	≥ 0.4
25.4 to 26.3	≥ 2.4	≤ 6.3	≥ 0.3

Source: *2021 CEQR Technical Manual*

Table 14-17 Significant Impact Criteria for Sidewalks – CBD Areas

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

Source: *2021 CEQR Technical Manual*

Table 14-18 Significant Impact Criteria for Corners and Crosswalks - Non-CBD Areas

No-Action Ped Space (sf/p)	With-Action Ped Space Reduction (sf/p)	No-Action Ped Space (sf/p)	With-Action Ped Space Reduction (sf/p)
≥ 26.6	With-Action Condition ≤24.0		
25.8 to 26.5	≥ 2.6	14.1 to 14.9	≥ 1.3
24.9 to 25.7	≥ 2.5	13.2 to 14.0	≥ 1.2
24.0 to 24.8	≥ 2.4	12.3 to 13.1	≥ 1.1
23.1 to 23.9	≥ 2.3	11.4 to 12.2	≥ 1.0
22.2 to 23.0	≥ 2.2	10.5 to 11.3	≥ 0.9
21.3 to 22.1	≥ 2.1	9.6 to 10.4	≥ 0.8
20.4 to 21.2	≥ 2.0	8.7 to 9.5	≥ 0.7
19.5 to 20.3	≥ 1.9	7.8 to 8.6	≥ 0.6
18.6 to 19.4	≥ 1.8	6.9 to 7.7	≥ 0.5
17.7 to 18.5	≥ 1.7	6.0 to 6.8	≥ 0.4
16.8 to 17.6	≥ 1.6	5.1 to 5.9	≥ 0.3
15.9 to 16.7	≥ 1.5	≤ 5.0	≥ 0.2
15.0 to 15.8	≥ 1.4		

Source: *2021 CEQR Technical Manual*

Table 14-19 Significant Impact Criteria for Corners and Crosswalks - CBD Areas

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

Source: *2021 CEQR Technical Manual*

Vehicle and Pedestrian Safety

An evaluation of vehicular and pedestrian safety is necessary for locations within the traffic and pedestrian study areas that have been identified as high-crash locations – defined as Vision Zero high priority intersections, or intersections where five or more pedestrian/bicyclist injury crashes occurred in any consecutive 12 months of the most recent three-year period for which data are available. Additionally, any location along a Vision Zero priority corridor where three or more pedestrian/bicyclist injury crashes occurred in any consecutive 12 months of the most recent three-year period should also be identified as a high crash location. For these locations, crash trends are identified to determine whether projected vehicular and pedestrian traffic would further impact safety at these locations. The determination of potential significant safety impacts depends on the type of area where the Proposed Project is located, traffic volumes, crash types and severity, and other contributing factors. Where appropriate, measures to improve traffic and pedestrian safety are identified.

Existing Conditions

Traffic

Local Roadway Network

The Development Site is surrounded by several key roadways in the Flushing section of Queens – Northern Boulevard to the north, Roosevelt Avenue to the south, 126th Street/Seaver Way to the east, and 108th Street and 114th Street to the west. Additionally, there are several key roadways within the Development Site along Shea Road, Olmsted Drive, Stadium Place North, and Stadium Place South. The overall study area is also comprised of a network of local roadways within Downtown Flushing between Astoria Boulevard, Northern Boulevard, and Roosevelt Avenue, as well

as between 108th Street and 126th Street/Seaver Way. The physical and operational characteristics of the major roadways within the local roadway network are described below:

Astoria Boulevard

Astoria Boulevard is a major corridor that travels east-west between western Queens and the Grand Central Parkway and Van Wyck Expressway. It typically has two to three lanes in each direction with curbside parking and is generally divided with a raised median.

Northern Boulevard

Northern Boulevard is a primary corridor within the study area and travels east-west, connecting the Grand Central Parkway and the Van Wyck Expressway as well as serving as a connection between western and eastern Queens. The corridor generally has two lanes in each direction throughout Downtown Flushing and Corona with curbside parking on both sides. It is mostly undivided except for the section between Prince Street and Bowne Street where the eastbound and westbound approaches are separated by a median designated for parking and green space. West of Prince Street, Northern Boulevard transforms into a viaduct crossing the Flushing River, and connects to the Grand Central parkway on-ramps and off-ramps, as well as the Van Wyck Expressway.

Roosevelt Avenue

Roosevelt Avenue extends east-west from Corona to Flushing, Queens, with moderate traffic volumes. West of 114th Street, Roosevelt Avenue generally has one lane in each direction with curbside parking. Between 114th Street and Main Street, the corridor increases to two lanes in each direction with no parking. East of Main Street, Roosevelt Avenue transitions to one lane in each direction with curbside parking and loading. Transit lines traveling parallel to the Roosevelt Avenue corridor include the elevated No. 7 subway line and Q48 bus route.

College Point Boulevard

College Point Boulevard is a north-south corridor area that connects the Long Island Expressway to the Whitestone Expressway and Van Wyck Expressway. The corridor generally has two lanes in each direction with parking and is divided with a painted median between Northern Boulevard and Roosevelt Avenue.

Prince Street

Prince Street is a minor north-south street and generally has one lane in each direction. It connects to major corridors such as Roosevelt Avenue and Northern Boulevard, as well as other cross streets in the Downtown Flushing area.

Main Street

Main Street is a primary corridor within the Downtown Flushing area; it extends from Northern Boulevard to south of the Long Island Expressway and Queens neighborhoods southeast of the study area. The majority of the corridor contains dedicated bus lanes, as well as a busway along the segment between Northern Boulevard and Sanford Avenue. Between this segment, bus and commercial trucks are allowed through access; private vehicles are permitted local access and must

make immediate right turns off the busway. In addition to the busway, activity along the corridor within the study area is attributed to retail use and high pedestrian density.

Union Street

Union Street is a minor north-south street within the study area that connects to major corridors such as Roosevelt Avenue and Northern Boulevard. It generally has one to two travel lanes in each direction with curbside parking.

Parsons Boulevard

Parsons Boulevard is a primary north-south residential corridor within the study area. It generally has one travel lane in each direction with parking.

108th Street

108th Street is a north-south residential corridor with one travel lane in each direction with parking and extends from Astoria Boulevard to south of Roosevelt Avenue.

111th Street

111th Street is a one-way northbound street in the Corona neighborhood on Queens. It generally has one moving lane with curbside parking and connects Roosevelt Avenue to Astoria Boulevard.

114th Street

114th Street is a one-way southbound street between 112th Street and 34th Avenue. South of this segment, this corridor is a two-way street through Roosevelt Avenue with one travel lane in each direction. This street provides access to the Grand Central Parkway eastbound at 34th Avenue and carries high traffic volumes toward the on-ramp; traffic volumes are lower south of the on-ramp.

126th Street/Seaver Way

126th Street/Seaver Way is a primary corridor for Development Site ingress and egress and borders Citi Field and the Special Willets Point District. The roadway generally has two lanes in each direction. On non-gamedays, traffic volumes are low along the corridor; however, on gamedays during pre-game and post-game peak hours, volumes are significantly higher, and traffic agents are present at key intersections such as Shea Road/34th Avenue.

Shea Road

Shea Road provides access and circulation within the Citi Field stadium and would also serve as a primary roadway for the Proposed Project. West of Boat Basin Place, Shea Road is a park road and is not mapped right of way. The roadway generally has two lanes in each direction and connects the portion of Flushing Meadows Corona Park south of Roosevelt Avenue to the Grand Central Parkway, Whitestone Expressway, and 126th Street/Seaver Way at 34th Avenue. Shea Road is generally comprised of unsignalized intersections, with the exception of its intersections at Boat Basin Place and 126th Street/Seaver Way. Specific traffic control measures are implemented on gamedays which alter the operations along the roadway and are described in further detail below.

Peak Hour Selection and Operations

An extensive traffic data collection program was conducted in September and October 2022, May 2023, and May 2024 to compile data and observations necessary to establish the existing conditions traffic volume network. Traffic volume data collected included 24-hour Automatic Traffic Recorder data as well as peak-period turning movement counts (TMC), vehicle classification, and conflicting pedestrian and bicycle counts.

The non-gameday weekday AM, midday, PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and the gameday Sunday midday, and PM peak hour existing condition traffic networks were established to serve as the analysis baseline from which the future projected conditions could be derived from. Per the *CEQR Technical Manual* guidelines, traffic analyses are conducted for specific peak hours where project generated trips are expected to be highest and where the potential effects of the project would be greatest. The analysis peak hours were selected based on the TMC counts that were conducted during the non-gameday weekday AM, midday, PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and the gameday Sunday midday, and PM peak periods. According to the traffic volume data, the peak hours were determined to be 8:00 to 9:00 AM, 1:00 to 2:00 PM, 5:00 to 6:00 PM, and 7:00 to 8:00 PM for the non-gameday weekday AM, midday, PM, and Saturday PM peak hours. For gameday weekday PM, Saturday PM Pre-game, Saturday PM Post Game, Sunday midday and Sunday PM; the peak hours were determined to be 5:00 to 6:00 PM, 6:00 to 7:00 PM, 6:30 to 7:30 PM, 1:00 to 2:00 PM, and 5:00 to 6:00 PM, respectively. Figures in **Appendix D** show existing traffic volumes during the nine peak analysis hours.

During the gameday weekday PM peak hour, New York Police Department (NYPD) traffic agents implement control measures to direct and manage the gameday arrival traffic. Traffic agents are in place at Marina Road at Boat Basin Place to convert the Marina Road westbound approach inner lane into a dedicated left turn lane. Traffic agents override the existing stop controls at the intersection, which operates as a northbound phase and an eastbound/westbound phase.

During the gameday Saturday PM Pre-game and gameday Sunday midday peak hours, NYPD traffic agents implement control measures to direct and manage the gameday arrival traffic. The traffic signal at the intersection of Shea Road at Boat Basin Place operates as a flashing signal with agents directing the flow of vehicles and pedestrians. Traffic agents are in place at the intersection of 34th Avenue/Shea Road and 126th Street/Seaver Way where cones are implemented at the southeast-bound approach from the Whitestone Expressway off-ramp to prevent slight and hard left turns; this converts the approach into a free channelized right turn. Traffic agents allocate the time formerly designated for the southeast-bound approach for a protected pedestrian phase. Agents and cones are placed to direct and control northbound left turn vehicles at the intersection of Grand Central Parkway westbound entrance ramp at Shea Road/Citi Field Entrance 4.

During the gameday Saturday PM Post Game peak hour, NYPD traffic agents implement control measures to direct and manage the Gameday departure traffic. Similar to the gameday Saturday PM Pre-game and Sunday midday peak hours, the signal at the intersection of Shea Road at Boat Basin Place operates as a flashing signal with traffic agents directing the flow of vehicles and pedestrians. The southbound receiving lanes are closed, and cones are in place to create a free northbound left turn onto westbound Shea Road. The southbound approach has cones placed at the inner lane restricting the leg to a single right turn lane. At the intersection of 34th Avenue/Shea Road and 126th Street/Seaver Way, cones are placed at the entrance of the southbound off-ramp from Northern

Boulevard restricting traffic onto the southbound approach. Traffic agents and cones are located at the intersection of Grand Central Parkway westbound entrance ramp at Shea Road/Citi Field Entrance 4 directing the flow of vehicles. Traffic agents close northbound Shea Road between Olmsted Drive and Citi Field Entrance 4; as a result, northbound vehicles are directed to make a right turn onto Olmsted Drive. Traffic agents and cones are in place at the intersection of Shea Road at Olmsted Drive restricting the southbound left and westbound right turn movements. The intersection of Roosevelt Avenue at Citi Field Entrance 3 has traffic control measures for the southbound leg; cones are implemented to make a free right turn, reducing the westbound Roosevelt Avenue approach to a single through lane. Traffic agents are in place at Marina Road at Boat Basin Place to convert the Marina Road westbound approach into a single shared left-through lane. NYPD Traffic agents are present at the unsignalized intersections of 126th Street/Seaver Way at Citi Field Entrance 1 and 126th Street/Seaver Way at Citi Field Entrance 11 to direct the flow of vehicles and pedestrians, which experience a high number of southbound through and eastbound left turning vehicles.

During the gameday Sunday PM peak hour, NYPD traffic agents implement control measures to direct and manage the Gameday departure traffic. Similar to the gameday Saturday PM Post Game peak hour, the signal at the intersection of Shea Road at Boat Basin Place operates as a flashing signal with agents directing the flow of vehicles and pedestrians. The southbound receiving lanes are closed, and cones are in place to create a free northbound left turn onto westbound Shea Road. The southbound approach has cones placed at the inner lane restricting the leg to a single right turn lane. At the intersection of 34th Avenue/Shea Road and 126th Street/Seaver Way, cones are placed at the entrance of the southeast-bound off-ramp from the Whitestone Expressway restricting traffic onto the southeast-bound approach. Agents and cones are located at the intersection of Grand Central Parkway westbound entrance ramp at Shea Road/Citi Field Entrance 4 preventing southbound and northbound through traffic. Southbound vehicles are rerouted to the entrance ramp onto Grand Central Parkway westbound. Westbound vehicles are diverted through to the Grand Central Parkway westbound entrance ramp or turn left onto southbound Shea Road. Northbound vehicles are directed to either make a U-turn onto southbound Shea Road or a right turn onto Stadium Place North with traffic agents and cones in place at the intersection of Shea Road at Stadium Place North. The intersection of Roosevelt Avenue at Citi Field Entrance 3 has traffic control measures for the southbound leg; cones are implemented to make a free right turn, reducing the westbound Roosevelt Avenue approach to a single through lane. Similar to the gameday Saturday PM Post Game peak hour, Traffic agents are present at the unsignalized intersections of 126th Street/Seaver Way at Citi Field Entrance 1 and 126th Street/Seaver Way at Citi Field Entrance 11 to direct the flow of vehicles and pedestrians, which experience a high number of southbound through and eastbound left turning vehicles.

Traffic Volumes

Northern Boulevard

Northern Boulevard volumes between 108th Street and 114th Street are approximately 625 vph to 710 vph in the eastbound direction and 815 vph to 955 vph in the westbound direction for the non-gameday weekday AM peak hour on a non-gameday. For the non-gameday weekday midday peak hour approximately 760 vph to 815 vph travel in the eastbound direction and 660 vph to 900 vph travel in the westbound direction. During the non-gameday weekday PM peak hour approximately 990 vph to 1,040 vph travel in the eastbound direction and 885 vph to 1,205 vph travel in the westbound direction. During the non-gameday Saturday PM peak hour the eastbound and

westbound traffic volumes are approximately 755 vph to 790 vph and 770 vph to 1,000 vph, respectively. Between 108th Street and 114th Street during the gameday weekday PM, Saturday PM Pre-game and Sunday midday peak hours, Northern Boulevard volumes are approximately 930 vph to 1,100 vph in the eastbound direction and 750 vph to 1,145 vph in the westbound direction. During gameday Saturday PM Post Game peak hour, Northern Boulevard eastbound volumes are approximately 590 vph to 780 vph, and westbound volumes are approximately 590 vph to 940 vph. During gameday Sunday PM peak hour, Northern Boulevard eastbound volumes are approximately 835 vph to 970 vph, and westbound volumes are approximately 860 vph to 1,250 vph.

East of 114th Street to 126th Street/Seaver Way, Northern Boulevard connects to key highways such as westbound Grand Central Parkway and eastbound Whitestone Expressway. In the eastbound direction, traffic volumes along Northern Boulevard are approximately 160 vph to 600 vph during the non-gameday weekday AM, midday, and Saturday PM peak hours; approximately 245 vph to 890 vph during the non-gameday and gameday weekday PM peak hours; approximately 220 vph to 810 vph during the gameday Saturday PM Pre-game and Sunday PM peak hours; and approximately 170 vph to 765 vph during the gameday Saturday PM Post Game and Sunday midday peak hours. Westbound Northern Boulevard volumes are approximately 1,265 vph to 1,665 vph during the non-gameday weekday AM, and PM peak hours; approximately 975 vph to 1,220 vph during the non-gameday weekday midday, and Saturday PM peak hours; approximately 1,405 vph to 1,650 vph during the gameday weekday PM and Sunday PM peak hours; and approximately 1,240 vph to 1,585 vph during the gameday Saturday PM Pre-game, Saturday PM Post Game and Sunday midday peak hours.

East of 126th Street/Seaver Way to Union Street, Northern Boulevard connects to the Whitestone Expressway and Van Wyck Expressway. Northern Boulevard volumes in the eastbound direction are approximately 960 vph to 1,375 vph during the non-gameday weekday AM, midday, and Saturday PM peak hours; approximately 995 vph to 1,785 vph during the non-gameday weekday PM, gameday weekday PM, gameday Saturday PM Post Game and gameday Sunday PM peak hours; and approximately 530 vph to 1,445 vph during the gameday Saturday PM Pre-game and Sunday midday peak hours. Westbound traffic volumes during the non-gameday weekday AM and gameday Saturday PM Pre-game peak hours are approximately 1,105 vph to 1,915 vph. Westbound traffic volumes during the non-gameday weekday midday, non-gameday weekday PM, non-gameday Saturday PM, gameday weekday PM, and gameday Sunday PM peak hours are approximately 875 vph to 1,415 vph. During the gameday Saturday PM Post Game peak hour, westbound Northern Boulevard volumes are approximately 1,090 vph to 1,695 vph. During the gameday Sunday midday peak hour, westbound Northern Boulevard volumes are approximately 1,240 vph to 1,725 vph.

East of Union Street to east of Parsons Boulevard, traffic volumes along eastbound Northern Boulevard are approximately 1,035 vph to 1,305 vph during the non-gameday and gameday weekday PM peak hour. During the non-gameday weekday AM peak hour, eastbound volumes are approximately 590 vph to 900 vph. During the non-gameday weekday midday and Saturday PM peak hours, gameday Saturday PM Pre-game, Saturday PM Post Game, Sunday midday and Sunday PM peak hours approximately 745 vph to 955 vph travel along eastbound Northern Boulevard. Traffic volumes along westbound Northern Boulevard during the non-gameday weekday AM peak hour are approximately 1,155 vph to 1,310 vph. During the non-gameday weekday midday, PM, Saturday PM, and all gameday peak hours, westbound traffic volumes are approximately 830 vph to 1,190 vph.

Roosevelt Avenue

In the eastbound direction from 108th Street to Prince Street, Roosevelt Avenue volumes are approximately 305 vph to 615 vph during the four non-gameday peak hours. During the non-gameday peak hours approximately 235 vph to 755 vph travel in the westbound direction, the majority of which turn westbound right onto 114th Street towards the Grand Central Parkway entrance ramp. On gamedays during the weekday PM, Saturday PM Pre-game, and Sunday midday peak hours, traffic volumes along Roosevelt Avenue are approximately 335 vph to 935 vph in the eastbound direction and 250 vph to 745 vph in the westbound direction. The majority of these volumes are heading towards Mets parking lots north and south of Roosevelt Avenue between Stadium Place and 126th Street/Seaver Way. During the gameday Saturday PM Post Game and Sunday PM peak hour, eastbound volumes are approximately 285 vph to 830 vph and westbound traffic volumes are approximately 220 vph to 1,130 vph. East of Prince Street on Roosevelt Avenue, eastbound volumes are approximately 120 vph to 300 vph and westbound volumes are 160 vph to 420 vph during all peak hours.

College Point Boulevard

Volumes along College Point Blvd north of 32nd Avenue to south of westbound Northern Boulevard Service Road are approximately 305 vph to 630 vph in the northbound direction during the non-gameday weekday AM, weekday midday, and Saturday PM peak hours; approximately 615 vph to 800 vph during the non-gameday and gameday weekday PM peak hours; and approximately 305 vph to 780 vph during the gameday Saturday PM Pre-game, Saturday PM Post Game, Sunday midday, and Sunday PM peak hours. In the southbound direction, approximately 750 vph to 975 vph travel during the non-gameday weekday AM and gameday Saturday PM Pre-game peak hours; approximately 395 vph to 680 vph during the non-gameday weekday midday, non-gameday Saturday PM, gameday Saturday PM Post Game, and gameday Sunday PM peak hours; and approximately 560 vph to 845 vph during the non-gameday weekday PM, gameday weekday PM, and gameday Sunday midday peak hours. College Point Boulevard volumes from north of Roosevelt Avenue to south of Sanford Avenue in the northbound direction are approximately 535 vph to 825 vph during the non-gameday weekday AM peak hour; approximately 530 vph to 765 vph during the non-gameday weekday midday, gameday Sunday midday, and gameday Sunday PM peak hours; approximately 480 vph to 690 vph during the non-gameday Saturday PM peak hour; and approximately 650 vph to 870 vph during the non-gameday weekday PM, gameday weekday PM, gameday Saturday PM Pre-game and gameday Saturday PM Post Game peak hours. In the southbound direction College Point Boulevard volumes are approximately 605 vph to 710 vph during the non-gameday weekday AM peak hour; approximately 485 vph to 785 vph during the non-gameday weekday midday and Saturday PM peak hours; approximately 535 vph to 975 vph during the non-gameday weekday PM, gameday weekday PM, and gameday Saturday PM Pre-game peak hours; approximately 660 vph to 865 vph during the gameday Sunday midday peak hour; and approximately 520 vph to 860 vph during the gameday Saturday PM Post Game and gameday Sunday PM peak hours.

Prince Street

Traffic volumes along Prince Street in both directions are approximately 125 vph to 345 vph during all peak hours.

Main Street

Northbound traffic volumes on Main Street are approximately 130 vph to 400 vph during both non-gameday and gameday peak hours. The majority of traffic originates at Roosevelt Avenue and turns onto Northern Boulevard. In the southbound direction, Main Street volumes are approximately 75 vph to 270 vph for the non-gameday weekday AM peak hour and 100 vph to 365 vph for the remaining peak hours.

Union Street

Union Street volumes through eastern Downtown Flushing during the non-gameday weekday AM peak hour are approximately 240 vph to 400 vph in the northbound direction and 250 vph to 510 vph in the southbound direction. During the non-gameday weekday midday peak hour, approximately 140 vph to 340 vph travel along northbound Union Street and about 350 vph to 455 vph travel in the southbound direction. Approximately 175 vph to 430 vph travel in the northbound direction and 345 vph to 495 vph travel in the southbound direction during the non-gameday and gameday weekday PM peak hours. During the non-gameday Saturday PM, gameday Saturday PM Pre-game, and gameday Saturday PM Post Game peak hours, Union Street volumes are approximately 145 vph to 395 vph in the northbound direction and 330 vph to 585 vph in the southbound direction. During the gameday Sunday midday peak hours approximately 210 vph to 375 vph travel along northbound Union Street and 325 vph to 525 vph travel in the southbound direction. Union Street volumes during the gameday Sunday PM peak hour are approximately 160 vph to 340 vph in the northbound direction and 310 vph to 460 vph in the southbound direction. During all the peak hours the highest traffic volumes are concentrated around Northern Boulevard. South of Sanford Avenue, traffic volumes in both directions are low during all peak hours, at approximately 105 vph to 235 vph.

Parsons Boulevard

Parsons Boulevard volumes during the non-gameday weekday AM and PM, and gameday weekday PM peak hours are approximately 245 vph to 385 vph in the northbound direction and 315 vph to 435 vph in the southbound direction. During the non-gameday weekday midday, and Saturday PM, gameday Saturday PM Pre-game, gameday Saturday PM Post Game, and gameday Sunday midday and Sunday PM peak hours Parsons Boulevard volumes are approximately 195 vph to 335 vph in the northbound direction and approximately 270 vph to 380 vph in the southbound direction.

108th Street

During all peak hours, northbound and southbound 108th Street traffic volumes between Astoria Boulevard and Roosevelt Avenue are approximately 150 (vph) to 310 vph and approximately 155 vph to 480 vph respectively. North of Astoria Boulevard, 108th Street is traveled by approximately 50 vph to 100 vph in the northbound direction and 80 vph to 205 vph in the southbound direction.

114th Street

The volumes along 114th Street in the southbound direction from Northern Boulevard to 34th Avenue are approximately 515 vph to 760 vph during the non-gameday and gameday peak hours with high turning volumes onto the eastbound Grand Central Parkway on-ramp. Street volumes south of 34th Avenue to south of Roosevelt Avenue are approximately 170 vph to 570 vph for both directions and all peak hours.

126th Street/Seaver Way

Northbound and southbound volumes along 126th Street/Seaver Way on non-gamedays are approximately 55 vph to 325 vph; during gameday weekday PM, Saturday PM Pre-game, and Sunday midday peak hours, volumes are approximately 170 vph to 580 vph for both directions. The majority of the northbound traffic volumes turn onto Northern Boulevard in both directions, while the majority of southbound traffic volumes enter from either eastbound or westbound Shea Road or southbound 126th Street/Seaver Way and turns off at Roosevelt Avenue in both directions. During the gameday Saturday PM Post Game peak hour volumes are approximately 425 vph to 700 vph in the northbound direction and 225 vph to 340 vph in the southbound direction. During the gameday Sunday PM peak hour volumes are approximately 115 vph to 520 vph in the northbound direction and 40 vph to 205 vph in the southbound direction. During the two gameday egress peak hours, northbound volumes primarily originate from eastbound left turns at Citi Field Entrances 1 and 11. In the southbound direction volumes are similar to those of the other peak hours with a large portion of the volume entering at Shea Road and turning off onto Roosevelt Avenue in both directions.

Shea Road

Northbound traffic volumes along Shea Road from New York Avenue to Stadium Place North are approximately 175 vph to 470 vph during non-gameday weekday AM, gameday Saturday PM Post Game, and gameday Sunday PM peak hours; and approximately 95 vph to 595 vph during the non-gameday weekday PM, gameday weekday PM, gameday Saturday PM Pre-game, and gameday Sunday midday peak hours. During the non-gameday weekday midday and Saturday PM peak hours approximately 75 vph to 345 vph and 30 vph to 435 vph travel northbound along Shea Road, respectively. During the non-gameday weekday AM, weekday midday and Saturday PM peak hours approximately 30 vph to 130 vph travel in the southbound direction. During the non-gameday weekday PM peak hour volumes are approximately 175 vph to 330 vph in the southbound direction with majority traveling south of New York Avenue. During the gameday weekday PM, Saturday PM Pre-game, Saturday PM Post Game, Sunday midday and Sunday PM peak hours southbound Shea Road volumes are approximately 125 vph to 265 vph, 215 vph to 1,125 vph, 260 vph to 990 vph, 30 vph to 621 vph and 270 vph to 835 vph, respectively. During the gameday weekday PM, Saturday PM Pre-game, and Sunday midday peak hours, the majority of the southbound volumes turn left onto Olmsted Drive to park at the Southfield parking Lot; during gameday Saturday PM Post Game and Sunday PM peak hours the majority of vehicles continue southbound along Shea Road towards the westbound Grand Central Parkway entrance ramp south of Meridian Road. Shea Road traffic volumes from Stadium Place North to Boat Basin Place in the northbound direction are approximately 20 vph to 285 vph during the non-gameday weekday AM and Saturday PM peak hours, and approximately 40 vph to 325 vph during the non-gameday weekday midday and PM peak hours. In the southbound direction, Shea Road volumes are approximately 225 vph to 300 vph during the non-gameday weekday AM and PM peak hours, 180 vph to 315 vph during the non-gameday weekday midday peak hour, and approximately 125 vph to 140 vph during the non-gameday Saturday PM peak hour. During the gameday weekday PM, Saturday PM Pre-game, and Sunday midday peak hours approximately 105 vph to 475 vph travel along Shea Road in the northbound direction. During the gameday Saturday PM Post Game peak hour, northbound Shea Road is closed between Olmsted Drive and Citi Field Entrance 4, reducing volumes to approximately 25 vph between Citi Field Entrance 4 and Boat Basin Place. During the gameday Sunday PM peak hour northbound Shea Road is closed between Stadium Place North and the westbound Grand Central Parkway entrance and exit ramps, reducing volumes to approximately 75 vph between the Grand Central Parkway ramps and

Boat Basin Place. Southbound Shea Road between Stadium Place North and Boat Basin Place is traveled by approximately 200 vph to 280 vph, 465 vph to 815 vph, and 230 vph to 440 vph during the gameday weekday PM, Saturday PM Pre-game, and Sunday midday peak hours, respectively. The majority of the vehicles during these peak hours turn left turn onto Olmsted Drive. Gameday Saturday PM Post Game peak hour volumes along Shea Road are approximately 200 vph to 990 vph in the southbound direction; nearly all these volumes turn onto the Whitestone Expressway entrance ramp with approximately 200 vph continuing to the Grand Central Parkway westbound entrance ramp. During the gameday Sunday PM peak hour, volumes along Shea Road are approximately 260 vph to 1,100 vph in the southbound direction; nearly all these volumes turn onto the Whitestone Expressway entrance ramp with approximately 260 vph continuing to the Grand Central Parkway westbound entrance ramp. During non-gameday weekday peak hours, Shea Road volumes east of Boat Basin Place to 126th Street/Seaver Way are approximately 130 vph to 165 vph in the eastbound direction and 85 vph to 145 vph in the westbound direction. During the non-gameday Saturday PM peak hour traffic volumes are lower and are approximately 40 vph to 45 vph in the eastbound direction and 70 vph to 75 vph in the westbound direction. During the gameday analysis peak hours, eastbound volumes along Shea Road are approximately 30 vph to 255 vph. Westbound traffic volumes are approximately 275 vph to 295 vph during the gameday weekday PM peak hour; approximately 795 vph to 1,040 vph during the gameday Saturday PM Pre-game and Sunday midday peak hours; approximately 315 vph to 360 vph during the gameday Saturday PM Post Game peak hour; and approximately 130 vph to 140 vph during the gameday Sunday PM peak hour.

Balanced existing traffic volumes can be found in **Appendix D**.

Levels of Service

Table 14-20 through **Table 14-23** provide an overview of the levels of service that characterize existing "overall" intersection conditions and individual traffic lane groups, respectively, during peak hours analyzed. Detailed existing traffic levels of service (LOS) showing the average delay and V/C ratio for each lane group at all study area intersections are provided in **Appendix D.**

Table 14-20 2022 Existing Non-Gameday Traffic Level of Service Summary – Overall Intersections

	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Saturday PM Peak Hour
Intersections at Overall LOS A/B/C/D	46	47	45	46
Intersections at Overall LOS E	1	0	2	1
Intersections at Overall LOS F	0	0	0	0

Note: Includes 24 signalized intersections and 23 unsignalized intersections

Table 14-21 2022 Existing Gameday Traffic Level of Service Summary – Overall Intersections

	Weekday PM Peak Hour	Saturday PM Pre-game Peak Hour	Saturday PM Post Game Peak Hour	Sunday Midday Peak Hour	Sunday PM Peak Hour
Intersections at Overall LOS A/B/C/D	45	43	43	45	41
Intersections at Overall LOS E	2	1	1	1	4
Intersections at Overall LOS F	0	3	3	1	2

Note: Includes 24 signalized intersections and 23 unsignalized intersections. During the gameday weekday PM, Saturday PM Post Game and Sunday PM peak hours, there are traffic agents present at select intersections, which for analysis purposes are modeled as signalized intersections based on field observations. As a result, the gameday weekday PM peak hour analysis includes 25 signalized intersections, the gameday Saturday PM Post Game analysis peak hour analysis includes 29 signalized intersections, and the gameday Sunday PM analysis peak hour analysis includes 27 signalized intersections.

Table 14-22 2022 Existing Non-Gameday Traffic Level of Service Summary – Traffic Lane Groups

	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Saturday PM Peak Hour
Traffic Lane Groups at LOS A/B/C/D	175	180	178	176
Traffic Lane Groups at LOS E	9	7	7	3
Traffic Lane Group at LOS F	11	7	11	12
Number of Individual Traffic Lane Groups	195	194	196	191

Note: Number of lane groups may vary between peak hours due to turn prohibitions, parking regulations, and the presence of de facto left turn movements.

Table 14-23 2022 Existing Gameday Traffic Level of Service Summary – Traffic Lane Groups

	Weekday PM Peak Hour	Saturday PM Pre-game Peak Hour	Saturday PM Post Game Peak Hour	Sunday Midday Peak Hour	Sunday PM Peak Hour
Traffic Lane Groups at LOS A/B/C/D	174	168	165	169	173
Traffic Lane Groups at LOS E	9	7	7	6	5
Traffic Lane Group at LOS F	14	19	21	16	15
Number of Individual Traffic Lane Groups	197	194	193	191	193

Note: Number of lane groups may vary between peak hours due to turn prohibitions, parking regulations, presence of traffic agents at select intersections, and the presence of de facto left turn movements.

The summary overview of existing conditions indicates that:

› In the non-gameday weekday AM peak hour, one intersection operates at overall LOS E or F. "Overall" LOS E or F means that serious congestion exists - either one specific traffic lane group

has severe delays or two or more of the specific traffic lane groups at the intersection are at LOS E or F with significant delays (the overall intersection level of service is a weighted average of all individual traffic movements). Twenty individual traffic lane groups out of the 195 groups analyzed are at LOS E or F (e.g., left turns from one street to another, through traffic on one street passing through the intersection, etc.).

- In the non-gameday weekday midday peak hour, no intersections operate at overall LOS E or F, and 14 out of 194 individual traffic lane groups operate at LOS E or F.
- In the non-gameday weekday PM peak hour, two intersections operate at overall LOS E or F, and 18 out of 196 individual traffic lane groups operate at LOS E or F.
- In the non-gameday Saturday PM peak hour, one intersection operates at overall LOS E or F, and 15 out of 191 individual traffic lane groups operate at LOS E or F.
- In the gameday weekday PM peak hour, two intersections operate at overall LOS E or F, and 23 out of 197 individual traffic lane groups operate at LOS E or F.
- In the gameday Saturday PM Pre-game peak hour, four intersections operate at overall LOS E or F, and 26 out of 194 individual traffic lane groups operate at LOS E or F.
- In the gameday Saturday PM Post Game peak hour, four intersections operate at overall LOS E or F, and 28 out of 193 individual traffic lane groups operate at LOS E or F.
- In the gameday Sunday midday peak hour, two intersections operate at overall LOS E or F, and 22 out of 191 individual traffic lane groups operate at LOS E or F.
- In the gameday Sunday PM peak hour, six intersections operate at overall LOS E or F, and 20 out of 193 individual traffic lane groups operate at LOS E or F.

Traffic lane groups operating at unacceptable levels of service (LOS E or F) are listed below. The majority of these lane groups are shared left-through-right lane groups from the key roadways in the area (e.g., Roosevelt Avenue at 108th Street) or along the minor street approach along these key roadways.

- Astoria Boulevard and 108th Street/31st Drive
  - Westbound Astoria Boulevard left turn lane group (non-gameday weekday PM, gameday weekday PM, gameday Saturday PM Pre-game, and gameday Saturday PM Post Game)
- Astoria Boulevard and Ditmars Boulevard/111th Street
  - Northbound 111th Street shared left-through-right lane group (non-gameday weekday AM, and midday)
  - Southbound Ditmars Boulevard left turn lane group (gameday weekday PM, and gameday Saturday PM Post Game)
- Northern Boulevard and 108th Street
  - Northbound 108th Street shared left-through-right lane group (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)
  - Southbound 108th Street shared left-through-right lane group (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)
- Northern Boulevard and 114th Street

- Southbound 114th Street shared left-through-right lane group (gameday Saturday PM Pre-game, and Saturday PM Post Game)

› Northern Boulevard and Prince Street

- Eastbound Northern Boulevard mainline left turn lane (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)
- Westbound Northern Boulevard mainline left turn lane (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)
- Northbound Prince Street shared left-through-right lane group (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)
- Southbound Prince Street shared left-through-right lane group (non-gameday weekday AM)

› Northern Boulevard Eastbound and Main Street

- Northbound Main Street right turn lane group (non-gameday weekday PM, and gameday weekday PM)

› Northern Boulevard and Union Street

- Eastbound Northern Boulevard shared through-right lane group (gameday weekday PM)

› Northern Boulevard and Parsons Boulevard

- Northbound Parsons Boulevard left turn lane (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)
- Southbound Parsons Boulevard shared left-through lane group (non-gameday weekday AM)
- Southbound Parsons Boulevard shared left-through-right lane group (non-gameday weekday midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)

› 34th Avenue and 114th Street

- Southbound 114th Street through lane group (gameday weekday PM)
- Southbound 114th Street left turn lane group (gameday Sunday PM)

› 34th Avenue/Shea Road and 126th Street/Seaver Way

- Eastbound Shea Road right turn lane group (gameday Saturday PM Pre-game, and gameday Sunday midday)
- Westbound 34th Avenue shared left-through-right lane group (gameday Sunday PM)
- Southeastbound Whitestone Expressway Ramp shared left-right lane group (gameday weekday PM, and gameday Saturday PM Post Game)

› Roosevelt Avenue and 108th Street

- Northbound 108th Street shared left-through-right lane group (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)

- Southbound 108th Street shared left-through-right lane group (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)

› Roosevelt Avenue and 111th Street

- Northbound 111th Street shared left-through-right lane group (non-gameday weekday AM, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)

› Roosevelt Avenue and 114th Street

- Westbound Roosevelt Avenue shared left-through lane group (non-gameday weekday AM, and PM; and gameday weekday PM)
- Northbound 114th Street shared left-through-right lane group (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)
- Southbound 114th Street left turn lane group (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)
- Southbound 114th Street shared through-right lane group (non-gameday weekday AM, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)

› Roosevelt Avenue and Stadium Place

- Northbound Stadium Place shared left-right turn lane group (gameday Saturday PM Post Game)

› Roosevelt Avenue and 126th Street/Seaver Way

- Eastbound Roosevelt Avenue left turn lane group (gameday Saturday PM Pre-game)
- Southbound 126th Street left turn lane group (gameday Saturday PM Post Game)
- Southbound 126th Street shared through-right lane group (gameday Saturday PM Post Game)

› Roosevelt Avenue and Main Street

- Westbound Roosevelt Avenue shared left-through-right lane group (gameday weekday PM)

› Roosevelt Avenue and Union Street

- Eastbound Roosevelt Avenue shared left-through-right lane group (non-gameday weekday AM)
- Westbound Roosevelt Avenue shared left-through-right lane group (non-gameday weekday midday, non-gameday Saturday PM, gameday Saturday PM Pre-game, and gameday Saturday PM Post Game)
- Southbound Union Street shared left-through lane group (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)

› Roosevelt Avenue and Parsons Boulevard

- Northbound Parsons Boulevard shared left-through lane group (non-gameday weekday AM, and gameday weekday PM)

› Marina Road and Boat Basin Place

- Northbound Boat Basin Place left turn lane group (gameday Saturday PM Pre-game, and gameday Sunday midday)

› Shea Road/Citi Field Entrance 8 and Boat Basin Place
  - Eastbound Shea Road shared left-through-right lane group (gameday Sunday midday)

› 126th Street/Seaver Way and Citi Field Entrance 11
  - Eastbound Citi Field Entrance 11 left-right lane group (gameday Saturday PM Pre-game, and gameday Sunday midday)

› Grand Central Parkway Westbound Entrance Ramp and Shea Road/ Citi Field Entrance 4
  - Southbound Shea Road shared through-right lane group (gameday Saturday PM Post Game)

› Shea Road and Stadium Place North
  - Westbound Stadium Place North shared left-right lane group (gameday Saturday PM Pre-game, and gameday Sunday midday)

› Stadium Place South and Southfield Parking Lot
  - Westbound Southfield Parking Lot shared left-right lane group (gameday Saturday PM Post Game)

› Shea Road and Olmsted Drive
  - Westbound Olmsted Drive shared left-right lane group (gameday Saturday PM Pre-game; and gameday Sunday midday, and Sunday PM)
  - Southbound Shea Road shared left-through lane group (gameday Saturday PM Pre-game)

› Shea Road and Meridian Road
  - Northbound Shea Road shared through-right lane group (gameday Saturday PM Pre-game)
  - Southbound Shea Road through lane group (gameday Saturday PM Post Game, and gameday Sunday PM)

› Shea Road and Grand Central Parkway Westbound off-ramp (9P)
  - Eastbound Grand Central Parkway westbound exit ramp (9P) left turn lane group (non-gameday weekday AM, and PM; gameday Saturday PM Post Game; gameday Sunday midday, and Sunday PM)

› Shea Road and New York Avenue
  - Westbound New York Avenue shared left-right lane group (gameday Saturday PM Post Game)

› United Nations Avenue and New York Avenue
  - Northbound New York Avenue shared left-right lane group (gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)

Highway Network

The highway network within the immediate study area includes the Grand Central Parkway west of the site, and the Van Wyck and Whitestone Expressways north and east of the site.

The Grand Central Parkway is located west of Flushing Meadows Corona Park and generally has four lanes in the westbound direction. The eastbound direction has three lanes north of the on-ramp at 34th Avenue, after which the highway increases to four lanes in this direction. The highway has major

interchanges with Astoria Boulevard, Northern Boulevard, the Long Island Expressway, and provides connections to the northbound Whitestone Expressway and southbound Van Wyck Expressway.

The Van Wyck Expressway is an elevated highway located east of Flushing Meadows Corona Park. North of its interchange with Northern Boulevard, the highway generally has two lanes in each direction; south of this interchange, the highway has three lanes in each direction. The Van Wyck Expressway connects to the Long Island Expressway south of the study area. North of Northern Boulevard, the highway transitions into the Whitestone Expressway. The Whitestone Expressway serves areas northeast of the study area, with an interchange at the Cross Island Parkway before transitioning into the Whitestone Bridge.

Traffic Volumes

The Grand Central Parkway between Exit 7 and the on- and off-ramps from the Whitestone Expressway carries about 3,485 vph to 6,865 vph in the westbound direction and about 3,235 vph to 6,555 vph in the eastbound direction for all time periods; and between the on- and off-ramps from the Whitestone Expressway and Exit 11 carries about 3,445 vph to 6,520 vph in the northbound direction and about 3,470 vph to 6,165 vph in the southbound direction for all time periods.

The Van Wyck Expressway between Exit 12A and the on- and off-ramps from the Whitestone Expressway carries about 2,050 vph to 4,400 vph in the westbound direction for all peak hours except for the non-gameday weekday midday peak hour when it carries about 1,370 vph to 3,170 vph; and in the eastbound direction it carries about 2,360 vph to 4,685 vph for all peak hours except for the gameday Sunday midday peak hour when it carries about 1,875 vph to 2,860 vph.

The Whitestone Expressway between the on- and off- ramps from the Van Wyck Expressway and Linden Place carries about 2,050 vph to 3,915 vph in the northbound direction for the non-gameday weekday AM, midday, PM peak hours and for the gameday weekday PM, Saturday PM Post Game, and Sunday PM peak hours, and about 1,400 vph to 2,730 vph for the non-gameday Saturday PM peak hour and the gameday Saturday PM Pre-game and Sunday midday peak hours; and in the southbound direction it carries about 4,230 vph to 6,285 vph for the non-gameday weekday midday, PM, and Saturday PM peak hours and for the gameday Saturday PM Pre-game, Saturday PM Post Game, Sunday midday, and Sunday PM peak hours, and about 5,795 vph to 7,385 vph for the non-gameday weekday AM peak hour and the gameday weekday PM peak hour.

The Whitestone Expressway between the on- and off- ramps from the Van Wyck Expressway and the on- and off- ramps from the Grand Central Parkway carries about 835 vph to 4,830 vph in the eastbound direction for the non-gameday weekday AM, midday, PM peak hours and for the gameday weekday PM, Saturday PM Post Game and Sunday PM peak hours, and about 795 vph to 3,140 vph for the non-gameday Saturday PM peak hour and the gameday Saturday PM Pre-game and Sunday midday peak hours. In the westbound direction it carries about 1,965 vph to 3,775 vph for the non-gameday weekday midday, PM, and Saturday PM peak hours and gameday Saturday PM Pre-game, Saturday PM Post Game, Sunday midday, and Sunday PM peak hours, and about 2,950 vph to 5,030 vph for the non-gameday weekday AM peak hour and the gameday weekday PM peak hour.

Balanced flow maps detailing the existing traffic volumes on these facilities, including all mainline and ramp locations within the study area, can be found in **Appendix D**.

Level of Service

Table D-3 and **Table D-4** in **Appendix D** show existing speeds, densities, and levels of service for the highway segments analyzed along the Grand Central Parkway between Exit 8 and Exit 11, the Whitestone Expressway between the Grand Central Parkway and Linden Place, the Van Wyck Expressway between the Whitestone Expressway and Exit 12A, Astoria Boulevard between Ditmars Boulevard and Whitestone Expressway, and Northern Boulevard between 114th Street and Prince Street for the non-gameday weekday and Saturday peak hours and for the gameday weekday, Saturday, and Sunday peak hours, respectively. **Table 14-24** and **Table 14-25** summarize the levels of service of the analyzed segments by segment type for the non-gameday and gameday peak hours. The outputs of the existing conditions Vissim models were calibrated to match field-observed data, including traffic volumes, measured travel times along the westbound and eastbound Grand Central Parkway corridor, the northbound and southbound Van Wyck Expressway, the eastbound and westbound Whitestone Expressway, the eastbound and westbound Astoria Boulevard, and the eastbound and westbound Northern Boulevard, and other observations of traffic conditions during the peak hours including vehicle queues.

Table 14-24 2022 Existing Condition: Non-Gameday Highway Segments Level of Service Summary

	Weekday AM Peak Hour				Weekday Midday Peak Hour				Weekday PM Peak Hour				Saturday PM Peak Hour			
	Segment Type				Segment Type				Segment Type				Segment Type			
	Basic	Merge	Diverge	Weave	Basic	Merge	Diverge	Weave	Basic	Merge	Diverge	Weave	Basic	Merge	Diverge	Weave
Highway Segments at LOS A/B/C	18	9	10	3	23	9	15	3	26	8	12	2	31	10	17	3
Highway Segments at LOS D	14	3	5	0	16	2	3	1	11	3	1	1	11	2	1	1
Highway Segments at LOS E	5	0	2	0	2	1	0	0	4	1	4	1	0	0	0	0
Highway Segments at LOS F	5	0	1	1	1	0	0	0	1	0	1	0	0	0	0	0
Number of Individual Highway Segments	42	12	18	4	42	12	18	4	42	12	18	4	42	12	18	4

Table 14-25 2022 Existing Condition: Gameday Highway Segments Level of Service Summary

	Weekday PM Peak Hour				Saturday PM Pre-game Peak Hour				Saturday PM Post Game Peak Hour				Sunday Midday Peak Hour				Sunday PM Peak Hour			
	Segment Type				Segment Type				Segment Type				Segment Type				Segment Type			
	Basic	Merge	Diverge	Weave	Basic	Merge	Diverge	Weave	Basic	Merge	Diverge	Weave	Basic	Merge	Diverge	Weave	Basic	Merge	Diverge	Weave
Highway Segments at LOS A/B/C	23	7	12	2	26	8	13	1	26	6	12	0	26	8	14	4	24	7	12	1
Highway Segments at LOS D	12	4	3	1	10	3	2	1	10	0	4	2	11	3	1	0	11	2	2	1
Highway Segments at LOS E	6	1	3	1	6	1	2	2	4	2	1	1	3	1	2	0	4	0	2	1
Highway Segments at LOS F	1	0	0	0	0	0	1	0	2	4	1	1	2	0	1	0	3	3	2	1
Number of Individual Highway Segments	42	12	18	4	42	12	18	4	42	12	18	4	42	12	18	4	42	12	18	4

As shown in **Table D-3** and **Table D-4** of **Appendix D**, average travel speeds along the westbound Grand Central Parkway range between approximately 30 and 50 mph during the non-gameday and gameday peak hours analyzed. Average speeds along the eastbound Grand Central Parkway range between approximately 40 and 49 mph during the non-gameday weekday AM, weekday midday and Saturday PM peak hours and during the gameday Saturday PM Pre-game and Sunday midday peak hours analyzed; between approximately 30 and 49 mph during the non-gameday weekday PM and gameday weekday PM peak hours analyzed; between approximately 22 and 49 mph during the gameday Saturday PM Post Game peak hour analyzed; and between approximately 19 and 49 mph during the gameday Sunday PM peak hour analyzed.

Average travel speeds along the northbound Van Wyck Expressway range between approximately 29 and 41 mph during the non-gameday and gameday peak hours analyzed. However, it should be noted that these speeds are affected by construction conditions expected to end before the 2030 build year. Average travel speeds along the southbound Van Wyck Expressway range between approximately 30 and 49 mph during the non-gameday and gameday peak hours analyzed.

Average travel speeds along the eastbound Whitestone Expressway range between approximately 24 and 50 mph during the non-gameday and gameday peak hours analyzed. Average travel speeds along the westbound Whitestone Expressway range between approximately 30 and 50 mph during the non-gameday weekday AM, weekday midday, weekday PM and Saturday PM and gameday weekday PM, Saturday PM Pre-game, Saturday PM Post Game, and Sunday midday peak hours analyzed, and between approximately 20 and 50 mph during the gameday Sunday PM peak hour.

Average travel speeds along the eastbound Astoria Boulevard are at approximately 25 mph during the non-gameday and gameday peak hours analyzed. Average travel speeds along the westbound Astoria Boulevard range between approximately 38 and 51 mph during the non-gameday weekday midday, weekday PM and Saturday PM and gameday weekday PM, Saturday PM Pre-game and Sunday midday peak hours analyzed, between approximately 21 and 50 mph during the non-gameday weekday AM peak hour, and between approximately 35 and 50 mph during the gameday Sunday PM peak hour.

Average travel speeds along the eastbound Northern Boulevard range between approximately 26 and 31 mph during the non-gameday weekday AM, weekday midday and Saturday PM peak hours and during the gameday Saturday PM Pre-game, Saturday PM Post Game, Sunday midday, and Sunday PM peak hours analyzed; and between 26 and 37 mph during the non-gameday weekday PM peak hour and the gameday weekday PM peak hour analyzed. Average travel speeds along the westbound Northern Boulevard range between approximately 24 and 31 mph during the non-gameday and gameday peak hours analyzed.

The summary overview of existing conditions indicates that:

- In the non-gameday weekday AM peak hour, 14 out of the 76 highway segments analyzed are at LOS E or F.
- In the non-gameday weekday midday peak hour, four out of the 76 highway segments analyzed are at LOS E or F.
- In the non-gameday weekday PM peak hour, 12 out of the 76 highway segments analyzed are at LOS E or F.
- In the non-gameday Saturday PM peak hour, none of the 76 highway segments analyzed operate at LOS E or F.

- In the gameday weekday PM peak hour, 12 out of the 76 highway segments analyzed are at LOS E or F.
- In the gameday Saturday PM Pre-game peak hour, 12 out of the 76 highway segments analyzed are at LOS E or F.
- In the gameday Saturday PM Post Game peak hour, 16 out of the 76 highway segments analyzed are at LOS E or F.
- In the gameday Sunday midday peak hour, nine out of the 76 highway segments analyzed are at LOS E or F.
- In the gameday Sunday PM peak hour, 16 out of the 76 highway segments analyzed are at LOS E or F.

Highway segments operating at unacceptable levels of service (LOS E or F) are listed below.

Grand Central Parkway

- Westbound Grand Central Parkway south of Hall of Science Bridge overpass (gameday Saturday PM Pre-game and gameday Sunday midday)
- Westbound Grand Central Parkway south of Exit 9P ramp (gameday Saturday PM Pre-game, gameday Sunday midday, and gameday Sunday PM)
- Westbound Grand Central Parkway north of Inner/Outer split (gameday Saturday PM Pre-game)
- Westbound Grand Central Parkway at Exit 9E ramp (gameday Saturday PM Pre-game and gameday Sunday PM)
- Westbound Grand Central Parkway at Exit 9E ramp to eastbound Whitestone Expressway (gameday Saturday PM Post Game and gameday Sunday PM)
- Eastbound Grand Central Parkway east of Exit 8 ramp (non-gameday weekday midday, non-gameday weekday PM, gameday weekday PM, gameday Saturday PM Pre-game, and gameday Sunday midday)
- Eastbound Grand Central Parkway west of Exit 9E ramp (non-gameday weekday PM, gameday Saturday PM, and gameday Sunday midday)
- Eastbound Grand Central Parkway south of ramp from Astoria Boulevard and 34th Avenue (gameday Saturday PM Post Game)
- Eastbound Grand Central Parkway north of ramp from Hall of Science (gameday Saturday PM Post Game and gameday Sunday PM)
- Eastbound Grand Central Parkway south of ramp from Hall of Science (gameday Saturday PM Pre-game, gameday Saturday PM Post Game, gameday Sunday midday, and gameday Sunday PM)
- Eastbound Grand Central Parkway south of Hall of Science Bridge overpass (non-gameday weekday AM, non-gameday weekday midday, non-gameday weekday PM, gameday weekday PM, gameday Saturday PM Pre-game, gameday Saturday PM Post Game, and gameday Sunday PM)
- Eastbound Grand Central Parkway north of ramp to LIE (non-gameday weekday PM, gameday weekday PM, gameday Saturday PM Post Game, and gameday Sunday PM)
- Eastbound Grand Central Parkway at Exit 9E ramp to eastbound Whitestone Expressway (gameday weekday PM)

Van Wyck Expressway

- Northbound Van Wyck Expressway north of ramp from College Point Boulevard (non-gameday weekday AM, gameday weekday PM, gameday Saturday PM Pre-game, gameday Saturday PM Post Game, gameday Sunday midday, and gameday Sunday PM)
- Northbound Van Wyck Expressway south of Exit 13 ramp (non-gameday weekday AM, non-gameday weekday PM, gameday weekday PM, gameday Saturday PM Pre-game, gameday Saturday PM Post Game, gameday Sunday midday, and gameday Sunday PM)
- Northbound Van Wyck Expressway north of Exit 13 ramp (non-gameday weekday AM, non-gameday weekday PM, gameday weekday PM, gameday Saturday PM Pre-game, gameday Saturday PM Post Game, gameday Sunday midday, and gameday Sunday PM)
- Northbound Van Wyck Expressway south of Exit 14 ramp (non-gameday weekday AM and non-gameday weekday PM)
- Southbound Van Wyck Expressway ramp from Whitestone Expressway and Northern Boulevard (gameday Saturday PM Post Game)
- Southbound Van Wyck Expressway south of ramps from Whitestone Expressway and Northern Boulevard (non-gameday weekday midday, non-gameday weekday PM, and gameday Saturday PM Post Game)
- Southbound Van Wyck Expressway north of ramp to College Point Boulevard (non-gameday weekday midday, non-gameday weekday PM, gameday weekday PM, gameday Saturday PM Post Game, and gameday Sunday PM)

Whitestone Expressway

- Eastbound Whitestone Expressway west of ramp to southbound Van Wyck Expressway (non-gameday weekday PM and gameday Saturday PM Post Game)
- Eastbound Whitestone Expressway south of Exit 14 ramp (non-gameday weekday PM and gameday weekday PM)
- Eastbound Outer Whitestone Expressway west of split to Inner Whitestone Expressway and eastbound Northern Boulevard (gameday Saturday PM Pre-game and gameday Sunday PM)
- Eastbound Outer Whitestone Expressway ramp to eastbound Whitestone Expressway (non-gameday weekday AM, non-gameday weekday PM, gameday weekday PM, gameday Saturday PM Post Game, and gameday Sunday PM)
- Westbound Outer Whitestone Expressway north of ramp from Service Road/Linden Place (non-gameday weekday AM)
- Westbound Outer Whitestone Expressway north of ramp to southbound Van Wyck Expressway (non-gameday weekday AM, gameday weekday PM, and gameday Saturday PM Post Game)
- Westbound Outer Whitestone Expressway south of ramp from Service Road/Linden Place (non-gameday weekday AM)
- Westbound Outer Whitestone Expressway north of Exit 13D ramp (non-gameday weekday AM)
- Westbound Outer Whitestone Expressway south of Exit 13D ramp (non-gameday weekday AM)
- Westbound Outer Whitestone Expressway at Exit 13B-C ramp (non-gameday weekday AM)
- Westbound Outer Whitestone Expressway west of ramp from Northern Boulevard and northbound Van Wyck Expressway (non-gameday weekday AM and gameday Sunday midday)

- Westbound Outer Whitestone Expressway east of Grand Central Parkway eastbound and westbound split (gameday Sunday PM)
- Westbound Outer Whitestone Expressway ramp to westbound Grand Central Parkway (gameday Sunday PM)

Astoria Boulevard

- Eastbound Astoria Boulevard ramp to eastbound Grand Central Parkway and eastbound Outer Whitestone Expressway (gameday weekday PM, gameday Saturday PM Post Game, and gameday Sunday PM)
- Westbound Astoria Boulevard ramp from westbound Whitestone Expressway and westbound Northern Boulevard (non-gameday weekday AM)

Parking

Under existing conditions, Mets patrons can currently park in a variety of surface lots surrounding Citi Field. The majority of vehicles park in surface parking lots within the Development Site, including Lots B, C, D, E, and F to the west of Citi Field. Lots A and G, also within the Development Site, are directly north and south of Citi Field and are used for employee/VIP parking. South of Roosevelt Avenue and Citi Field, the Southfield Lot is available for parking within the Development Site. A dedicated Bus Lot is located within the Development Site at the northeast corner of Shea Road and Boat Basin Place. North of Shea Road and Citi Field, four parking lots outside of the Development Site are also used and licensed by the Mets for parking; these include the Stadium View East and Stadium View West lots, which are located under the elevated highway structure and flank Boat Basin Place, as well as the Marina East and Marina West lots, which are located along the Flushing Bay waterfront and are accessed via Marina Road.

As part of the Proposed Project, Mets patron parking within the Development Site would be relocated to new parking structures located south of Roosevelt Avenue (Southfield parking structure with a capacity of 2,901 parking spaces) and north of Citi Field (Northfield parking structure with a capacity of 4,200 parking spaces) with Mets VIP patrons parking at the Area B parking structure (with a capacity of 825 parking spaces, located where Lot G is currently, and serving the same use) on gamedays. A detailed inventory of the existing off-street parking lot facilities (i.e., the Mets surface lots) was conducted during peak periods covering the non-gameday weekday AM, midday, PM and Saturday PM peak hours, as well as the gameday weekday PM, Saturday PM Pre-game, and Sunday midday peak hours. Inventory of the parking facilities during the gameday Saturday PM Post Game and Sunday PM peak periods is not needed, as these are egress conditions when Mets patrons are exiting the parking facilities. **Table 14-26** and **Table 14-27** and present the capacity and occupancy of these off-street parking facilities during the peak periods. The total capacity of the 16 existing parking facilities within and immediately surrounding the Development Site is 3,155 parking spaces on non-gameday weekdays and 8,667 on the non-gameday Saturday PM peak hours; on gamedays, the parking capacity is 9,089 parking spaces. On non-gamedays, the Bus Lot, and Lots A, B, C, D, E, F, and G are generally not open for public use, and result in less parking capacity than on gamedays. Since the proposed Northfield and Southfield parking structures are able to fully accommodate the demand for commuter, employee and Mets patron parking on non-gamedays and gamedays, and because the parking demand expected to be generated by the Proposed Project is anticipated to be entirely accommodated within the available parking supply at Area A and Area B, a detailed parking analysis for on-and off-street parking would not be warranted.

Table 14-26 Existing Non-Gameday Off-Street Parking Inventory

Map No.	Location	Capacity	Weekday AM Occupancy	Weekday Midday Occupancy	Weekday PM Occupancy	Saturday Capacity	Saturday PM Occupancy
1	Marina West	200	1 1%	6 3%	3 2%	200	18 9%
2	Marina B	98	45 46%	27 28%	0 0%	95	1 1%
3	Marina A	85	8 9%	14 16%	5 6%	85	4 5%
4	Marina East	585	61 10%	62 11%	10 2%	585	13 2%
5	Stadium View West	120	0 0%	0 0%	0 0%	120	0 0%
6	Stadium View East	279	0 0%	0 0%	0 0%	279	0 0%
7	Northern Boulevard Parking (under Highway	213	65 31%	133 62%	104 49%	213	54 25%
8	Bus Lot	-	-	-	-	40	40 100%
9	Lot A	-	-	-	-	828	90 11%
10	Lot B	-	-	-	-	413	1 0%
11	Lot C	-	-	-	-	822	0 0%
12	Lot D	-	-	-	-	539	0 0%
13	Lot E	-	-	-	-	1,490	0 0%
14	Lot F	-	-	-	-	851	0 0%
15	Lot G	-	-	-	-	532	32 6%
16	Southfield Parking	1,575	495 31%	472 30%	362 23%	1,575	122 8%
	Total	**3,155**	**675 21%**	**714 23%**	**484 15%**	**8,667**	**375 4%**

Table 14-27 Existing Gameday Off-Street Parking Inventory

Map No.	Location	Capacity	Weekday PM Occupancy	Saturday PM Pre-game Occupancy	Sunday Midday Occupancy
1	Marina West	200	38 19%	196 98%	250 125%*
2	Marina B	95	68 72%	64 67%	42 44%
3	Marina A	85	71 84%	75 88%	78 92%
4	Marina East	585	141 24%	507 87%	457 78%
5	Stadium View West	120	94 78%	127 106%*	114 95%
6	Stadium View East	279	116 42%	278 100%	256 92%
7	Northern Boulevard Parking (under Highway	213	123 58%	165 77%	194 91%
8	Bus Lot	40	16 40%	138 345%**	137 343%#
9	Lot A	828	455 55%	639 77%	659 80%
10	Lot B	413	343 83%	349 85%	399 97%
11	Lot C	822	377 46%	803 98%	816 99%
12	Lot D	539	505 94%	473 88%	533 99%
13	Lot E	1,490	990 66%	1,414 95%	1,461 98%
14	Lot F	851	537 63%	809 95%	827 97%
15	Lot G	532	352 66%	380 71%	409 77%
16	Southfield Parking	1,575	210 13%	1,596 101%*	756 48%
Total		**8,667**	**4,436** **51%**	**8,013** **92%**	**7,388** **85%**

*Observed parking may exceed striped parking counts due to operational characteristics

**During the Gameday Saturday PM Pre-game period, the Bus Los is over capacity with 43 buses, as well as 95 cars

During the Gameday Sunday midday period, the Bus Lot is over capacity with 20 buses, as well as 117 cars

Subways

Subway Station Elements

The Mets - Willets Points subway station serves the No. 7 subway line, which operates between the 34th Street - Hudson Yards in Chelsea, Manhattan and Flushing – Main Street station in Flushing, Queens. There are multiple entrances to the station, both on the north and south sides of Roosevelt Avenue at the street level (Locations A, B), as well as a Flushing Meadows Pedestrian Bridge connecting the subway station to Flushing Meadows Corona Park and the Mets – Willets Point LIRR station (Location C). Street-level stairs both on the north and south sides of Roosevelt Avenue (Locations D, E) connect to a fare control area (Location F) consisting of a five-turnstile array across from a station booth on a mezzanine level. Within the fare zone past the turnstiles are two ramps (Locations G, H) and four stairways (Locations I, J, K, L) which provide access to the Manhattan-bound and Flushing-bound platforms, respectively.

On non gamedays, patrons entering and exiting the station utilize the main control area on the mezzanine level. However, on game days, this fare control area is closed, and the mezzanine level is a free zone providing access between the Flushing Meadows Pedestrian Bridge via a Special Event Mezzanine Ramp (Location M) and a 42-foot wide stairway (hereby known as the "Citi Field Stairs"). The Citi Field Stairs (Location N) provide direct access from Citi Field stadium to the subway station at the mezzanine level. During these gameday operations, four individual fare control areas (Locations O, P, Q, R) are activated to access the Manhattan-bound and Flushing-bound platforms, each consisting of six to eight-turnstile arrays. In addition, a Special Event fare control area (Location S) with two high entry-exit turnstiles (HEET) is located along the southernmost platform, which is only utilized on gamedays. This platform can be accessed by Special Event Stairs (Locations T, U) on the mezzanine level. The Special Event fare control area can be accessed via a set of Special Event ramps (Locations V, W). **Figure 14-7** through **Figure 14-9** below illustrate the locations of the subway station elements described above during both non-gameday and gameday conditions.

Figure 14-7 Existing Mets – Willets Point Subway Station Elements – Street Level

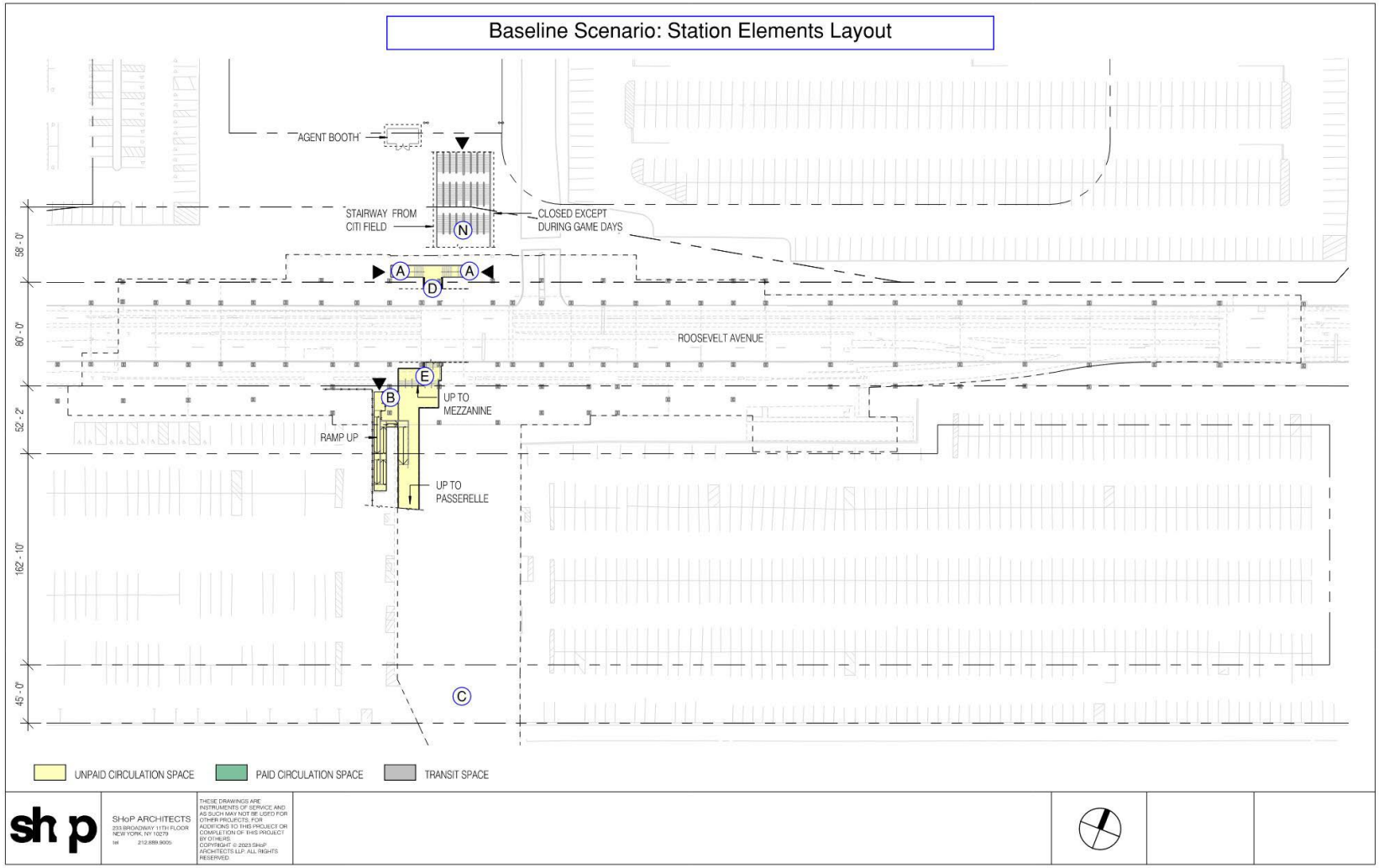


Figure 14-8 Existing Mets – Willets Point Subway Station Elements – Mezzanine Level

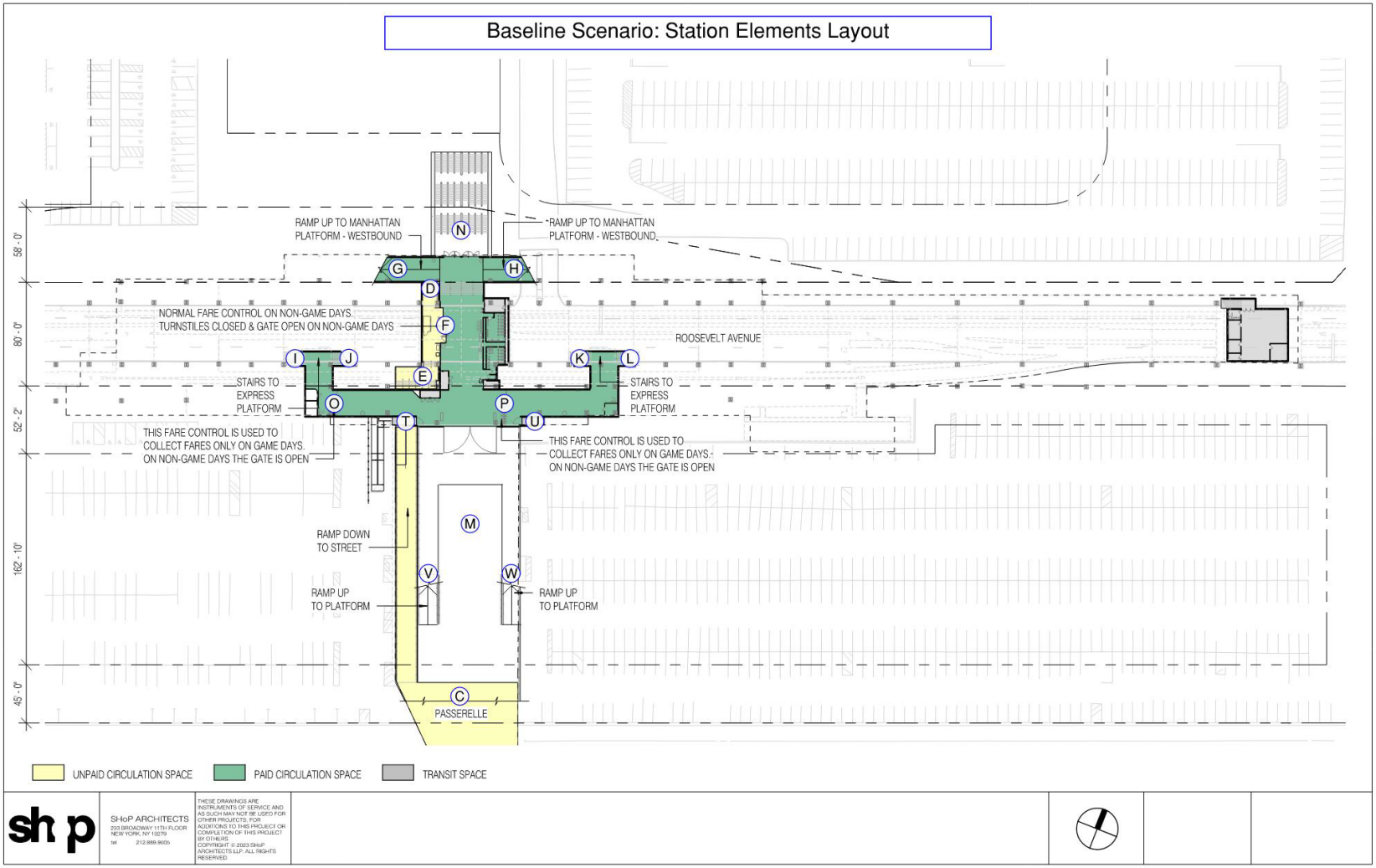
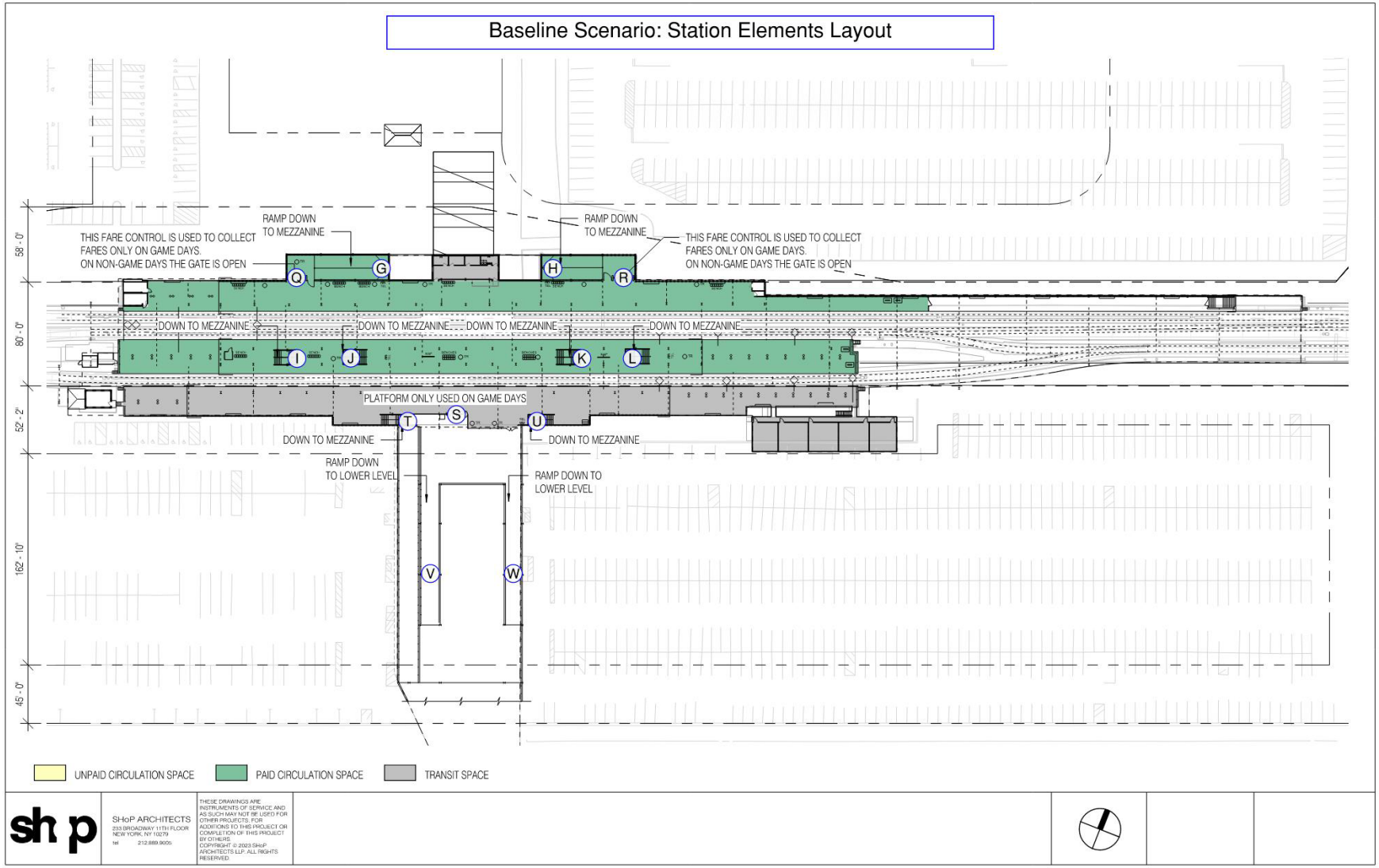


Figure 14-9 Existing Mets – Willets Point Subway Station Elements – Platform Level



Pedestrian counts were conducted at the subway station elements identified above in September 2022, with supplemental counts conducted in May and June 2023, as well as May 2024. Subway station elements were evaluated for the weekday AM and PM peak commuter peak periods, as well as weekday game ingress, Saturday game ingress, and Saturday game egress conditions to address worst-case conditions that occur on gamedays.

Level of Service

As shown in **Table 14-28** through **Table 14-30**, all subway station elements operate at acceptable levels of service during all peak hours analyzed.

Table 14-28 2022 Existing Subway Station Vertical Circulation Level of Service

Vertical Circulation Element	Width (ft)	Effective Width (ft)	15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	v/c Ratio	LOS
			Up	Down				
Non-Gameday Weekday AM Peak Hour								
Roosevelt Avenue Northeast Stair (S2)	8.0	6.8	4	3	0.80	0.90	0.01	A
Roosevelt Avenue Northwest Stair (S3)	8.0	6.8	10	28	0.80	0.90	0.05	A
North Mezzanine Stair (M4)	13.0	11.8	14	31	0.80	0.90	0.03	A
Roosevelt Avenue South Stair (S1)	8.3	7.1	38	16	0.80	0.90	0.06	A
South Mezzanine Stair (M1)	30.6	28.3	42	31	0.80	0.90	0.02	A
South Mezzanine Stair (M5)	12.0	10.8	42	31	0.80	0.90	0.06	A
Manhattan-bound Mezzanine Stair (P1)	32.9	31.2	75	10	0.80	0.90	0.02	A
Flushing-bound East Stair (P2)	10.0	8.8	3	18	0.75	0.90	0.02	A
Flushing-bound East Stair (P4)	10.0	8.8	2	27	0.75	0.90	0.03	A
Flushing-bound West Stair (P10)	10.0	8.8	1	18	0.75	0.90	0.02	A
Flushing-bound West Stair (P12)	10.0	8.8	2	14	0.75	0.90	0.02	A
Non-Gameday Weekday PM Peak Hour								
Roosevelt Avenue Northeast Stair (S2)	8.0	6.8	4	4	0.80	0.90	0.01	A
Roosevelt Avenue Northwest Stair (S3)	8.0	6.8	23	19	0.80	0.90	0.05	A
North Mezzanine Stair (M4)	13.0	11.8	27	23	0.80	0.90	0.03	A
Roosevelt Avenue South Stair (S1)	8.3	7.1	14	29	0.80	0.90	0.05	A
South Mezzanine Stair (M1)	30.6	28.3	44	94	0.80	0.90	0.04	A
South Mezzanine Stair (M5)	12.0	10.8	44	94	0.80	0.90	0.11	A
Manhattan-bound Mezzanine Stair (P1)	32.9	31.2	77	12	0.80	0.90	0.02	A
Flushing-bound East Stair (P2)	10.0	8.8	7	34	0.75	0.90	0.04	A
Flushing-bound East Stair (P4)	10.0	8.8	2	27	0.75	0.90	0.03	A
Flushing-bound West Stair (P10)	10.0	8.8	3	28	0.75	0.90	0.03	A
Flushing-bound West Stair (P12)	10.0	8.8	1	29	0.75	1.00	0.03	A

Table 14-28 2022 Existing Subway Station Vertical Circulation Level of Service

Vertical Circulation Element	Width (ft)	Effective Width (ft)	15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	v/c Ratio	LOS
			Up	Down				
Gameday Weekday PM Peak Hour								
Roosevelt Avenue Northeast Stair (S2)	8.0	6.8	8	4	0.80	0.90	0.01	A
Roosevelt Avenue Northwest Stair (S3)	8.0	6.8	8	28	0.80	0.90	0.05	A
North Mezzanine Stair (M4)	13.0	11.8	16	32	0.80	0.90	0.04	A
Roosevelt Avenue South Stair (S1)	8.3	7.1	18	43	0.80	0.90	0.07	A
South Mezzanine Stair (M1)	30.6	28.3	26	35	0.80	0.90	0.02	A
South Mezzanine Stair (M5)	12.0	10.8	26	35	0.80	0.90	0.05	A
Manhattan-bound Mezzanine Stair (P1)	32.9	31.2	2,338	4	0.80	1.00	0.63	B
Flushing-bound East Stair (P2)	10.0	8.8	7	369	0.75	1.00	0.38	A
Flushing-bound East Stair (P4)	10.0	8.8	3	319	0.75	1.00	0.32	A
Flushing-bound West Stair (P10)	10.0	8.8	6	365	0.75	1.00	0.37	A
Flushing-bound West Stair (P12)	10.0	8.8	6	509	0.75	1.00	0.52	B
Citi Field Stairs (U2)	44.3	41.6	38	2,288	0.90	1.00	0.41	A
Special Event East Stair (P6)	5.8	4.8	0	0	0.75	1.00	0.00	A
Special Event West Stair (P8)	5.8	4.8	0	0	0.75	1.00	0.00	A
Gameday Saturday PM Pre-game Peak Hour								
Roosevelt Avenue Northeast Stair (S2)	8.0	6.8	6	4	0.80	0.90	0.01	A
Roosevelt Avenue Northwest Stair (S3)	8.0	6.8	7	27	0.80	0.90	0.04	A
North Mezzanine Stair (M4)	13.0	11.8	13	31	0.80	0.90	0.03	A
Roosevelt Avenue South Stair (S1)	8.3	7.1	30	16	0.80	0.90	0.05	A
South Mezzanine Stair (M1)	30.6	28.3	18	10	0.80	0.90	0.01	A
South Mezzanine Stair (M5)	12.0	10.8	18	10	0.80	0.90	0.02	A
Manhattan-bound Mezzanine Stair (P1)	32.9	31.2	1,423	5	0.80	1.00	0.38	A
Flushing-bound East Stair (P2)	10.0	8.8	6	106	0.75	0.90	0.12	A
Flushing-bound East Stair (P4)	10.0	8.8	7	352	0.75	1.00	0.36	A
Flushing-bound West Stair (P10)	10.0	8.8	3	247	0.75	1.00	0.25	A
Flushing-bound West Stair (P12)	10.0	8.8	3	270	0.75	1.00	0.28	A
Citi Field Stairs (U2)	44.3	41.6	30	1,413	0.90	1.00	0.26	A
Special Event East Stair (P6)	5.8	4.8	2	128	0.75	1.00	0.24	A
Special Event West Stair (P8)	5.8	4.8	1	11	0.75	0.90	0.02	A
Gameday Saturday PM Post Game Peak Hour								
Roosevelt Avenue Northeast Stair (S2)	8.0	6.8	19	3	0.90	0.90	0.02	A
Roosevelt Avenue Northwest Stair (S3)	8.0	6.8	127	25	0.90	0.90	0.17	A
North Mezzanine Stair (M4)	13.0	11.8	145	27	0.90	0.90	0.11	A
Roosevelt Avenue South Stair (S1)	8.3	7.1	38	20	0.90	0.90	0.06	A
South Mezzanine Stair (M1)	30.6	28.3	19	19	0.90	0.90	0.01	A
South Mezzanine Stair (M5)	12.0	10.8	19	19	0.90	0.90	0.03	A

Table 14-28 2022 Existing Subway Station Vertical Circulation Level of Service

Vertical Circulation Element	Width (ft)	Effective Width (ft)	15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	v/c Ratio	LOS
			Up	Down				
Manhattan-bound Mezzanine Stair (P1)	32.9	31.2	381	1,512	0.80	0.90	0.56	B
Flushing-bound East Stair (P2)	10.0	8.8	237	52	0.75	0.90	0.26	A
Flushing-bound East Stair (P4)	10.0	8.8	185	58	0.75	0.90	0.22	A
Flushing-bound West Stair (P10)	10.0	8.8	92	73	0.75	0.90	0.16	A
Flushing-bound West Stair (P12)	10.0	8.8	150	54	0.75	0.90	0.19	A
Citi Field Stairs (U2)	44.3	41.6	3,062	20	0.90	1.00	0.49	B
Special Event East Stair (P6)	5.8	4.8	23	10	0.75	0.90	0.06	A
Special Event West Stair (P8)	5.8	4.8	0	0	0.75	1.00	0.00	A

Note:
Methodology based on *2021 CEQR Technical Manual* guidelines
Surging factors only apply to exiting volumes. The surge factor for entry volumes is 1.0. At the Mezzanine Manhattan-bound stair (P1) during game day peak hours, surges are experienced from both the Manhattan-bound and Flushing-bound platforms; therefore, a surging factor of 0.8 is applied to entry volumes. At the street level (S1/S2/S3) and mezzanine (M1/M4/M5) stairs during the gameday Saturday PM Post Game peak hour, a surging factor of 0.9 is applied for exit volumes, to account for the activation of the center special event track at the Flushing-bound platform.

Table 14-29 2022 Existing Subway Station Passageway Level of Service

Subway Station Element	Width (ft)	Effective Width (ft)	15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	v/c Ratio	LOS
			In	Out				
Non-Gameday Weekday AM Peak Hour								
Within Mets – Willets Point Station								
Mezzanine Outside Fare Zone Passageway	7.6	5.6	58	53	0.80	0.90	0.11	A
Mezzanine Central Corridor Passageway	27.8	25.8	151	17	0.80	0.90	0.04	A
Manhattan-bound West Ramp Passageway	17.1	15.1	18	6	0.75	0.90	0.01	A
Manhattan-bound East Ramp Passageway	16.0	14.0	57	4	0.75	0.90	0.02	A
Flushing-bound East Passageway	18.3	16.3	4	44	0.80	0.90	0.02	A
Flushing-bound West Passageway	14.0	12.0	3	32	0.80	0.90	0.02	A
Outside Mets – Willets Point Station								
Roosevelt Avenue South Ramp to Mezzanine Passageway	5.7	3.7	2	1	1.00	0.90	0.00	A
South Mezzanine to Pedestrian Bridge	7.0	5.0	17	45	1.00	0.90	0.06	A
Pedestrian Bridge to Flushing Meadows Corona Park	38.0	36.0	17	45	1.00	0.90	0.01	A
Non-Gameday Weekday PM Peak Hour								
Within Mets – Willets Point Station								
Mezzanine Outside Fare Zone Passageway	7.6	5.6	67	128	0.80	0.90	0.20	A

Table 14-29 2022 Existing Subway Station Passageway Level of Service

Subway Station Element	Width (ft)	Effective Width (ft)	15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	v/c Ratio	LOS
			In	Out				
Mezzanine Central Corridor Passageway	27.8	25.8	195	24	0.80	0.90	0.05	A
Manhattan-bound West Ramp Passageway	17.1	15.1	16	7	0.75	0.90	0.01	A
Manhattan-bound East Ramp Passageway	16.0	14.0	62	4	0.75	0.90	0.02	A
Flushing-bound East Passageway	18.3	16.3	9	60	0.80	0.90	0.03	A
Flushing-bound West Passageway	14.0	12.0	3	58	0.80	1.00	0.03	A
Outside Mets – Willets Point Station								
Roosevelt Avenue South Ramp to Mezzanine Passageway	5.7	3.7	5	3	1.00	0.90	0.01	A
South Mezzanine to Pedestrian Bridge	7.0	5.0	64	120	1.00	0.90	0.18	A
Pedestrian Bridge to Flushing Meadows Corona Park	38.0	36.0	64	120	1.00	0.90	0.03	A
Gameday Weekday PM Peak Hour								
Within Mets – Willets Point Station								
Mezzanine Outside Fare Zone Passageway	7.6	5.6	31	63	0.80	0.90	0.10	A
Mezzanine Central Corridor Passageway	27.8	25.8	2338	8	0.80	1.00	0.51	B
Manhattan-bound West Ramp Passageway	17.1	15.1	30	61	0.75	0.90	0.04	A
Manhattan-bound East Ramp Passageway	16.0	14.0	134	20	0.75	0.90	0.06	A
Flushing-bound East Passageway	18.3	16.3	10	688	0.80	1.00	0.24	A
Flushing-bound West Passageway	14.0	12.0	12	873	0.80	1.00	0.41	A
Outside Mets – Willets Point Station								
Roosevelt Avenue South Ramp to Mezzanine Passageway	5.7	3.7	8	3	1.00	0.90	0.01	A
South Mezzanine to Pedestrian Bridge Passageway	7.0	5.0	18	34	1.00	0.90	0.05	A
Pedestrian Bridge to Flushing Meadows Corona Park Passageway	38.0	36.0	739	98	1.00	0.90	0.11	A
Special Event Mezzanine Ramp Passageway	43.9	41.9	699	86	0.80	0.90	0.10	A
Special Event East Ramp Passageway	15.8	13.8	1	1	0.75	0.90	0.00	A
Special Event West Ramp Passageway	15.0	13.0	4	14	0.75	0.90	0.01	A
Gameday Saturday PM Pre-game Peak Hour								
Within Mets – Willets Point Station								
Mezzanine Outside Fare Zone Passageway	7.6	5.6	33	26	0.80	0.90	0.06	A
Mezzanine Central Corridor Passageway	27.8	25.8	1423	11	0.80	1.00	0.31	A
Manhattan-bound West Ramp Passageway	17.1	15.1	28	42	0.75	0.90	0.03	A
Manhattan-bound East Ramp Passageway	16.0	14.0	76	26	0.75	0.90	0.04	A

Table 14-29 2022 Existing Subway Station Passageway Level of Service

Subway Station Element	Width (ft)	Effective Width (ft)	15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	v/c Ratio	LOS
			In	Out				
Flushing-bound East Passageway	18.3	16.3	15	585	0.80	1.00	0.20	A
Flushing-bound West Passageway	14.0	12.0	6	528	0.80	1.00	0.25	A
Outside Mets – Willets Point Station								
Roosevelt Avenue South Ramp to Mezzanine Passageway	5.7	3.7	19	14	1.00	0.90	0.04	A
South Mezzanine to Pedestrian Bridge Passageway	7.0	5.0	43	31	1.00	0.90	0.07	A
Pedestrian Bridge to Flushing Meadows Corona Park Passageway	38.0	36.0	552	233	1.00	0.90	0.11	A
Special Event Mezzanine Ramp Passageway	43.9	41.9	758	155	0.80	0.90	0.11	A
Special Event East Ramp Passageway	15.8	13.8	3	8	0.75	0.90	0.00	A
Special Event West Ramp Passageway	15.0	13.0	7	295	0.75	1.00	0.14	A
Gameday Saturday PM Post Game Peak Hour								
Within Mets – Willets Point Station								
Mezzanine Outside Fare Zone Passageway	7.6	5.6	180	59	0.80	0.90	0.22	A
Mezzanine Central Corridor Passageway	27.8	25.8	381	1512	0.80	0.90	0.45	A
Manhattan-bound West Ramp Passageway	17.1	15.1	896	50	0.75	0.90	0.31	A
Manhattan-bound East Ramp Passageway	16.0	14.0	1095	58	0.75	0.90	0.41	A
Flushing-bound East Passageway	18.3	16.3	445	120	0.80	0.90	0.18	A
Flushing-bound West Passageway	14.0	12.0	243	127	0.80	0.90	0.17	A
Outside Mets – Willets Point Station								
Roosevelt Avenue South Ramp to Mezzanine Passageway	5.7	3.7	38	19	1.00	0.90	0.08	A
South Mezzanine to Pedestrian Bridge Passageway	7.0	5.0	34	71	1.00	0.90	0.10	A
Pedestrian Bridge to Flushing Meadows Corona Park Passageway	38.0	36.0	158	1043	1.00	0.90	0.16	A
Special Event Mezzanine Ramp Passageway	43.9	41.9	138	1013	0.80	0.90	0.17	A
Special Event East Ramp Passageway	15.8	13.8	3	1	0.75	0.90	0.00	A
Special Event West Ramp Passageway	15.0	13.0	12	20	0.75	0.90	0.01	A

Note:
Methodology based on *2021 CEQR Technical Manual* guidelines
Surging factors only apply to exiting volumes. The surge factor for entry volumes is 1.0. At the Mezzanine Central Corridor Passageway, surging factors of 0.80 are applied to the entry and exit volumes during non-gameday and gameday peak hours. This is due to the passageway experiencing cross flows from both the platforms and station entrances due to its central location within the station.

Table 14-30 2022 Existing Subway Station Fare Control Level of Service

Fare Control Element	15-Minute Pedestrian Volumes In	15-Minute Pedestrian Volumes Out	Surging Factor	Friction Factor	v/c Ratio	LOS
Non-Gameday Weekday AM Peak Hour						
Main Control Area Turnstiles (R532)	58	53	0.80	0.90	0.05	A
Non-Gameday Weekday PM Peak Hour						
Main Control Area Turnstiles (R532)	67	128	0.80	0.90	0.09	A
Gameday Weekday PM Peak Hour						
Manhattan-bound East Ramp Turnstiles	30	61	0.75	0.90	0.03	A
Manhattan-bound West Ramp Turnstiles	134	20	0.75	0.90	0.07	A
Flushing-bound East Stair Turnstiles	10	688	0.80	1.00	0.17	A
Flushing-bound West Stair Turnstiles	12	873	0.80	1.00	0.29	A
Special Event High Entry/Exit	2	13	0.75	0.90	0.02	A
Gameday Saturday PM Pre-game Peak Hour						
Manhattan-bound East Ramp Turnstiles	28	42	0.75	0.90	0.02	A
Manhattan-bound West Ramp Turnstiles	76	26	0.75	0.90	0.04	A
Flushing-bound East Stair Turnstiles	15	585	0.80	1.00	0.15	A
Flushing-bound West Stair Turnstiles	5	517	0.80	1.00	0.17	A
Special Event High Entry/Exit	5	277	0.75	1.00	0.35	A
Gameday Saturday PM Post Game Peak Hour						
Manhattan-bound East Ramp Turnstiles	896	50	0.75	0.90	0.36	A
Manhattan-bound West Ramp Turnstiles	1,095	58	0.75	1.00	0.45	A
Flushing-bound East Stair Turnstiles	445	120	0.80	0.90	0.18	A
Flushing-bound West Stair Turnstiles	242	127	0.80	0.90	0.15	A
Special Event High Entry/Exit	12	18	0.75	0.90	0.05	A

Note:
Methodology based on *2021 CEQR Technical Manual* guidelines
Surging factors only apply to exiting volumes. The surge factor for entry volumes is 1.0.

Subway Line-Haul Conditions

Existing subway line-haul conditions for the No. 7 subway line serving the Mets – Willets Point station are summarized in **Table 14-31** below. The analysis examines the peak hour load passing through the maximum load point of the subway line in the peak direction. The peak direction of travel on this line is the southbound (Manhattan-bound) in the weekday AM peak hour. The maximum load points are at the 40th Street – Lowery Street station (for the local No. 7 line), 61st Street – Woodside station (for the express No. 7 line), and the Vernon Boulevard – Jackson Avenue station (for the combined local and express lines). The peak direction of travel on this line during the weekday PM peak hour is the northbound (Flushing-bound); the maximum load points are at the Queensboro Plaza for the local, express, and combined No. 7 lines. The peak direction of travel

during the Saturday PM peak hour is also the northbound, and the maximum load point is at the 74th Street – Broadway station (there is only local No. 7 service on the weekends).

The peak direction subway line operates at v/c ratios of 0.76, 0.86 and 0.73 at the three respective maximum load points (local, express, and combined No. 7 lines) during the weekday AM peak hour, and v/c ratios 0.63, 0.71, and 0.68 during the weekday PM peak hour. During the Saturday PM peak hour, the peak direction subway line operates at a v/c ratio of 1.04; a v/c ratio of 1.0 signifies that the subway line-haul is at capacity under existing conditions.

Table 14-31 Existing Subway Line-Haul Analysis

Peak Hour	Route	Direction	Max Load Point (leaving station)	Average Passengers Per Hour[1,2]	Average Trains Per Hour[1,2]	Average Cars Per Hour[1]	Average Passengers Per Car[1,2]	Guideline Passengers Per Car	V/C Ratio[4]
AM	7 (local)	SB	40 St - Lowery St	13,991	15.0	165	85	110	0.77
	7 (express)	SB	61 St - Woodside	14,857	14.0	154	96	110	0.88
	7 (combined)	SB	Vernon Blvd - Jackson Av	26,038	29.0	319	82	110	0.74
PM	7 (local)	NB	Queensboro Plaza	10,889	14.0	154	71	110	0.64
	7 (express)	NB	Queensboro Plaza	12,292	14.0	154	80	110	0.73
	7 (combined)	NB	Queensboro Plaza	23,338	28.0	308	76	110	0.69
SAT PM	7 (local)	NB	74 St-Broadway	8,584	15.0	165	52	50	1.04

Notes:
[1] Weekday AM data is based on a three-year average of pre-pandemic ridership and 2023 train throughput data from NYCT
[2] Weekday PM data is based on 2017-2018 ridership and 2019 train throughput data from NYCT; Saturday PM is based on 2019 ridership and train throughout from NYCT (Saturday is based on 2018 modeled ridership)
[3] Guideline capacities are based on NYCT rush hour loading guidelines which vary by car type, line, and location based on frequency and type of service.
[4] Volume to guideline capacity ratio

Buses

The study area is served by several MTA-NYCT local bus routes, including the Q19, Q48, and Q66 bus routes. Based on the Proposed Project trip assignments, these have been identified for analysis during the weekday AM and PM commuter peak hours, and Saturday PM peak hour. The Q19 bus route operates between Astoria and Flushing, with stops along Astoria Boulevard and Northern Boulevard. The Q48 bus route operates between La Guardia Airport and Flushing with stops along Roosevelt Avenue in the vicinity of the Development Site. The Q66 bus route operates between Long Island City and Flushing with bus stops along Northern Boulevard.

Table 14-32 shows the existing number of buses and ridership at the maximum load points in each direction for the Q19, Q48, and Q66 bus routes in the weekday AM, PM, and Saturday PM peak hours. The bus routes analyzed currently operate with available capacity at their maximum load points during the peak hours analyzed.

Table 14-32 Existing Local Bus Analysis

Peak Hour	Route	Direction	Maximum Load Point	Peak Hour Buses[1]	Peak Hour Passengers[2,4]	Average Passengers per Bus	Available Peak Hour Capacity[3]
AM	Q19	EB	Astoria Blvd/108 St	5	160	32	110
			Northern Blvd/126 Pl	5	154	31	116
	Q48	EB	Roosevelt Av/108 St	4	82	21	134
			Roosevelt Av/114 St	4	68	17	148
		WB	108 St/34 Av	4	49	12	167
	Q66	EB	Northern Blvd/127 Pl	15	434	29	376
			Northern Blvd/126 Pl	15	444	30	366
PM	Q19	EB	Astoria Blvd/77 St	3	109	36	53
	Q48	EB	108 St/37 Av	3	86	29	76
			Roosevelt Av/108 St	3	20	7	142
		WB	Roosevelt Av/College Pt Blvd	4	66	17	150
	Q66	EB	Northern Blvd/54 St	11	306	28	288
SAT PM	Q19	EB	Astoria Blvd/49 St	2	48	24	60
	Q48	EB	Roosevelt Av/Willets Pt Blvd Station	4	59	15	157
		WB	Roosevelt Av/Grand Central Pkwy	3	58	19	104
	Q66	EB	Northern Blvd/54 St	6	189	32	135

Notes:
[1] Based on most currently available timetables (September 2022)
[2] Based on most currently available data from NYCT (May 2023)
[3] Available capacities based on NYCT loading guidelines of 54 passengers per standard bus
[4]For load points where data provided by NYCT is for a half hour, the peak hour passenger volumes were prorated to reflect a full hour

Pedestrians

Pedestrian counts were conducted in September and October 2022, as well as May 2023 and May 2024 at key potential impact locations for the non-gameday weekday AM, midday, PM, and Saturday PM peak hours, as well as on Mets gamedays during the weekday PM, Saturday PM Pre-game, Saturday PM Post Game, Sunday midday, and Sunday PM peak hours. The peak hours of 8:00 to 9:00 AM, 1:00 to 2:00 PM, 5:00 to 6:00 PM, and 7:00 to 8:00 PM for the non-gameday weekday AM, midday, PM, and Saturday PM peak hours were selected for analysis. For gameday weekday PM, Saturday PM Pre-game, Sunday midday and Sunday PM; the peak hours selected for analysis were 5:00 to 6:00 PM, 6:00 to 7:00 PM, 6:30 PM to 7:30 PM, 1:00 to 2:00 PM, and 5:00 to 6:00 PM, respectively. Pedestrian volumes during these peak hours are shown in **Appendix D.**

As shown in **Table 14-33** and **Table 14-34**:

› All sidewalk elements operate at acceptable LOS C or better during the four non-gameday peak hours, and the gameday weekday PM and Sunday midday peak hours. One of the 16 sidewalk elements operates at unacceptable LOS D during the gameday Saturday PM Pre-game and

Saturday PM Post Game peak hours, and two of the 16 sidewalk elements operate at an unacceptable LOS E during the gameday Sunday PM peak hour.

- All crosswalk elements operate at acceptable LOS C or better during the four non-gameday peak hours, and the gameday weekday PM peak hour. One of the 14 crosswalk elements operates at an unacceptable LOS E or F during the gameday Saturday PM Pre-game and Sunday midday peak hours, four of the 14 crosswalk elements operate at an unacceptable LOS E or F during the gameday Saturday PM Post Game peak hour, and two of the 14 crosswalk elements operate at an unacceptable LOS E or F during the gameday Sunday PM peak hour.
- All eight corner elements operate at acceptable LOS C or better during the non-gameday and gameday peak hours, with the exception of two elements during the gameday Saturday PM Post Game peak hour and one element during the gameday Sunday PM peak hour, which operate at an unacceptable LOS F.

The existing peak hour volumes and levels of service for each pedestrian element analyzed are presented in **Table 14-35** through **0**.

Table 14-33 2022 Existing Non-Gameday Pedestrian Levels of Service Summary

	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Saturday PM Peak Hour
Sidewalk Elements				
Sidewalks at LOS A/B/C	16	16	16	16
Sidewalks at Unacceptable LOS D	0	0	0	0
Sidewalks at LOS E	0	0	0	0
Sidewalks at LOS F	0	0	0	0
Crosswalk Elements				
Crosswalks at LOS A/B/C	14	14	14	14
Crosswalks at Unacceptable LOS D	0	0	0	0
Crosswalks at LOS E	0	0	0	0
Crosswalks at LOS F	0	0	0	0
Corner Elements				
Corners at LOS A/B/C	8	8	8	8
Corners at Unacceptable LOS D	0	0	0	0
Corners at LOS E	0	0	0	0
Corners at LOS F	0	0	0	0

Note: Includes 16 sidewalk, 14 crosswalk, and eight corner analysis locations

Table 14-34 2022 Existing Gameday Pedestrian Levels of Service Summary

	Weekday PM Peak Hour	Saturday PM Pre-game Peak Hour	Saturday PM Post Game Peak Hour	Sunday Midday Peak Hour	Sunday PM Peak Hour
Sidewalk Elements					
Sidewalks at LOS A/B/C	16	15	15	16	14
Sidewalks at Unacceptable LOS D	0	1	1	0	0
Sidewalks at LOS E	0	0	0	0	2
Sidewalks at LOS F	0	0	0	0	0
Crosswalk Elements					
Crosswalks at LOS A/B/C	14	13	10	13	12
Crosswalks at Unacceptable LOS D	0	0	0	0	0
Crosswalks at LOS E	0	0	2	1	1
Crosswalks at LOS F	0	1	2	0	1
Corner Elements					
Corners at LOS A/B/C	8	8	6	8	7
Corners at Unacceptable LOS D	0	0	0	0	0
Corners at LOS E	0	0	0	0	0
Corners at LOS F	0	0	2	0	1

Note: Includes 16 sidewalk, 14 crosswalk, and eight corner analysis locations

Table 14-35 2022 Existing Non-Gameday Pedestrian Levels of Service – Sidewalks

		Weekday AM Peak Hour			Weekday Midday Peak Hour			Weekday PM Peak Hour			Saturday PM Peak Hour		
Sidewalk	Effective Width, ft	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS
114th Street between 39th Avenue and Roosevelt Avenue (west side)	4.5	40	890.9	A	67	742.4	A	67	848.5	A	48	1,048.2	A
114th Street between Roosevelt Avenue and 41st Avenue (west side)	1.8	45	345.6	B	52	329.8	B	41	518.5	B	30	806.6	A
126th Street/Seaver Way between Northern Boulevard and 34th Avenue (east side)	5.4	20	2,383.3	A	42	932.6	A	30	1,430.0	A	12	4,290.0	A
126th Street/Seaver Way between 34th Avenue and 35th Avenue (east side)	2.0	2	7,920.0	A	4	2,613.6	A	3	4,012.8	A	1	7,920.0	A
126th Street/Seaver Way between 34th Avenue and Citi Field Entrance 11 (west side)	2.0	3	3,960.0	A	7	2,640.0	A	4	2,640.0	A	2	3,960.0	A
126th Street/Seaver Way between 36th Avenue and Citi Field Entrance 1 (west side)	4.5	64	890.9	A	36	1,188.0	A	63	890.9	A	14	2,227.5	A
Roosevelt Avenue between 112th Street and 114th Street (north side)	3.0	76	456.8	B	74	494.9	B	128	329.8	B	35	913.8	A
Roosevelt Avenue between 112th Street and 114th Street (south side)	3.7	54	854.1	A	51	1,037.1	A	82	604.9	A	31	1,037.1	A
Roosevelt Avenue between 14th Street and Shea Road (north side)	4.0	56	879.9	A	39	833.6	A	112	406.0	B	41	1,218.4	A
Roosevelt Avenue between 14th Street and Shea Road (south side)	4.0	26	1,980.0	A	44	633.5	A	55	719.9	A	12	2,640.0	A

Table 14-35 2022 Existing Non-Gameday Pedestrian Levels of Service – Sidewalks

		Weekday AM Peak Hour			Weekday Midday Peak Hour			Weekday PM Peak Hour			Saturday PM Peak Hour		
Sidewalk	Effective Width, ft	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS
Roosevelt Avenue between Shea Road and Subway Station (north side)	10.1	69	1,901.4	A	39	2,852.1	A	116	1,109.1	A	53	2,101.6	A
Roosevelt Avenue between Shea Road and Subway Station (south side)	10.7	26	5,280.0	A	44	1,689.6	A	55	1,920.0	A	12	7,040.0	A
Roosevelt Avenue between Subway Station and 126th Street/Seaver Way (north side)	11.3	66	2,362.1	A	48	2,493.3	A	124	1,068.5	A	41	3,205.7	A
Roosevelt Avenue between Subway Station and 126th Street/Seaver Way (south side)	10.5	3	20,790.0	A	10	10,395.0	A	14	5,940.0	A	1	41,580.0	A
Roosevelt Avenue between 126th Street/Seaver Way and Flushing Creek (north side)	7.2	46	1,576.6	A	30	2,365.0	A	77	1,013.5	A	26	3,153.3	A
Roosevelt Avenue between 126th Street/Seaver Way and Flushing Creek (south side)	8.0	4	7,920.0	A	4	11,880.0	A	2	15,840.0	A	0	-	A

Table 14-36 2022 Existing Gameday Pedestrian Levels of Service – Sidewalks

	Weekday PM Peak Hour				Saturday PM Pre-game Peak Hour			Saturday PM Post Game Peak Hour			Sunday Midday Peak Hour			Sunday PM Peak Hour		
Sidewalk	Effective Width, ft	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS
114th Street between 39th Avenue and Roosevelt Avenue (west side)	4.5	103	524.0	B	29	1,620.0	A	211	211.9	B	16	2,545.7	A	14	2,227.5	A
114th Street between Roosevelt Avenue and 41st Avenue (west side)	1.8	78	315.5	B	89	219.8	B	102	147.8	B	95	268.7	B	122	181.2	B
126th Street/Seaver Way between Northern Boulevar and 34th Avenue (east side)	5.4	110	612.8	A	650	102.1	B	898	47.5	B	530	120.7	B	897	42.7	C
126th Street/Seaver Way between 34th Avenue and 35th Avenue (east side)	2.0	22	878.3	A	1	7,920.0	A	261	60.5	A	17	987.6	A	52	292.2	B
126th Street/Seaver Way between 34th Avenue and Citi Field Entrance 11 (west side)	2.0	64	272.9	B	543	33.8	D	1,384	8.6	D	543	50.4	C	633	21.3	E
126th Street/Seaver Way between 36th Avenue and Citi Field Entrance 1 (west side)	4.5	201	307.1	B	344	126.0	B	1,272	32.8	B	328	172.7	B	2,640	15.7	E
Roosevelt Avenue between 112th Street and 114th Stree (north side)	3.0	120	329.8	B	170	247.3	B	263	134.6	B	164	228.2	B	247	120.8	B

Table 14-36 2022 Existing Gameday Pedestrian Levels of Service – Sidewalks

	Weekday PM Peak Hour				Saturday PM Pre-game Peak Hour			Saturday PM Post Game Peak Hour			Sunday Midday Peak Hour			Sunday PM Peak Hour		
Sidewalk	Effective Width, ft	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS
Roosevelt Avenue between 112th Street and 114th Stree (south side)	3.7	81	604.9	A	119	403.2	B	125	382.0	B	151	329.8	B	133	362.9	B
Roosevelt Avenue between 114th Street and Shea Road (north side)	4.0	154	351.8	B	190	259.5	B	513	82.7	B	217	219.8	B	460	84.1	C
Roosevelt Avenue between 114th Street and Shea Road (south side)	4.0	97	609.1	A	119	395.9	B	153	344.2	B	87	428.0	B	133	351.8	B
Roosevelt Avenue between Shea Road and Subway Station (north side)	10.1	171	814.8	A	956	124.3	B	365	295.6	B	1,040	87.9	C	1,120	70.8	C
Roosevelt Avenue between Shea Road and Subway Station (south side)	10.7	97	1,624.6	A	119	1,055.9	A	153	918.2	A	87	1,141.6	A	133	938.6	A
Roosevelt Avenue between Subway Station and 126th Street/Seaver Way (north side)	11.3	155	1,043.7	A	182	760.6	A	245	367.7	A	153	831.0	A	661	123.5	B
Roosevelt Avenue between Subway Station and 126th Street/Seaver Way (south side)	10.5	25	1,897.5	A	29	3,198.4	A	137	1,066.1	A	21	5,940.0	A	52	1,890.0	A

Table 14-36 2022 Existing Gameday Pedestrian Levels of Service – Sidewalks

	Weekday PM Peak Hour				Saturday PM Pre-game Peak Hour			Saturday PM Post Game Peak Hour			Sunday Midday Peak Hour			Sunday PM Peak Hour		
Sidewalk	Effective Width, ft	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS
Roosevelt Avenue between 26th Street/Seaver Way and Flushing Creek (north side)	7.2	128	709.4	A	299	322.3	B	0	-	A	264	383.4	B	331	156.4	B
Roosevelt Avenue between 26th Street/Seaver Way and Flushing Creek (south side)	8.0	1	31,680.0	A	0	-	A	763	82.7	C	0	-	A	0	-	A

Table 14-37 2022 Existing Non-Gameday Pedestrian Levels of Service – Crosswalks

		Weekday AM Peak Hour			Weekday Midday Peak Hour			Weekday PM Peak Hour			Saturday PM Peak Hour		
Intersection	Crosswalk	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS
126th Street/Seaver Way and 34th Avenue	East	21	893.9	A	37	509.1	A	37	508.2	A	7	1,461.4	A
	South	11	379.6	A	9	273.6	A	6	668.2	A	0	-	A
	West	1	14,965.7	A	4	4,888.3	A	0	-	A	2	7,549.3	A
126th Street/Seaver Way and Roosevelt Avenue	North	31	1,056.8	A	29	1,148.9	A	71	458.2	A	24	1,583.4	A
	East	3	1,681.4	A	3	2,047.2	A	9	632.1	A	1	2,262.0	A
	South	3	6,073.7	A	4	6,483.5	A	5	9,150.3	A	0	-	A
	West	0	-	A	2	2,807.0	A	7	891.8	A	0	-	A
Roosevelt Avenue and Subway Station	North	101	262.8	A	82	324.4	A	121	239.7	A	55	351.2	A
	East	3	3,106.6	A	1	6,213.2	A	3	3,106.6	A	1	6,213.2	A
	West	4	3,224.2	A	4	3,226.1	A	12	920.0	A	3	6,452.3	A
Roosevelt Avenue and 114th Street	North	28	1,925.6	A	26	1,527.8	A	79	553.0	A	36	1,200.4	A
	East	4	1,324.7	A	3	1,485.6	A	9	1,002.2	A	2	2,291.1	A
	South	22	1,553.3	A	35	723.0	A	39	841.4	A	16	1,589.8	A
	West	24	314.1	A	43	216.5	A	32	417.6	A	20	794.8	A

Table 14-38 2022 Existing Gameday Pedestrian Levels of Service – Crosswalks

Intersection	Crosswalk	Weekday PM Peak Hour			Saturday PM Pre-game Peak Hour			Saturday PM Post Game Peak Hour			Sunday Midday Peak Hour			Sunday PM Peak Hour		
		Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS
126th Street/Seaver Way and 34th Avenue	East	120	160.0	A	623	26.0	C	822	10.3	E	488	30.7	C	795	9.6	E
	South	46	76.6	A	387	5.7	F	740	3.8	F	362	8.8	E	490	4.4	F
	West	20	1,102.5	A	94	288.2	A	552	46.7	B	142	171.7	A	151	179.7	A
126th Street/Seaver Way and Roosevelt Avenue	North	119	336.7	A	261	141.1	A	403	50.3	B	236	163.7	A	332	65.8	A
	East	5	1,018.5	A	15	205.0	A	405	7.7	F	15	480.4	A	5	558.6	A
	South	7	4,556.9	A	19	2,179.6	A	425	77.8	A	17	2,429.8	A	21	1,625.5	A
	West	13	787.7	A	27	87.6	A	272	10.0	E	6	708.9	A	25	131.2	A
Roosevelt Avenue and Subway Station	North	103	190.1	A	207	107.2	A	345	60.3	A	160	129.5	A	405	45.0	B
	East	1	6,213.2	A	7	1,552.3	A	8	1,034.0	A	0	-	A	32	266.5	A
	West	42	337.2	A	53	291.5	A	208	67.6	A	152	134.3	A	146	74.0	A
Roosevelt Avenue and 114th Street	North	106	417.1	A	144	294.5	A	480	79.1	A	199	253.3	A	383	73.4	A
	East	11	414.7	A	27	318.7	A	41	203.4	A	33	284.2	A	82	137.6	A
	South	81	399.6	A	100	347.7	A	164	243.7	A	87	437.4	A	153	237.3	A
	West	48	281.8	A	56	254.1	A	272	29.1	C	49	281.8	A	101	146.0	A

Table 14-39 2022 Existing Non-Gameday Pedestrian Levels of Service – Corners

		Weekday AM Peak Hour			Weekday Midday Peak Hour			Weekday PM Peak Hour			Saturday PM Peak Hour		
Intersection	Corner	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS
126th Street/Seaver Way and 34th Avenue	Southeast	21	1,373.6	A	19	1,000.5	A	18	1,161.3	A	10	3,374.5	A
	Southwest	2	2,127.1	A	2	1,238.5	A	1	3,753.3	A	2	3,762.0	A
126th Street/Seaver Way and Roosevelt Avenue	Northeast	12	351.4	A	1	528.5	A	8	194.9	A	4	617.7	A
	Southeast	0	4,123.9	A	0	5,170.8	A	0	2,947.9	A	0	20,683.1	A
	Southwest	1	6,752.7	A	5	3,857.6	A	2	2,983.5	A	1	27,042.3	A
	Northwest	11	2,388.3	A	8	2,385.6	A	26	986.5	A	5	3,694.5	A
Roosevelt Avenue and 114th Street	Southwest	20	452.3	A	20	260.8	A	22	401.0	A	24	632.5	A
	Northwest	18	1,324.6	A	29	943.3	A	28	852.0	A	28	1,378.9	A

Table 14-40 2022 Existing Gameday Pedestrian Levels of Service – Corners

Intersection	Corner	Weekday PM Peak Hour			Saturday PM Pre-Game Peak Hour			Saturday PM Post Game Peak Hour			Sunday Midday Peak Hour			Sunday PM Peak Hour		
		Volume, ped/hr	Avg Ped Space, SF/ft	LOS	Volume, ped/hr	Avg Ped Space, SF/ft	LOS	Volume, ped/hr	Avg Ped Space, SF/ft	LOS	Volume, ped/hr	Avg Ped Space, SF/ft	LOS	Volume, ped/hr	Avg Ped Space, SF/ft	LOS
126th Street/Seaver Way and 34th Avenue	Southeast	26	417.4	A	21	49.6	B	46	24.7	C	30	75.2	A	23	25.9	C
	Southwest	13	381.8	A	54	59.3	B	32	-20.3	F	34	70.3	A	39	-9.3	F
126th Street/Seaver Way and Roosevelt Avenue	Northeast	7	165.0	A	12	62.8	A	0	-13.4	F	23	78.1	A	79	30.7	C
	Southeast	0	2,938.1	A	0	1,019.2	A	0	43.3	B	0	1,575.5	A	0	1,206.3	A
	Southwest	3	2,444.4	A	2	834.8	A	4	60.4	A	2	2,232.4	A	3	782.2	A
	Northwest	24	761.0	A	22	360.4	A	53	70.8	A	11	487.1	A	617	69.9	A
Roosevelt Avenue and 114th Street	Southwest	22	236.6	A	43	176.2	A	8	65.3	A	30	236.6	A	29	137.1	A
	Northwest	27	650.2	A	47	510.1	A	22	110.1	A	38	442.1	A	39	195.4	A

No-Action Conditions

This section establishes the Future without the Proposed Actions condition (or the No-Action condition) to provide a baseline condition against which potential impacts of the Proposed Project can be identified. Future year conditions were analyzed for the year 2030.

Traffic

Traffic Volumes

Future year conditions were analyzed for the year 2030. No-Action traffic, pedestrian, and transit volumes were established by applying a background growth rate of 0.50 percent per year for the first five years (years 2022 to 2027) and a growth rate of 0.25 percent per year for the subsequent three years (years 2027 to 2030) in accordance with the *CEQR Technical Manual* guidelines for Queens projects. This background growth is applied to existing traffic volumes and accounts for smaller projects and general increases in travel demand. As detailed in **Chapter 2, Land Use, Zoning, and Public Policy**, several developments are being planned and are expected to be developed by the year 2030 within the study area. Thirty-three projects were identified in consultation with NYCDCP to be incorporated in the 2030 No-Action condition analyses. An additional five projects outside of the one-mile radius of the study area were also included in the 2030 No-Action condition, as requested by NYCDOT. These would result in a total of thirty-eight projects, totaling approximately 6,732 residential units, 187,555 sf office floor space, 1,700 hotel rooms, 235,895 sf of community facility space, and 515,304 sf of retail space; these projects are detailed in **Table 14-41**. No-Action traffic volume maps for the four non-gameday and five gameday peak hours are provided in **Appendix D.**

Table 14-41 Background Development Projects

No.	Project Name/Address	Description	Projected Completion Date
1	Willets Point Phase 1	Residential: 1,100 units/ 892,635 sf Retail: 23,756 sf Community Facility: 3,159 sf	2026
2	Willets Point Phase 2	Residential: 2,500 units Retail: 60,000 sf Hotel: 145,000 sf/ 250 room Soccer Stadium: 500,000 sf/ 25,000 seat	2027
3	SFWD Proposed Development Site 1 (Block 4963/Lots 7, 8, 9)	Residential: 546 units/ 458,604 gsf Retail: 168,989 gsf Commercial Office: 180,835 gsf Hotel: 146,100 gsf/ 353 room Community Facility: 4,300 gsf Parking Facility: 510 spaces Waterfront Access: 42,869 sf/ 0.98 acre	2025

Table 14-41 Background Development Projects

No.	Project Name/Address	Description	Projected Completion Date
4	SFWD Proposed Development Site 2 (Block 4963/Lot 65)	Residential: 368 units/ 398,646 gsf Retail: 54,304 gsf Hotel: 350,873 gsf/ 301 room Community Facility: 13,505 gsf Parking Facility: 318 spaces Waterfront Access: 34,810 sf/ 0.79 acre	2028
5	Porpoise Bridge (Tidal Gate Bridge)	NYCDDC rehabilitation of bridge structure and replacement of existing floodgates	2026
6	Passerelle Bridge Reconstruction	Relocation of the Passerelle Bridge within Flushing Meadows Corona Park, east of the existing alignment	2029
7	Flushing Bay Promenade—Candela Structures/Boat Basin Place Intersections	NYC Parks improvements to Candela structures and Flushing Bay Promenade intersections at Boat Basin Place	2026
8	134-03 35th Avenue / 33-71 Prince Street (Block 4949/Lot 46)	Residential: 120 units Retail: 14,182 sf Hotel: 208 room Community Facility: 17,388 sf Parking Facility: 196 spaces	2025
9	135-01 35th Avenue (Block 4950/Lot 1)	Residential: 93 units Parking Facility: 52 spaces	2027
10	134-16 35th Ave (Block 4958/Lot 120)	Residential: 50 units	2025
11	RKO Theatre, 135-27 Northern Blvd (Block 4958/Lot 38)	Residential: 269 units/ 280,810 sf Commercial: 17,460 sf Community Facility: 15,857 sf Parking Facility: 214 spaces	2028
12	132-03 41st Road (Block 5039/ Lot 1)	Residential: 8 units/ 6,923 sf Community Facility: 2,289 sf	2025
13	36-04 Bud Place (Block 4968/Lot 22)	Residential: 235 units Retail: 64,000 sf Parking Facility: 164 spaces	2030
14	133-20 41st Avenue (Block 5041/Lot 8)	Community Facility: 28,064 sf (House of Worship)	2027

Table 14-41 Background Development Projects

No.	Project Name/Address	Description	Projected Completion Date
15	133-25 37th Avenue (Block 4970/Lot 11)	Residential: 150 units Retail: 25,000 sf Hotel: 202 room Community Facility: 500 sf Parking Facility: 290 spaces	2027
16	131-28 40th Road (Block 5060/Lot 53)	Residential: 19 units Hotel: 136 room Community Facility: 550 sf	2027
17	131-78 40th Road (Block 5060/Lot 38)	Residential: 32 units Retail: 11,500 sf Community Facility: 741 sf	2027
18	132-22 41st Road (Block 5040/Lot 18)	Residential: 10 units Community Facility: 2,792 sf	2027
19	132-21 41st Road (Block 5049/Lot 58)	Community Facility: 10,586 sf	2027
20	132-51 41st Road (Block 5039/Lot 40)	Residential: 10 units Community Facility: 4,224 sf	2027
21	132-55 41st Road (Block 5039/Lot 38)	Residential: 9 units Community Facility: 9,402 sf	2027
22	131-19 Fowler Avenue (Block 5076/Lot 29)	Residential: 30 units	2027
23	35-32 Leavitt Street /137-45 Northern Boulevard (Block 4960/Lot 29)	Residential: 48 units/ 48,420 sf Retail: 9,600 sf Hotel: 249 room/ 98,200 sf Community Facility: 2,580 sf Parking Facility: 82 spaces	2025
24	Whitestone Lanes, 30-05 Farrington Street (Block 4370/Lot 15)	Residential: 361 units Parking Facility: 155 spaces	2027
25	31-35 137th Street (Block 4410/Lot 7)	Residential: 51 units Community Facility: 17,000 sf	2027
26	35-10 Union Street (Block 4961/Lot 17)	Residential: 44 units Community Facility: 8,133 sf	2027
27	136-80 41st Avenue (Block 5044/Lot 44)	Residential: 44 units Community Facility: 8,796 sf Parking Facility: 22 spaces	2027
28	44-15 College Point Boulevard (Block 5102/Lot 1)	Residential: 42 units Community Facility: 9,116 sf Parking Facility: 21 spaces	2027

Table 14-41 Background Development Projects

No.	Project Name/Address	Description	Projected Completion Date
29	42-80 Main Street (Block 5124/Lot 30)	Residential: 39 units Retail: 11,270 sf (supermarket) Community Facility: 11,775 sf Parking Facility: 107 spaces	2027
30	140-46 Sanford Avenue (Block 5180/Lot 38)	Residential: 34 units Community Facility: 4,815 sf Parking Facility: 6 spaces	2027
31	104-10 Northern Boulevard (Block 1719/Lot 4)	Residential: 30 units Community Facility: 11,552 sf	2027
32	31-34 137th Street (Block 4409/Lot 45)	Residential: 10 units Community Facility: 2,238 sf	2027
33	LaGuardia Airport: East Side Reconfiguration	Demolition of existing Terminals C and D and construction of a new consolidated single Terminal C headhouse with four concourses and 37 gates. Includes roadway improvements and expansion of the East Garage	2026
34	32-14 111th Street	Residential: 65 units Parking Facility: 54 spaces	2030
35	38-20 Parsons Boulevard	Residential: 175 units Community Facility: 37,000 sf	2027
36	144-49 Northern Boulevard	Residential: 172 unit Local Retail: 31,600 sf Community Facility: 1,500 sf	2027
37	35-15 146th Street	Residential: 36 units Community Facility: 400 sf	2027
38	144-16 38th Avenue	Residential: 30 units Community Facility: 7,582 sf	2027
39	146-10 35th Avenue	Residential: 19 units Community Facility: 3,250 sf	2027

Roadway Improvements

Roadway improvement projects were identified within the study area and are discussed in detail below.

The Northern Boulevard bus improvement project includes the implementation of a bus lane along Northern Boulevard from Broadway to 114th Street. As part of this project, a general travel lane is reduced in each direction along the segment; right turning vehicles are permitted to use the bus lane. Corner curb extensions and pedestrian refuge island would also be implemented along the

corridor as part of the project. Although the removal of a general traffic lane in each direction along Northern Boulevard and replacement with a dedicated bus lane is anticipated to reduce the effective vehicular capacity at these intersections for general traffic, no reduction credit was taken in the No Action volumes to provide a conservative analysis.

NYCDOT has also proposed capital improvements at key intersections along Astoria Boulevard. Within the study area, improvements at the intersection of Astoria Boulevard and 108th Street include the closure of the northbound right turn slip lane and restriping the northbound approach as a left turn and shared through-right turn lane as part of a citywide pedestrian safety project. This project began construction in late 2022, after existing conditions traffic counts were conducted.

As part of the Flushing Meadows Corona Park Capital Improvements program, vehicular and pedestrian improvements at the intersection of Marina Road and Boat Basin Place have been proposed. These include the signalization of the intersection with stop bars along the eastbound and westbound approaches, and striped high visibility crosswalks on all approaches. The eastbound approach would be restriped with a channelized median and one approach through-right lane. This project is anticipated to be complete by December 2024.

As part of the Willets Point Phase 2 development, improvements are proposed at the intersection of Roosevelt Avenue and 126th Street/Seaver Way to widen existing crosswalks at the intersection and enhance corner reservoir space. The westbound approach would be reconfigured to remove the channelized right turn lane and allow the right turn movement from the shared through lane.

Improvements at the intersection of New York Avenue and United Nations Avenue have been implemented in spring 2024, which include the striping of a west high visibility crosswalk.

Local Roadway Network

Levels of Service

Based on the traffic volume increases and traffic operations changes mentioned above, the 2030 No-Action traffic levels of service were determined for the 47 analysis locations. **Table 14-42** through **Table 14-45** provide an overview of the levels of service that are projected to characterize the No-Action "overall" intersection conditions and individual traffic lane groups, respectively, during the peak hours analyzed. Detailed traffic levels of service showing the average delay and V/C ratio for each lane group at all student intersections are provided in **Appendix D.**

Table 14-42 2030 No-Action Non-Gameday Traffic Level of Service Summary – Overall Intersections

	Existing				No-Action			
	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Saturday PM Peak Hour	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Saturday PM Peak Hour
Intersections at Overall LOS A/B/C/D	46	47	45	46	39	41	39	41
Intersections at Overall LOS E	1	0	2	1	4	4	2	4

Intersections at Overall LOS F	0	0	0	0	4	2	6	2

Note: Includes 24 signalized intersections and 23 unsignalized intersections in the Existing condition; includes 25 signalized intersections and 22 unsignalized intersections in the No-Action condition

Table 14-43 2030 No-Action Gameday Traffic Level of Service Summary – Overall Intersections

	Existing					No-Action				
	Weekday PM Peak Hour	Saturday PM Pre-game Peak Hour	Saturday PM Post-Game Peak Hour	Sunday Midday Peak Hour	Sunday PM Peak Hour	Weekday PM Peak Hour	Saturday PM Pre-game Peak Hour	Saturday PM Post Game Peak Hour	Sunday Midday Peak Hour	Sunday PM Peak Hour
Intersections at Overall LOS A/B/C/D	45	43	43	45	41	37	37	35	39	34
Intersections at Overall LOS E	2	1	1	1	4	4	3	6	4	5
Intersections at Overall LOS F	0	3	3	1	2	6	7	6	4	8

Note: Includes 24 signalized intersections and 23 unsignalized intersections in the Existing condition; includes 25 signalized intersections and 22 unsignalized intersections in the No-Action condition due to the new signal at Marina Road and Boat Basin Place. During the gameday weekday PM, Saturday PM Post Game and Sunday PM peak hours, there are traffic agents present at select intersections, which for analysis purposes are modeled as signalized intersections based on field observations. As a result, the gameday weekday PM peak hour analysis includes 25 signalized intersections, the gameday Saturday PM Post Game analysis peak hour analysis includes 29 signalized intersections, and the gameday Sunday PM analysis peak hour analysis includes 27 signalized intersections in the Existing condition. Because there is no traffic agent present at Marina Road and Boat Basin in the Existing condition, the new signal results in a total of 28 signalized intersections during the gameday Sunday PM analysis peak in the No-Action condition

Table 14-44 2030 No-Action Non-Gameday Traffic Level of Service Summary – Traffic Lane Groups

	Existing				No-Action			
	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Saturday PM Peak Hour	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Saturday PM Peak Hour
Traffic Lane Groups at LOS A/B/C/D	175	180	178	176	161	172	163	171
Traffic Lane Groups at LOS E	9	7	7	3	17	8	12	7
Traffic Lane Groups at LOS F	11	7	11	12	20	17	24	16
Number of Individual Traffic Lane Groups	195	194	196	191	198	197	199	194

Note: Number of lane groups may vary between peak hours due to turn prohibitions, parking regulations, and the presence of de facto turn movements.

Table 14-45 2030 No-Action Gameday Traffic Level of Service Summary – Traffic Lane Groups

	Existing					No-Action				
	Weekday PM Peak Hour	Saturday PM Pre-game Peak Hour	Saturday PM Post Game Peak Hour	Sunday Midday Peak Hour	Sunday PM Peak Hour	Weekday PM Peak Hour	Saturday PM Pre-game Peak Hour	Saturday PM Post Game Peak Hour	Sunday Midday Peak Hour	Sunday PM Peak Hour
Traffic Lane Groups at LOS A/B/C/D	174	168	165	169	173	158	155	159	159	161
Traffic Lane Groups at LOS E	9	7	7	6	5	9	15	10	11	4
Traffic Lane Groups at LOS F	14	19	21	16	15	32	28	28	25	31
Number of Individual Traffic Lane Groups	197	194	193	191	193	199	198	197	195	196

Note: Number of lane groups may vary between peak hours due to turn prohibitions, parking regulations, presence of traffic agents at select intersections, and the presence of de facto turn movements.

The summary overview of 2030 No-Action conditions indicates that:

- In the non-gameday weekday AM peak hour, eight intersections would be expected to operate at overall LOS E or F, compared to one intersection in the existing conditions. Thirty-seven traffic lane groups would operate at LOS E or F, compared to 20 lane groups in the existing conditions.
- In the non-gameday weekday midday peak hour, six intersections would be expected to operate at overall LOS E or F, compared to none in the existing conditions. Twenty-five traffic lane groups would operate at LOS E or F, compared to 14 lane groups in the existing conditions.
- In the non-gameday weekday PM peak hour, eight intersections would be expected to operate at overall LOS E or F, compared to two in the existing conditions. Thirty-six traffic lane groups would operate at LOS E or F, compared to 18 lane groups in the existing conditions.
- In the non-gameday Saturday PM peak hour, six intersections would be expected to operate at overall LOS E or F, compared to one in the existing conditions. Twenty-three traffic lane groups would operate at LOS E or F, compared to 15 lane groups in the existing conditions.
- In the gameday weekday PM peak hour, 10 intersections would be expected to operate at LOS E or F, compared to two in the existing conditions. Forty-one traffic lane groups would operate at LOS E or F, compared to 23 lane groups in the existing conditions.
- In the gameday Saturday PM Pre-game peak hour, 10 intersections would be expected to operate at LOS E or F, compared to four in the existing conditions. Forty-three traffic lane groups would operate at LOS E or F, compared to 26 in the existing conditions.
- In the gameday Saturday PM Post Game peak hour, 12 intersections would be expected to operate at LOS E or F, compared to four in the existing conditions. Thirty-eight traffic lane groups would operate at LOS E or F, compared to 28 in the existing conditions.

- In the gameday Sunday midday peak hour, eight intersections would be expected to operate at LOS E of R, compared to two in the existing conditions. Thirty-six traffic lane groups would operate at LOS E or F, compared to 22 in the existing conditions.
- In the gameday Sunday PM peak hour, 13 intersections would be expected to operate at LOS E or F, compared to six in the existing conditions. Thirty-five traffic lane groups would operate at LOS E or F, compared to 20 in the existing conditions.

Based on the analysis results, the majority of traffic lane groups would continue to operate at acceptable levels of service in the No-Action condition. The majority of the intersections with at least one traffic movement operating at unacceptable levels of service during the peak hours analyzed under existing conditions would continue to do so during the No-Action condition. The following intersections would have at least one movement operating at unacceptable levels of service during at least one peak hour:

- Astoria Boulevard and 108th Street/31st Drive
  - Westbound Astoria Boulevard left turn lane group (non-gameday weekday PM, gameday weekday PM, gameday Saturday PM Pre-game and gameday Saturday PM Post Game)
- Astoria Boulevard and Ditmars Boulevard/111th Street
  - Northbound 111th Street shared left-through-right lane group (non-gameday weekday AM, midday, and PM; gameday Saturday PM Pre-game)
  - Southbound Ditmars Boulevard left turn lane group (gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game)
- Northern Boulevard and 108th Street
  - Eastbound Northern Boulevard left turn lane group (non-gameday weekday AM)
  - Eastbound Northern Boulevard through lane group (non-gameday weekday AM, midday, PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game; and gameday Sunday midday and Sunday PM)
  - Westbound Northern Boulevard left turn lane group (non-gameday weekday AM, midday, PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game; and gameday Sunday midday and Sunday PM)
  - Westbound Northern Boulevard through lane group (non-gameday weekday AM, midday, PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game; and gameday Sunday midday and Sunday PM)
  - Northbound 108th Street shared left-through-right lane group (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)
  - Southbound 108th Street shared left-through-right lane group (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)
- Northern Boulevard and 114th Street
  - Westbound Northern Boulevard shared left-through lane group (non-gameday weekday AM; gameday Saturday PM Pre-game; gameday Sunday midday)
  - Westbound Northern Boulevard left turn lane group (gameday weekday PM; gameday Saturday PM Post Game; gameday Sunday PM)

- Westbound Northern Boulevard through lane group (non-gameday weekday PM; gameday weekday PM; gameday Sunday PM)
- Southbound 114th Street shared left-through-right lane group (gameday Saturday PM Pre-game, gameday Saturday PM Post Game, gameday Sunday midday)

› Northern Boulevard and 126th Street/Seaver Way

- Eastbound Northern Boulevard through lane group (non-gameday weekday PM; gameday weekday PM)

› Northern Boulevard and Prince Street

- Eastbound Northern Boulevard mainline left turn lane (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)
- Westbound Northern Boulevard mainline left turn lane (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)
- Northbound Prince Street shared left-through-right lane group (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)
- Southbound Prince Street shared left-through-right lane group (non-gameday weekday AM, midday, and PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; gameday Sunday PM)

› Northern Boulevard Eastbound and Main Street

- Northbound Main Street right turn lane group (non-gameday weekday PM, and gameday weekday PM)

› Northern Boulevard and Union Street

- Eastbound Northern Boulevard left turn lane group (non-gameday weekday AM)
- Eastbound Northern Boulevard shared through-right lane group (non-gameday weekday PM; non-gameday Saturday PM; gameday weekday PM)

› Northern Boulevard and Parsons Boulevard

- Eastbound Northern Boulevard through lane group (non-gameday weekday PM; gameday weekday PM)
- Westbound Northern Boulevard left turn lane group (non-gameday weekday PM)
- Westbound Northern Boulevard shared through-right lane group (non-gameday weekday midday and PM; gameday Sunday midday)
- Northbound Parsons Boulevard left turn lane (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)
- Northern Parsons Boulevard shared through-right lane group (non-gameday weekday AM; gameday Saturday PM Pre-game)
- Southbound Parsons Boulevard shared left-through lane group (non-gameday weekday AM)
- Southbound Parsons Boulevard shared left-through-right lane group (non-gameday weekday midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday

Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)

- 34th Avenue and 114th Street
  - Southbound 114th Street left turn lane group (gameday Sunday PM)
  - Southbound 114th Street through lane group (gameday weekday PM; gameday Saturday PM Pre-game)
- 34th Avenue/Shea Road and 126th Street/Seaver Way
  - Eastbound Shea Road shared-left-through lane group (non-gameday weekday midday)
  - Eastbound Shea Road right turn lane group (non-gameday weekday AM and PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday and Sunday PM)
  - Westbound 34th Avenue shared left-through-right lane group (gameday Saturday PM Post Game; gameday Sunday PM)
  - Northbound 126th Street/Seaver Way de-facto left turn lane group (gameday Saturday PM Pre-game)
  - Southeastbound Whitestone Expressway Ramp shared left-right lane group (non-gameday weekday AM and midday; gameday weekday PM; gameday Saturday PM Post Game)
- Roosevelt Avenue and 108th Street
  - Eastbound Roosevelt Avenue shared left-through-right lane group (non-gameday weekday PM; gameday weekday PM)
  - Westbound Roosevelt Avenue shared left-through-right lane group (non-gameday weekday AM and PM; gameday weekday PM)
  - Northbound 108th Street shared left-through-right lane group (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)
  - Southbound 108th Street shared left-through-right lane group (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)
- Roosevelt Avenue and 111th Street
  - Westbound Roosevelt Avenue shared left-through-right lane group (gameday weekday PM)
  - Northbound 111th Street shared left-through-right lane group (non-gameday weekday AM, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)
- Roosevelt Avenue and 114th Street
  - Eastbound Roosevelt Avenue shared left-through-right lane group (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)
  - Westbound Roosevelt Avenue shared left-through lane group (non-gameday weekday AM and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)

- Northbound 114th Street shared left-through-right lane group (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)
- Southbound 114th Street left turn lane group (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)
- Southbound 114th Street shared through-right lane group (non-gameday weekday AM, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)

› Roosevelt Avenue and Stadium Place

- Northbound Stadium Place shared left-right turn lane group (gameday Saturday PM Post Game)

› Roosevelt Avenue and Southfield Parking Lot

- Northbound Southfield Parking Lot left turn lane group (gameday Saturday PM Pre-game, and Saturday PM Post Game)

› Roosevelt Avenue and 126th Street/Seaver Way

- Eastbound Roosevelt Avenue de-facto left turn lane group (gameday Saturday PM Post Game and gameday Sunday midday)
- Eastbound Roosevelt Avenue left turn lane group (gameday Saturday PM Pre-game)
- Southbound 126th Street/Seaver Way left turn lane group (non-gameday weekday midday and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Post Game)
- Southbound 126th Street/Seaver Way shared through-right lane group (gameday Saturday PM Pre-game, and Saturday PM Post Game; gameday Sunday midday)

› Roosevelt Avenue westbound at College Point Boulevard

- Northbound College Point Boulevard left turn lane group (non-gameday weekday AM; gameday Sunday midday)
- Southbound College Point Boulevard shared through-right lane group (non-gameday weekday AM, midday and PM; gameday PM; gameday Saturday PM Pre-game; gameday Sunday midday)

› Roosevelt Avenue and Prince Street

- Eastbound Roosevelt Avenue shared left-through lane group (non-gameday weekday PM; gameday weekday PM)
- Southbound Prince Street shared left-through-right lane group (non-gameday weekday midday; non-gameday Saturday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; gameday Sunday midday and Sunday PM)

› Roosevelt Avenue and Main Street

- Eastbound Roosevelt Avenue shared left-through-right lane group (non-gameday weekday AM)
- Westbound Roosevelt Avenue shared left-through-right lane group (gameday weekday PM)

› Roosevelt Avenue and Union Street

- Eastbound Roosevelt Avenue shared left-through-right lane group (non-gameday weekday AM)
- Westbound Roosevelt Avenue shared left-through-right lane group (non-gameday weekday AM and midday; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; gameday Sunday midday and Sunday PM)
- Southbound Union Street shared left-through lane group (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)

› Roosevelt Avenue and Parsons Boulevard
- Westbound Roosevelt Avenue shared left-through lane group (non-gameday weekday AM)
- Northbound Parsons Boulevard shared left-through lane group (non-gameday weekday AM; gameday weekday PM; gameday Saturday PM Pre-game)
- Southbound Parsons Boulevard shared left-through-right lane group (non-gameday weekday AM)

› Shead Road and Boat Basin Place
- Northbound Boat Basin Place shared through-right lane group (gameday Sunday PM)
- Southbound Boat Basin Place shared left-through-right lane group (gameday Sunday PM)

› Marina Road and Boat Basin Place
- Northbound Boat Basin Place left turn lane group (gameday Saturday PM Post Game; gameday Sunday PM)
- Northbound Boat Basin Place right turn lane group (gameday Sunday PM)

› Shea Road/Citi Field Entrance 8 and Boat Basin Place
- Eastbound Shea Road shared left-through-right lane group (gameday Sunday midday)

› 126th Street/Seaver Way at Citi Field Entrance 11
- Eastbound Citi Field Entrance 11 left-right lane group (gameday Saturday PM Pre-game, and gameday Sunday midday)

› Grand Central Parkway Westbound Entrance Ramp and Shea Road/ Citi Field Entrance 4
- Southbound Shea Road shared through-right lane group (gameday Saturday PM Post Game)

› Shea Road and Stadium Place North
- Westbound Stadium Place North shared left-right lane group (gameday Saturday PM Pre-game, and gameday Sunday midday)

› Stadium Place South and Southfield Parking Lot
- Westbound Southfield Parking Lot shared left-right lane group (gameday Saturday PM Post Game)

› Shea Road and Olmsted Drive
- Westbound Olmsted Drive shared left-right lane group (gameday Saturday PM Pre-game; gameday Sunday midday, and Sunday PM)
- Southbound Shea Road shared left-through lane group (gameday Saturday PM Pre-game)

› Shea Road and Meridian Road

- Northbound Shea Road shared through-right lane group (gameday Saturday PM Pre-game, gameday Sunday midday)
- Southbound Shea Road through lane group (gameday Saturday PM Post Game, gameday Sunday PM)

› Shea Road and Grand Central Parkway Westbound off-ramp (9P)

- Eastbound Grand Central Parkway westbound exit ramp (9P) left turn lane group (non-gameday weekday AM, and PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; gameday Sunday midday and Sunday PM)

› Shea Road and New York Avenue

- Westbound New York Avenue shared left-right turn lane group (gameday Saturday PM Post Game)

› United Nations Avenue and New York Avenue

- Northbound New York Avenue shared left-right lane group (gameday Saturday PM Pre-game, and Saturday PM Post Game; gameday Sunday midday and Sunday PM)

Highway Network

Level of Service

Table D-7 and **Table D-8** in **Appendix D** present future No-Action condition speeds, vehicle densities and levels of service for the highway segments analyzed along the Grand Central Parkway between Exit 8 and Exit 11, the Whitestone Expressway between the Grand Central Parkway and Linden Place, the Van Wyck Expressway between the Whitestone Expressway and Exit 12A, Astoria Boulevard between Ditmars Boulevard and Whitestone Expressway, and Northern Boulevard between 114th Street and Prince Street for the non-gameday weekday, non-gameday Saturday, gameday weekday, gameday Saturday, and gameday Sunday peak hours**. Table 14-46** and **Table 14-47** summarize the levels of service of the analyzed segments by segment type for the non-gameday and gameday peak hours. In the 2030 No-Action condition, increased vehicular volumes generated by the 2030 No-Action projects superimposed on top of the background growth rate would generally result in higher vehicle densities and lower speeds on most highway segments. In a few instances, conditions slightly improved as a result of congested locations having a "metering" effect on adjacent downstream segments of the highway network.

Table 14-46 2030 No-Action Condition: Non-Gameday Highway Segments Level of Service Summary

	Weekday AM Peak Hour Segment Type				Weekday Midday Peak Hour Segment Type				Weekday PM Peak Hour Segment Type				Saturday PM Peak Hour Segment Type			
	Basic	Merge	Diverge	Weave	Basic	Merge	Diverge	Weave	Basic	Merge	Diverge	Weave	Basic	Merge	Diverge	Weave
Highway Segments at LOS A/B/C	15	6	6	1	20	8	13	2	23	6	12	1	30	10	15	3
Highway Segments at LOS D	12	5	5	1	13	2	1	1	10	3	0	0	11	2	3	1
Highway Segments at LOS E	5	0	2	1	4	0	1	1	6	3	5	3	1	0	0	0
Highway Segments at LOS F	10	1	5	1	5	2	3	0	3	0	1	0	0	0	0	0
Number of Individual Highway Segments	42	12	18	4	42	12	18	4	42	12	18	4	42	12	18	4

Table 14-47 2030 No-Action Condition: Gameday Highway Segments Level of Service Summary

	Weekday PM Peak Hour Segment Type				Saturday PM Pre-game Peak Hour Segment Type				Saturday PM Post Game Peak Hour Segment Type				Sunday Midday Peak Hour Segment Type				Sunday PM Peak Hour Segment Type			
	Basic	Merge	Diverge	Weave	Basic	Merge	Diverge	Weave	Basic	Merge	Diverge	Weave	Basic	Merge	Diverge	Weave	Basic	Merge	Diverge	Weave
Highway Segments at LOS A/B/C	18	5	10	0	22	8	13	1	23	5	11	0	27	8	15	4	24	6	11	1
Highway Segments at LOS D	12	4	2	0	13	3	2	1	8	0	4	0	10	1	0	0	12	1	3	1
Highway Segments at LOS E	6	2	5	2	4	1	2	1	7	1	1	2	2	3	1	0	2	2	2	2
Highway Segments at LOS F	6	1	1	2	3	0	1	1	4	6	2	2	3	0	2	0	4	3	2	0
Number of Individual Highway Segments	42	12	18	4	42	12	18	4	42	12	18	4	42	12	18	4	42	12	18	4

Average vehicle travel speeds on the westbound Grand Central Parkway in the 2030 No-Action condition would be generally similar to the existing speeds during all non-gameday and gameday peak hours. During the non-gameday weekday AM peak hour, westbound speeds on the segments south of Exit 9W on the inner mainline would decrease to approximately 39 mph, compared to a range of 47 to 48 mph in the existing conditions. During the gameday weekday PM peak hour, westbound speeds on the segments along Exit 9E ramp would decrease to approximately 23 mph, compared to a range of 31 to 40 mph in the existing conditions. Average travel speeds on the eastbound Grand Central Parkway in the 2030 No-Action condition would be generally similar to the existing speeds during all non-gameday and gameday peak hours. During the gameday Saturday PM Post peak hour, eastbound speeds on the segments between the Astoria Boulevard ramp and the Hall of Science ramp would decrease to a range of approximately 22 to 32 mph, compared to a range of 35 to 44 mph in the existing conditions

Average vehicle travel speeds on the northbound Van Wyck Expressway in the 2030 No-Action condition would be higher than the existing speeds during all non-gameday and gameday peak hours. This is expected as construction on the northbound Van Wyck Expressway during the existing condition is expected to be completed by 2030. Average travel speeds on the southbound Van Wyck Expressway in the 2030 No-Action condition would be generally similar to the existing speeds during all non-gameday and gameday peak hours except the non-gameday weekday midday peak hour. During the non-gameday weekday midday peak hour, average travel speeds on the southbound Van Wyck Expressway are lower than in the existing conditions. South of the eastbound Whitestone Expressway, the average speed declines to a range of approximately 18 to 22 mph, compared to approximately 33 to 48 mph in the existing conditions.

Average vehicle travel speeds on the eastbound Whitestone Expressway in the 2030 No-Action condition would be generally similar to the existing speeds during all non-gameday and gameday peak hours. During the gameday weekday PM and gameday Saturday PM Pre-game peak hours, for the eastbound Whitestone Expressway Outer segment west of the split to Inner/eastbound Northern Boulevard, the average speed declines to a range of approximately 25 to 31 mph, compared to approximately 48 mph in the existing condition. Average travel speeds on the westbound Whitestone Expressway in the 2030 No-Action condition would be generally similar to the existing speeds during all non-gameday and gameday peak hours except the non-gameday weekday AM peak hour. During the non-gameday weekday AM peak hour, the westbound Whitestone Expressway south of the ramp to southbound Van Wyck Expressway and east of the Grand Central Parkway eastbound/westbound split average speed declines to a range of approximately 23 to 32 mph, compared to approximately 36 to 43 mph in the existing condition.

Average vehicle travel speed on the eastbound Northern Boulevard in the 2030 No-Action condition would be generally similar to the existing speeds during all non-gameday and gameday peak hours. Average travel speeds on the westbound Northern Boulevard in the 2030 No-Action condition would be generally similar to the existing speeds during all non-gameday and gameday peak hours.

Average vehicle travel speed on the eastbound Astoria Boulevard in the 2030 No-Action condition would be generally similar to the existing speeds during all non-gameday and gameday peak hours. Average travel speeds on the westbound Astoria Boulevard in the 2030 No-Action condition would be generally similar to the existing speeds during all non-gameday and gameday peak hours.

The summary overview of No-Action conditions indicates that:

- In the non-gameday weekday AM peak hour, 25 out of the 76 highway segments analyzed are at LOS E or F, compared to 14 highway segments in the existing conditions.
- In the non-gameday weekday midday peak hour, 16 out of the 76 highway segments analyzed are at LOS E or F, compared to four highway segments in the existing conditions.
- In the non-gameday weekday PM peak hour, 21 out of the 76 highway segments analyzed are at LOS E or F, compared to 12 highway segments in the existing conditions.
- In the non-gameday Saturday PM peak hour, one of the 76 highway segments analyzed operate at LOS E or F, compared to none in the existing conditions.
- In the gameday weekday PM peak hour, 25 out of the 76 highway segments analyzed are at LOS E or F, compared to 12 highway segments in the existing conditions.
- In the gameday Saturday PM Pre-game peak hour, 13 out of the 76 highway segments analyzed are at LOS E or F, compared to 12 highway segments in the existing conditions.
- In the gameday Saturday PM Post Game peak hour, 25 out of the 76 highway segments analyzed are at LOS E or F, compared to 16 highway segments in the existing conditions.
- In the gameday Sunday midday peak hour, 11 out of the 76 highway segments analyzed are at LOS E or F, compared to 9 highway segments in the existing conditions.
- In the gameday Sunday PM peak hour, 17 out of the 76 highway segments analyzed are at LOS E or F, compared to 16 highway segments in the existing conditions.

Highway segments operating at unacceptable levels of service (LOS E or F) are listed below.

Grand Central Parkway

- Westbound Grand Central Parkway north of ramp from Long Island Expressway (non-gameday weekday AM, gameday Saturday PM Post Game, and gameday Sunday midday)
- Westbound Grand Central Parkway south of Hall of Science Bridge overpass (non-gameday weekday AM, gameday Saturday PM Pre-game, gameday Saturday PM Post Game, and gameday Sunday midday)
- Westbound Grand Central Parkway south of Exit 9P ramp (non-gameday weekday AM, non-gameday weekday PM, gameday Saturday PM Pre-game, gameday Saturday PM Post Game, gameday Sunday midday, and gameday Sunday PM)
- Westbound Inner Grand Central Parkway north of Inner/Outer split (non-gameday weekday AM and gameday Saturday PM Pre-game)
- Westbound Grand Central Parkway south of Exit 9W (non-gameday weekday AM)
- Westbound Grand Central Parkway at Roosevelt Avenue overpass (non-gameday weekday AM and gameday weekday PM)
- Westbound Grand Central Parkway south of Exit 9E ramp (gameday weekday PM)
- Westbound Grand Central Parkway at Exit 9E ramp (gameday weekday PM, gameday Saturday PM Pre-game, gameday Saturday PM Post Game, and gameday Sunday PM)
- Westbound Grand Central Parkway at Exit 9E ramp to eastbound Whitestone Expressway (gameday weekday PM, gameday Saturday PM Post Game, and gameday Sunday PM)
- Eastbound Grand Central Parkway east of Exit 8 ramp (non-gameday weekday AM, non-gameday weekday midday, non-gameday weekday PM, gameday weekday PM, gameday Saturday PM Pre-game, gameday Saturday PM Post Game, and gameday Sunday midday)

- Eastbound Grand Central Parkway west of Exit 9E ramp (non-gameday weekday midday, non-gameday weekday PM, gameday weekday PM, gameday Saturday PM Pre-game, and gameday Sunday midday)
- Eastbound Grand Central Parkway south of ramp from Astoria Boulevard and 34th Avenue (gameday weekday PM, gameday Saturday PM Pre-game, gameday Saturday PM Post Game, gameday Sunday midday and gameday Sunday PM)
- Eastbound Grand Central Parkway north of ramp from Hall of Science (gameday weekday PM, gameday Saturday PM Pre-game, gameday Saturday PM Post Game, gameday Sunday midday and gameday Sunday PM)
- Eastbound Grand Central Parkway south of ramp from Hall of Science (non-gameday weekday PM, gameday weekday PM, gameday Saturday PM Pre-game, gameday Saturday PM Post Game, gameday Sunday midday, and gameday Sunday PM)
- Eastbound Grand Central Parkway south of Hall of Science Bridge overpass (non-gameday weekday AM, non-gameday weekday midday, non-gameday weekday PM, non-gameday Saturday PM, gameday weekday PM, gameday Saturday PM Pre-game, gameday Saturday PM Post Game, gameday Sunday midday, and gameday Sunday PM)
- Eastbound Grand Central Parkway north of ramp to the Long Island Expressway (non-gameday weekday PM, gameday weekday PM, gameday Saturday PM Post Game, and gameday Sunday PM)
- Eastbound Grand Central Parkway at Exit 9E ramp to eastbound Whitestone Expressway (gameday weekday PM, gameday Saturday PM Pre-game, and gameday Saturday PM Post Game)

Van Wyck Expressway

- Northbound Van Wyck Expressway north of ramp from College Point Boulevard (non-gameday weekday AM, non-gameday weekday midday, and gameday Saturday PM Post Game)
- Northbound Van Wyck Expressway south of Exit 13 ramp (non-gameday weekday AM, non-gameday weekday midday, non-gameday weekday PM, gameday weekday PM, gameday Saturday PM Pre-game, gameday Saturday PM Post Game, gameday Sunday midday, and gameday Sunday PM)
- Northbound Van Wyck Expressway north of Exit 13 ramp (non-gameday weekday AM, non-gameday weekday PM, and gameday weekday PM, and gameday Saturday PM Post Game)
- Northbound Van Wyck Expressway ramp to Northern Boulevard and westbound Whitestone Expressway (non-gameday weekday AM, non-gameday weekday midday, non-gameday weekday PM, and gameday weekday PM)
- Southbound Van Wyck Expressway ramp from westbound Whitestone Expressway (non-gameday weekday midday, non-gameday weekday PM and gameday weekday PM)
- Southbound Van Wyck Expressway ramp from eastbound Whitestone Expressway and westbound Northern Boulevard (non-gameday weekday midday, and non-gameday weekday PM, gameday Saturday PM Post Game, and gameday Sunday PM)
- Southbound Van Wyck Expressway south of ramps from Whitestone Expressway and Northern Boulevard (non-gameday weekday midday, non-gameday weekday PM, and gameday Saturday PM Post Game)

- Southbound Van Wyck Expressway north of ramp to College Point Boulevard (non-gameday weekday midday, non-gameday weekday PM, gameday weekday PM, and gameday Saturday PM Post Game)

Whitestone Expressway

- Eastbound Whitestone Expressway west of ramp to southbound Van Wyck Expressway (non-gameday weekday PM, gameday weekday PM, and gameday Saturday PM Post Game)
- Eastbound Whitestone Expressway south of Exit 14 ramp (non-gameday weekday PM and gameday weekday PM)
- Eastbound Outer Whitestone Expressway ramp from eastbound Astoria Boulevard and eastbound Grand Central Parkway (non-gameday weekday PM, gameday weekday PM, gameday Saturday PM Pre-game, and gameday Saturday PM Post Game)
- Eastbound Outer Whitestone Expressway west of split to Inner Whitestone Expressway and eastbound Northern Boulevard (non-gameday weekday AM, non-gameday weekday PM, gameday weekday PM, gameday Saturday PM Pre-game, gameday Saturday PM Post Game, and gameday Sunday PM)
- Eastbound Outer Whitestone Expressway ramp to eastbound Whitestone Expressway (non-gameday weekday AM, non-gameday weekday midday, non-gameday weekday PM, gameday weekday PM, gameday Saturday PM Post Game, and gameday Sunday PM)
- Westbound Outer Whitestone Expressway north of ramp from Service Road/Linden Place (non-gameday weekday AM)
- Westbound Outer Whitestone Expressway north of ramp to southbound Van Wyck Expressway (non-gameday weekday AM, non-gameday weekday midday, non-gameday weekday PM, gameday weekday PM, and gameday Saturday PM Post Game)
- Westbound Outer Whitestone Expressway south of ramp from southbound Van Wyck Expressway (non-gameday weekday AM)
- Westbound Outer Whitestone Expressway north of Exit 13D ramp (non-gameday weekday AM)
- Westbound Outer Whitestone Expressway south of Exit 13D ramp (non-gameday weekday AM)
- Westbound Outer Whitestone Expressway east of Exit 13A/13B-C split (non-gameday weekday AM)
- Westbound Outer Whitestone Expressway at Exit 13B-C ramp (non-gameday weekday AM)
- Westbound Outer Whitestone Expressway west of ramp from Northern Boulevard and northbound Van Wyck Expressway (non-gameday weekday AM, gameday Sunday midday and gameday Sunday PM)
- Westbound Outer Whitestone Expressway east of Grand Central Parkway eastbound and westbound split (non-gameday weekday AM and gameday Sunday PM)
- Westbound Outer Whitestone Expressway ramp to westbound Grand Central Parkway (gameday Sunday PM)

Astoria Boulevard

- Eastbound Astoria Boulevard and 34th Avenue ramp to eastbound Grand Central Parkway (gameday weekday PM, gameday Saturday PM Post Game, and gameday Sunday PM)

› Westbound Astoria Boulevard ramp from westbound Whitestone Expressway and westbound Northern Boulevard (non-gameday weekday AM)

Northern Boulevard

› Eastbound Northern Boulevard west of ramp from northbound Van Wyck Expressway (non-gameday weekday midday, non-gameday weekday PM, and gameday weekday PM)

› Eastbound Northern Boulevard east of ramp from northbound Van Wyck Expressway (non-gameday weekday AM, non-gameday weekday midday, non-gameday weekday PM, gameday weekday PM, gameday Saturday PM Post Game, and gameday Sunday PM)

› Westbound Northern Boulevard west of Prince Street (non-gameday weekday midday)

› Westbound Northern Boulevard east of ramp to southbound Van Wyck Expressway and westbound Whitestone Expressway (non-gameday weekday midday)

Parking

Absent the Proposed Project, the supply and utilization of parking facilities within and around the development site would be similar to the existing conditions.

Subways

Subway Station Elements

Existing subway station volumes were increased based on the background growth rates recommended in the *CEQR Technical Manual* and incorporated subway trips associated with appropriate No-Action background projects to develop the No-Action condition subway volumes. As shown in **Table 14-48** through **Table 14-50**, the subway station elements all continue to operate at acceptable levels of service during all peak hours.

Table 14-48 2030 No-Action Subway Station Vertical Circulation Level of Service

Vertical Circulation Element	Width (ft)	Effective Width (ft)	15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	v/c Ratio	LOS
			Up	Down				
Non-Gameday Weekday AM Peak Hour								
Roosevelt Avenue Northeast Stair (S2)	8.0	6.8	163	58	0.80	0.90	0.26	A
Roosevelt Avenue Northwest Stair (S3)	8.0	6.8	11	28	0.80	0.90	0.05	A
North Mezzanine Stair (M4)	13.0	11.8	174	87	0.80	0.90	0.18	A
Roosevelt Avenue South Stair (S1)	8.3	7.1	39	17	0.80	0.90	0.06	A
South Mezzanine Stair (M1)	30.6	28.3	43	32	0.80	0.90	0.02	A
South Mezzanine Stair (M5)	12.0	10.8	43	32	0.80	0.90	0.06	A
Manhattan-bound Mezzanine Stair (P1)	32.9	31.2	228	13	0.80	0.90	0.06	A
Flushing-bound East Stair (P2)	10.0	8.8	7	31	0.75	0.90	0.04	A
Flushing-bound East Stair (P4)	10.0	8.8	3	42	0.75	0.90	0.05	A
Flushing-bound West Stair (P10)	10.0	8.8	3	31	0.75	0.90	0.04	A
Flushing-bound West Stair (P12)	10.0	8.8	3	28	0.75	0.90	0.03	A

Table 14-48 2030 No-Action Subway Station Vertical Circulation Level of Service

Vertical Circulation Element	Width (ft)	Effective Width (ft)	15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	v/c Ratio	LOS
			Up	Down				
Non-Gameday Weekday PM Peak Hour								
Roosevelt Avenue Northeast Stair (S2)	8.0	6.8	91	128	0.80	0.90	0.27	A
Roosevelt Avenue Northwest Stair (S3)	8.0	6.8	23	19	0.80	0.90	0.05	A
North Mezzanine Stair (M4)	13.0	11.8	115	147	0.80	0.90	0.19	A
Roosevelt Avenue South Stair (S1)	8.3	7.1	14	30	0.80	0.90	0.05	A
South Mezzanine Stair (M1)	30.6	28.3	46	97	0.80	0.90	0.04	A
South Mezzanine Stair (M5)	12.0	10.8	46	97	0.80	0.90	0.11	A
Manhattan-bound Mezzanine Stair (P1)	32.9	31.2	162	18	0.80	0.90	0.04	A
Flushing-bound East Stair (P2)	10.0	8.8	10	65	0.75	0.90	0.08	A
Flushing-bound East Stair (P4)	10.0	8.8	3	62	0.75	1.00	0.06	A
Flushing-bound West Stair (P10)	10.0	8.8	3	55	0.75	0.90	0.06	A
Flushing-bound West Stair (P12)	10.0	8.8	2	57	0.75	1.00	0.06	A
Gameday Weekday PM Peak Hour								
Roosevelt Avenue Northeast Stair (S2)	8.0	6.8	95	128	0.80	0.90	0.28	A
Roosevelt Avenue Northwest Stair (S3)	8.0	6.8	9	29	0.80	0.90	0.05	A
North Mezzanine Stair (M4)	13.0	11.8	103	157	0.80	0.90	0.19	A
Roosevelt Avenue South Stair (S1)	8.3	7.1	19	44	0.80	0.90	0.08	A
South Mezzanine Stair (M1)	30.6	28.3	27	37	0.80	0.90	0.02	A
South Mezzanine Stair (M5)	12.0	10.8	27	37	0.80	0.90	0.05	A
Manhattan-bound Mezzanine Stair (P1)	32.9	31.2	2,498	15	0.80	1.00	0.67	B
Flushing-bound East Stair (P2)	10.0	8.8	8	403	0.75	1.00	0.41	A
Flushing-bound East Stair (P4)	10.0	8.8	5	364	0.75	1.00	0.37	A
Flushing-bound West Stair (P10)	10.0	8.8	7	414	0.75	1.00	0.42	A
Flushing-bound West Stair (P12)	10.0	8.8	7	546	0.75	1.00	0.56	B
Citi Field Stairs (U2)	44.3	41.6	39	2,364	0.90	1.00	0.43	A
Special Event East Stair (P6)	5.8	4.8	0	0	0.75	1.00	0.00	A
Special Event West Stair (P8)	5.8	4.8	0	0	0.75	1.00	0.00	A
Gameday Saturday PM Pre-game Peak Hour								
Roosevelt Avenue Northeast Stair (S2)	8.0	6.8	52	47	0.80	0.90	0.12	A
Roosevelt Avenue Northwest Stair (S3)	8.0	6.8	7	28	0.80	0.90	0.05	A
North Mezzanine Stair (M4)	13.0	11.8	59	75	0.80	0.90	0.10	A
Roosevelt Avenue South Stair (S1)	8.3	7.1	31	17	0.80	0.90	0.05	A
South Mezzanine Stair (M1)	30.6	28.3	19	10	0.80	0.90	0.01	A
South Mezzanine Stair (M5)	12.0	10.8	19	10	0.80	0.90	0.02	A
Manhattan-bound Mezzanine Stair (P1)	32.9	31.2	1,513	7	0.80	1.00	0.41	A
Flushing-bound East Stair (P2)	10.0	8.8	8	118	0.75	0.90	0.14	A
Flushing-bound East Stair (P4)	10.0	8.8	8	378	0.75	1.00	0.39	A
Flushing-bound West Stair (P10)	10.0	8.8	3	264	0.75	1.00	0.27	A

Table 14-48 2030 No-Action Subway Station Vertical Circulation Level of Service

Vertical Circulation Element	Width (ft)	Effective Width (ft)	15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	v/c Ratio	LOS
			Up	Down				
Flushing-bound West Stair (P12)	10.0	8.8	3	288	0.75	1.00	0.29	A
Citi Field Stairs (U2)	44.3	41.6	31	1,460	0.90	1.00	0.26	A
Special Event East Stair (P6)	5.8	4.8	2	132	0.75	1.00	0.25	A
Special Event West Stair (P8)	5.8	4.8	1	11	0.75	0.90	0.02	A
Gameday Saturday PM Post Game Peak Hour								
Roosevelt Avenue Northeast Stair (S2)	8.0	6.8	77	68	0.90	0.90	0.17	A
Roosevelt Avenue Northwest Stair (S3)	8.0	6.8	131	26	0.90	0.90	0.17	A
North Mezzanine Stair (M4)	13.0	11.8	207	94	0.90	0.90	0.20	A
Roosevelt Avenue South Stair (S1)	8.3	7.1	40	21	0.90	0.90	0.07	A
South Mezzanine Stair (M1)	30.6	28.3	20	20	0.90	0.90	0.01	A
South Mezzanine Stair (M5)	12.0	10.8	20	20	0.90	0.90	0.03	A
Manhattan-bound Mezzanine Stair (P1)	32.9	31.2	447	1,565	0.80	0.90	0.60	B
Flushing-bound East Stair (P2)	10.0	8.8	246	64	0.75	0.90	0.28	A
Flushing-bound East Stair (P4)	10.0	8.8	192	76	0.75	0.90	0.25	A
Flushing-bound West Stair (P10)	10.0	8.8	96	98	0.75	0.90	0.19	A
Flushing-bound West Stair (P12)	10.0	8.8	156	69	0.75	0.90	0.21	A
Citi Field Stairs (U2)	44.3	41.6	3,163	21	0.90	1.00	0.51	B
Special Event East Stair (P6)	5.8	4.8	24	10	0.75	0.90	0.06	A
Special Event West Stair (P8)	5.8	4.8	0	0	0.75	1.00	0.00	A

Note:
Methodology based on *2021 CEQR Technical Manual* guidelines
Surging factors only apply to exiting volumes. The surge factor for entry volumes is 1.0. At the Mezzanine Manhattan-bound stair (P1) during game day peak hours, surges are experienced from both the Manhattan-bound and Flushing-bound platforms; therefore, a surging factor of 0.8 is applied to entry volumes. At the street level (S1/S2/S3) and mezzanine (M1/M4/M5) stairs during the gameday Saturday PM Post Game peak hour, a surging factor of 0.9 is applied for exit volumes, to account for the activation of the center special event track at the Flushing-bound platform.

Table 14-49 2030 No-Action Subway Station Passageway Level of Service

Subway Station Element	Width (ft)	Effective Width (ft)	15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	v/c Ratio	LOS
			In	Out				
Non-Gameday Weekday AM Peak Hour								
Within Mets – Willets Point Station								
Mezzanine Outside Fare Zone Passageway	7.6	5.6	219	110	0.80	0.90	0.31	A
Mezzanine Central Corridor Passageway	27.8	25.8	359	29	0.80	0.90	0.09	A
Manhattan-bound West Ramp Passageway	17.1	15.1	73	8	0.75	0.90	0.03	A
Manhattan-bound East Ramp Passageway	16.0	14.0	155	5	0.75	1.00	0.05	A
Flushing-bound East Passageway	18.3	16.3	10	72	0.80	0.90	0.03	A
Flushing-bound West Passageway	14.0	12.0	6	59	0.80	0.90	0.03	A

Table 14-49 2030 No-Action Subway Station Passageway Level of Service

Subway Station Element	Width (ft)	Effective Width (ft)	15-Minute Pedestrian Volumes In	15-Minute Pedestrian Volumes Out	Surging Factor	Friction Factor	v/c Ratio	LOS
Outside Mets – Willets Point Station								
Roosevelt Avenue South Ramp to Mezzanine Passageway	5.7	3.7	2	1	1.00	0.90	0.00	A
South Mezzanine to Pedestrian Bridge	7.0	5.0	18	47	1.00	0.90	0.06	A
Pedestrian Bridge to Flushing Meadows Corona Park	38.0	36.0	18	47	1.00	0.90	0.01	A
Non-Gameday Weekday PM Peak Hour								
Within Mets – Willets Point Station								
Mezzanine Outside Fare Zone Passageway	7.6	5.6	156	256	0.80	0.90	0.42	A
Mezzanine Central Corridor Passageway	27.8	25.8	400	36	0.80	0.90	0.10	A
Manhattan-bound West Ramp Passageway	17.1	15.1	37	11	0.75	0.90	0.02	A
Manhattan-bound East Ramp Passageway	16.0	14.0	125	7	0.75	0.90	0.05	A
Flushing-bound East Passageway	18.3	16.3	13	127	0.80	0.90	0.05	A
Flushing-bound West Passageway	14.0	12.0	5	112	0.80	1.00	0.05	A
Outside Mets – Willets Point Station								
Roosevelt Avenue South Ramp to Mezzanine Passageway	5.7	3.7	5	3	1.00	0.90	0.01	A
South Mezzanine to Pedestrian Bridge	7.0	5.0	66	124	1.00	0.90	0.19	A
Pedestrian Bridge to Flushing Meadows Corona Park	38.0	36.0	66	124	1.00	0.90	0.03	A
Gameday Weekday PM Peak Hour								
Within Mets – Willets Point Station								
Mezzanine Outside Fare Zone Passageway	7.6	5.6	119	188	0.80	0.90	0.31	A
Mezzanine Central Corridor Passageway	27.8	25.8	2612	23	0.80	1.00	0.57	B
Manhattan-bound West Ramp Passageway	17.1	15.1	56	69	0.75	0.90	0.05	A
Manhattan-bound East Ramp Passageway	16.0	14.0	196	25	0.75	0.90	0.08	A
Flushing-bound East Passageway	18.3	16.3	13	767	0.80	1.00	0.26	A
Flushing-bound West Passageway	14.0	12.0	14	960	0.80	1.00	0.45	A
Outside Mets – Willets Point Station								
Roosevelt Avenue South Ramp to Mezzanine Passageway	5.7	3.7	8	3	1.00	0.90	0.01	A
South Mezzanine to Pedestrian Bridge Passageway	7.0	5.0	18	36	1.00	0.90	0.05	A
Pedestrian Bridge to Flushing Meadows Corona Park Passageway	38.0	36.0	763	101	1.00	0.90	0.12	A
Special Event Mezzanine Ramp Passageway	43.9	41.9	723	89	0.80	0.90	0.10	A

Table 14-49 2030 No-Action Subway Station Passageway Level of Service

Subway Station Element	Width (ft)	Effective Width (ft)	15-Minute Pedestrian Volumes In	15-Minute Pedestrian Volumes Out	Surging Factor	Friction Factor	v/c Ratio	LOS
Special Event East Ramp Passageway	15.8	13.8	1	1	0.75	0.90	0.00	A
Special Event West Ramp Passageway	15.0	13.0	4	14	0.75	0.90	0.01	A
Gameday Saturday PM Pre-game Peak Hour								
Within Mets – Willets Point Station								
Mezzanine Outside Fare Zone Passageway	7.6	5.6	79	69	0.80	0.90	0.15	A
Mezzanine Central Corridor Passageway	27.8	25.8	1554	15	0.80	1.00	0.34	A
Manhattan-bound West Ramp Passageway	17.1	15.1	40	45	0.75	0.90	0.03	A
Manhattan-bound East Ramp Passageway	16.0	14.0	110	28	0.75	0.90	0.05	A
Flushing-bound East Passageway	18.3	16.3	18	628	0.80	1.00	0.22	A
Flushing-bound West Passageway	14.0	12.0	7	563	0.80	1.00	0.26	A
Outside Mets – Willets Point Station								
Roosevelt Avenue South Ramp to Mezzanine Passageway	5.7	3.7	20	14	1.00	0.90	0.05	A
South Mezzanine to Pedestrian Bridge Passageway	7.0	5.0	44	32	1.00	0.90	0.08	A
Pedestrian Bridge to Flushing Meadows Corona Park Passageway	38.0	36.0	570	241	1.00	0.90	0.11	A
Special Event Mezzanine Ramp Passageway	43.9	41.9	783	160	0.80	0.90	0.12	A
Special Event East Ramp Passageway	15.8	13.8	3	8	0.75	0.90	0.00	A
Special Event West Ramp Passageway	15.0	13.0	7	304	0.75	1.00	0.14	A
Gameday Saturday PM Post Game Peak Hour								
Within Mets – Willets Point Station								
Mezzanine Outside Fare Zone Passageway	7.6	5.6	243	127	0.80	0.90	0.35	A
Mezzanine Central Corridor Passageway	27.8	25.8	509	1568	0.80	0.90	0.50	B
Manhattan-bound West Ramp Passageway	17.1	15.1	944	54	0.75	0.90	0.33	A
Manhattan-bound East Ramp Passageway	16.0	14.0	1166	61	0.75	1.00	0.40	A
Flushing-bound East Passageway	18.3	16.3	462	150	0.80	0.90	0.20	A
Flushing-bound West Passageway	14.0	12.0	252	168	0.80	0.90	0.19	A
Outside Mets – Willets Point Station								
Roosevelt Avenue South Ramp to Mezzanine Passageway	5.7	3.7	40	19	1.00	0.90	0.08	A
South Mezzanine to Pedestrian Bridge Passageway	7.0	5.0	36	73	1.00	0.90	0.11	A
Pedestrian Bridge to Flushing Meadows Corona Park Passageway	38.0	36.0	163	1077	1.00	0.90	0.17	A
Special Event Mezzanine Ramp Passageway	43.9	41.9	143	1047	0.80	0.90	0.17	A

Table 14-49 2030 No-Action Subway Station Passageway Level of Service

Subway Station Element	Width (ft)	Effective Width (ft)	15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	v/c Ratio	LOS
			In	Out				
Special Event East Ramp Passageway	15.8	13.8	3	1	0.75	0.90	0.00	A
Special Event West Ramp Passageway	15.0	13.0	13	20	0.75	0.90	0.02	A

Note:
Methodology based on *2021 CEQR Technical Manual* guidelines
Surging factors only apply to exiting volumes. The surge factor for entry volumes is 1.0. At the Mezzanine Central Corridor Passageway, surging factors of 0.80 are applied to the entry and exit volumes during non-gameday and gameday peak hours. This is due to the passageway experiencing cross flows from both the platforms and station entrances due to its central location within the station.

Table 14-50 2030 No-Action Subway Station Fare Control Level of Service

Fare Control Element	15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	v/c Ratio	LOS
	In	Out				
Non-Gameday Weekday AM Peak Hour						
Main Control Area Turnstiles (R532)	219	110	0.80	0.90	0.16	A
Non-Gameday Weekday PM Peak Hour						
Main Control Area Turnstiles (R532)	156	256	0.80	0.90	0.19	A
Gameday Weekday PM Peak Hour						
Manhattan-bound East Ramp Turnstiles	56	69	0.75	0.90	0.04	A
Manhattan-bound West Ramp Turnstiles	196	25	0.75	0.90	0.10	A
Flushing-bound East Stair Turnstiles	13	766	0.80	1.00	0.19	A
Flushing-bound West Stair Turnstiles	14	961	0.80	1.00	0.32	A
Special Event High Entry/Exit	2	13	0.75	0.90	0.02	A
Gameday Saturday PM Pre-game Peak Hour						
Manhattan-bound East Ramp Turnstiles	40	45	0.75	0.90	0.03	A
Manhattan-bound West Ramp Turnstiles	110	28	0.75	0.90	0.06	A
Flushing-bound East Stair Turnstiles	18	628	0.80	1.00	0.16	A
Flushing-bound West Stair Turnstiles	6	552	0.80	1.00	0.18	A
Special Event High Entry/Exit	5	286	0.75	1.00	0.36	A
Gameday Saturday PM Post Game Peak Hour						
Manhattan-bound East Ramp Turnstiles	944	54	0.75	0.90	0.37	A
Manhattan-bound West Ramp Turnstiles	1,166	61	0.75	1.00	0.48	B
Flushing-bound East Stair Turnstiles	462	150	0.80	0.90	0.19	A
Flushing-bound West Stair Turnstiles	251	168	0.80	0.90	0.17	A
Special Event High Entry/Exit	12	18	0.75	0.90	0.05	A

Note:
Methodology based on *2021 CEQR Technical Manual* guidelines
Surging factors only apply to exiting volumes. The surge factor for entry volumes is 1.0.

Subway Line-Haul Conditions

Table 14-51 summarized anticipated 2030 No-Action subway line-haul conditions at the maximum load points of the subway line in the peak direction. The No-Action condition passenger volumes reflect increases in volumes due to background growth based on the recommended rates in the *CEQR Technical Manual* as well as demand from new developments in the vicinity of the Proposed Project. In the No-Action condition, the No. 7 local subway line would operate at a v/c ratio of 1.14 during the Saturday PM peak hour, a moderate increase from the v/c ratio of 1.04 in existing conditions.

Table 14-51 No-Action Subway Line-Haul Analysis

Peak Hour	Route	Direction	Max Load Point (leaving station)	Average Passengers Per Hour[1,2]	Average Trains Per Hour[1,2]	Average Cars Per Hour[1]	Average Passengers Per Car[1,2]	Guideline Passengers Per Car	V/C Ratio[4]
AM	7 (local)	SB	40 St - Lowery St	14,623	15.0	165	89	110	0.81
	7 (express)	SB	61 St - Woodside	16,263	14.0	154	106	110	0.96
	7 (combined)	SB	Vernon Blvd - Jackson Av	27,983	29.0	319	88	110	0.80
PM	7 (local)	NB	Queensboro Plaza	11,559	14.0	154	75	110	0.68
	7 (express)	NB	Queensboro Plaza	13,311	14.0	154	86	110	0.79
	7 (combined)	NB	Queensboro Plaza	25,032	28.0	308	81	110	0.74
SAT PM	7 (local)	NB	74 St-Broadway	9,380	15.0	165	57	50	1.14

Notes:
[1] Weekday AM data is based on a three-year average of pre-pandemic ridership and 2023 train throughput data from NYCT
[2] Weekday PM data is based on 2017-2018 ridership and 2019 train throughput data from NYCT; Saturday PM is based on 2019 ridership and train throughout from NYCT (Saturday is based on 2018 modeled ridership)
[3] Guideline capacities are based on NYCT rush hour loading guidelines which vary by car type, line, and location based on frequency and type of service.
[4] Volume to guideline capacity ratio

Buses

Demand on the local bus routes operating near the Proposed Project is expected to increase as a result of background growth as well as demand from new developments in the vicinity of the Proposed Project. **Table 14-52** shows that existing levels of bus service would be sufficient to meet the projected demand in the 2030 No-Action condition along the three bus routes analyzed.

Table 14-52 No-Action Local Bus Analysis

Peak Hour	Route	Direction	Maximum Load Point	Peak Hour Buses[1]	Peak Hour Passengers[2,4]	Average Passengers per Bus	Available Peak Hour Capacity[3]
AM	Q19	EB	Astoria Blvd/108 St	5	193	39	77
			Northern Blvd/126 Pl	5	187	37	83
	Q48	EB	Roosevelt Av/108 St	4	107	27	109
			Roosevelt Av/114 St	4	96	24	120
		WB	108 St/34 Av	4	135	34	81
	Q66	EB	Northern Blvd/127 Pl	15	516	34	294
			Northern Blvd/126 Pl	15	527	35	283
PM	Q19	EB	Astoria Blvd/77 St	3	147	49	15
	Q48	EB	108 St/37 Av	3	110	37	52
			Roosevelt Av/108 St	3	59	20	103
		WB	Roosevelt Av/College Pt Blvd	4	186	47	30
	Q66	EB	Northern Blvd/54 St	11	403	37	191
SAT PM	Q19	EB	Astoria Blvd/49 St	2	63	32	45
	Q48	EB	Roosevelt Av/Willets Pt Blvd Station	4	112	28	104
		WB	Roosevelt Av/Grand Central Pkwy	3	161	54	1
	Q66	EB	Northern Blvd/54 St	6	245	41	79

Notes:
[1] Based on most currently available timetables (September 2022)
[2] Based on most currently available data from NYCT (May 2023)
[3] Available capacities based on NYCT loading guidelines of 54 passengers per standard bus
[4]For load points where data provided by NYCT is for a half hour, the peak hour passenger volumes were prorated to reflect a full hour

Pedestrians

The 2030 No-Action pedestrian volumes were developed by increasing existing volumes to reflect expected growth in overall travel through and within the study area. Pedestrian trips resulting from the Willets Point Phase 2 project adjacent to the Proposed Project were also incorporated into the pedestrian analysis, in addition to changes to pedestrian element geometry associated with the Willets Point Phase 2 project and other roadway improvements described in the No-Action section above. Pedestrian volumes are shown in **Appendix D**.

The No-Action pedestrian levels of service were determined for the locations analyzed in the existing conditions. **Table 14-53** through **Table 14-54** provide an overview of the pedestrian levels of service for the peak hours analyzed, and detailed levels of service are provided in **Table 14-55** through **Table 14-1.** The summary of the No-Action condition indicates that:

› All sidewalk elements operate at acceptable LOS C or better during the non-gameday midday peak hour. One of the 16 sidewalk elements operates at LOS D during the non-gameday AM, non-gameday Saturday PM, gameday weekday PM and gameday Sunday midday peak hours. One sidewalk element operates at LOS E during the non-gameday weekday PM, gameday

Saturday PM Pre-game and Saturday PM Post Game peak hours. Two sidewalk elements operate at LOS E or F during the gameday Sunday PM peak hour.

› All crosswalk elements operate at acceptable LOS C or better during the non-gameday Saturday PM peak hour. One of the 14 crosswalk elements operates at LOS E during the non-gameday weekday AM, midday, PM, and gameday weekday PM peak hours. One crosswalk element operates at LOS F during the gameday Saturday PM Pre-game and Sunday midday peak hours. Four crosswalk elements operate at LOS E or F during the gameday Saturday PM Post Game peak hour. Two crosswalk elements operate at LOS E or F during the gameday Sunday PM peak hour.

› All eight corner elements operate at acceptable LOS C or better during the non-gameday peak hours, gameday weekday PM, Saturday PM Pre-game, and gameday Sunday midday peak hours. Two corner elements operate at LOS D or F during the gameday Saturday PM Post Game peak hour, and two corner elements operate at LOS E or F during the gameday Sunday PM peak hour.

Table 14-53 2030 No-Action Non-Gameday Pedestrian Levels of Service Summary

	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Saturday PM Peak Hour
Sidewalk Elements				
Sidewalks at LOS A/B/C	15	16	15	15
Sidewalks at Unacceptable LOS D	1	0	0	1
Sidewalks at LOS E	0	0	1	0
Sidewalks at LOS F	0	0	0	0
Crosswalk Elements				
Crosswalks at LOS A/B/C	13	13	13	14
Crosswalks at Unacceptable LOS D	0	0	0	0
Crosswalks at LOS E	1	1	1	0
Crosswalks at LOS F	0	0	0	0
Corner Elements				
Corners at LOS A/B/C	8	8	8	8
Corners at Unacceptable LOS D	0	0	0	0
Corners at LOS E	0	0	0	0
Corners at LOS F	0	0	0	0

Note: Includes 16 sidewalk, 14 crosswalk, and eight corner analysis locations

Table 14-54 2030 No-Action Gameday Pedestrian Levels of Service Summary

	Weekday PM Peak Hour	Saturday PM Pre-game Peak Hour	Saturday PM Post Game Peak Hour	Sunday Midday Peak Hour	Sunday PM Peak Hour
Sidewalk Elements					
Sidewalks at LOS A/B/C	15	15	15	15	14
Sidewalks at Unacceptable LOS D	1	0	0	1	0
Sidewalks at LOS E	0	1	1	0	1
Sidewalks at LOS F	0	0	0	0	1
Crosswalk Elements					
Crosswalks at LOS A/B/C	13	13	10	13	12
Crosswalks at Unacceptable LOS D	0	0	0	0	0
Crosswalks at LOS E	1	0	3	0	1
Crosswalks at LOS F	0	1	1	1	1
Corner Elements					
Corners at LOS A/B/C	8	8	6	8	6
Corners at Unacceptable LOS D	0	0	1	0	0
Corners at LOS E	0	0	0	0	1
Corners at LOS F	0	0	1	0	1

Note: Includes 16 sidewalk, 14 crosswalk, and eight corner analysis locations

Table 14-55 2030 No-Action Non-Gameday Pedestrian Levels of Service – Sidewalks

		Weekday AM Peak Hour			Weekday Midday Peal Hour			Weekday PM Peak Hour			Saturday PM Peak Hour		
Sidewalk	Effective Width, ft	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS
114th Street between 39th Avenue and Roosevelt Avenue (west side)	4.5	53	672.4	A	87	571.7	A	80	710.6	A	60	845.3	A
114th Street between Roosevelt Avenue and 41st Avenue (west side)	1.8	56	277.6	B	67	255.9	B	53	401.0	B	40	607.3	A
126th Street/Seaver Way between Northern Boulevard and 34th Avenue (east side)	7.5	300	219.8	B	282	192.0	B	368	161.1	B	222	320.7	B
126th Street/Seaver Way between 34th Avenue and 35th Avenue (east side)	7.5	119	499.1	B	133	294.6	B	173	260.7	B	115	257.5	B
126th Street/Seaver Way between 34th Avenue and Citi Field Entrance 11 (west side)	2.0	459	23.8	D	299	60.9	C	442	21.6	E	249	30.1	D
126th Street/Seaver Way between 36th Avenue and Citi Field Entrance 1 (west side)	4.5	522	108.7	B	329	129.6	B	503	111.1	B	261	119.1	B
Roosevelt Avenue between 112th Street and 114th Street (north side)	3.0	88	394.5	B	89	411.4	B	143	295.2	B	46	692.2	A
Roosevelt Avenue between 112th Street and 114th Street (south side)	3.7	64	720.6	A	66	801.4	A	94	527.7	B	41	787.2	A
Roosevelt Avenue between 14th Street and Shea Road (north side)	4.0	78	631.7	A	70	464.4	B	135	336.8	B	62	809.3	A
Roosevelt Avenue between 14th Street and Shea Road (south side)	4.0	46	1,119.1	A	74	376.6	B	76	520.9	B	30	1,043.4	A

Table 14-55 2030 No-Action Non-Gameday Pedestrian Levels of Service – Sidewalks

		Weekday AM Peak Hour			Weekday Midday Peal Hour			Weekday PM Peak Hour			Saturday PM Peak Hour		
Sidewalk	Effective Width, ft	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS
Roosevelt Avenue between Shea Road and Subway Station (north side)	10.1	93	1,410.7	A	70	1,589.0	A	139	925.6	A	74	1,510.9	A
Roosevelt Avenue between Shea Road and Subway Station (south side)	10.7	46	2,984.3	A	74	1,004.6	A	76	1,389.4	A	30	2,782.6	A
Roosevelt Avenue between Subway Station and 126th Street/Seaver Way (north side)	11.3	842	184.9	B	583	205.0	B	890	148.5	B	479	274.1	B
Roosevelt Avenue between Subway Station and 126th Street/Seaver Way (south side)	10.5	32	1,949.0	A	45	2,310.0	A	44	1,890.0	A	24	1,723.8	A
Roosevelt Avenue between 126th Street/Seaver Way and Flushing Creek (north side)	3.1	75	413.7	B	75	404.7	B	140	238.3	B	75	470.2	B
Roosevelt Avenue between 126th Street/Seaver Way and Flushing Creek (south side)	10.1	31	1,290.2	A	48	1,249.8	A	62	645.0	A	48	3,361.0	A

Table 14-56 2030 No-Action Gameday Pedestrian Levels of Service – Sidewalks

Sidewalk	Effective Width, ft	Weekday PM Peak Hour			Saturday PM Pre-game Peak Hour			Saturday PM Post Game Peak Hour			Sunday Midday Peak Hour			Sunday PM Peak Hour		
		Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS
114th Street between 39th Avenue and Roosevelt Avenue (west side)	4.5	117	461.3	B	40	1,176.2	A	226	197.8	B	26	1,566.6	A	25	1,247.4	A
114th Street between Roosevelt Avenue and 41st Avenue (west side)	1.8	90	273.4	B	101	193.1	B	113	133.0	B	107	238.5	B	136	162.5	B
126th Street/Seaver Way between Northern Boulevard and 34th Avenue (east side)	7.5	451	206.7	B	890	103.2	B	1,150	51.6	B	766	115.6	B	1,231	43.1	C
126th Street/Seaver Way between 34th Avenue and 35th Avenue (east side)	7.5	193	375.3	B	120	246.7	B	389	154.1	B	130	484.2	B	217	262.6	B
126th Street/Seaver Way between 34th Avenue and Citi Field Entrance 11 (west side)	2.0	504	33.1	D	819	21.1	E	1,695	5.3	E	828	32.1	D	1,017	11.0	F
126th Street/Seaver Way between 36th Avenue and Citi Field Entrance 1 (west side)	4.5	645	95.2	B	613	70.2	C	1,579	25.8	C	606	93.1	B	3,090	12.5	E
Roosevelt Avenue between 112th Street and 114th Street (north side)	3.0	135	293.1	B	187	225.2	B	280	126.5	B	179	209.1	B	267	111.7	B

Table 14-56 2030 No-Action Gameday Pedestrian Levels of Service – Sidewalks

Sidewalk	Effective Width, ft	Weekday PM Peak Hour			Saturday PM Pre-game Peak Hour			Saturday PM Post Game Peak Hour			Sunday Midday Peak Hour			Sunday PM Peak Hour		
		Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS
Roosevelt Avenue between 112th Street and 114th Street (south side)	3.7	93	526.8	B	132	362.8	B	136	350.3	B	165	301.8	B	147	328.3	B
Roosevelt Avenue between 114th Street and Shea Road (north side)	4.0	178	304.4	B	217	227.6	B	547	77.5	B	244	195.4	B	498	77.5	C
Roosevelt Avenue between 114th Street and Shea Road (south side)	4.0	119	496.5	B	142	331.3	B	173	303.8	B	108	344.7	B	159	294.3	B
Roosevelt Avenue between Shea Road and Subway Station (north side)	10.1	195	714.5	A	1,009	117.8	B	394	274.0	B	1,095	83.4	C	1,180	67.1	C
Roosevelt Avenue between Shea Road and Subway Station (south side)	10.7	119	1,324.2	A	142	883.8	A	173	810.5	A	108	919.6	A	159	785.1	A
Roosevelt Avenue between Subway Station and 126th Street/Seaver Way (north side)	11.3	922	175.2	B	645	214.5	B	695	129.2	B	607	209.2	B	1,288	62.8	C
Roosevelt Avenue between Subway Station and 126th Street/Seaver Way (south side)	10.5	55	1,575.0	A	54	1,713.2	A	162	899.1	A	45	2,772.0	A	82	1,198.5	A

Table 14-56 2030 No-Action Gameday Pedestrian Levels of Service – Sidewalks

		Weekday PM Peak Hour			Saturday PM Pre-game Peak Hour			Saturday PM Post Game Peak Hour			Sunday Midday Peak Hour			Sunday PM Peak Hour		
Sidewalk	Effective Width, ft	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS
Roosevelt Avenue between 126th Street/Seaver Way and Flushing Creek (north side)	3.1	192	202.1	B	359	114.6	B	51	950.5	A	321	134.6	B	412	52.9	C
Roosevelt Avenue between 126th Street/Seaver Way and Flushing Creek (south side)	10.1	61	655.6	A	50	3,219.0	A	839	95.1	B	48	3,333.0	A	70	2,285.5	A

Table 14-57 2030 No-Action Non-Gameday Pedestrian Levels of Service – Crosswalks

		Weekday AM Peak Hour			Weekday Midday Peak Hour			Weekday PM Peak Hour			Saturday PM Peak Hour		
Intersection	Crosswalk	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS
126th Street/Seaver Way and 34th Avenue	East	276	109.3	A	262	111.1	A	349	80.1	A	203	62.9	A
	South	309	11.7	E	197	12.4	E	287	12.9	E	152	61.9	A
	West	159	102.9	A	108	152.7	A	157	360.1	A	99	143.2	A
126th Street/Seaver Way and Roosevelt Avenue	North	360	160.4	A	285	180.7	A	408	149.0	A	225	282.9	A
	East	51	188.8	A	68	121.3	A	91	74.7	A	64	66.6	A
	South	24	1,063.9	A	25	2,060.7	A	27	2,810.7	A	16	7,106.3	A
	West	7	3,388.8	A	13	698.3	A	14	575.9	A	7	2,412.8	A
Roosevelt Avenue and Subway Station	North	104	255.1	A	84	316.6	A	125	231.9	A	56	345.1	A
	East	3	3,106.6	A	1	6,213.2	A	3	3,106.6	A	1	6,213.2	A
	West	4	3,224.2	A	4	3,226.1	A	12	920.0	A	3	6,452.3	A
Roosevelt Avenue and 114th Street	North	50	1,014.1	A	57	693.6	A	101	423.6	A	57	751.4	A
	East	4	1,302.4	A	3	1,465.5	A	9	985.5	A	2	2,260.9	A
	South	42	746.8	A	64	394.8	A	60	549.1	A	34	742.1	A
	West	24	313.7	A	44	211.4	A	33	403.8	A	20	792.9	A

Table 14-58 2030 No-Action Gameday Pedestrian Levels of Service – Crosswalks

		Weekday PM Peak Hour			Saturday PM Pre-game Peak Hour			Saturday PM Post Game Peak Hour			Sunday Midday Peak Hour			Sunday PM Peak Hour		
Intersection	Crosswalk	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS
126th Street/Seaver Way and 34th Avenue	East	435	67.8	A	847	31.9	C	1,056	14.5	E	706	33.3	C	1,104	12.1	E
	South	328	8.1	E	557	3.9	F	928	3.4	F	540	4.9	F	729	3.0	F
	West	178	178.1	A	199	135.9	A	675	37.4	C	251	94.6	A	299	80.9	A
126th Street/Seaver Way and Roosevelt Avenue	North	457	156.2	A	479	140.6	A	601	66.5	A	435	157.7	A	597	72.7	A
	East	87	99.1	A	81	47.8	B	482	9.7	E	76	110.7	A	93	36.8	C
	South	29	1,589.5	A	35	1,606.1	A	452	105.5	A	30	1,915.2	A	40	1,374.8	A
	West	20	646.0	A	36	78.6	A	287	11.6	E	15	393.4	A	35	107.6	A
Roosevelt Avenue and Subway Station	North	106	184.6	A	214	103.6	A	356	58.3	B	165	125.5	A	418	43.5	B
	East	1	6,213.2	A	7	1,552.3	A	8	1,034.0	A	0	-	A	33	258.3	A
	West	43	329.9	A	55	280.3	A	215	65.3	A	157	130.1	A	151	71.5	A
Roosevelt Avenue and 114th Street	North	129	335.7	A	170	245.0	A	513	72.4	A	225	219.6	A	419	64.9	A
	East	11	405.8	A	28	301.0	A	42	195.5	A	34	270.4	A	84	132.4	A
	South	103	311.5	A	122	279.0	A	185	213.2	A	109	338.6	A	179	201.7	A
	West	50	269.6	A	58	244.7	A	280	28.1	C	51	269.6	A	105	140.1	A

Table 14-59 2030 No-Action Non-Gameday Pedestrian Levels of Service – Corners

		Weekday AM Peak Hour			Weekday Midday Peak Hour			Weekday PM Peak Hour			Saturday PM Peak Hour		
Intersection	Corner	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS
126th Street/Seaver Way and 34th Avenue	Southeast	39	83.8	A	29	91.0	A	33	85.4	A	15	129.6	A
	Southwest	2	45.9	B	2	36.9	C	1	49.1	B	2	88.3	A
126th Street/Seaver Way and Roosevelt Avenue	Northeast	39	375.7	A	45	352.0	A	68	297.8	A	52	452.6	A
	Southeast	0	1,552.2	A	0	2,239.1	A	0	1,206.6	A	0	1,653.9	A
	Southwest	1	1,860.6	A	5	2,342.8	A	2	2,355.8	A	1	7,362.2	A
	Northwest	464	254.0	A	297	306.6	A	462	290.9	A	246	467.2	A
Roosevelt Avenue and 114th Street	Southwest	21	353.2	A	21	199.3	A	23	322.6	A	25	448.0	A
	Northwest	19	1,066.4	A	30	732.7	A	29	723.2	A	29	1,098.0	A

Table 14-60 2030 No-Action Gameday Pedestrian Levels of Service – Corners

		Weekday PM Peak Hour			Saturday PM Pre-game Peak Hour			Saturday PM Post Game Peak Hour			Sunday Midday Peak Hour			Sunday PM Peak Hour		
Intersection	Corner	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS
126th Street/Seaver Way and 34th Avenue	Southeast	41	78.5	A	27	29.6	C	53	16.1	D	35	40.3	B	31	12.2	E
	Southwest	13	38.3	C	56	33.0	C	33	-22.3	F	35	29.0	C	40	-15.8	F
126th Street/Seaver Way and Roosevelt Avenue	Northeast	67	336.4	A	62	275.5	A	51	93.5	A	72	368.4	A	152	141.3	A
	Southeast	0	1,360.8	A	0	922.4	A	0	139.7	A	0	1,684.9	A	0	638.7	A
	Southwest	3	1,925.9	A	2	1,066.0	A	4	111.3	A	2	2,277.2	A	3	967.9	A
	Northwest	460	246.4	A	275	300.6	A	314	126.6	A	272	305.4	A	992	98.1	A
Roosevelt Avenue and 114th Street	Southwest	23	202.5	A	44	155.9	A	8	61.9	A	31	203.1	A	30	124.0	A
	Northwest	28	568.7	A	49	453.0	A	23	104.3	A	39	402.0	A	40	180.0	A

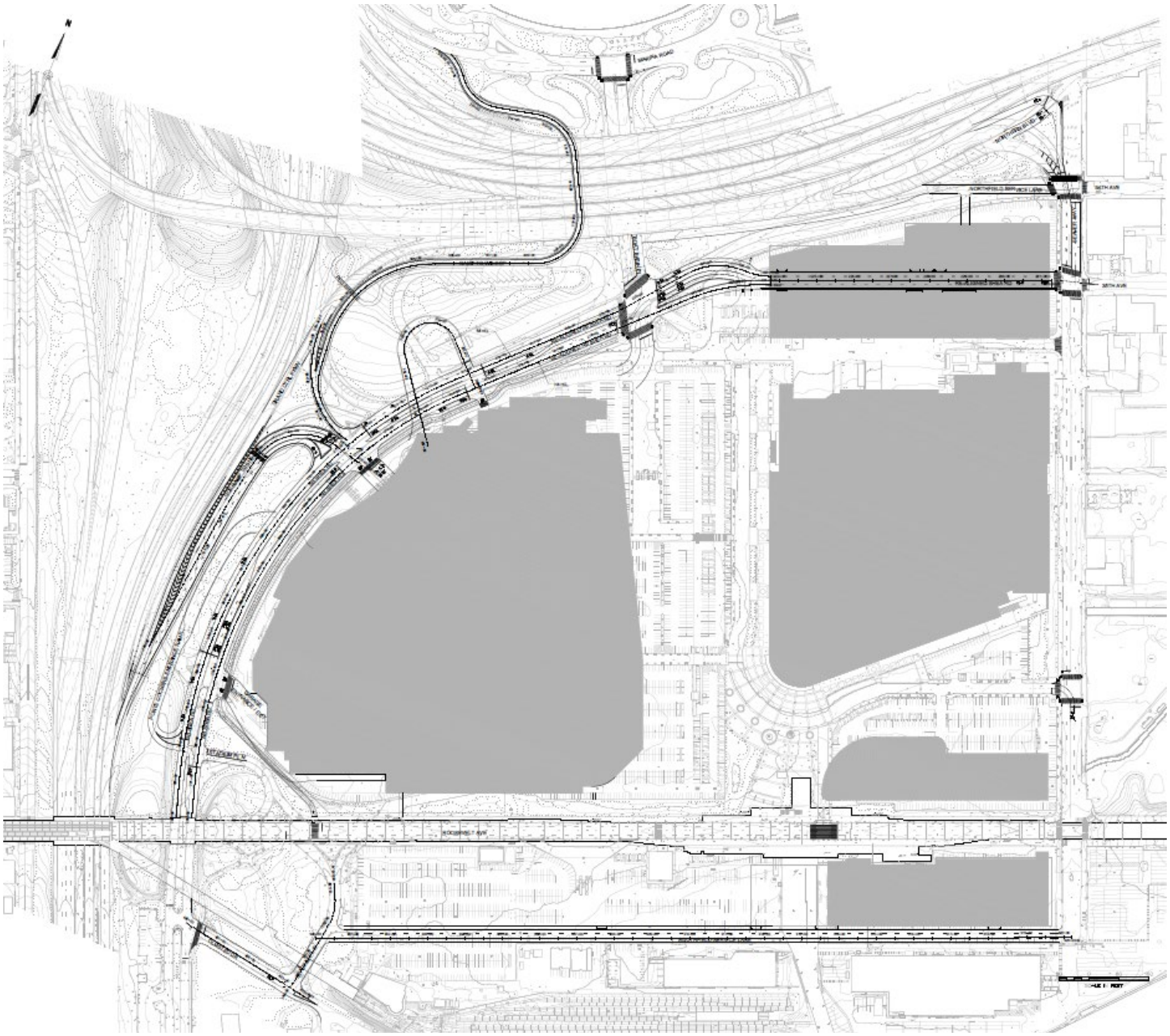
With-Action Conditions

This section provides an analysis of future conditions with the Proposed Project (under the With-Action Condition) in the Proposed Project's Build year of 2030. As noted above, the Proposed Project is located within Citi Field's existing parking area in the Willets Point section of Queens. The Proposed Project would consist of a major development including a mixed-use development (referred to as Area A) comprised of a gaming facility, hotel, convention and meeting space, music hall, local retail, and restaurant uses, and a second development (referred to as Area B) comprised of a mix of non-profit office, standard office, restaurant and retail uses related to the Citi Field Mets fanbase. These two developments would be accommodated on the existing Citi Field site and would require relocating parking from existing surface lots to new garage structures for stadium parking. These structures would be located south of Roosevelt Avenue at the Southfield parking structure and north of Citi Field at the Northfield parking structure, as well as the Area B parking structure and a small surface lot adjacent to the Southfield parking structure south of Roosevelt Avenue. These developments would be accompanied by enhancements to the geometry and operations of the surrounding public roadway network, including changes to surface streets and highway ramps, as detailed below. Project improvements for both the local street and highway networks are intended to accommodate the demand expected as a result of the Proposed Project. It should be noted that the Applicant is not committed to making these improvements in the absence of the Proposed Project.

Traffic

As part of the Proposed Project, several roadway improvements to both the local roadways and highway network have been developed to better accommodate the demand generated by the project. These are described in further detail in the sections below and shown in **Figure 14-10**. Intersection details of the roadway improvements are provided in **Appendix D**.

Figure 14-10 With-Action Roadway Improvements



Local Roadway

During the period between Draft and Final EIS, the Applicant expects to advance further design of the proposed roadway improvements at a higher level of detail. These design details will be reviewed by the New York City Department of Transportation (NYC DOT) and the applicant team will update the transportation analysis as necessary. In cases where signal controls are proposed, a signal warrant analysis will be conducted between the Draft and Final EIS. In addition, the highway ramp modifications being proposed are subject to review as part of an Access Modification Report (AMR) by NYSDOT. The AMR is reviewed by NYSDOT to ensure that the proposed changes meet required

standards per the NYSDOT Highway Design Manual, as well as meeting current and future traffic needs. Upon review and approval of the AMR, a Highway Work Permit is issued by NYSDOT to allow for implementation of the proposed changes to the highway network. Key roadway improvements to the public street network would be made at the following intersections:

- Northern Boulevard eastbound at 126th Street/Seaver Way
- 34th Avenue at 126th Street/Seaver Way
- 35th Street at 126th Street/Seaver Way
- Shea Road and Boat Basin
- 126th Street/Seaver Way and the Area B Entrance
- Four new driveways for the Northfield parking structure along Shea Road
- New signal at Roosevelt Avenue and Stadium Place
- Additional lane capacity south of the intersection of Roosevelt Avenue and 126th Street/Seaver Way
- New signal at Shea Road and Stadium Place North/ Porte Cochere Entrance, in coordination with Area A access intersection Shea Road at Tower Parking Access (as shown in **Figure 14-2**)
- New signal at Grand Central Parkway westbound exit ramp/ Podium Parking West Access at Shea Road (as shown in **Figure 14-2**)
- New signal at Shea Road and Porte Cochere Exit Ramp
- New signal at Shea Road and Olmsted Drive
- Reconfigured Stadium Place South at Olmsted Drive (unsignalized)
- New intersection at Stadium Place South at Southfield Parking Lot

Northern Boulevard eastbound at 126th Street/Seaver Way

Improvements at this intersection would include the reconfiguration of the eastbound approach to protect the right turn movement from the Grand Central Parkway. This would require 126th Street/Seaver Way to be converted from one-way northbound to northbound with one lane of southbound traffic. This signal phasing would allow the eastbound right turn movement to go concurrently with the existing northbound traffic phase as well as with the eastbound through phase. Since this realignment would conflict with the south pedestrian crossing, the south crosswalk would be removed to ensure pedestrian safety.

34th Avenue at 126th Street/Seaver Way

Improvements at this intersection would involve the realignment of Shea Road to 35th Avenue, which would eliminate the eastbound Shea Road approach and west crosswalk. Instead, a Northfield parking structure service lane would be provided, which would only be in operation during gameday egress conditions. The southbound approach would be reconfigured to accommodate the ramp from the Whitestone Expressway and the proposed southbound approach from Northern Boulevard. The signal phasing would be expected to operate as a two-phase signal with a cycle length of 120 seconds.

35th Avenue at 126th Street/Seaver Way

Improvements at this intersection would involve the realignment of Shea Road from 34th Avenue to this intersection to accommodate the Northfield parking structure and improve parking access. The eastbound approach would be striped with a left turn lane and a through-right lane. The intersection would be signalized with crosswalks and stop bars striped on all approaches and operate with a cycle length of 120 seconds and a two-phase signal for the northbound/southbound and eastbound/westbound approaches. A "Right Turn on Red" would be provided for the southbound approach to prevent queueing of vehicles along 126th Street/Seaver Way destined for the Proposed Project and Citi Field.

Shea Road at Boat Basin Place

Improvements at this intersection include restriping the intersection as follows: an eastbound approach with one left turn lane and two shared through-right travel lanes; a westbound approach with two left turn lanes, two through lanes, and one right turn lane; a northbound approach with three moving lanes (operating as one left turn and two shared through-right lanes); a southbound approach with three moving lanes (operating as one left turn lane, one through lane and one right turn lane). The signal would be expected to operate with three phases with a northbound/southbound phase, an eastbound left turn/westbound protected left turn phase, and an eastbound/westbound phase, with a cycle length of 120 seconds. Pedestrian crosswalks would be provided at the north and west legs of the intersection, with an above-grade pedestrian bridge crossing Shea Road east of the intersection.

126th Street/Seaver Way and Area B Entrance (formerly Citi Field Entrance 1)

Improvements at this intersection include implementing a new signal and restriping the eastbound approach to one left-right turn lane, the northbound approach to two moving lanes (operating as one left turn lane and one through lane) and the southbound approach to two moving lanes (operating as two shared through-right lanes). The signal would be expected to operate with a cycle length of 110 seconds as a three-phase signal with a northbound protected lead phase, a northbound/southbound phase, and an eastbound phase. Crosswalks and stop bars would be provided on all approaches.

Shea Road at Northfield Parking Structure Access

As part of the Proposed Project, four new intersections along Shea Road between Boat Basin Place and 35th Avenue would provide access to the Northfield parking structure. Shea Road at Mets Truck Loading would operate as an unsignalized intersection with two moving lanes along Shea Road in each direction. Shea Road at Northfield Parking Structure South/North Access 3 would operate as an unsignalized intersection with northbound left and right turn lanes, a southbound right turn lane, and two moving lanes along Shea Road in each direction. Shea Road at both Northfield Parking Structure North Access 1 and 2 would operate as unsignalized intersections each with a southbound right turn lane and two moving lanes along Shea Road in each direction.

Roosevelt Avenue and Stadium Place

Improvements at this intersection include implementing a new signal and providing stop bars along the eastbound and westbound approaches. In addition, a new crosswalk would be provided crossing Roosevelt Avenue. The signal would be expected to operate with a cycle length of 120 seconds as a

two-phase signal with a northbound right/southbound right turn phase, and an eastbound/westbound phase.

Roosevelt Avenue and 126th Street/Seaver Way

Improvements at this intersection include reconfiguration of the northbound approach and southbound receiving leg with two lanes in each direction to provide more capacity for vehicles entering and exiting the Southfield parking structure from the Southfield Access Road.

Shea Road and Stadium Place North/ Porte Cochere Entrance

Improvements at this intersection include restriping the intersection as follows: a westbound approach with a shared left-right turn lane, a northbound approach with a left turn lane and two shared through-right lanes, and a southbound approach with two shared left-through lanes and a channelized right turn lane. The intersection would be signalized with a cycle length of 100 seconds with three phases: a protected southbound lead phase, a northbound/southbound phase, and a westbound phase. The channelized southbound right turn would operate freely.

Shea Road at Tower Parking Access

Improvements at this intersection including restriping the intersection as follows: a westbound approach with one left turn and one right turn lane, a northbound approach with two shared through-right lanes, and a southbound approach with two left turn lanes, and three through lanes. The intersection would be signalized and operate in coordination with the Shea Road and Stadium Place North/ Porte Cochere Entrance intersection to the south. A crosswalk would be provided along the westbound approach.

Grand Central Parkway westbound exit ramp/ Podium Parking West Access at Shea Road

Improvements at this intersection would include restriping the intersection as follows: an eastbound approach with one left turn lane, two through lanes and one channelized right turn lane; a westbound approach with two left turn lanes and one shared through-right lane; a northbound approach with one left turn lane and two shared through-right lanes; and a southbound approach with one left turn lane and three shared through-right lanes. The intersection would be signalized with a cycle length of 90 seconds or 120 seconds depending on the time of day and operates in five phases: a protected northbound left/southbound left turn phase (with a permitted eastbound right turn), a northbound phase (with a permitted eastbound right turn), a northbound/southbound phase, a protected eastbound left/westbound left turn phase, a westbound lead phase, and an eastbound/westbound phase. A "Right Turn on Red" would be provided for the southbound approach to prevent queuing of vehicles along Shea Road leaving the Development Site towards the Grand Central Parkway. A crosswalk would be provided along the westbound approach.

Shea Road and Porte Cochere Exit Ramp

Improvements at this intersection would include restriping the intersection as follows: an eastbound approach with one left-through lane and one right turn lane; one northbound approach with two through lanes and one right turn lane; and a southbound approach with one left turn lane (with approximately 140 feet of vehicle queue storage length) and two through lanes. The intersection would be signalized with a cycle length of 100 seconds and operate in two phases, including a northbound/southbound phase and an eastbound phase (with a permitted northbound right turn).

The eastbound right turn would operate freely into a dedicated receiving lane. A crosswalk would be provided along the eastbound receiving leg.

Shea Road and Olmsted Drive

Improvements at this intersection would include reconfiguring the westbound approach to one left turn lane and one right turn lane, with a crosswalk provided along this approach and stop bars provided on all approaches. The intersection would be signalized with a cycle length of 90 seconds and operate in three phases: a protected southbound lead phase (with a permitted westbound right turn), a northbound/southbound phase, and a protected westbound phase.

Stadium Place South at Olmsted Drive

Improvements at this intersection would include reconfiguring the eastbound approach to one left turn lane and one through lane, the westbound approach to one shared through-right lane, and the southbound approach to one shared left-right turn lane. The intersection would remain unsignalized as in existing conditions.

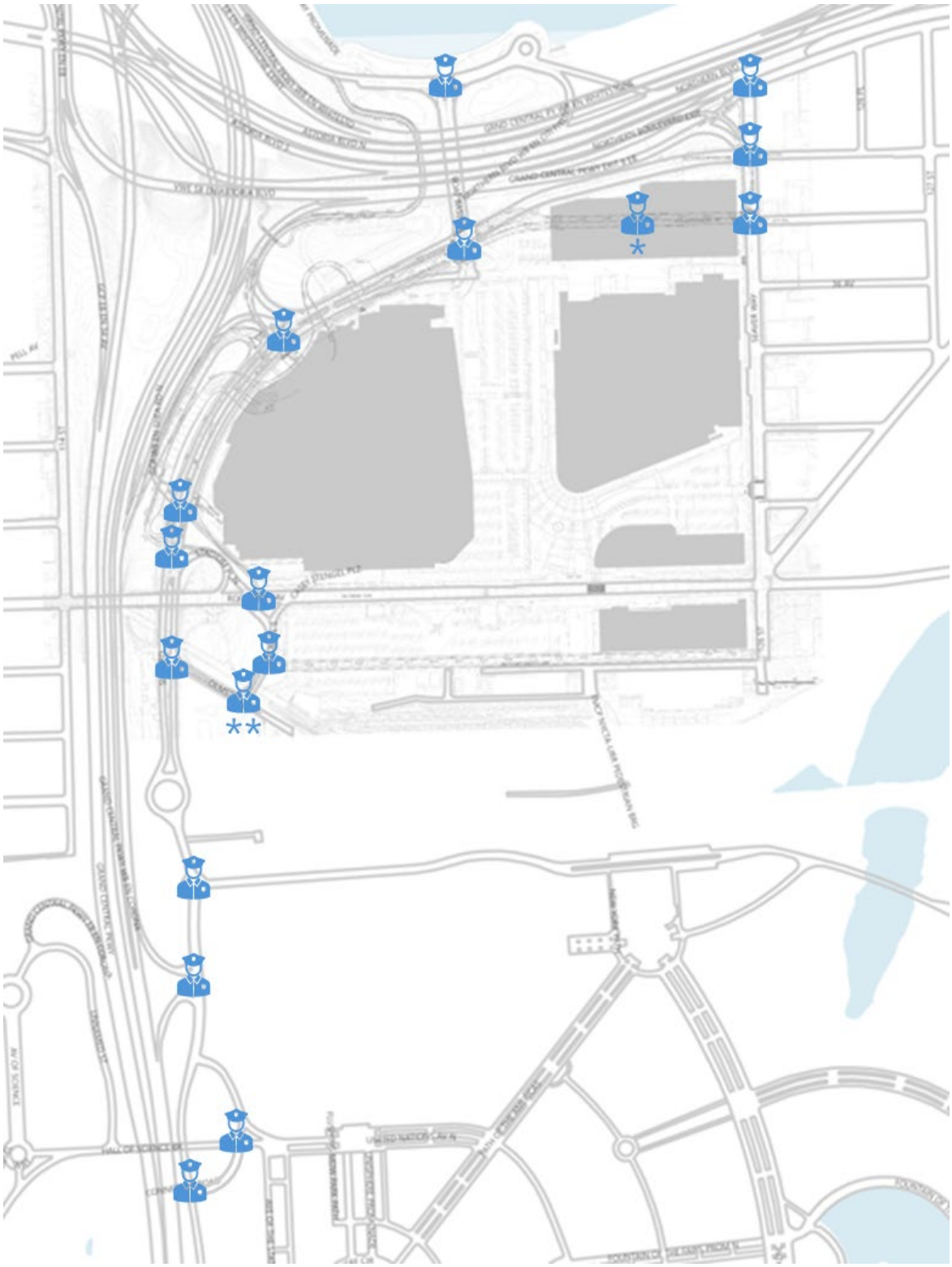
Stadium Place South at Southfield Parking Lot

This is a new intersection reconfigured to accommodate the demand from Mets patrons on gamedays. The intersection would be unsignalized and striped as follows: a westbound approach with one left turn lane and one right turn lane, a northbound approach with two shared through-right lanes, and a southbound approach with one shared left-through lane.

Gameday Operations

Similar to existing conditions, traffic agents (TAs) would be needed to implement control measures and manage gameday ingress and egress traffic, in addition to trips generated by the Proposed Project. The TAs would be in place at corresponding intersections already with TA coordination in existing conditions (e.g. Marina Road at Boat Basin Place; Shea Road at Boat Basin Place; 34th Avenue at 126th Street/Seaver Way; Grand Central Parkway westbound entrance ramp at Shea Road/Citi Field Entrance 4; Shea Road at Stadium Place North), as well as at new intersections reconfigured by the Proposed Project along Shea Road, and intersections along Boat Basin Place, 126th Street/Seaver Way, Roosevelt Avenue, Shea Road, Olmsted Drive and New York Avenue. Operations at affected intersections are shown in **Figure 14-11** detailed below:

Figure 14-11 With-Action Gameday Traffic Agent Locations



* During gameday Saturday PM Post Game and Sunday PM peak hours
**During gameday weekday PM, Saturday PM Post Game, and Sunday PM peak hours

Northern Boulevard eastbound at 126th Street/Seaver Way

During the gameday peak hours analyzed, TAs would override the existing signal timing at this intersection and implement timings to provide additional green time for movements with higher demand (i.e. for the Whitestone Expressway off-ramp during ingress conditions, and for northbound traffic along 126th Street/Seaver Way during egress conditions).

34th Avenue at 126th Street/Seaver Way

During the gameday weekday PM, Saturday PM Pre-game and Sunday midday peak hours, the southeastbound ramp from the Whitestone Expressway would be coned off and operate as a free movement. One northbound approach lane would be coned off to provide an additional southbound receiving lane. The northbound approach would operate as a single shared through-right lane. TAs would override the proposed signal phasing and the intersection would operate as follows: a northbound/southbound phase, a pedestrian phase, and a westbound phase. TAs would prohibit use of the north and south crosswalks during these time periods to avoid conflicts between pedestrians and vehicles.

During the gameday Saturday PM Post Game and Sunday PM peak hours, the eastbound Northfield parking structure service lane would be in operation, and TAs would override the proposed signal phasing, and operated the intersection as follows: a northbound/southbound/southeastbound phase, a protected eastbound left turn phase, and a protected westbound phase. Traffic agents would prohibit use of the north and south crosswalks during to avoid conflicts between pedestrians and vehicles.

35th Avenue at 126th Street/Seaver Way

During the gameday peak hours analyzed, the southbound right turn lane would be coned off to operate as a free movement; as such, traffic agents would prohibit the use of the north and west crosswalks during these time periods to avoid conflicts between pedestrians and vehicles

During the gameday weekday PM, Saturday PM Pre-game, and Sunday midday peak hours, one northbound receiving lane would be coned off to provide an additional southbound lane. The southbound approach would operate as two shared left-through lanes and one free right turn lane (for a total of 3 lanes). The northbound approach would operate as one left turn lane and one shared through-right lane. Traffic agents would override the proposed signal timings to provide additional green time for movements with higher demand.

During the gameday Saturday PM Post Game and Sunday PM peak hour, TAs would manage traffic in three-phases as follows: a northbound/southbound phase, a protected eastbound lead phase, and an eastbound/westbound phase.

Shea Road at Boat Basin Place

During the gameday peak hours, TAs would override the proposed signal phasing plan from the With-Action condition.

During the gameday weekday PM peak hour, the intersection would operate as follows: a protected northbound left/southbound left turn phase (with permitted westbound right turn); a protected southbound lead phase (with a permitted westbound right turn phase); a northbound/southbound phase; a protected eastbound left/westbound left turn phase; an eastbound/westbound phase.

During the gameday Saturday PM Pre-game and Sunday midday peak hours, the intersection would operate as follows: protected southbound lead phase (with a permitted westbound right turn phase); a northbound/southbound phase; a protected eastbound left/westbound left turn phase (with a permitted southbound right turn phase); an eastbound/westbound phase.

During the gameday Saturday PM Post Game and Sunday PM peak hours, the northbound, southbound, and westbound approaches would be coned to reflect specific egress operations. The two outer lanes of the westbound approach would be coned off to provide two free westbound right turn lanes. The outer left turn lane would become a through lane, and the approach would operate as one left turn lane, two through lanes, and two right turn lanes). The northbound approach would operate as one left turn lane, one through lane, and one right turn lane. One southbound approach lane would be coned off to provide an additional northbound receiving lane. The southbound approach would operate as one shared left-through lane and one right turn lane (for a total of two lanes). TAs would prohibit use of the north crosswalk to avoid conflicts between pedestrians and vehicles. During the gameday Saturday PM Post Game peak hour, the intersection would operate as follows: a northbound/southbound phase; a protected eastbound phase (with a permitted southbound right turn phase); a protected eastbound left/westbound left turn phase (with a permitted southbound right turn phase); a protected westbound phase. During the gameday Sunday PM peak hour, the intersection would operate as follows: a northbound/southbound phase; a protected eastbound phase (with a permitted southbound right turn phase); a protected westbound phase.

Marina Road at Boat Basin Place

During the gameday weekday PM, Saturday PM Pre-game, and Sunday midday peak hours, the westbound approach would operate as one left turn lane and one shared left-through lane. TAs would override the signal phasing in operation under the No-Action condition to provide a protected westbound lead phase.

During the gameday Saturday PM Post Game peak hour, the westbound approach would operate as two shared left-through lanes. The northbound approach would operate as a left turn lane and a shared left-right turn lane. TAs would override the signal phasing in operation under the No-Action condition as follows: a pedestrian phase, a protected northbound phase, a protected westbound phase, and an eastbound/westbound phase. TAs would prohibit use of the west and south crosswalks to avoid conflicts between pedestrians and vehicles.

During the gameday Sunday PM peak hour, the northbound approach would operate as a left turn lane and a shared left-right turn lane. TAs would override the signal phasing in operation under the No-Action condition as follows: a pedestrian phase, a protected northbound phase, a protected westbound phase, and an eastbound/westbound phase. TAs would prohibit use of the west and south crosswalks to avoid conflicts between pedestrians and vehicles.

Shea Road at Northfield Parking Structure

During the gameday Saturday PM Post Game peak hour, one eastbound lane would be coned off between the Mets Truck Loading intersection and the Northfield Parking Structure North Access 1 intersection, to provide an additional westbound lane (for a total of 3 lanes).

Shea Road at Northfield Parking Structure South/North Access 3

During the gameday Saturday PM Post Game and Sunday PM peak hours, TAs would override the proposed stop controls and the intersection would operate as a two-phase signal with a northbound/southbound phase and an eastbound/westbound phase.

Grand Central Parkway westbound exit ramp/ Podium Parking West Access at Shea Road

During the gameday weekday PM and Sunday midday peak hours, TAs would override the proposed signal phasing at this intersection as follows: a protected northbound left/southbound left turn phase (with a permitted eastbound right turn); a northbound lead phase (with a permitted eastbound right turn); a northbound/southbound phase; an eastbound/westbound phase; a protected westbound lag phase; and a protected eastbound/westbound left turn phase.

During the gameday Saturday PM Pre-game peak hour, TAs would override the proposed signal phasing at this intersection as follows: a protected northbound left/southbound left turn phase (with a permitted eastbound right turn); a northbound lead phase (with a permitted eastbound right turn); a northbound/southbound phase; an eastbound/westbound phase; a protected westbound phase (with a permitted eastbound right turn); and a protected eastbound/westbound left turn phase (with a permitted eastbound right turn)

During the gameday Saturday PM Post Game and Sunday PM peak hours, the southbound approach would operate as a one left turn lane, two through lanes and one right turn lane. The traffic agents would override the proposed signal phasing at this intersection as follows: a northbound left/southbound left turn phase, with permitted eastbound and southbound right turns; a northbound/southbound phase; an eastbound lead phase (with a permitted southbound right turn phase); an eastbound/westbound phase; a protected westbound lag phase.

Shea Road at Tower Parking Access & Shea Road at Stadium Place North/ Porte Cochere Entrance

The traffic signals at these two intersections are coordinated; therefore, TAs would direct and manage traffic at these intersections concurrently.

During the gameday PM peak hour, the southbound approach at the Porte Cochere Entrance intersection would operate as a left turn lane, one through lane and one right lane. The traffic agent would override the proposed signal phasing at this intersection as follows: a southbound phase; a protected southbound phase (Porte Cochere Entrance only) and protected westbound phase (Tower Parking Access only); a northbound/southbound phase; and a protected westbound phase.

During the gameday Saturday PM Pre-game peak hour, the intersection would operate similar to the gameday weekday PM peak hour, with an additional permitted northbound right turn during the protected westbound phase (for both intersections). The northbound approach at the Tower Parking Access intersection would operate as one through lane and one right turn lane.

During the gameday Sunday midday peak hour, TAs would override the proposed signal timing from the proposed signal timing to provide additional green time for the westbound Tower Parking Access approach.

During the gameday Saturday PM Post Game and Sunday PM peak hours, the intersection would operate similar to the gameday Sunday midday peak hour, with an additional permitted northbound right turn during the protected westbound phase (for both intersections). During the Saturday PM Post Game peak hour, the southbound approach at the Porte Cochere Entrance intersection would

operate as a left turn lane, one through lane and one right lane. During the Sunday PM peak hour, the northbound approach at the Tower Parking Access intersection would operate as one through lane and one right turn lane.

Stadium Place South at Southfield Parking Lot

During the gameday weekday PM, Saturday PM Pre-game and Sunday midday peak hours, the northbound approach would operate as one through lane and one right turn lane for ingress traffic. The westbound left turn lane would be coned off to act as an eastbound receiving lane; as such, the westbound approach would operate as a shared left-right lane. The traffic agent would override the existing stop controls and the intersection would operate with a northbound/southbound phase, and a westbound phase.

During the gameday Saturday PM Post Game and Sunday PM peak hours, the westbound approach would operate as one left turn lane and one shared left-right turn lane. One northbound lane would be conned off to provide an additional southbound receiving lane (for a total of two receiving lanes); the northbound approach would then operate as one shared through-right lane. Similar to the gameday ingress peak hours, the TA would override the existing stop controls and the intersection would operate with a northbound/southbound phase, and a westbound phase.

Roosevelt Avenue at Stadium Place

During the five gameday peak hours, the eastbound and westbound approaches would operate as a through lane and a right turn lane. The southbound approach would be coned into a channelized right turn, reducing the westbound Roosevelt Avenue approach to a single through lane. TAs would permit the eastbound/westbound right turn during northbound/southbound phase. TAs would permit the southbound right turn during the eastbound/westbound phase.

Shea Road at Olmsted Drive

During the gameday weekday PM peak hour, the inner eastbound receiving lane would be coned off to provide an additional westbound lane (for a total of three lanes). The westbound approach would operate as one left turn lane and two right turn lanes.

During the gameday Saturday PM Pre-game and Sunday midday peak hours, the southbound approach would operate as a left turn lane and a through lane. The TA would override the proposed signal timings to provide additional green time for the southbound/westbound right turn phase during the Saturday PM Pre-game peak hour, and for the protected westbound phase during the Sunday midday peak hour.

During the gameday Saturday PM Post Game peak hour, the inner eastbound receiving lane would be coned off to provide an additional westbound lane (for a total of three lanes). The westbound approach would operate as two left turn lanes and one right turn lane. The northbound approach would operate as a through lane and a right turn lane. The TA would override the proposed signal timings to provide additional green time to the protected westbound phase and permit the northbound right turn during the protected westbound phase.

During the gameday Sunday PM peak hour, the inner eastbound receiving lane would be coned off to provide an additional westbound lane (for a total of three lanes). The westbound approach would operate as two left turn lanes and one right turn lane. The TA would override the proposed signal timings to provide additional green time to the protected westbound phase.

Stadium Place South at Olmsted Drive

During the gameday weekday PM peak hour, the inner eastbound lane would be coned off for a westbound receiving lane to accommodate operational changes at Shea Road at Olmsted Drive. The eastbound approach would then operate as a shared left-through lane.

During the gameday Saturday PM Post Game and Sunday PM peak hours, a northbound receiving lane would be converted to a southbound lane to provide the southbound approach with two lanes, operating as a shared left-right turn lane and a right turn lane. One lane from the eastbound approach would be converted to a westbound receiving lane (for a total of three receiving lanes); the eastbound approach would then operate as a shared left-through lane. The TA would override the existing stop controls and the intersection would operate with a southbound phase and an eastbound/westbound phase. Traffic agents would facilitate the southbound right turn movement.

Shea Road at Meridian Road

During the gameday weekday PM, Saturday PM Pre-game and Sunday midday peak hours, TAs would override the existing stop controls and the intersection would operate with a protected southbound lead phase, a northbound/southbound phase, and a westbound phase.

During the gameday Saturday PM Post Game and Sunday PM peak hours, the intersection would operate with two southbound shared left-through lanes. A second southbound receiving lane would be accommodated by shifting a northbound approach lane towards the curbside bike lane, a management measure that has historically been implemented for large events held at Flushing Meadows Corona Park. Traffic agents would override the existing stop controls and the intersection would operate with a northbound/southbound phase and a westbound phase.

Shea Road at Grand Central Parkway westbound exit ramp (9P)

During the gameday weekday PM, Saturday PM Pre-game, Sunday midday, and Sunday PM peak hours, TAs would override the existing stop controls and the intersection would operate with an eastbound phase and a northbound/southbound phase. The eastbound right turn movement would remain stop controlled, and a "Right Turn on Red" would be permitted for the southbound approach. During the gameday Saturday PM Post Game peak hour, TAs would override the existing stop controls and the intersection would operate with an eastbound phase, a protected northbound phase, and a northbound/southbound phase. The eastbound right turn movement would remain stop controlled, and traffic agents would facilitate the southbound right turn movement. During the gameday Saturday PM Post Game and Sunday PM peak hours, the northbound approach would shift towards the existing bike lane, providing the southbound approach with two moving lanes; these would operate as a through lane and a through-right lane.

Shea Road at New York Avenue

During the weekday PM, Saturday PM Pre-game, and Sunday midday peak hours, TAs would override the existing stop controls and the intersection would operate with a northbound/southbound phase and a westbound phase. During the gameday Saturday PM Post Game and Sunday PM peak hours, the northbound receiving lane would shift towards the existing bike lane, providing the southbound approach with two moving lanes; these would operate as a left turn lane and a through lane. Traffic agents would override the existing stop controls and the intersection would operate with a protected southbound lead phase, a northbound/southbound phase, and a westbound phase.

New York Avenue at United Nations Avenue North

During the five gameday peak hours analyzed, TAs would override the existing stop controls and the intersection would operate with a northbound phase and an eastbound/westbound phase. TA's would prohibit use of the west crosswalk and direct pedestrians to cross to the east inside the park.

Traffic Volumes

Overall, the Proposed Project would generate a total of: 1,330 vph (899 "ins" and 431 "outs") during the non-gameday weekday AM peak hour; 3,441 vph (1,861 "ins" and 1,580 "outs") during the non-gameday weekday midday peak hour; 4,233 vph (2,226 "ins" and 2,007 "outs") during the non-gameday weekday PM peak hour; 4,082 vph (2,194 "ins" and 1,888 "outs") during the non-gameday Saturday PM peak hour; 4,217 vph (2,217 "ins" and 2,000 "outs") during the gameday weekday PM peak hour; 4,379 vph (2,217 "ins" and 2,162 "outs") during the gameday Saturday PM Pre-game peak hour; 4,079 vph (2,201 "ins" and 1,878 "outs") during the gameday Saturday PM Post Game peak hour; 2,987 vph (1,621 "ins" and 1,366 "outs") during the gameday Sunday midday peak hour; and 3,846 vph (2,157 "ins" and 1,689 "outs) during the gameday Sunday PM peak hour. These vehicle trips were distributed as described in the Level 2 screening assessment. The With-Action traffic volumes for nine peak hours analyzed are provided in **Appendix D.**

Levels of Service

Table 14-61 through **Table 14-64** provide an overview of the levels of service that characterize 2030 With-Action "overall" intersection conditions and individual traffic lane groups during the peak hours analyzed. Detailed traffic levels of service comparing the No-Action and With-Action conditions during each peak hour are provided in **Appendix D.**

Table 14-61 2030 With-Action Non-Gameday Traffic Level of Service Summary – Overall Intersections

	No-Action				With-Action			
	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Saturday PM Peak Hour	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Saturday PM Peak Hour
Intersections at Overall LOS A/B/C/D	39	41	39	41	39	39	30	40
Intersections at Overall LOS E	4	4	2	4	4	2	5	2
Intersections at Overall LOS F	4	2	6	2	5	7	13	6
Number of significantly impacted intersections	-	-	-	-	11	11	18	10

Note: Includes 25 signalized intersections and 22 unsignalized intersections in the No-Action condition; includes 35 signalized intersections and 13 unsignalized intersections in the With-Action condition

Table 14-62 2030 With-Action Gameday Traffic Level of Service Summary – Overall Intersections

	No-Action					With-Action				
	Weekday PM Peak Hour	Saturday PM Pre-game Peak Hour	Saturday PM Post Game Peak Hour	Sunday Midday Peak Hour	Sunday PM Peak Hour	Weekday PM Peak Hour	Saturday PM Pre-game Peak Hour	Saturday PM Post Game Peak Hour	Sunday Midday Peak Hour	Sunday PM Peak Hour
Intersections at Overall LOS A/B/C/D	37	37	35	39	34	32	35	37	39	36
Intersections at Overall LOS E	4	3	6	4	5	4	5	1	4	1
Intersections at Overall LOS F	6	7	6	4	8	12	8	10	5	11
Number of significantly impacted intersections	-	-	-	-	-	17	18	13	13	14

Note: Includes 25 signalized intersections and 22 unsignalized intersections in the No-Action condition; includes 35 signalized intersections and 13 unsignalized intersections in the With-Action condition In the With-Action condition during the gameday weekday PM, Saturday PM Pre-game, and Sunday midday peak hours, five unsignalized intersections are modeled as signalized intersections to simulate traffic agent activity. In the With-Action condition during the gameday Saturday PM Post Game and gameday Sunday PM peak hours, seven unsignalized intersections are modeled as signalized intersections to simulate traffic agent activity.

Table 14-63 2030 With-Action Non-Gameday Traffic Level of Service Summary – Traffic Lane Groups

	No-Action				With-Action			
	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Saturday PM Peak Hour	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Saturday PM Peak Hour
Traffic Lane Groups at LOS A/B/C/D	161	172	163	171	184	190	173	188
Traffic Lane Groups at LOS E	17	8	12	7	17	8	13	7
Traffic Lane Groups at LOS F	20	17	24	16	23	26	39	25
Number of significantly impacted lane groups	-	-	-	-	16	18	35	19
Number of Individual Traffic Lane Groups	198	197	199	194	224	224	225	220

Note: Number of lane groups may vary between peak hours due to turn prohibitions, parking regulations, and the presence of de facto turn movements.

Table 14-64 2030 With-Action Gameday Traffic Level of Service Summary – Traffic Lane Groups

	No-Action					With-Action				
	Weekday PM Peak Hour	Saturday PM Pre-game Peak Hour	Saturday PM Post Game Peak Hour	Sunday Midday Peak Hour	Sunday PM Peak Hour	Weekday PM Peak Hour	Saturday PM Pre-game Peak Hour	Saturday PM Post Game Peak Hour	Sunday Midday Peak Hour	Sunday PM Peak Hour
Traffic Lane Groups at LOS A/B/C/D	158	155	159	159	161	170	173	176	187	177
Traffic Lane Groups at LOS E	9	15	10	11	4	10	18	16	10	10
Traffic Lane Groups at LOS F	32	28	28	25	31	46	35	33	26	37
Number of significantly impacted lane groups	-	-	-	-	-	37	30	27	19	28
Number of Individual Traffic Lane Groups	199	198	197	195	196	226	226	225	223	224

Note: Number of lane groups may vary between peak hours due to turn prohibitions, parking regulations, presence of traffic agents at select intersections, and the presence of de facto turn movements.

The summary overview of 2030 With-Action conditions indicates that:

- In the non-gameday weekday AM peak hour, nine intersections operate at overall LOS E or F, compared to eight in the No-Action condition. Forty individual traffic lane groups out of the 224 groups analyzed are at LOS E or F, compared to 37 lane groups out of 198 groups in the No-Action condition.
- In the non-gameday weekday midday peak hour, nine intersections operate at overall LOS E or F, compared to six in the No-Action condition. Thirty-four out of 224 individual traffic lane groups operate at LOS E or F, compared to 25 out of 197 groups in the No-Action condition.
- In the non-gameday weekday PM peak hour, 18 intersections operate at overall LOS E or F, compared to eight in the No-Action condition. Fifty-two out of 225 individual traffic lane groups operate at LOS E or F, compared to 36 out of 199 groups in the No-Action condition.
- In the non-gameday Saturday PM peak hour, eight intersections operate at overall LOS E or F, compared to six in the No-Action condition. Thirty-two out of 220 individual traffic lane groups operate at LOS E or F, compared to 23 out of 194 groups in the No-Action condition.
- In the gameday weekday PM peak hour, 16 intersections operate at overall LOS E or F, compared to 10 in the No-Action condition. Fifty-six out of 226 individual traffic lane groups operate at LOS E or F, compared to 41 out of 199 in the No-Action condition.

- In the gameday Saturday PM Pre-game peak hour, 13 intersections operate at overall LOS E or F, compared to 10 in the No-Action condition. Fifty-three out of 226 individual traffic lane groups operate at LOS E or F, compared to 43 out of 198 groups in the No-Action condition.
- In the gameday Saturday PM Post Game peak hour, 11 intersections operate at overall LOS E or F, compared to 12 in the No-Action condition. Forty-nine out of 225 individual traffic lane groups operate at LOS E or F, compared to 38 out of 197 groups in the No-Action condition.
- In the gameday Sunday midday peak hour, nine intersections operate at overall LOS E or F, compared to eight in the No-Action condition. Thirty-six out of 223 individual traffic lane groups operate at LOS E or F, compared to 36 out of 195 groups in the No-Action condition.
- In the gameday Sunday PM peak hour, 12 intersections operate at overall LOS E or F, compared to 13 in the No-Action condition. Forty-seven out of 224 individual traffic lane groups operate at LOS E or F, compared to 35 out of 196 groups in the No-Action condition.

As a result of proposed roadway improvements at key intersections, select traffic lane groups that operate at unacceptable levels of service under the No-Action condition would improve to acceptable levels of service under the With-Action condition. These include:

- The eastbound approach at Northern Boulevard eastbound and 126th Street/Seaver Way during the non-gameday weekday PM and gameday weekday PM peak hours
- The eastbound shared left-through and left turn lane groups at 34th Avenue and 126th Street/Seaver Way during all peak periods, which is no longer a lane group in the With-Action condition.
- The southeastbound approach at 34th Avenue and 126th Street/Seaver Way during the non-gameday weekday AM and midday peak hours and the gameday weekday PM peak hours
- The westbound approach at 34th Avenue and 126th Street/Seaver Way during the gameday Sunday PM peak hour
- The northbound de facto left turn lane group at 34th Avenue and 126th Street/Seaver Way during the gameday Saturday PM Pre-game peak hour
- The eastbound left turn lane group at Shea Road and Grand Central Parkway westbound exit ramp (9P) during the gameday PM, Saturday PM Pre-game, Sunday midday and Sunday PM peak hours
- The westbound approach at Shea Road and Olmsted Drive during the gameday Saturday PM Pre-game, Sunday midday, and Sunday PM peak hours
- The northbound approach at Roosevelt Avenue and Stadium Place South during the gameday Saturday PM Post Game peak hour
- The northbound left turn lane group at Roosevelt Avenue and Southfield Parking Lot during all peak periods, which no longer exists in the With-Action condition
- The northbound approach at Shea Road and Meridian Road during the gameday Saturday PM Pre-game and Sunday midday peak hours
- The southbound approach at Shea Road and Meridian Road during the gameday Saturday PM Post Game peak hour
- The eastbound approach at 126th Street/Seaver Way at Citi Field Entrance 11 during the gameday Saturday PM Pre-game and Sunday midday peak hours

- The northbound approach at New York Avenue at United Nations Avenue North during the gameday Saturday PM Pre-game and Sunday midday peak hours
- The eastbound de facto left turn lane group at Roosevelt Avenue and 126th Street/Seaver Way during the gameday Saturday PM Post Game, and Sunday midday peak hours
- The westbound approach at Shea Road and Stadium Place North during the gameday Sunday midday peak hour
- The eastbound approach at Shea Road/ Citi Field Entrance 8 and Boat Basin Place, which no longer exists in the With-Action condition
- The northbound shared through-right lane group at Shea Road and Boat Basin during the gameday Sunday PM peak hour
- The southbound approach at Shea Road and Boat Basin during the gameday Sunday PM peak hour

All other lane groups that would operate at unacceptable levels of service under the No-Action condition would continue to do so under the With-Action condition. Additional lane groups that would be expected to operate at unacceptable levels of service as a result of the Proposed Project are listed below.

- Northern Boulevard and 114th Street
  - Eastbound Northern Boulevard through lane group (non-gameday weekday AM, gameday weekday PM)
  - Westbound Northern Boulevard shared left-through lane group (non-gameday weekday midday, non-gameday Saturday PM)
  - Westbound Northern Boulevard left turn lane group (non-gameday weekday PM)
- Northern Boulevard and Union Street
  - Eastbound Northern Boulevard left turn lane group (non-gameday weekday PM)
  - Eastbound Northern Boulevard shared through-right lane group (gameday Saturday PM Post Game)
  - Westbound Northern Boulevard shared through-right lane group (non-gameday weekday AM, gameday Sunday midday)
- Northern Boulevard and Parsons Boulevard
  - Westbound Northern Boulevard shared through-right lane group (gameday weekday PM, gameday Saturday PM Pre-game, and Saturday PM Post Game)
- Roosevelt Avenue and 108th Street
  - Eastbound Roosevelt Avenue shared left-through-right lane group (non-gameday weekday midday, non-gameday Saturday PM, gameday Saturday PM Pre-game, gameday Saturday PM Post Game, gameday Sunday midday, gameday Sunday PM)
  - Westbound Roosevelt Avenue shared left-through-right lane group (non-gameday weekday midday, non-gameday Saturday PM, gameday Saturday PM Pre-game, gameday Saturday PM Post Game, gameday Sunday midday, gameday Sunday PM)
- Roosevelt Avenue and 111th Street
  - Eastbound Roosevelt Avenue shared left-through-right lane group (non-gameday weekday PM, gameday weekday PM)

- Westbound Roosevelt Avenue shared left-through-right lane group (non-gameday weekday AM, weekday PM, non-gameday Saturday PM; gameday Saturday PM Pre-game, gameday Saturday PM Post Game, gameday Sunday midday, gameday Sunday PM)

› Roosevelt Avenue and 114th Street

- Westbound Roosevelt Avenue shared left-through-right lane group (non-gameday weekday midday)
- Westbound Roosevelt Avenue right turn lane group (non-gameday weekday PM, gameday weekday PM, gameday Saturday PM Post Game, gameday Sunday PM)
- Southbound 114th Street shared through-right lane group (non-gameday weekday midday)

› Roosevelt Avenue and 126th Street/Seaver Way

- Eastbound Roosevelt Avenue de facto left turn lane group (non-gameday weekday midday and PM)
- Northbound 126th Street/Seaver Way de facto left turn lane group (non-gameday weekday midday)
- Northbound 126th Street/Seaver Way de facto right turn lane group (gameday Saturday PM Post Game, gameday Sunday PM)
- Northbound 126th Street/Seaver Way shared left-through-right lane group (gameday Sunday PM)
- Southbound 126th Street/Seaver Way de facto left turn lane group (non-gameday weekday AM, gameday Sunday midday)
- Southbound 126th Street/Seaver Way shared left-through lane group (non-gameday Saturday PM, gameday Saturday PM Post Game)
- Southbound 126th Street/Seaver Way de facto right turn lane group (non-gameday Saturday PM, gameday Saturday PM Post Game)
- Southbound 126th Street/Seaver Way shared left-through-right lane group (gameday Sunday PM)

› Roosevelt Avenue eastbound and College Point Boulevard

- Eastbound Roosevelt Avenue shared left-through-right lane group (gameday Saturday PM Pre-game)
- Southbound College Point Boulevard shared through-right lane group (gameday Saturday PM Post Game)

› Roosevelt Avenue and Prince Street

- Eastbound Roosevelt Avenue shared left-through lane group (gameday Saturday PM Pre-game, gameday Saturday PM Post Game, gameday Sunday midday, gameday Sunday PM)

› Roosevelt Avenue and Main Street

- Eastbound Roosevelt Avenue shared left-through-right lane group (non-gameday weekday PM, gameday weekday PM)
- Westbound Roosevelt Avenue shared left-through-right lane group (non-gameday weekday PM)

› Roosevelt Avenue and Union Street

- Eastbound Roosevelt Avenue shared left-through-right lane group (non-gameday Saturday PM, gameday Saturday PM Pre-game, gameday Saturday PM Post Game, gameday Sunday PM)
- Westbound Roosevelt Avenue shared left-through-right lane group (non-gameday weekday PM)

› Roosevelt Avenue and Parsons Boulevard

- Eastbound Roosevelt Avenue shared left-through lane group (non-gameday weekday PM, gameday weekday PM, gameday Saturday PM Pre-game)
- Westbound Roosevelt Avenue shared left-through lane group (non-gameday weekday midday, weekday PM, gameday weekday PM, gameday Sunday midday, gameday Sunday PM)

› 34th Avenue at 126th Street/Seaver Way

- Southeastbound Whitestone Expressway Ramp right turn lane group (gameday Saturday PM Pre-game)

› 35th Avenue/Shea Road at 126th Street/Seaver Way

- Southbound 126th Street/Seaver Way right turn lane group (gameday Sunday midday)

› Grand Central Parkway westbound exit ramp/Podium Parking West Access at Shea Road

- Eastbound Grand Central Parkway westbound exit ramp left turn lane group (non-gameday weekday PM, gameday weekday PM, gameday Saturday PM Pre-game)
- Westbound Podium Parking West Access shared through-right lane group (non-gameday weekday PM, non-gameday Saturday PM, gameday weekday PM, gameday Saturday PM Pre-game)
- Northbound Shea Road left turn lane group (non-gameday weekday PM, gameday weekday PM, gameday Saturday PM Pre-game)
- Southbound Shea Road shared through-right lane group (non-gameday weekday PM, non-gameday Saturday PM, gameday weekday PM, gameday Saturday PM Pre-game)
- This intersection is substantially reconfigured under With-Action conditions to include multiple dedicated turning phases, appropriate queueing space for individual turning movements and for vehicles exiting the highway ramp. The intersection facilitates a significant portion of the project-generated vehicles trips destined for Area A/Integrated Resort. Although some movements in some peak hours operate above unacceptable level of service, the reconfiguration is expected to enhance overall traffic flow and safety by optimizing signal timing and reducing conflicts between turning and through traffic. This will provide significant benefits during non-peak hours and contribute to smoother operations for the majority of vehicles, even during high-demand periods. The improvements will help to better accommodate the anticipated increase in traffic volume to and from the Area A/Integrated Resort.

› Shea Road and Tower Parking Access

- Northbound Shea Road shared through-right lane group (gameday weekday PM)
- Southbound Shea Road left turn lane group (gameday weekday PM)

› Shea Road at Stadium Place North

- Northbound Shea Road shared through-right lane group (gameday weekday PM, gameday Saturday PM Pre-game)
- Southbound Shea Road left turn lane group (gameday weekday PM)
- Southbound Shea Road shared left-through lane group (gameday Saturday PM Pre-game)

› Marina Road and Boat Basin Place

- Eastbound Marina Road shared through-right lane group (gameday Saturday PM Post Game, gameday Sunday PM)
- Westbound Marina Road left turn lane group (non-gameday weekday AM, non-gameday weekday midday, gameday weekday PM, gameday Sunday PM)
- Westbound Marina Road through lane group (gameday weekday PM, gameday Sunday PM)
- Westbound Marina Road shared left-through lane group (gameday Saturday PM Post Game)
- Northbound Boat Basin Place left turn lane group (gameday weekday PM, gameday Saturday PM Pre-game)
- Northbound Boat Basin Place shared left-right lane group (gameday Saturday PM Post Game)

› Shea Road and Northfield Parking Structure North Access 2

- Southbound Northfield Parking Structure North Access 2 right turn lane group (gameday Sunday PM)

› Shea Road and Northfield Parking Structure South/North Access 3

- Northbound Northfield Parking Structure South Access left turn lane group (gameday weekday PM, gameday Saturday PM Pre-game)

› Shea Road and Meridian Road

- Westbound Meridian Road shared left-right lane group (gameday Sunday PM)
- Southbound Shea Road through lane group (non-gameday weekday PM)

› Shea Road at Grand Central Parkway westbound exit ramp (9P)

- Eastbound Grand Central Parkway westbound exit ramp (9P) left turn lane (non-gameday weekday midday, non-gameday Saturday PM)

› Shea Road and New York Avenue

- Westbound New York Avenue shared left-right lane group (non-gameday weekday PM, gameday Saturday PM Pre-game, gameday Sunday PM)
- Northbound Shea Road shared through-right lane group (gameday Saturday PM Post Game, gameday Sunday PM)
- Southbound Shea Road shared left-through lane group (gameday Saturday PM Pre-game)
- Southbound Shea Road left turn lane group (gameday Saturday PM Post Game. gameday Sunday PM)

› 126th Street/Seaver Way and Citi Field Entrance 11

- Eastbound Citi Field Entrance 11 shared left-right lane group (non-gameday weekday midday, gameday Saturday PM Post Game)

› New York Avenue and United Nations Avenue North

- Eastbound United Nations Avenue North shared through-right lane group (gameday Saturday PM Post Game, gameday Sunday PM)
- Westbound United Nations Avenue North shared left-through lane group (gameday Saturday PM Post Game, gameday Sunday PM)
- Northbound New York Avenue shared left-right lane group (non-gameday weekday PM)

It is important to note that gameday operations for Mets patrons coming into and leaving the site are extremely congested under existing conditions and require the closure of Shea Road to non-game related traffic. The roadway improvements proposed in the With-Action condition allow for Shea Road to remain open, even during gameday ingress and conditions; overall, traffic conditions are greatly improved by the proposed modifications. Even with these improvements, however, it is not possible to achieve all movements at a LOS D or better, given the high traffic throughput anticipated during pre-game and post-game peak hours.

Of the 48 intersections analyzed (including new site access driveway intersections along Shea Road), the Proposed Project would result in significant adverse traffic impacts at 11 intersections (at 16 lane groups) during the non-gameday weekday AM peak hour; 11 intersections (at 18 lane groups) during the non-gameday weekday midday peak hour; 18 intersections (at 35 lane groups) during the non-gameday weekday PM peak hour; 10 intersections (at 19 lane groups) during the non-gameday Saturday PM peak hour; 17 intersections (at 37 lane groups) during the gameday weekday PM peak hour; 18 intersections (at 30 lane groups) during the gameday Saturday PM Pre-game peak hour; 13 intersections (at 27 lane groups) during the gameday Saturday PM Post Game peak hour; 13 intersections (at 19 lane groups) during the gameday Sunday midday peak hour, and 14 intersections (at 28 lane groups) during the gameday Sunday PM peak hour. The significantly impacted traffic lane groups are identified below:

› Astoria Boulevard at 108th Street/ 31st Drive
  - Westbound Astoria Boulevard left turn lane group (gameday Saturday PM Pre-game, gameday Saturday PM Post Game)
› Northern Boulevard at 108th Street
  - Eastbound Northern Boulevard through lane group (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game; and gameday Sunday midday, and Sunday PM)
  - Westbound Northern Boulevard through lane group (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game; and gameday Sunday midday, and Sunday PM)
› Northern Boulevard at 114th Street
  - Eastbound Northern Boulevard through lane group (gameday weekday PM)
  - Westbound Northern Boulevard left turn lane group (non-gameday weekday PM, gameday weekday PM, gameday Sunday PM)
  - Westbound Northern Boulevard through lane group (non-gameday weekday PM, gameday weekday PM)
  - Westbound Northern Boulevard shared left-through lane group (non-gameday weekday midday, non-gameday Saturday PM, gameday Saturday PM Pre-game, gameday Sunday midday)
› Northern Boulevard at Union Street

- Eastbound Northern Boulevard left turn lane group (non-gameday weekday PM)
- Eastbound Northern Boulevard shared through-right lane group (non-gameday weekday PM, non-gameday Saturday PM, gameday weekday PM, gameday Saturday PM Post Game)
- Westbound Northern Boulevard shared through-right lane group (non-gameday weekday AM, gameday Sunday midday)

› Northern Boulevard at Parsons Boulevard

- Eastbound Northern Boulevard through lane group (non-gameday weekday PM, gameday weekday PM)
- Westbound Northern Boulevard shared through-right lane group (non-gameday weekday midday, non-gameday weekday PM, gameday weekday PM, gameday Saturday PM Pre-game, gameday Saturday PM Post Game, gameday Sunday midday)

› Roosevelt Avenue at 108th Street

- Eastbound Roosevelt Avenue shared left-through-right lane group (non-gameday weekday midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)
- Westbound Roosevelt Avenue shared left-through-right lane group (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)

› Roosevelt Avenue at 111th Street

- Eastbound Roosevelt Avenue shared left-through-right lane group (non-gameday weekday PM, gameday weekday PM)
- Westbound Roosevelt Avenue shared left-through-right lane group (non-gameday weekday AM, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)

› Roosevelt Avenue at 114th Street

- Eastbound Roosevelt Avenue shared left-through-right lane group (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)
- Westbound Roosevelt Avenue shared left-through lane group (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)
- Westbound Roosevelt Avenue right turn lane group (non-gameday weekday PM, gameday weekday PM, gameday Saturday PM Post Game, gameday Sunday PM)
- Northbound 114th Street shared left-through-right lane group (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)
- Southbound 114th Street left turn lane group (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)
- Southbound 114th Street shared through-right lane group (non-gameday weekday AM, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)

- Roosevelt Avenue at 126th Street/Seaver Way
  - Eastbound Roosevelt Avenue de facto left turn lane group (non-gameday weekday midday, non-gameday weekday PM)
  - Northbound 126th Street/Seaver Way de facto left turn lane group (non-gameday weekday midday)
  - Northbound 126th Street/Seaver Way de facto right turn lane group (gameday Saturday PM Post Game, gameday Sunday PM)
  - Southbound 126th Street/Seaver Way de facto left turn lane group (non-gameday weekday AM; gameday Sunday midday)
  - Southbound 126th Street/Seaver Way shared left-through lane group (non-gameday Saturday PM; gameday Saturday PM Post Game)
  - Southbound 126th Street/Seaver Way de facto right turn lane group (non-gameday Saturday PM; gameday Saturday PM Post Game)
  - Southbound 126th Street/Seaver Way shared left-through-right lane group (non-gameday weekday midday, and PM; gameday weekday PM; gameday Saturday PM Pre-game; gameday Sunday PM)
- Roosevelt Avenue westbound at College Point Boulevard
  - Northbound College Point Boulevard left turn lane group (non-gameday weekday AM)
  - Southbound College Point Boulevard shared through-right lane group (non-gameday weekday midday, and PM; gameday weekday PM; gameday Saturday PM Pre-game; and gameday Sunday midday)
- Roosevelt Avenue eastbound at College Point Boulevard
  - Eastbound Roosevelt Avenue shared left-through-right lane group (gameday Saturday PM Pre-game)
- Roosevelt Avenue at Prince Street
  - Eastbound Roosevelt Avenue shared left-through lane group (non-gameday weekday PM, gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; gameday Sunday midday and Sunday PM)
- Roosevelt Avenue at Main Street
  - Eastbound Roosevelt Avenue shared left-through-right lane group (non-gameday weekday PM, gameday weekday PM)
  - Westbound Roosevelt Avenue shared left-through-right lane group (non-gameday weekday PM, gameday weekday PM)
- Roosevelt Avenue at Union Street
  - Eastbound Roosevelt Avenue shared left-through-right lane group (non-gameday Saturday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday PM)
  - Westbound Roosevelt Avenue shared left-through-right lane group (non-gameday weekday AM, midday, and PM; non-gameday Saturday PM; gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; and gameday Sunday midday, and Sunday PM)
- Roosevelt Avenue at Parsons Boulevard

- Eastbound Roosevelt Avenue shared left-through lane group (non-gameday weekday PM, gameday weekday PM, gameday Saturday PM Pre-game)
- Westbound Roosevelt Avenue shared left-through lane group (non-gameday weekday AM, midday, and PM; gameday weekday PM)
- Westbound Roosevelt Avenue shared left-through-right lane group (gameday Sunday midday, gameday Sunday PM)

› 34th Avenue at 126th Street/Seaver Way

- Eastbound Northfield Service Lane left turn lane group (gameday Saturday PM Post Game)
- Southeastbound Ramp from Whitestone Expressway right turn lane group (gameday Saturday PM Pre-game)

› 35th Avenue at 126th Street/Seaver Way

- Southbound 126th Street/Seaver Way right turn lane group (gameday Sunday midday)

› Grand Central Parkway westbound exit ramp/ Podium Parking West Access at Shea Road

- Eastbound Grand Central Parkway westbound exit ramp left turn lane group (non-gameday weekday PM, gameday weekday PM, gameday Saturday PM Pre-game)
- Westbound Podium Parking West Access shared through-right lane group (non-gameday weekday PM, non-gameday Saturday PM, gameday weekday PM, gameday Saturday PM Pre-game)
- Northbound Shea Road left turn lane group (non-gameday weekday PM, gameday weekday PM, gameday Saturday PM Pre-game)
- Southbound Shea Road shared through-right lane group (non-gameday weekday PM, non-gameday Saturday PM, gameday weekday PM, gameday Saturday PM Pre-game)

› Shea Road at Tower Parking Access

- Northbound Shea Road shared through-right lane group (gameday weekday PM)
- Northbound Shea Road left turn lane group (gameday weekday PM)

› Shea Road at Stadium Place North

- Northbound Shea Road shared through-right lane group (gameday weekday PM, gameday Saturday PM Pre-game)
- Southbound Shea Road left turn lane group (gameday weekday PM)
- Southbound Shea Road shared left-through lane group (gameday Saturday PM Pre-game)

› Marina Road at Boat Basin Place

- Eastbound Marina Road shared through-right lane group (gameday Saturday PM Post Game, gameday Sunday PM)
- Westbound Marina Road left turn lane group (non-gameday weekday AM, and midday; gameday weekday PM; gameday Sunday PM)
- Westbound Marina Road shared left-through lane group (gameday weekday PM, gameday Saturday PM Post Game)
- Westbound Marina Road through lane group (gameday Sunday PM)
- Northbound Boat Basin Place left turn lane group (gameday weekday PM, gameday Saturday PM Pre-game)

- Northbound Boat Basin Place shared left-right lane group (gameday Saturday PM Post Game)

› Shea Road at Northfield Parking Structure North Access 2
  - Southbound Northfield Parking Structure North Access 2 right turn lane group (gameday Sunday PM)

› Shea Road at Meridian Road
  - Westbound Meridian Road shared left-right lane group (gameday Sunday PM)
  - Southbound Shea Road through lane group (non-gameday weekday PM)

› Shea Road at Grand Central Parkway westbound exit ramp (9P)
  - Eastbound Grand Central Parkway westbound exit ramp (9P) left turn lane group (non-gameday weekday AM, midday, and PM; and non-gameday Saturday PM)

› Shea Road at New York Avenue
  - Westbound New York Avenue shared left-right lane group (non-gameday weekday PM; gameday Saturday PM Pre-game, and Saturday PM Post Game; gameday Sunday PM)
  - Northbound Shea Road shared through-right lane group (gameday Saturday PM Post Game, gameday Sunday PM)
  - Southbound Shea Road left turn lane group (gameday Saturday PM Post Game, gameday Sunday PM)
  - Southbound Shea Road shared left-through lane group (gameday Saturday PM Pre-game)

› New York Avenue at United Nations Avenue North
  - Eastbound United Nations Avenue North shared through-right lane group (gameday Saturday PM Post Game. gameday Sunday PM)
  - Westbound United Nations Avenue North shared left-through lane group (gameday Saturday PM Post Game, gameday Sunday PM)
  - Northbound New York Avenue shared left-right lane group (non-gameday weekday PM)

The identification and evaluation of traffic capacity improvements needed to mitigate potential significant adverse traffic impacts created by the Proposed Projected are presented in **Chapter 21, Mitigation**.

Highway Network

Roadway Improvements

In order to accommodate trips to and from the Development Site, the Proposed Project includes improvements to the highway ramps connecting Shea Road and the Grand Central Parkway. These improvements aim to address the safety and operational problems of the current ramp design, which without intervention would become worse in the future due to developments near the Development Site. The current ramp design has an entrance/exit pair that has a very short distance between the marked gore areas (less than 500 feet) for weaving traffic. Under existing conditions, this short weave section is compatible with its main use, which is to mainly serve the Citi Field parking lots; the existing traffic is mostly one-way before and after events, and relatively low at other times. However, with the Proposed Project, the traffic on the ramps would be higher and more balanced throughout the day. This means that the current ramp design would be a major operational issue under future

conditions with the Proposed Project. Accordingly, the Proposed Project would include physical and operational improvements to fix these issues by removing the short weave section, while keeping the existing access from the local road to the highway system. These changes include:

- Realignment and widening of the ramp from Grand Central Parkway Exit 9E to Shea Road
- Realignment of the ramp from Shea Road to the Grand Central Parkway/Whitestone Expressway connector
- Elimination of the existing entrance ramp from Shea Road to the Grand Central Parkway Collector/Distributor (C/D) road
- Construction of a new entrance ramp from Shea Road to the westbound Grand Central Parkway
- Elimination of the existing slip ramp from the westbound Grand Central Parkway C/D road to the westbound Grand Central Parkway mainline

Detailed schematics of the proposed ramp improvements can be found in **Appendix D.**

Level of Service

Table D-18 and **Table D-19** in **Appendix D** present future With-Action speeds, densities, and levels of service for the highway segments analyzed along the Grand Central Parkway, the Van Wyck Expressway, the Whitestone Expressway, Astoria Boulevard and Northern Boulevard for the non-gameday and gameday peak hours, respectively, and also identify the highway segments that would have significant adverse traffic impacts. **Table 14-65** and **Table 14-66** summarize the levels of service of the analyzed segments by segment type and identify the number of significantly impacted segments for the non-gameday and gameday peak hours. As a result of the additional vehicle trips added to the highway network due to the Proposed Project, there would be decreases in travel speeds and increases in density to most of the highway segments. Also, there would be some instances where conditions would appear to improve due to the "metering" effect that highly congested locations would have on adjacent downstream segments of the highway network.

Table 14-65 2030 With-Action Condition: Non-Gameday Highway Segments Level of Service Summary

	Weekday AM Peak Hour Segment Type				Weekday Midday Peak Hour Segment Type				Weekday PM Peak Hour Segment Type				Saturday PM Peak Hour Segment Type			
	Basic	Merge	Diverge	Weave	Basic	Merge	Diverge	Weave	Basic	Merge	Diverge	Weave	Basic	Merge	Diverge	Weave
Highway Segments at LOS A/B/C	17	5	6	1	20	5	11	0	21	3	10	0	25	5	13	2
Highway Segments at LOS D	6	3	2	0	10	2	3	0	7	0	1	0	13	2	3	1
Highway Segments at LOS E	5	0	3	0	7	1	4	1	7	2	3	2	3	2	0	0
Highway Segments at LOS F	16	3	8	2	7	3	1	2	9	6	5	1	3	2	3	0
Number of significantly impacted Highway Segments	11	3	7	2	7	4	3	2	10	7	4	2	7	4	3	0
Number of Individual Highway Segments	44	11	19	3	44	11	19	3	44	11	19	3	44	11	19	3

Table 14-66 2030 With-Action Condition: Gameday Highway Segments Level of Service Summary

	Weekday PM Peak Hour Segment Type				Saturday PM Pre-game Peak Hour Segment Type				Saturday PM Post Game Peak Hour Segment Type				Sunday Midday Peak Hour Segment Type				Sunday PM Peak Hour Segment Type			
	Basic	Merge	Diverge	Weave	Basic	Merge	Diverge	Weave	Basic	Merge	Diverge	Weave	Basic	Merge	Diverge	Weave	Basic	Merge	Diverge	Weave
Highway Segments at LOS A/B/C	23	5	9	0	23	4	10	1	18	3	10	0	26	7	15	2	25	4	10	1
Highway Segments at LOS D	7	1	1	0	14	2	4	1	11	1	3	1	10	0	1	0	8	2	0	0
Highway Segments at LOS E	4	1	5	1	1	2	2	0	4	0	1	0	3	1	2	1	0	0	2	0
Highway Segments at LOS F	10	4	4	2	6	3	3	1	11	7	5	2	5	3	1	0	11	5	7	2
Number of significantly impacted Highway Segments	8	5	3	1	8	6	5	1	12	4	4	2	7	4	0	1	11	4	7	2
Number of Individual Highway Segments	44	11	19	3	44	11	19	3	44	11	19	3	44	11	19	3	44	11	19	3

The key overall findings of the traffic level of service analyses are:

Non-Gameday

Non-Gameday Weekday AM Peak Hour

During the non-gameday weekday AM peak hour, compared to the No-Action condition, average travel speeds on multiple segments along the westbound Grand Central Parkway north of the on-ramp from the Long Island Expressway (Location 1) and south of the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard would decrease by approximately 8 to 18 mph. This decrease is due to spillback from congestion at the intersections of the Exit 9P ramp and Meridian Road and the Exit 9E ramp and Shea Road, and at the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard. On the northbound Van Wyck Expressway, average travel speeds would generally be similar to speeds in the No-Action, except for a decrease of approximately 9 mph on segments south of the Exit 13 ramp (Location 31). On the eastbound Whitestone Expressway, average travel speeds would generally be similar to speeds in the No-Action condition, except for a decrease of approximately 13 mph at the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard. On the westbound Whitestone Expressway, average travel speeds would generally be similar to speeds in the No-Action condition, except for an increase of approximately 5 mph south of the Exit 13D ramp (Location 53) attributed to fewer vehicles traveling at a faster pace. This would be a consequence of congestion extending from the merge point between the Whitestone Expressway and the Van Wyck Expressway ramps and this congestion would have a cascading effect, metering traffic downstream along the mainline of the westbound Whitestone Expressway. On the eastbound Grand Central Parkway, the southbound Van Wyck Expressway, eastbound/westbound Astoria Boulevard, and eastbound/westbound Northern Boulevard average travel speeds would generally be similar to speeds in the No-Action condition.

Highway segments along the westbound Grand Central Parkway would generally operate at the same levels of service as in the No-Action condition, except that five segments north of the Exit 9W ramp (Location 6) and south of the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard would deteriorate from LOS D to LOS F due to spillback from congestion at the previously mentioned weaving segment. Highway segments along the eastbound Grand Central Parkway would generally operate at the same levels of service as in the No-Action condition, except that one segment at the Grand Central Parkway Exit 9E ramp to the Whitestone Expressway (Location 29) would deteriorate from LOS D to LOS E due to spillback from congestion at the previously mentioned weaving segment. Highway segments along the northbound Van Wyck Expressway would generally operate at the same levels of service as in the No-Action condition, except that one segment at the Exit 13 ramp to Northern Boulevard and westbound Whitestone Expressway (Location 33) would deteriorate from LOS D to LOS F due to spillback from congestion along westbound Whitestone Expressway. Highway segments along the eastbound Whitestone Expressway would generally operate at the same levels of service as in the No-Action condition, except that one segment at the merge of the Grand Central Parkway off-ramp and Astoria Boulevard off-ramp to the Whitestone Expressway (Location 46) would deteriorate from LOS D to LOS F due to spillback from congestion at the previously mentioned weaving segment. Highway segments along the westbound Whitestone Expressway would generally operate at the same levels of service as in the No-Action condition, except that one segment along the Whitestone

Expressway east of the split ramps to the eastbound and westbound Grand Central Parkway (Location 57) would improve from LOS E to LOS C due to metering conditions along the westbound Whitestone Expressway as a result of congestion at the merge between the Whitestone Expressway and the Van Wyck Expressway ramps. Highway segments along westbound Northern Boulevard would mostly deteriorate from LOS C or D to LOS E or F between the off-ramp to the Whitestone Expressway (Location 74) and Prince Street and operate at the same levels of service as in the No-Action condition west of the off-ramp to the Whitestone Expressway. Highway segments along the southbound Van Wyck Expressway, eastbound/westbound Astoria Boulevard, and eastbound Northern Boulevard would generally operate at the same levels of service as in the No-Action condition.

A total of 37 out of 77 highway segments analyzed would operate at LOS E or F, compared to 25 highway segments under the No-Action condition for the non-gameday weekday AM peak hour.

According to the *CEQR Technical Manual* criteria, the Proposed Project would result in significant adverse traffic impacts at 23 out of the 77 highway segments analyzed for the non-gameday weekday AM peak hour.

Non-Gameday Weekday Midday Peak Hour

During the non-gameday weekday midday peak hour, compared to the No-Action condition, average travel speeds would generally be similar to speeds in the No-Action condition on the westbound Grand Central Parkway, except for a decrease of approximately 25 mph north of the Exit 9E ramp (Location 17) and south of the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard due to spillback from congestion at the weaving segment. Average travel speeds would generally be similar to speeds in the No-Action condition on the eastbound Whitestone Expressway, except for a decrease of approximately 19 mph at the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard. On the eastbound Grand Central Parkway, the northbound/southbound Van Wyck Expressway, westbound Whitestone Expressway, eastbound/westbound Astoria Boulevard, and eastbound/westbound Northern Boulevard average travel speeds would generally be similar to speeds in the No-Action condition.

Highway segments along the westbound Grand Central Parkway would generally operate at the same levels of service as in the No-Action condition, except that three segments south of the Exit 9P ramp (Location 3), south of the Exit 9E ramp (Location 9), and south of the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard would deteriorate from LOS B or C to LOS E or F due to spillback from congestion at the intersections of the Exit 9P ramp and Meridian Road and the Exit 9E ramp and Shea Road, and at the previously mentioned weaving segment. Highway segments along the eastbound Grand Central Parkway would generally operate at the same levels of service as in the No-Action condition, except that three segments north and south of the ramp from Hall of Science (Location 25 and 26) and at the Grand Central Parkway Exit 9E ramp to the Whitestone Expressway (Location 29) would deteriorate from LOS D to LOS E due to spillback from congestion at the previously mentioned weaving segment and along the eastbound Grand Central Parkway as a result of merging traffic from the ramp from Hall of Science. Highway segments along the eastbound Whitestone Expressway would generally operate at the same levels of service as in the No-Action condition, except that three segments west of the ramp to the southbound Van Wyck Expressway (Location 43), at the merge of the Grand Central Parkway off-ramp and Astoria Boulevard off-ramp to the Whitestone Expressway

(Location 46) and at the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard would deteriorate from LOS C or D to LOS F. Highway segments along the westbound Whitestone Expressway would generally operate at the same levels of service as in the No-Action condition, except that two segments along the Whitestone Expressway south of the ramp to the southbound Van Wyck Expressway (Location 51) and west of the ramp from Northern Boulevard and northbound Van Wyck Expressway (Location 56) would deteriorate from LOS D to LOS E. Highway segments along the southbound Van Wyck Expressway, eastbound/westbound Astoria Boulevard, and eastbound/westbound Northern Boulevard would generally operate at the same levels of service as in the No-Action condition.

A total of 26 out of 77 highway segments analyzed would operate at LOS E or F, compared to 16 highway segments under the No-Action condition for the non-gameday weekday midday peak hour.

According to the *CEQR Technical Manual* criteria, the Proposed Project would result in significant adverse traffic impacts at 16 out of the 77 highway segments analyzed for the non-gameday weekday midday peak hour.

Non-Gameday Weekday PM Peak Hour

During the non-gameday weekday PM peak hour, compared to the No-Action condition, average travel speeds on multiple segments along the westbound Grand Central Parkway south of the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard, south of the Exit 9E (Location 10) ramp, and south of the Exit 9P ramp (Location 3) would decrease by approximately 9 to 22 mph due to spillback from congestion at the intersection of the Exit 9P ramp and Meridian Road, at the intersection of the Exit 9E ramp and Shea Road, and at the previously mentioned weaving segment (Location 47). Average travel speeds would generally be similar to speeds in the No-Action condition on the eastbound Grand Central Parkway, except for a decrease of approximately 20 to 24 mph on segments north of the ramp from Hall of Science (Location 26) and south of the ramp from Astoria Boulevard and 34th Avenue (Location 24) due to spillback from congestion along the eastbound Grand Central Parkway as a result of merging traffic from the ramp from Hall of Science. Average travel speeds would generally be similar to speeds in the No-Action condition on the eastbound Whitestone Expressway, except for a decrease of approximately 22 mph at the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard due to congestion on the weaving segment as a result of added ingress vehicular demand to the Development Site. On the northbound/southbound Van Wyck Expressway, the westbound Whitestone Expressway, eastbound/westbound Astoria Boulevard, and eastbound/westbound Northern Boulevard average travel speeds would generally be similar to speeds in the No-Action condition.

Highway segments along the westbound Grand Central Parkway would generally operate at the same levels of service as in the No-Action condition, except that eight segments south of the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard, south of the Exit 9E ramp (Location 17), and south of the Exit 9P ramp (Location 3) would deteriorate from LOS B, C or D to LOS E or F due to spillback from congestion at the intersections of the Exit 9P ramp and Meridian Road and the Exit 9E ramp and Shea Road, and at the previously mentioned weaving segment. Highway segments along the eastbound Grand Central Parkway would generally operate at the same levels of service as in the No-Action condition, except that four segments north of the ramp from Hall of Science (Locations 23, 24, 25) and at the Grand Central Parkway Exit 9E ramp to the Whitestone Expressway (Location 29) would

deteriorate from LOS D to LOS E or F due to spillback from congestion at the previously mentioned weaving segment and along the eastbound Grand Central Parking as a result of merging traffic from the ramp from Hall of Science. Highway segments along the westbound Whitestone Expressway would generally operate at the same levels of service as in the No-Action condition, except for one segment south of the ramp to the southbound Van Wyck Expressway (Location 51) which would deteriorate from LOS C to LOS E due to congestion on the weaving segment as a result of added ingress vehicular demand to the Development Site. Highway segments along eastbound Astoria Boulevard would generally operate at the same levels of service as in the No-Action condition, except that one segment at the Astoria Boulevard and 34th Avenue ramp to the eastbound Grand Central Parkway (Location 62) would deteriorate from LOS D to LOS F due to congestion as a result of added egress vehicular demand from the Development Site. Highway segments along the northbound/southbound Van Wyck Expressway, eastbound Whitestone Expressway, westbound Astoria Boulevard, and eastbound/westbound Northern Boulevard would generally operate at the same levels of service as in the No-Action condition.

A total of 35 out of 77 highway segments analyzed would operate at LOS E or F, compared to 21 highway segments under the No-Action condition for the non-gameday weekday PM peak hour.

According to the *CEQR Technical Manual* criteria, the Proposed Project would result in significant adverse traffic impacts at 23 out of the 77 highway segments analyzed for the non-gameday weekday PM peak hour.

Non-Gameday Saturday PM Peak Hour

During the non-gameday Saturday PM peak hour, compared to the No-Action condition, average travel speeds on multiple segments along the westbound Grand Central Parkway south of the Exit 9E (Location 10) ramp would decrease by approximately 6 mph due to spillback from congestion at the intersection of the Exit 9E ramp and Shea Road. On the eastbound Grand Central Parkway, northbound/southbound Van Wyck Expressway, the eastbound/westbound Whitestone Expressway, eastbound/westbound Astoria Boulevard, and eastbound/westbound Northern Boulevard average travel speeds would generally be similar to speeds in the No-Action condition.

Highway segments along the westbound Grand Central Parkway would generally operate at the same levels of service as in the No-Action condition, except that seven segments south of the Exit 9E ramp (Location 10) and south of the Exit 9P ramp (Location 3) would deteriorate from LOS B or C to LOS F due to spillback from congestion at the intersections of the Exit 9P ramp and Meridian Road and the Exit 9E ramp and Shea Road. Highway segments along the eastbound Grand Central Parkway would generally operate at the same levels of service as in the No-Action condition, except that three segments north and south of the ramp from Hall of Science (Locations 25 and 26) and west of the Exit 9E ramp (Location 20) would deteriorate from LOS C or D to LOS E due to spillback from congestion along the eastbound Grand Central Parking as a result of merging traffic from the ramp from Hall of Science and at the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard. Highway segments along eastbound Astoria Boulevard would generally operate at the same levels of service as in the No-Action condition, except for one segment at the Astoria Boulevard and 34th Avenue ramp to the eastbound Grand Central Parkway (Location 62), which would deteriorate from LOS C to LOS E due to congestion as a result of added egress vehicular demand from the Development Site. Highway segments along the northbound/southbound Van Wyck Expressway, the eastbound/westbound

Whitestone Expressway, westbound Astoria Boulevard, and eastbound/westbound Northern Boulevard would generally operate at the same levels of service as in the No-Action condition.

A total of 13 out of 77 highway segments analyzed would operate at LOS E or F, compared to one highway segment under the No-Action condition for the non-gameday Saturday PM peak hour.

According to the *CEQR Technical Manual* criteria, the Proposed Project would result in significant adverse traffic impacts at 14 out of the 77 highway segments analyzed for the non-gameday Saturday PM peak hour.

Gameday

The Gameday scenarios represent traffic conditions that would be actively managed by NYPD Traffic Agents to facilitate ingress and egress for both drivers and pedestrians around Citi Field. Field observations of existing conditions on gamedays during data collection indicated that roadways or turning movements were often closed off even for short periods of time (5-10 minutes) based on the judgement of individual Traffic Agents. The traffic management strategies used by the Traffic Agents would vary from game to game depending on many fluid conditions including game attendance and the progression of the game itself, which impacts when patrons start to leave Citi Field. As such, this traffic analysis seeks to reflect potential gameday traffic management strategies as best as possible, while understanding that these minute-by-minute fluctuations are difficult to fully replicate at every location in the Vissim network.

Gameday Weekday PM Peak Hour

During the gameday weekday PM peak hour, average travel speeds would generally be similar to speeds in the No-Action condition on the westbound Grand Central Parkway, except for a decrease of approximately 12mph south of the Exit 9P ramp (Location 3) due to congestion at the intersection of the Exit 9P ramp and Meridian Road; and except for a decrease by approximately 8 to 14 mph on segments along the westbound Grand Central Parkway south of the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard, due to spillback from congestion at the previously mentioned weaving segment. Average travel speeds would generally be similar to speeds in the No-Action condition on the eastbound Grand Central Parkway, except for a decrease of approximately 19 to 23 mph on segments north of the ramp from Hall of Science (Location 25) and south of the ramp from Astoria Boulevard and 34th Avenue (Location 24) due to spillback from congestion along the eastbound Grand Central Parkway as a result of merging traffic from the ramp from Hall of Science. Average travel speeds would generally be similar to speeds in the No-Action condition on the eastbound Whitestone Expressway, except for an increase of approximately 20 mph at the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard due to the resulting metering on the westbound Grand Central Parkway from the Exit 9P ramp congestion. Average travel speeds would generally be similar to speeds in the No-Action condition on the westbound Whitestone Expressway, except for a decrease of approximately 10 to 29 mph east of the split between the Exit 13A and 13B-C ramps as a result of congestion spillback from the merge between the Whitestone Expressway and the Van Wyck Expressway ramps. On the northbound/southbound Van Wyck Expressway, eastbound/westbound Astoria Boulevard, and eastbound/westbound Northern Boulevard, average travel speeds would generally be similar to speeds in the No-Action condition.

Highway segments along the westbound Grand Central Parkway would generally operate at the same levels of service as in the No-Action condition, except that three segments south of the Exit 9P ramp (Location 3) would deteriorate from LOS C or D to LOS F due to spillback from congestion at the intersections of the Exit 9P ramp and Meridian Road, and two segments north of the Exit 9P ramp and north of the Exit 9E ramp (Location 17) would improve from LOS F to LOS A or C due to the resulting metering on the westbound Grand Central Parkway from the previously discussed Exit 9P ramp congestion. Highway segments along the eastbound Grand Central Parkway would generally operate at the same levels of service as in the No-Action condition, except that one segment south of the Astoria Boulevard and 34th Avenue on-ramp (Location 24) would deteriorate from LOS D to LOS F. Highway segments along the northbound Van Wyck Expressway would generally operate at the same levels of service as in the No-Action condition, except that one segment north of the ramp from College Point Boulevard (Location 30) would deteriorate from LOS D to LOS E. Average travel speeds on multiple segments along the southbound Van Wyck Expressway (Locations 36 and 39) would improve from LOS E to LOS D, compared to the No-Action condition, due to congestion along the westbound Whitestone Expressway which would regulate traffic downstream along the southbound Van Wyck Expressway. Highway segments along the westbound Whitestone Expressway would generally operate at the same levels of service as in the No-Action condition, except that three segments north of the Exit 13D ramp (Location 52) would deteriorate from LOS C or D to LOS F as a result of congestion at the merge between the Whitestone Expressway and the Van Wyck Expressway ramps. Highway segments along the eastbound Whitestone Expressway, eastbound/westbound Astoria Boulevard, and eastbound/westbound Northern Boulevard would generally operate at the same levels of service as in the No-Action condition.

A total of 31 out of 77 highway segments analyzed would operate at LOS E or F, compared to 25 highway segments under the No-Action condition for the gameday weekday PM peak hour.

According to the *CEQR Technical Manual* criteria, the Proposed Project would result in significant adverse traffic at 17 out of the 77 highway segments analyzed for the gameday weekday PM peak hour.

Gameday Saturday PM Pre-game Peak Hour

During the gameday Saturday PM Pre-game peak hour, compared to the No-Action condition, average travel speeds along the westbound Grand Central Parkway, south of the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway would decrease by approximately 8 mph, due to spillback from congestion at the weaving segment. Average travel speeds would generally be similar to speeds in the No-Action condition on the eastbound Grand Central Parkway, except for a decrease of approximately 10 mph on segments east and west of the Exit 9E ramp (Locations 19, 20, and 29), due to spillback from congestion at the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard and a decrease of approximately 8 mph on segments north of the ramp from Hall of Science (Location 25), due to spillback from congestion at the merge between the ramp and the eastbound Grand Central Parkway. Average travel speeds would generally be similar to speeds in the No-Action condition on the eastbound Whitestone Expressway, except for a decrease of approximately 8 mph at the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard due to congestion on the weaving segment as a result of added ingress vehicular demand to the Proposed Project. On the northbound/southbound Van Wyck Expressway, the westbound Whitestone Expressway,

eastbound/westbound Astoria Boulevard, and eastbound/westbound Northern Boulevard average travel speeds would generally be similar to speeds in the No-Action condition.

Highway segments along the westbound Grand Central Parkway would generally operate at the same levels of service as in the No-Action condition, except that three segments south of the Exit 9E ramp (Location 10) and south of the Exit 9P ramp (Location 3) would deteriorate from LOS C or D to LOS E or F due to congestion at the intersections of the Exit 9P ramp and Meridian Road and the Exit 9E ramp and Shea Road; that two segments north of the exit 9E ramp (Location 17) would improve from LOS E to LOS D due to the congestion previously discussed and its metering effects on traffic along the westbound Grand Central Parkway; and that one segment south of the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard would deteriorate from LOS B to LOS F due to congestion on the weaving segment as a result of added ingress vehicular demand to the Proposed Project site. Highway segments along the eastbound Grand Central Parkway would generally operate at the same levels of service as in the No-Action condition, except that one segment south of the ramp from Astoria Boulevard and 34th Avenue (Location 24) would deteriorate from LOS D to LOS E as a result of congestion at the merge between the ramp from Hall of Science and the eastbound Grand Central Parkway. Highway segments along eastbound Astoria Boulevard would generally operate at the same levels of service as in the No-Action condition, except for one segment at the Astoria Boulevard and 34th Avenue ramp to the eastbound Grand Central Parkway (Location 62), which would deteriorate from LOS D to LOS E due to congestion as a result of added egress vehicular demand from the Development Site. Highway segments along the northbound/southbound Van Wyck Expressway, the eastbound/westbound Whitestone Expressway, westbound Astoria Boulevard, and eastbound/westbound Northern Boulevard would generally operate at the same levels of service as in the No-Action condition.

A total of 18 out of 77 highway segments analyzed would operate at LOS E or F, compared to 13 highway segments under the No-Action condition for the gameday Saturday PM Pre-game peak hour.

According to the *CEQR Technical Manual* criteria, the Proposed Project would result in significant adverse traffic impacts at 20 out of the 77 highway segments analyzed for the gameday Saturday PM Pre-game peak hour.

Gameday Saturday PM Post Game Peak Hour

During the gameday Saturday PM Post Game peak hour, average travel speeds would generally be similar to speeds in the No-Action condition on the eastbound Grand Central Parkway, except for a decrease of approximately 21 to 23 mph on segments east and west of the Exit 9E ramp (Locations 19, 20, and 29), due to spillback from congestion at the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard; and for a decrease of approximately 12 to 21 mph on segments south of Exit 9E ramp and north of the Hall of Science ramp (Locations 21, 22, 23, and 24), due to congestion from the merge between the Hall of Science ramp and the Grand Central Parkway as a result of added egress vehicular demand from the Proposed Project site. On the northbound Van Wyck Expressway, average travel speeds would generally be similar to speeds in the No-Action, except for a decrease of approximately 8 mph at the Van Wyck Expressway ramp to the Whitestone Expressway (Location 35). Average travel speeds would generally be similar to speeds in the No-Action condition on the eastbound Whitestone Expressway, except for a decrease of approximately 9 to 16 mph at the weaving segment (Location

47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard, due to congestion at the previously mentioned weaving segment. Average travel speeds would generally be similar to speeds in the No-Action condition on the westbound Whitestone Expressway, except for a decrease of approximately 9 mph along segments north of the Exit 13D ramp (Location 52), as a result of congestion spillback from the merge between the Whitestone Expressway ramp and Northern Boulevard; and except for a decrease of 10 to 13 mph at segments east and west of the ramp from Marina Road (Locations 59 and 60) due to congestion at the ramp merge as a result of added egress vehicular demand from the Proposed Project site. On the westbound Grand Central Parkway, southbound Van Wyck Expressway, eastbound/westbound Astoria Boulevard, and eastbound/westbound Northern Boulevard average travel speeds would generally be similar to speeds in the No-Action condition.

Highway segments along the westbound Grand Central Parkway would generally operate at the same levels of service as in the No-Action condition, except that two segments south of the Exit 9E ramp (Location 10) would deteriorate from LOS C or D to LOS E or F due to congestion at the intersections of the Exit 9P ramp and Meridian Road and the Exit 9E ramp and Shea Road; and except that one segment north of the exit 9E ramp (Location 17) would improve from LOS E to LOS A due to the congestion previously discussed and its metering effects on traffic along the westbound Grand Central Parkway. Highway segments along the eastbound Grand Central Parkway would generally operate at the same levels of service as in the No-Action condition, except that four segments between the Exit 9E ramp and the ramp from Astoria Boulevard (Locations 20, 21, 22, and 23) would deteriorate from LOS C or D to LOS F, due to spillback from congestion downstream. Highway segments along the eastbound Whitestone Expressway would generally operate at the same levels of service as in the No-Action condition, except that two segments between the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard and the ramp to the Van Wyck Expressway would improve from LOS E to LOS D due to metering from congestion upstream at the weaving segment. Highway segments along the westbound Whitestone Expressway would generally operate at the same levels of service as in the No-Action condition, except that three segments north of the Exit 13D ramp (Location 52) would deteriorate from LOS B or C to LOS E or F due to congestion as a result of added egress vehicular demand from the Proposed Project site; that one segments east of the ramp from Marina Road (Location 59) would deteriorate from LOS B to LOS E due to congestion at the ramp merge as a result of added egress vehicular demand from the Proposed Project site; and that one segment at the ramp to eastbound Grand Central Parkway (Location 58) would deteriorate from LOS B to LOS E due to spillback from congestion downstream along the Grand Central Parkway. Highway segments along eastbound/westbound Astoria Boulevard, and westbound Northern Boulevard would generally operate at the same levels of service as in the No-Action condition.

A total of 30 out of 77 highway segments analyzed would operate at LOS E or F, compared to 25 highway segments under the No-Action condition for the gameday Saturday PM Post Game peak hour.

According to the *CEQR Technical Manual* criteria, the Proposed Project would result in significant adverse traffic impacts at 22 out of the 77 highway segments analyzed for the gameday Saturday PM Post Game peak hour.

Gameday Sunday Midday Peak Hour

During the gameday Sunday midday peak hour, compared to the No-Action condition, average travel speeds on segments along the eastbound Grand Central Parkway north of the ramp from Hall of Science (Location 25) would decrease by approximately 10 mph, due to spillback from congestion at the merge between the ramp and the eastbound Grand Central Parkway. On the westbound Grand Central Parkway, the northbound/southbound Van Wyck Expressway, the eastbound/westbound Whitestone Expressway, eastbound/westbound Astoria Boulevard, and eastbound/westbound Northern Boulevard average travel speeds would generally be similar to speeds in the No-Action condition.

Highway segments along the westbound Grand Central Parkway would generally operate at the same levels of service as in the No-Action condition, except that one segment north of the Long Island Expressway ramps (Location 1) would improve from LOS E to LOS C due to the congestion on the Long Island Expressway ramps spilling back onto the mainline westbound Grand Central Parking and metering traffic downstream. Highway segments along the eastbound Grand Central Parkway would generally operate at the same levels of service as in the No-Action condition, except that one segment at the Grand Central Parkway Exit 9E ramp to the Whitestone Expressway (Location 29) would deteriorate from LOS D to LOS E due to congestion on the weaving segment. Highway segments along the eastbound Whitestone Expressway would generally operate at the same levels of service as in the No-Action condition, except that two segments at the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard and at the merge of the Grand Central Parkway off-ramp and Astoria Boulevard off-ramp to the Whitestone Expressway (Location 46) would deteriorate from LOS C or D to LOS E due to congestion on the weaving segment. Highway segments along the westbound Whitestone Expressway would generally operate at the same levels of service as in the No-Action condition, except that two segments east and west of the ramp from Marina Road (Locations 59 and 60) would deteriorate from LOS C or D to LOS F. Highway segments along eastbound Astoria Boulevard would generally operate at the same levels of service as in the No-Action condition, except for one segment at the Astoria Boulevard and 34th Avenue ramp to the eastbound Grand Central Parkway (Location 62), which would deteriorate from LOS D to LOS E due to congestion as a result of added egress vehicular demand from the Development Site. Highway segments along the northbound/southbound Van Wyck Expressway, westbound Astoria Boulevard, and eastbound/westbound Northern Boulevard would generally operate at the same levels of service as in the No-Action condition.

A total of 16 out of 77 highway segments analyzed would operate at LOS E or F, compared to 11 highway segments under the No-Action condition for the gameday Sunday midday peak hour.

According to the *CEQR Technical Manual* criteria, the Proposed Project would result in significant adverse traffic impacts at 12 out of the 77 highway segments analyzed for the gameday Sunday midday peak hour.

Gameday Sunday PM Peak Hour

During the gameday Sunday PM peak hour, average travel speeds would generally be similar to speeds in the No-Action condition on the westbound Grand Central Parkway, except for a decrease of approximately 8 to 14 mph south of the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard, due to spillback from congestion at the previously mentioned weaving segment. Average travel speeds would generally be similar to speeds in the No-Action condition on the eastbound Grand Central Parkway, except for a

decrease of approximately 13 to 15 mph on segments east and west of the Exit 9E ramp (Locations 19, 20, and 29), due to spillback from congestion at the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard. On the northbound Van Wyck Expressway, average travel speeds would generally be similar to speeds in the No-Action, except for a decrease of approximately 8 mph on segments south of the Exit 13 ramp (Location 31). Average travel speeds would generally be similar to speeds in the No-Action condition on the eastbound Whitestone Expressway, except for a decrease of approximately 21 mph at the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard, due to congestion at the previously mentioned weaving segment. Average travel speeds would generally be similar to speeds in the No-Action condition on the westbound Whitestone Expressway, except for a decrease of approximately 15 to 28 mph along segments north of the Exit 13D ramp (Location 52), as a result of congestion spillback from the merge between the Whitestone Expressway ramp and Northern Boulevard; and except for an increase of approximately 12 mph along the westbound Whitestone Expressway ramp to the westbound Grand Central parkway, due to resulting metering effects from congestion at the merge between the Whitestone Expressway ramp and Northern Boulevard. On the southbound Van Wyck Expressway, eastbound/westbound Astoria Boulevard, and eastbound/westbound Northern Boulevard average travel speeds would generally be similar to speeds in the No-Action condition.

Highway segments along the westbound Grand Central Parkway would generally operate at the same levels of service as in the No-Action condition, except that one segment north of the ramp from the Long Island Expressway would deteriorate from LOS C or D to LOS F. Highway segments along the eastbound Grand Central Parkway would generally operate at the same levels of service as in the No-Action condition, except that three segments east and west of the Exit 9E ramp (Locations 19, 20, and 29) would deteriorate from LOS C or D to LOS F due to spillback from congestion at the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard. Highway segments along the northbound Van Wyck Expressway would generally operate at the same levels of service as in the No-Action condition, except that two segments north and south of the Exit 13 ramp (Locations 30 and 33) would deteriorate from LOS C or D to LOS F due to spillback from congestion at the merge between the westbound Whitestone Expressway ramp and westbound Northern Boulevard. Highway segments along the eastbound Whitestone Expressway would generally operate at the same levels of service as in the No-Action condition, except that one segment south of the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard would deteriorate from LOS C to LOS F due to congestion at the weaving segment; and that one segment at the ramp from the outer to the inner eastbound Whitestone Expressway (Location 48) would improve from LOS E to LOS D due to metering from congestion upstream at the weaving segment. Highway segments along the westbound Whitestone Expressway would generally operate at the same levels of service as in the No-Action condition, except that four segments north of the Exit 13D ramp (Location 52) would deteriorate from LOS B, C, or D to LOS F due to congestion as a result of added egress vehicular demand from the Proposed Project site; and that one segment on the Whitestone Expressway to the west of the ramp from Northern Boulevard and the Van Wyck Expressway (Location 56) would improve from LOS F to LOS C due to metering from congestion upstream. Highway segments along the southbound Van Wyck Expressway, eastbound/westbound Astoria Boulevard, and westbound Northern Boulevard would generally operate at the same levels of service as in the No-Action condition.

A total of 27 out of 77 highway segments analyzed would operate at LOS E or F, compared to 17 highway segments under the No-Action condition for the gameday Sunday PM peak hour.

According to the *CEQR Technical Manual* criteria, the Proposed Project would result in significant adverse traffic impacts at 24 out of the 77 highway segments analyzed for the gameday Sunday PM peak hour.

Vehicle Demand Analysis

It is important to note that the results of the Vissim analysis are conservative since the trip generation does not account for additional potential linkages between land uses on the Project Site on game days, nor does it apply a "stay-away factor" for trips that may not happen or vehicular trips that would shift to another mode on game days. Project trip generation also does not account for expected temporal shifts in behavior for other non-game trips to the development site, where these trips would shift their arrival and departure times to the Project Site to avoid congestion associated with Mets games. In addition, the land uses associated with the Proposed Project are likely to attract some Mets patrons to arrive to the site earlier or depart later than they currently do, effectively spreading some traffic demand to hours when the network would not be as congested; in order to be conservative, this analysis does not take any credits associated with this potential overlapping visitors with Mets patrons. The analysis also does not account for potential changes to baseline traffic volumes due to motorists choosing to alter their travel patterns by traveling at a different time of day or by using alternate highways. Although the results of the Vissim analysis are more conservative by not accounting for these conditions, the methodology and findings of the analysis are appropriate to identify the incremental effects of the Proposed Project on the highway network in the vicinity of the Development Site. To complement the LOS-based impacts documented in the previous section, this section presents discussions of which highway segment locations would act as constraints under the With-Action condition, resulting in lower volumes being processed at these and neighboring highway segments.

Table D-20 through **Table D-28** in **Appendix D** present a comparison of the total vehicular demand and the number of vehicles that could be processed by the highway network based on the results of the Vissim micro-simulation model in the future No-Action and With-Action conditions for all peak hours. These comparisons were made for each studied segment throughout the network. The unserved vehicles would be processed outside of the peak hour and would result in extended congestion on the roadway network. Network constraints, starvation of upstream locations, and queue spillback to downstream locations as discussed in the Level of Service section also contribute to unmet demand and further extend congestion as observed in the Vissim model. Congestion in the Vissim model is identified using a number of criteria, including poor level of service, queue spillback from physical constraints, and queue spillback from operational constraints.

The key overall findings of the vehicle demand analysis are detailed below.

Non-Gameday

Non-Gameday Weekday AM Peak Hour

Several constraints in the highway network cause congestion and in some cases, starve downstream locations of traffic as the congestion does not clear within the peak hour. This results in unmet demand increasing in the With-Action scenario when compared to the No-Action scenario. In the non-gameday weekday AM peak hour, congestion propagates from the eastbound Whitestone Expressway weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard, the intersection of the westbound Grand Central

Parkway off-ramp at Exit 9P and Meridian Road (Location 29), and the intersection of the westbound Grand Central Parkway off-ramp at Exit 9E and Shea Road. The Northern Boulevard ramps to/from Marina Road (Locations 75 and 76) also cause queue spillback on westbound Whitestone Expressway and northbound Van Wyck Expressway.

The westbound Grand Central Parkway could process about 79 to 89 percent of the peak hour demand (compared to about 93 to 97 percent in the No-Action condition) and the eastbound Grand Central Parkway could process about 98 to 100 percent of the peak hour demand (compared to about 99 to 100 percent in the No-Action condition). Project generated trips would result in congestion on the westbound Grand Central Parkway. As shown in **Table D-20**, 5,089 of the total 5,909 vehicles could be processed by the westbound Grand Central Parkway mainline (Location 1) north of the ramp from the Long Island Expressway. The remaining 820 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on the Grand Central Parkway.

The northbound Van Wyck Expressway could process about 85 to 90 percent of the peak hour demand (compared to about 97 percent in the No-Action condition) and the southbound Van Wyck Expressway could process about 95 to 96 percent of the peak hour demand (compared to about 97 to 99 percent in the No-Action condition). Project generated trips would result in congestion on the northbound Van Wyck Expressway. As shown in **Table D-20**, 4,199 of the total 4,706 vehicles could be processed by the northbound Van Wyck Expressway mainline (Location 30) north of the ramp from College Point Boulevard. The remaining 507 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on the Van Wyck Expressway.

The eastbound Whitestone Expressway could process about 91 to 99 percent of the peak hour demand (compared to about 94 to 99 percent in the No-Action condition) and the westbound Whitestone Expressway could process about 92 to 96 percent of the peak hour demand (compared to about 96 to 100 percent in the No-Action condition). Project generated trips would result in congestion on the eastbound Whitestone Expressway. As shown in **Table D-20**, 4,021 of the total 4,283 vehicles could be processed by the eastbound Whitestone Expressway mainline at the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard. The remaining 262 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on the Whitestone Expressway.

Westbound Astoria Boulevard could process about 91 to 96 percent of the peak hour demand (compared to about 94 to 100 percent in the No-Action condition) and eastbound Astoria Boulevard could process about 98 to 100 percent of the peak hour demand (compared to about 99 to 100 percent in the No-Action condition).

Westbound Northern Boulevard could process about 87 to 94 percent of the peak hour demand (compared to about 94 to 95 percent in the No-Action condition) and eastbound Northern Boulevard could process about 92 to 100 percent of the peak hour demand (compared to about 97 to 100 percent in the No-Action condition). Project generated trips would result in congestion on eastbound and westbound Northern Boulevard. As shown in **Table D-20**, 1,210 of the total 1,398 vehicles could be processed on westbound Northern Boulevard (Location 76) west of the ramp from Marina Road. The remaining 188 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on westbound Northern Boulevard. As shown in **Table D-20**, 1,423 of the total 1,545 vehicles could be processed on eastbound Northern Boulevard (Location 70) east of the ramp from the Van Wyck Expressway. The remaining 122 "unserved" vehicles, or unmet

demand, would be processed outside of the peak hour and would result in congestion on eastbound Northern Boulevard.

Non-Gameday Weekday Midday Peak Hour

Several constraints in the highway network cause congestion and in some cases, starve downstream locations of traffic as the congestion does not clear within the peak hour. This results in unmet demand increasing in the With-Action scenario when compared to the No-Action scenario. In the non-gameday weekday midday peak hour, congestion propagates from the eastbound Whitestone Expressway weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard.

The westbound Grand Central Parkway could process about 79 to 100 percent of the peak hour demand (compared to about 98 to 100 percent in the No-Action condition) and the eastbound Grand Central Parkway could process about 98 to 99 percent of the peak hour demand (compared to about 99 to 100 percent in the No-Action condition). Project generated trips would result in congestion on the westbound Grand Central Parkway. As shown in **Table D-21**, 771 of the total 975 vehicles could be processed by the westbound Grand Central Parkway mainline (Location 18) ramp to eastbound Whitestone Expressway. The remaining 204 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on the Grand Central Parkway.

The northbound Van Wyck Expressway could process about 96 percent of the peak hour demand (compared to about 94 to 96 percent in the No-Action condition) and the southbound Van Wyck Expressway could process about 88 to 100 percent of the peak hour demand (compared to about 92 to 100 percent in the No-Action condition).

The eastbound Whitestone Expressway could process about 92 to 99 percent of the peak hour demand (compared to about 93 to 99 percent in the No-Action condition) and the westbound Whitestone Expressway could process about 93 to 100 percent of the peak hour demand (compared to about 98 to 100 percent in the No-Action condition). Project generated trips would result in congestion on the westbound Whitestone Expressway. As shown in **Table D-21**, 3,045 of the total 3,281 vehicles could be processed by the westbound Whitestone Expressway ramp (Location 60) to westbound Grand Central Parkway from westbound Whitestone Expressway and Marina Road. The remaining 236 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on the Whitestone Expressway.

Westbound Astoria Boulevard could process about 96 to 99 percent of the peak hour demand (compared to about 97 to 100 percent in the No-Action condition) and eastbound Astoria Boulevard could process about 99 to 100 percent of the peak hour demand (compared to about 100 percent in the No-Action condition).

Westbound Northern Boulevard could process about 91 to 94 percent of the peak hour demand (compared to about 92 to 94 percent in the No-Action condition) and eastbound Northern Boulevard could process about 94 to 100 percent of the peak hour demand (compared to about 94 to 100 percent in the No-Action condition).

Non-Gameday Weekday PM Peak Hour

Several constraints in the highway network cause congestion and in some cases, starve downstream locations of traffic as the congestion does not clear within the peak hour. This results in unmet demand increasing in the With-Action scenario when compared to the No-Action scenario. In the

non-gameday weekday PM peak hour, congestion propagates from the eastbound Whitestone Expressway weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard, the intersection of the westbound Grand Central Parkway off-ramp at Exit 9P and Meridian Road (Location 29), and the intersection of the westbound Grand Central Parkway off-ramp at Exit 9E and Shea Road.

The westbound Grand Central Parkway could process about 68 to 90 percent of the peak hour demand (compared to about 98 to 100 percent in the No-Action condition) and the eastbound Grand Central Parkway could process about 93 to 98 percent of the peak hour demand (compared to about 99 percent in the No-Action condition). Project generated trips would result in congestion on the westbound and eastbound Grand Central Parkway. As shown in **Table D-22**, 6,104 of the total 6,871 vehicles could be processed by the westbound Grand Central Parkway mainline (Location 15) north of the merge of Inner and Outer westbound Grand Central Parkway. The remaining 767 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on the westbound Grand Central Parkway. As shown in **Table D-22**, 5,984 of the total 6,408 vehicles could be processed by the eastbound Grand Central Parkway mainline (Location 28) north of the ramp to the Long Island Expressway. The remaining 424 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on the eastbound Grand Central Parkway.

The northbound Van Wyck Expressway could process about 97 to 98 percent of the peak hour demand (compared to about 97 to 98 percent in the No-Action condition) and the southbound Van Wyck Expressway could process about 95 to 99 percent of the peak hour demand (compared to about 97 to 100 percent in the No-Action condition).

The eastbound Whitestone Expressway could process about 91 to 100 percent of the peak hour demand (compared to about 92 to 100 percent in the No-Action condition) and the westbound Whitestone Expressway could process about 88 to 100 percent of the peak hour demand (compared to about 98 to 100 percent in the No-Action condition). Project generated trips would result in congestion on the eastbound and westbound Whitestone Expressway. As shown in **Table D-22**, 4,453 of the total 4,879 vehicles could be processed by the eastbound Whitestone Expressway mainline at the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard. The remaining 426 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on the eastbound Whitestone Expressway. As shown in **Table D-22**, 2,718 of the total 3,077 vehicles could be processed by the westbound Whitestone Expressway ramp (Location 60) to westbound Grand Central Parkway from westbound Whitestone Expressway and Marina Road. The remaining 359 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on the westbound Whitestone Expressway.

Westbound Astoria Boulevard could process about 97 to 98 percent of the peak hour demand (compared to about 98 to 99 percent in the No-Action condition) and eastbound Astoria Boulevard could process about 89 to 100 percent of the peak hour demand (compared to about 99 to 100 percent in the No-Action condition). Project generated trips would result in congestion on eastbound Astoria Boulevard. As shown in **Table D-22**, 1,301 of the total 1,456 vehicles could be processed by the eastbound Astoria Boulevard ramp (Location 62) to eastbound Grand Central Parkway from eastbound Astoria Boulevard and 34th Avenue. The remaining 155 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on Astoria Boulevard.

Westbound Northern Boulevard could process about 91 to 94 percent of the peak hour demand (compared to about 91 to 96 percent in the No-Action condition) and eastbound Northern Boulevard could process about 93 to 99 percent of the peak hour demand (compared to about 96 to 99 percent in the No-Action condition).

Non-Gameday Saturday PM Peak Hour

Several constraints in the highway network cause congestion and in some cases, starve downstream locations of traffic as the congestion does not clear within the peak hour. This results in unmet demand increasing in the With-Action scenario when compared to the No-Action scenario. In the non-gameday Saturday PM peak hour, congestion propagates from the intersection of the westbound Grand Central Parkway off-ramp at Exit 9P and Meridian Road (Location 29), and the intersection of the westbound Grand Central Parkway off-ramp at Exit 9E and Shea Road.

The westbound Grand Central Parkway could process about 95 to 99 percent of the peak hour demand (compared to about 98 to 100 percent in the No-Action condition) and the eastbound Grand Central Parkway could process about 99 to 100 percent of the peak hour demand (compared to about 98 to 100 percent in the No-Action condition). Project generated trips would result in congestion on the westbound Grand Central Parkway. As shown in **Table D-23**, 6,489 of the total 6,633 vehicles could be processed by the westbound Grand Central Parkway mainline (Location 15) north of the merge of Inner and Outer westbound Grand Central Parkway. The remaining 144 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on the Grand Central Parkway.

The northbound Van Wyck Expressway could process about 97 to 98 percent of the peak hour demand (compared to about 97 to 98 percent in the No-Action condition) and the southbound Van Wyck Expressway could process about 100 percent of the peak hour demand (compared to about 100 percent in the No-Action condition).

The eastbound Whitestone Expressway could process about 97 to 99 percent of the peak hour demand (compared to about 97 to 99 percent in the No-Action condition) and the westbound Whitestone Expressway could process about 99 to 100 percent of the peak hour demand (compared to about 99 to 100 percent in the No-Action condition).

Westbound Astoria Boulevard could process about 99 percent of the peak hour demand (compared to about 98 to 99 percent in the No-Action condition) and eastbound Astoria Boulevard could process about 100 percent of the peak hour demand (compared to about 100 percent in the No-Action condition).

Westbound Northern Boulevard could process about 97 to 100 percent of the peak hour demand (compared to about 97 to 99 percent in the No-Action condition) and eastbound Northern Boulevard could process about 99 to 100 percent of the peak hour demand (compared to about 99 to 100 percent in the No-Action condition).

Gameday

Gameday Weekday PM Peak Hour

Several constraints in the highway network cause congestion and in some cases, starve downstream locations of traffic as the congestion does not clear within the peak hour. This results in unmet demand increasing in the With-Action scenario when compared to the No-Action scenario. In the

non-gameday weekday AM peak hour, congestion propagates from the eastbound Whitestone Expressway weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard, the intersection of the westbound Grand Central Parkway off-ramp at Exit 9P and Meridian Road (Location 29), and the intersection of the westbound Grand Central Parkway off-ramp at Exit 9E and Shea Road. The Northern Boulevard ramps to/from Marina Road (Locations 75 and 76) also cause queue spillback on westbound Whitestone Expressway and northbound Van Wyck Expressway.

The westbound Grand Central Parkway could process about 87 to 91 percent of the peak hour demand (compared to about 95 to 100 percent in the No-Action condition) and the eastbound Grand Central Parkway could process about 94 to 99 percent of the peak hour demand (compared to about 97 to 99 percent in the No-Action condition). Project generated trips would result in congestion on the westbound and eastbound Grand Central Parkway. As shown in **Table D-24**, 5,515 of the 6,117 vehicles could be processed by the westbound Grand Central Parkway mainline (Location 1) north of the ramp from the Long Island Expressway. The remaining 602 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on the westbound Grand Central Parkway. As shown in **Table D-24**, 5,977 of the total 6,367 vehicles could be processed by the eastbound Grand Central Parkway mainline (Location 28) north of the ramp to the Long Island Expressway. The remaining 390 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on the eastbound Grand Central Parkway.

The northbound Van Wyck Expressway could process about 97 percent of the peak hour demand (compared to about 97 percent in the No-Action condition) and the southbound Van Wyck Expressway could process about 81 to 97 percent of the peak hour demand (compared to about 96 to 100 percent in the No-Action condition). Project generated trips would result in congestion on the southbound Van Wyck Expressway. As shown in **Table D-24**, 4,078 of the total 4,721 vehicles could be processed by the southbound Van Wyck Expressway mainline (Location 39) north of the ramp to College Point Boulevard. The remaining 643 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on the Van Wyck Expressway.

The eastbound Whitestone Expressway could process about 93 to 99 percent of the peak hour demand (compared to about 92 to 100 percent in the No-Action condition) and the westbound Whitestone Expressway could process about 80 to 85 percent of the peak hour demand (compared to about 98 to 100 percent in the No-Action condition). Project generated trips would result in congestion on the westbound Whitestone Expressway. As shown in **Table D-24**, 6,022 of the total 7,349 vehicles could be processed by the westbound Whitestone Expressway ramp (Location 50) north of the ramp to the southbound Van Wyck Expressway. The remaining 1,327 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on the Whitestone Expressway.

Westbound Astoria Boulevard could process about 78 to 81 percent of the peak hour demand (compared to about 99 to 100 percent in the No-Action condition) and eastbound Astoria Boulevard could process about 91 to 99 percent of the peak hour demand (compared to about 99 percent in the No-Action condition). Project generated trips would result in congestion on westbound and eastbound Astoria Boulevard. As shown in **Table D-24**, 858 of the total 1,059 vehicles could be processed by the westbound Astoria Boulevard segment (Location 64) on the ramp from westbound Whitestone Expressway and westbound Northern Boulevard. The remaining 201 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on

westbound Astoria Boulevard. As shown in **Table D-24**, 1,500 of the total 1,645 vehicles could be processed by the eastbound Astoria Boulevard ramp (Location 62) to eastbound Grand Central Parkway from eastbound Astoria Boulevard and 34th Avenue. The remaining 145 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on eastbound Astoria Boulevard.

Westbound Northern Boulevard could process about 88 to 93 percent of the peak hour demand (compared to about 91 to 98 percent in the No-Action condition) and eastbound Northern Boulevard could process about 92 to 99 percent of the peak hour demand (compared to about 93 to 99 percent in the No-Action condition). Project generated trips would result in congestion on westbound Northern Boulevard. As shown in **Table D-24**, 1,112 of the total 1,259 vehicles could be processed on westbound Northern Boulevard (Location 76) west of the ramp from Marina Road. The remaining 147 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on Northern Boulevard.

Gameday Saturday PM Pre-game Peak Hour

Several constraints in the highway network cause congestion and in some cases, starve downstream locations of traffic as the congestion does not clear within the peak hour. This results in unmet demand increasing in the With-Action scenario when compared to the No-Action scenario. In the gameday Saturday PM Pre-game peak hour, congestion propagates from the eastbound Whitestone Expressway weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard, the intersection of the westbound Grand Central Parkway off-ramp at Exit 9P and Meridian Road (Location 29), and the intersection of the westbound Grand Central Parkway off-ramp at Exit 9E and Shea Road. The merges to eastbound Grand Central Parkway from Astoria Boulevard/34th Avenue (Location 24) and from Hall of Science Drive (Location 25) also cause queue spillback on eastbound Grand Central Parkway.

The westbound Grand Central Parkway could process about 72 to 88 percent of the peak hour demand (compared to about 95 to 100 percent in the No-Action condition) and the eastbound Grand Central Parkway could process about 86 to 90 percent of the peak hour demand (compared to about 98 to 100 percent in the No-Action condition). Project generated trips would result in congestion on the westbound and eastbound Grand Central Parkway. As shown in **Table D-25**, 4,593 of the total 6,409 vehicles could be processed by the westbound Grand Central Parkway mainline (Location 1) north of the ramp from the Long Island Expressway. The remaining 1,816 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on the westbound Grand Central Parkway. As shown in **Table D-25,** 6,434 of the total 7,418 vehicles could be processed by the eastbound Grand Central Parkway mainline (Location 19) east of Exit 8. The remaining 984 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on the eastbound Grand Central Parkway.

The northbound Van Wyck Expressway could process about 97 to 98 percent of the peak hour demand (compared to about 97 to 98 percent in the No-Action condition) and the southbound Van Wyck Expressway could process about 93 to 100 percent of the peak hour demand (compared to about 97 to 100 percent in the No-Action condition).

The eastbound Whitestone Expressway could process about 85 to 96 percent of the peak hour demand (compared to about 96 to 98 percent in the No-Action condition) and the westbound Whitestone Expressway could process about 93 to 100 percent of the peak hour demand (compared to about 98 to 100 percent in the No-Action condition). Project generated trips would result in

congestion on the eastbound and westbound Whitestone Expressway. As shown in **Table D-25**, 3,853 of the total 4,540 vehicles could be processed by the eastbound Whitestone Expressway mainline at the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard. The remaining 687 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on the eastbound Whitestone Expressway. As shown in **Table D-25**, 2,941 of the total 3,157 vehicles could be processed by the westbound Whitestone Expressway ramp (Location 60) to westbound Grand Central Parkway from westbound Whitestone Expressway and Marina Road. The remaining 216 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on the westbound Whitestone Expressway.

Westbound Astoria Boulevard could process about 99 to 100 percent of the peak hour demand (compared to about 99 to 100 percent in the No-Action condition) and eastbound Astoria Boulevard could process about 96 to 98 percent of the peak hour demand (compared to about 100 percent in the No-Action condition).

Westbound Northern Boulevard could process about 95 to 100 percent of the peak hour demand (compared to about 95 to 100 percent in the No-Action condition) and eastbound Northern Boulevard could process about 88 to 98 percent of the peak hour demand (compared to about 95 to 100 percent in the No-Action condition). Project generated trips would result in congestion on eastbound Northern Boulevard. As shown in **Table D-25**, 1,594 of the total 1,711 vehicles could be processed on eastbound Northern Boulevard (Location 70) east of the ramp from the Van Wyck Expressway. The remaining 117 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on Northern Boulevard.

Gameday Saturday PM Post Game Peak Hour

Several constraints in the highway network cause congestion and in some cases, starve downstream locations of traffic as the congestion does not clear within the peak hour. This results in unmet demand increasing in the With-Action scenario when compared to the No-Action scenario. In the gameday Saturday PM Post Game peak hour, congestion propagates from the eastbound Whitestone Expressway weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard. The merges to eastbound Grand Central Parkway from Astoria Boulevard/34th Avenue (Location 24) and from Hall of Science Drive (Location 25) also cause queue spillback on eastbound Grand Central Parkway. The Northern Boulevard ramps to/from Marina Road (Locations 75 and 76) also cause queue spillback on westbound Whitestone Expressway.

The westbound Grand Central Parkway could process about 86 to 92 percent of the peak hour demand (compared to about 84 to 95 percent in the No-Action condition) and the eastbound Grand Central Parkway could process about 76 to 80 percent of the peak hour demand (compared to about 95 to 100 percent in the No-Action condition). Project generated trips would result in congestion on the westbound and eastbound Grand Central Parkway. As shown in **Table D-26,** 6,688 of the total 7,672 vehicles could be processed by the westbound Grand Central Parkway mainline (Location 15) north of the merge of Inner and Outer westbound Grand Central Parkway. The remaining 984 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on the westbound Grand Central Parkway. As shown in **Table D-26**, 5,557 of the total 7,263 vehicles could be processed by the eastbound Grand Central Parkway mainline (Location 28) north of the ramp to the Long Island Expressway. The remaining 1,706 "unserved" vehicles, or

unmet demand, would be processed outside of the peak hour and would result in congestion on the eastbound Grand Central Parkway.

The northbound Van Wyck Expressway could process about 97 to 98 percent of the peak hour demand (compared to about 97 percent in the No-Action condition) and the southbound Van Wyck Expressway could process about 91 to 97 percent of the peak hour demand (compared to about 96 to 100 percent in the No-Action condition). Project generated trips would result in congestion on the southbound Van Wyck Expressway. As shown in **Table D-26**, 4,556 of the total 4,793 vehicles could be processed by the southbound Van Wyck Expressway mainline (Location 39) north of the ramp to College Point Boulevard. The remaining 237 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on the southbound Van Wyck Expressway.

The eastbound Whitestone Expressway could process about 78 to 99 percent of the peak hour demand (compared to about 92 to 99 percent in the No-Action condition) and the westbound Whitestone Expressway could process about 85 to 98 percent of the peak hour demand (compared to about 95 to 100 percent in the No-Action condition). Project generated trips would result in congestion on the eastbound and westbound Whitestone Expressway. As shown in **Table D-26**, 3,626 of the total 4,548 vehicles could be processed by the eastbound Whitestone Expressway mainline at the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard. The remaining 922 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on the eastbound Whitestone Expressway. As shown in **Table D-26**, 3,178 of the total 3,755 vehicles could be processed by the westbound Whitestone Expressway ramp (Location 60) to westbound Grand Central Parkway from westbound Whitestone Expressway and Marina Road. The remaining 577 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on the Whitestone Expressway.

Westbound Astoria Boulevard could process about 86 to 95 percent of the peak hour demand (compared to about 92 to 99 percent in the No-Action condition) and eastbound Astoria Boulevard could process about 67 to 99 percent of the peak hour demand (compared to about 93 to 100 percent in the No-Action condition). Project generated trips would result in congestion on eastbound and westbound Astoria Boulevard. As shown in **Table D-26,** 1,214 of the total 1,805 vehicles could be processed by the eastbound Astoria Boulevard segment (Location 62) on the ramp to Grand Central Parkway. The remaining 591 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on Astoria Boulevard. As shown in **Table D-26,** 1,372 of the total 1,587 vehicles could be processed by the westbound Astoria Boulevard segment (Location 64) on the ramp from westbound Whitestone Expressway and westbound Northern Boulevard. The remaining 215 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on Astoria Boulevard.

Westbound Northern Boulevard could process about 77 to 96 percent of the peak hour demand (compared to about 83 to 96 percent in the No-Action condition) and eastbound Northern Boulevard could process about 84 to 99 percent of the peak hour demand (compared to about 90 to 100 percent in the No-Action condition). Project generated trips would result in congestion on westbound Northern Boulevard. As shown in **Table D-26**, 1,305 of the total 1,693 vehicles could be processed on westbound Northern Boulevard (Location 76) west of the ramp from Marina Road. The remaining 388 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on westbound Northern Boulevard.

Gameday Sunday Midday Peak Hour

Several constraints in the highway network cause congestion and in some cases, starve downstream locations of traffic as the congestion does not clear within the peak hour. This results in unmet demand increasing in the With-Action scenario when compared to the No-Action scenario. In the gameday Sunday midday peak hour, congestion propagates from the eastbound Whitestone Expressway weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard.

The westbound Grand Central Parkway could process about 87 to 95 percent of the peak hour demand (compared to about 90 to 97 percent in the No-Action condition) and the eastbound Grand Central Parkway could process about 99 percent of the peak hour demand (compared to about 99 to 100 percent in the No-Action condition). Project generated trips would result in congestion on the westbound Grand Central Parkway. As shown in **Table D-27,** 5,504 of the total 6,318 vehicles could be processed by the westbound Grand Central Parkway mainline (Location 1) north of the ramp from the Long Island Expressway. The remaining 814 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on the westbound Grand Central Parkway.

The northbound Van Wyck Expressway could process about 97 to 98 percent of the peak hour demand (compared to about 97 to 98 percent in the No-Action condition) and the southbound Van Wyck Expressway could process about 99 to 100 percent of the peak hour demand (compared to about 99 to 100 percent in the No-Action condition).

The eastbound Whitestone Expressway could process about 96 to 100 percent of the peak hour demand (compared to about 97 to 99 percent in the No-Action condition) and the westbound Whitestone Expressway could process about 98 to 100 percent of the peak hour demand (compared to about 98 to 100 percent in the No-Action condition). .

Westbound Astoria Boulevard could process about 99 to 100 percent of the peak hour demand (compared to about 99 to 100 percent in the No-Action condition) and eastbound Astoria Boulevard could process about 100 percent of the peak hour demand (compared to about 100 percent in the No-Action condition).

Westbound Northern Boulevard could process about 96 to 100 percent of the peak hour demand (compared to about 97 to 100 percent in the No-Action condition) and eastbound Northern Boulevard could process about 98 to 100 percent of the peak hour demand (compared to about 98 to 100 percent in the No-Action condition)..

Gameday Sunday PM Peak Hour

Several constraints in the highway network cause congestion and in some cases, starve downstream locations of traffic as the congestion does not clear within the peak hour. This results in unmet demand increasing in the With-Action scenario when compared to the No-Action scenario. In the gameday Sunday PM peak hour, congestion propagates from the eastbound Whitestone Expressway weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard. The merges to eastbound Grand Central Parkway from Astoria Boulevard/34th Avenue (Location 24) and from Hall of Science Drive (Location 25) also cause queue spillback on eastbound Grand Central Parkway. The Northern Boulevard ramps to/from Marina Road (Locations 75 and 76) also cause queue spillback on westbound Whitestone Expressway and northbound Van Wyck Expressway.

The westbound Grand Central Parkway could process about 79 to 87 percent of the peak hour demand (compared to about 85 to 99 percent in the No-Action condition) and the eastbound Grand Central Parkway could process about 85 to 92 percent of the peak hour demand (compared to about 98 to 100 percent in the No-Action condition). Project generated trips would result in congestion on the westbound and eastbound Grand Central Parkway. As shown in **Table D-28,** 5,994 of the total 7,313 vehicles could be processed by the westbound Grand Central Parkway mainline (Location 15) north of the merge of Inner and Outer westbound Grand Central Parkway. The remaining 1,319 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on the westbound Grand Central Parkway. As shown in **Table D-28**, 6,465 of the total 7,625 vehicles could be processed by the eastbound Grand Central Parkway mainline (Location 28) north of the ramp to the Long Island Expressway. The remaining 1,160 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on the eastbound Grand Central Parkway.

The northbound Van Wyck Expressway could process about 83 to 89 percent of the peak hour demand (compared to about 97 to 98 percent in the No-Action condition) and the southbound Van Wyck Expressway could process about 83 to 92 percent of the peak hour demand (compared to about 96 to 100 percent in the No-Action condition). Project generated trips would result in congestion on the northbound Van Wyck Expressway. As shown in **Table D-28**, 3,854 of the total 4,347 vehicles could be processed by the northbound Van Wyck Expressway mainline (Location 30) north of the ramp to College Point Boulevard. The remaining 493 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on the northbound Van Wyck Expressway.

The eastbound Whitestone Expressway could process about 83 to 98 percent of the peak hour demand (compared to about 92 to 99 percent in the No-Action condition) and the westbound Whitestone Expressway could process about 78 to 84 percent of the peak hour demand (compared to about 93 to 100 percent in the No-Action condition). Project generated trips would result in congestion on the eastbound and westbound Whitestone Expressway. As shown in **Table D-28**, 3,414 of the total 4,098 vehicles could be processed by the eastbound Whitestone Expressway mainline at the weaving segment (Location 47) west of the split to eastbound Inner Whitestone Expressway and eastbound Northern Boulevard. The remaining 684 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on the eastbound Whitestone Expressway. As shown in **Table D-28**, 3,113 of the total 3,942 vehicles could be processed by the westbound Whitestone Expressway ramp (Location 60) to westbound Grand Central Parkway from westbound Whitestone Expressway and Marina Road. The remaining 829 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on the Whitestone Expressway.

Westbound Astoria Boulevard could process about 75 to 78 percent of the peak hour demand (compared to about 93 to 99 percent in the No-Action condition) and eastbound Astoria Boulevard could process about 96 to 99 percent of the peak hour demand (compared to about 98 to 99 percent in the No-Action condition). Project generated trips would result in congestion on westbound Astoria Boulevard. As shown in **Table D-28,** 1,291 of the total 1,732 vehicles could be processed by the westbound Astoria Boulevard segment (Location 64) on the ramp from westbound Whitestone Expressway and westbound Northern Boulevard. The remaining 441 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on Astoria Boulevard.

Westbound Northern Boulevard could process about 68 to 97 percent of the peak hour demand (compared to about 85 to 96 percent in the No-Action condition) and eastbound Northern Boulevard could process about 81 to 100 percent of the peak hour demand (compared to about 93 to 100 percent in the No-Action condition). Project generated trips would result in congestion on eastbound and westbound Northern Boulevard. As shown in **Table D-28**, 1,508 of the total 1,827 vehicles could be processed on eastbound Northern Boulevard (Location 70) east of the ramp from the Van Wyck Expressway. The remaining 319 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on eastbound Northern Boulevard. As shown in **Table D-28**, 1,265 of the total 1,825 vehicles could be processed on westbound Northern Boulevard (Location 76) west of the ramp from Marina Road. The remaining 560 "unserved" vehicles, or unmet demand, would be processed outside of the peak hour and would result in congestion on westbound Northern Boulevard.

While all peak hours show unmet demand on the highway network, the Vissim analysis is conservative for several reasons. Assumptions used to generate project trips did not account for additional linkages between complimentary land uses on the Project Site on game days, nor did they apply "stay-away factors" to account for trips that may not happen on game days due to drivers choosing to travel using another mode (i.e. public transit). Potential shifts in arrival or departure times away from peak periods or drivers avoiding the Project site entirely due to traffic congestion associated with Mets games were also not assumed in trip generation for the Proposed Project. As part of the standard *CEQR Technical Manual* methodology, trip generation for the Proposed Project was performed without considering the lack of available capacity for additional trips on the surrounding highway network; therefore, the quantitative results in terms of incremental delay for traffic and LOS are conservative and reflect a worst-case possible condition. Travelers to the proposed development and on the surrounding street network would be likely to modify the time they are making their trip and mode of travel in response to network congestion, and a new equilibrium of demand would be reached on each of the roadway elements evaluated as part of this analysis. Therefore, the full volume projected for added trips to the Development Site may never actually be realized. Also, the analysis assumes there would be no changes in baseline traffic volumes on the highway network, while some motorists could choose to alter their travel patterns either by using an alternate highway or to traveling at a different time of day.

While the results of the Vissim analysis are more conservative by not accounting for these conditions, the methodology and findings of the analysis are appropriate to identify the incremental effects of the Proposed Project on the highway network in the vicinity of the Development Site.

Parking

The Proposed Project would provide approximately 13,750 parking spaces between Area A, Northfield parking structure, Southfield parking structure and surface lot, and Area B (including the player lot), as shown in **Table 14-67** below. In order to allocate space for the proposed Grand Central Parkway on-ramp improvement, the Stadium View West parking lot (which has a capacity of 120 parking spaces) and approximately one-fifth of the Marina B parking lot (which has a capacity of approximately 95 parking spaces) would be displaced as part of the Proposed Project. These lots are currently publicly available for use on non-gamedays, and are exclusively used by the Mets on gamedays. However, this displacement of approximately 140 parking spaces is not significant, as the Proposed Project would provide a net increase in parking than what is provided in existing conditions**. Table 14-68** through **Table 14-69** show the project's hourly non-game weekday and

Saturday, and gameday weekday, Saturday and Sunday parking demand for the Area A and the Area B developments. Detailed parking demand tables for each land use can be found in **Appendix D.** Overall, the Proposed Project would provide enough spaces to accommodate non-gameday and gameday parking demand. On gamedays, parking for Mets patrons would be accommodated at the Northfield and Southfield parking structures, with Mets VIP parking at Area B. Trips destined for Area B would be fully accommodated between the Area A podium and tower parking. As a result, all project-generated and Mets patron parking would be fully accommodated, and no parking shortfalls are expected as a result of the Proposed Project. Because all parking demand is anticipated to be accommodated on-site, there would be no overflow of parking demand to the surrounding neighborhood.

Table 14-67 Proposed Project Parking Supply

Location	No. of Parking Spaces
Area A	**5,500**
Tower	1,595
Podium	3,905
Areas B, C, and D	**8,250**
Area D - Northfield Parking Structure	4,200
Area C - Southfield Parking Structure	2,901
Area C - Southfield Surface Lot	250
Area B	825
Area B Player Lot	74
Total	**13,750**

Table 14-68 Projected Non-Gameday Parking Demand

	Weekday			Saturday		
Hour	**Area A**	**Area B**	**Total**	**Area A**	**Area B**	**Total**
12 AM - 1 AM	2,553	30	2,583	3,199	95	3,294
1 AM - 2 AM	1,971	20	1,991	2,358	51	2,409
2 AM - 3 AM	1,606	15	1,621	1,863	31	1,894
3 AM - 4 AM	1,161	15	1,176	1,375	31	1,406
4 AM - 5 AM	475	14	489	518	29	547
5 AM - 6 AM	434	15	449	517	29	546
6 AM - 7 AM	441	19	460	515	31	546
7 AM - 8 AM	681	33	714	704	40	744
8 AM - 9 AM	1,089	92	1,181	1,080	57	1,137
9 AM - 10 AM	1,517	133	1,650	1,344	75	1,419
10 AM - 11 AM	1,863	160	2,023	1,758	97	1,855
11 AM - 12 PM	2,222	197	2,419	2,158	157	2,315
12 PM - 1 PM	2,496	213	2,709	2,556	336	2,892
1 PM - 2 PM	2,646	343	2,989	2,824	389	3,213
2 PM - 3 PM	2,637	227	2,864	2,805	433	3,238
3 PM - 4 PM	2,584	243	2,827	2,708	365	3,073
4 PM - 5 PM	2,377	317	2,694	2,690	405	3,095
5 PM - 6 PM	2,596	315	2,911	3,261	529	3,790
6 PM - 7 PM	2,545	320	2,865	3,369	487	3,856
7 PM - 8 PM	2,988	327	3,315	3,729	433	4,162
8 PM - 9 PM	3,455	332	3,787	4,159	501	4,660
9 PM - 10 PM	3,706	234	3,940	4,279	382	4,661
10 PM - 11 PM	3,660	143	3,803	4,265	250	4,515
11 PM - 12 AM	2,968	47	3,015	3,657	155	3,812

Maximum parking demand in **bold**

Table 14-69 Projected Gameday Parking Demand

	Weekday			Saturday			Sunday		
Hour	**Area A**	**Area B**	**Total**	**Area A**	**Area B**	**Total**	**Area A**	**Area B**	**Total**
12 AM - 1 AM	2,478	30	2,508	3,105	95	3,200	2,540	95	2,635
1 AM - 2 AM	1,896	20	1,916	2,264	51	2,315	2,049	51	2,100
2 AM - 3 AM	1,531	15	1,546	1,769	31	1,800	1,662	31	1,693
3 AM - 4 AM	1,086	15	1,101	1,281	31	1,312	1,283	31	1,314
4 AM - 5 AM	400	14	414	424	29	453	615	29	644
5 AM - 6 AM	359	15	374	423	29	452	614	29	643
6 AM - 7 AM	366	19	385	421	31	452	612	31	643
7 AM - 8 AM	606	33	639	609	41	650	762	40	802
8 AM - 9 AM	1,013	92	1,105	983	59	1,042	1,060	57	1,117
9 AM - 10 AM	1,438	133	1,571	1,245	75	1,320	1,191	74	1,265
10 AM - 11 AM	1,781	160	1,941	1,655	97	1,752	1,543	96	1,639
11 AM - 12 PM	2,137	197	2,334	2,049	157	2,206	1,880	156	2,036
12 PM - 1 PM	2,410	213	2,623	2,443	326	2,769	2,198	326	2,524
1 PM - 2 PM	2,558	343	2,901	2,710	379	3,089	2,408	369	2,777
2 PM - 3 PM	2,551	227	2,778	2,691	423	3,114	2,394	403	2,797
3 PM - 4 PM	2,500	243	2,743	2,595	355	2,950	2,288	325	2,613
4 PM - 5 PM	2,295	318	2,613	2,580	395	2,975	2,232	356	2,588
5 PM - 6 PM	2,512	316	2,828	3,154	519	3,673	2,584	470	3,054
6 PM - 7 PM	2,470	320	2,790	3,262	466	3,728	2,702	437	3,139
7 PM - 8 PM	2,913	327	3,240	3,628	423	4,051	3,048	403	3,451
8 PM - 9 PM	3,380	332	3,712	4,058	491	4,549	3,433	481	3,914
9 PM - 10 PM	3,631	234	3,865	4,179	372	4,551	3,518	372	3,890
10 PM - 11 PM	3,585	143	3,728	4,167	247	4,414	3,468	250	3,718
11 PM - 12 AM	2,893	47	2,940	3,562	155	3,717	2,873	155	3,028

Maximum parking demand in **bold**

Subways

The Proposed Project would generate 782 subway trips (543 "ins" and 239 "outs") during the non-gameday weekday AM peak hour; 3,437 subway trips (1,897 "ins" and 1,540 "outs" during the non-gameday weekday PM peak hour; 3,410 subway trips (1,882 "ins" and 1,528 "outs") during the gameday weekday PM peak hour; 3,643 subway trips (1,947 "ins" and 1,696 "outs") during the gameday Saturday PM Pre-game peak hour; and 3,311 subway trips (1,980 "ins" and 1,331 "outs") during the gameday Saturday PM Post Game peak hour. All of these trips were assigned to the Mets-Willets Point Subway Station. Two scenarios were evaluated for the future With-Action conditions: a Baseline Scenario, which evaluates the existing subway station geometry and operations with the additional With-Action trips, and a preferred With Improvements Scenario, which evaluates the additional With-Action trips alongside station enhancements which would increase the connectivity of the station to the surrounding area and add ADA accessibility.

Subway Station Elements

Baseline Scenario

The Baseline Scenario considers the With-Action subway station analysis with existing station configuration and operations. **Table 14-70** through **Table 14-72** show the Baseline Scenario station levels of service. As shown in the tables, all subway station elements would continue to operate at acceptable levels of service during the non-gameday weekday AM, gameday weekday PM, Saturday PM Pre-game, and Saturday PM Post Game peak hours. One element, the Mezzanine Outside Fare Zone Passageway, would operate at LOS E (v/c ratio of 1.50) during the non-gameday weekday PM peak hour. As a result, the passageway would be significantly impacted as a result of the Proposed Project under the Baseline Scenario.

Table 14-70 2030 With-Action Baseline Scenario Subway Station Vertical Circulation Level of Service

Vertical Circulation Element	Width (ft)	Effective Width (ft)	15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	v/c Ratio	LOS
			Up	Down				
Non-Gameday Weekday AM Peak Hour								
Roosevelt Avenue Northeast Stair (S2)	8.0	6.8	185	75	0.80	0.90	0.30	A
Roosevelt Avenue Northwest Stair (S3)	8.0	6.8	64	181	0.80	0.90	0.32	A
North Mezzanine Stair (M4)	13.0	11.8	249	256	0.80	0.90	0.36	A
Roosevelt Avenue South Stair (S1)	8.3	7.1	39	17	0.80	0.90	0.06	A
South Mezzanine Stair (M1)	30.6	28.3	43	32	0.80	0.90	0.02	A
South Mezzanine Stair (M5)	12.0	10.8	43	32	0.80	0.90	0.06	A
Manhattan-bound Mezzanine Stair (P1)	32.9	31.2	280	132	0.80	0.90	0.11	A
Flushing-bound East Stair (P2)	10.0	8.8	16	43	0.75	0.90	0.06	A
Flushing-bound East Stair (P4)	10.0	8.8	8	60	0.75	0.90	0.07	A
Flushing-bound West Stair (P10)	10.0	8.8	6	43	0.75	0.90	0.05	A
Flushing-bound West Stair (P12)	10.0	8.8	8	37	0.75	0.90	0.05	A
Non-Gameday Weekday PM Peak Hour								
Roosevelt Avenue Northeast Stair (S2)	8.0	6.8	236	305	0.80	0.90	0.67	B
Roosevelt Avenue Northwest Stair (S3)	8.0	6.8	360	434	0.80	0.90	0.98	C
North Mezzanine Stair (M4)	13.0	11.8	596	740	0.80	0.90	0.95	C
Roosevelt Avenue South Stair (S1)	8.3	7.1	14	30	0.80	0.90	0.05	A
South Mezzanine Stair (M1)	30.6	28.3	46	97	0.80	0.90	0.04	A
South Mezzanine Stair (M5)	12.0	10.8	46	97	0.80	0.90	0.11	A
Manhattan-bound Mezzanine Stair (P1)	32.9	31.2	306	196	0.80	0.90	0.13	A
Flushing-bound East Stair (P2)	10.0	8.8	199	183	0.75	0.90	0.37	A
Flushing-bound East Stair (P4)	10.0	8.8	61	156	0.75	0.90	0.23	A
Flushing-bound West Stair (P10)	10.0	8.8	68	155	0.75	0.90	0.23	A
Flushing-bound West Stair (P12)	10.0	8.8	26	160	0.75	0.90	0.20	A

Table 14-70 2030 With-Action Baseline Scenario Subway Station Vertical Circulation Level of Service

Vertical Circulation Element	Width (ft)	Effective Width (ft)	15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	v/c Ratio	LOS
			Up	Down				
Gameday Weekday PM Peak Hour								
Roosevelt Avenue Northeast Stair (S2)	8.0	6.8	198	129	0.80	0.90	0.39	A
Roosevelt Avenue Northwest Stair (S3)	8.0	6.8	120	39	0.80	0.90	0.18	A
North Mezzanine Stair (M4)	13.0	11.8	317	168	0.80	0.90	0.33	A
Roosevelt Avenue South Stair (S1)	8.3	7.1	19	44	0.80	0.90	0.08	A
South Mezzanine Stair (M1)	30.6	28.3	27	37	0.80	0.90	0.02	A
South Mezzanine Stair (M5)	12.0	10.8	27	37	0.80	0.90	0.05	A
Manhattan-bound Mezzanine Stair (P1)	32.9	31.2	2,963	199	0.80	0.90	0.94	C
Flushing-bound East Stair (P2)	10.0	8.8	108	499	0.75	0.90	0.65	B
Flushing-bound East Stair (P4)	10.0	8.8	57	448	0.75	0.90	0.55	B
Flushing-bound West Stair (P10)	10.0	8.8	103	510	0.75	0.90	0.66	B
Flushing-bound West Stair (P12)	10.0	8.8	93	679	0.75	0.90	0.84	C
Citi Field Stairs (U2)	44.3	41.6	303	2,941	0.90	0.90	0.64	B
Special Event East Stair (P6)	5.8	4.8	0	0	0.75	1.00	0.00	A
Special Event West Stair (P8)	5.8	4.8	0	0	0.75	1.00	0.00	A
Gameday Saturday PM Pre-game Peak Hour								
Roosevelt Avenue Northeast Stair (S2)	8.0	6.8	183	48	0.80	0.90	0.26	A
Roosevelt Avenue Northwest Stair (S3)	8.0	6.8	152	33	0.80	0.90	0.21	A
North Mezzanine Stair (M4)	13.0	11.8	334	80	0.80	0.90	0.27	A
Roosevelt Avenue South Stair (S1)	8.3	7.1	31	17	0.80	0.90	0.05	A
South Mezzanine Stair (M1)	30.6	28.3	19	10	0.80	0.90	0.01	A
South Mezzanine Stair (M5)	12.0	10.8	19	10	0.80	0.90	0.02	A
Manhattan-bound Mezzanine Stair (P1)	32.9	31.2	1,950	134	0.80	0.90	0.62	B
Flushing-bound East Stair (P2)	10.0	8.8	96	141	0.75	0.90	0.24	A
Flushing-bound East Stair (P4)	10.0	8.8	110	454	0.75	0.90	0.60	B
Flushing-bound West Stair (P10)	10.0	8.8	40	318	0.75	0.90	0.39	A
Flushing-bound West Stair (P12)	10.0	8.8	40	347	0.75	0.90	0.42	A
Citi Field Stairs (U2)	44.3	41.6	286	2,063	0.90	0.90	0.46	B
Special Event East Stair (P6)	5.8	4.8	2	160	0.75	1.00	0.30	A
Special Event West Stair (P8)	5.8	4.8	1	14	0.75	0.90	0.03	A
Gameday Saturday PM Post Game Peak Hour								
Roosevelt Avenue Northeast Stair (S2)	8.0	6.8	80	89	0.90	0.90	0.19	A
Roosevelt Avenue Northwest Stair (S3)	8.0	6.8	151	235	0.90	0.90	0.45	A
North Mezzanine Stair (M4)	13.0	11.8	230	324	0.90	0.90	0.37	A

Table 14-70 2030 With-Action Baseline Scenario Subway Station Vertical Circulation Level of Service

Vertical Circulation Element	Width (ft)	Effective Width (ft)	15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	v/c Ratio	LOS
			Up	Down				
Roosevelt Avenue South Stair (S1)	8.3	7.1	40	21	0.90	0.90	0.07	A
South Mezzanine Stair (M1)	30.6	28.3	20	20	0.90	0.90	0.01	A
South Mezzanine Stair (M5)	12.0	10.8	20	20	0.90	0.90	0.03	A
Manhattan-bound Mezzanine Stair (P1)	32.9	31.2	538	1,761	0.80	0.90	0.68	B
Flushing-bound East Stair (P2)	10.0	8.8	320	124	0.75	0.90	0.41	A
Flushing-bound East Stair (P4)	10.0	8.8	250	144	0.75	0.90	0.37	A
Flushing-bound West Stair (P10)	10.0	8.8	124	183	0.75	0.90	0.31	A
Flushing-bound West Stair (P12)	10.0	8.8	203	132	0.75	0.90	0.32	A
Citi Field Stairs (U2)	44.3	41.6	3,556	409	0.90	0.90	0.71	C
Special Event East Stair (P6)	5.8	4.8	24	21	0.75	0.90	0.08	A
Special Event West Stair (P8)	5.8	4.8	0	1	0.75	1.00	0.00	A

Note:
Methodology based on *2021 CEQR Technical Manual* guidelines
Surging factors only apply to exiting volumes. The surge factor for entry volumes is 1.0. At the Mezzanine Manhattan-bound stair (P1) during game day peak hours, surges are experienced from both the Manhattan-bound and Flushing-bound platforms; therefore, a surging factor of 0.8 is applied to entry volumes. At the streetlevel (S1/S2/S3) and mezzanine (M1/M4/M5) stairs during gameday egress peak hours, surges are for three tracks due to the activation of the center special event track at the Flushing-bound platform.

Table 14-71 2030 With-Action Baseline Scenario Subway Station Passageway Level of Service

Subway Station Element	Width (ft)	Effective Width (ft)	15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	v/c Ratio	LOS
			In	Out				
Non-Gameday Weekday AM Peak Hour								
Within Mets – Willets Point Station								
Mezzanine Outside Fare Zone Passageway	7.6	5.6	294	279	0.80	0.90	0.57	B
Mezzanine Central Corridor Passageway	27.8	25.8	462	170	0.80	0.90	0.15	A
Manhattan-bound West Ramp Passageway	17.1	15.1	86	78	0.75	0.90	0.06	A
Manhattan-bound East Ramp Passageway	16.0	14.0	195	53	0.75	0.90	0.09	A
Flushing-bound East Passageway	18.3	16.3	24	102	0.80	0.90	0.05	A
Flushing-bound West Passageway	14.0	12.0	14	80	0.80	0.90	0.05	A
Outside Mets – Willets Point Station								
Roosevelt Avenue South Ramp to Mezzanine Passageway	5.7	3.7	2	1	1.00	0.90	0.00	A
South Mezzanine to Pedestrian Bridge	7.0	5.0	18	47	1.00	0.90	0.06	A
Pedestrian Bridge to Flushing Meadows Corona Park	38.0	36.0	18	47	1.00	0.90	0.01	A

Table 14-71 2030 With-Action Baseline Scenario Subway Station Passageway Level of Service

Subway Station Element	Width (ft)	Effective Width (ft)	15-Minute Pedestrian Volumes In	15-Minute Pedestrian Volumes Out	Surging Factor	Friction Factor	v/c Ratio	LOS
Non-Gameday Weekday PM Peak Hour								
Within Mets – Willets Point Station								
Mezzanine Outside Fare Zone Passageway	7.6	5.6	637	849	0.80	0.90	1.50	E
Mezzanine Central Corridor Passageway	27.8	25.8	960	551	0.80	0.90	0.36	A
Manhattan-bound West Ramp Passageway	17.1	15.1	66	122	0.75	0.90	0.07	A
Manhattan-bound East Ramp Passageway	16.0	14.0	240	74	0.75	0.90	0.12	A
Flushing-bound East Passageway	18.3	16.3	260	339	0.80	0.90	0.21	A
Flushing-bound West Passageway	14.0	12.0	95	315	0.80	0.90	0.20	A
Outside Mets – Willets Point Station								
Roosevelt Avenue South Ramp to Mezzanine Passageway	5.7	3.7	5	3	1.00	0.90	0.01	A
South Mezzanine to Pedestrian Bridge	7.0	5.0	66	124	1.00	0.90	0.19	A
Pedestrian Bridge to Flushing Meadows Corona Park	38.0	36.0	66	124	1.00	0.90	0.03	A
Gameday Weekday PM Peak Hour								
Within Mets – Willets Point Station								
Mezzanine Outside Fare Zone Passageway	7.6	5.6	333	199	0.80	0.90	0.51	B
Mezzanine Central Corridor Passageway	27.8	25.8	3088	357	0.80	0.90	0.82	C
Manhattan-bound West Ramp Passageway	17.1	15.1	83	201	0.75	0.90	0.11	A
Manhattan-bound East Ramp Passageway	16.0	14.0	313	69	0.75	0.90	0.14	A
Flushing-bound East Passageway	18.3	16.3	166	947	0.80	0.90	0.41	A
Flushing-bound West Passageway	14.0	12.0	195	1189	0.80	0.90	0.69	B
Outside Mets – Willets Point Station								
Roosevelt Avenue South Ramp to Mezzanine Passageway	5.7	3.7	8	3	1.00	0.90	0.01	A
South Mezzanine to Pedestrian Bridge Passageway	7.0	5.0	18	36	1.00	0.90	0.05	A
Pedestrian Bridge to Flushing Meadows Corona Park Passageway	38.0	36.0	763	101	1.00	0.90	0.12	A
Special Event Mezzanine Ramp Passageway	43.9	41.9	726	89	0.80	0.90	0.10	A
Special Event East Ramp Passageway	15.8	13.8	1	1	0.75	0.90	0.00	A
Special Event West Ramp Passageway	15.0	13.0	4	18	0.75	0.90	0.01	A
Gameday Saturday PM Pre-game Peak Hour								
Within Mets – Willets Point Station								
Mezzanine Outside Fare Zone Passageway	7.6	5.6	355	75	0.80	0.90	0.40	A

Table 14-71 2030 With-Action Baseline Scenario Subway Station Passageway Level of Service

Subway Station Element	Width (ft)	Effective Width (ft)	15-Minute Pedestrian Volumes In	15-Minute Pedestrian Volumes Out	Surging Factor	Friction Factor	v/c Ratio	LOS
Mezzanine Central Corridor Passageway	27.8	25.8	1996	280	0.80	0.90	0.54	B
Manhattan-bound West Ramp Passageway	17.1	15.1	110	233	0.75	0.90	0.14	A
Manhattan-bound East Ramp Passageway	16.0	14.0	305	144	0.75	0.90	0.18	A
Flushing-bound East Passageway	18.3	16.3	208	756	0.80	0.90	0.35	A
Flushing-bound West Passageway	14.0	12.0	81	678	0.80	0.90	0.38	A
Outside Mets – Willets Point Station								
Roosevelt Avenue South Ramp to Mezzanine Passageway	5.7	3.7	20	14	1.00	0.90	0.05	A
South Mezzanine to Pedestrian Bridge Passageway	7.0	5.0	44	32	1.00	0.90	0.08	A
Pedestrian Bridge to Flushing Meadows Corona Park Passageway	38.0	36.0	570	241	1.00	0.90	0.11	A
Special Event Mezzanine Ramp Passageway	43.9	41.9	843	160	0.80	0.90	0.12	A
Special Event East Ramp Passageway	15.8	13.8	3	9	0.75	0.90	0.01	A
Special Event West Ramp Passageway	15.0	13.0	7	363	0.75	1.00	0.17	A
Gameday Saturday PM Post Game Peak Hour								
Within Mets – Willets Point Station								
Mezzanine Outside Fare Zone Passageway	7.6	5.6	266	357	0.80	0.90	0.63	B
Mezzanine Central Corridor Passageway	27.8	25.8	830	1776	0.80	0.90	0.62	B
Manhattan-bound West Ramp Passageway	17.1	15.1	1038	198	0.75	0.90	0.43	A
Manhattan-bound East Ramp Passageway	16.0	14.0	1281	226	0.75	0.90	0.56	B
Flushing-bound East Passageway	18.3	16.3	594	290	0.80	0.90	0.29	A
Flushing-bound West Passageway	14.0	12.0	327	316	0.80	0.90	0.30	A
Outside Mets – Willets Point Station								
Roosevelt Avenue South Ramp to Mezzanine Passageway	5.7	3.7	40	19	1.00	0.90	0.08	A
South Mezzanine to Pedestrian Bridge Passageway	7.0	5.0	36	73	1.00	0.90	0.11	A
Pedestrian Bridge to Flushing Meadows Corona Park Passageway	38.0	36.0	163	1077	1.00	0.90	0.17	A
Special Event Mezzanine Ramp Passageway	43.9	41.9	163	1047	0.80	0.90	0.17	A
Special Event East Ramp Passageway	15.8	13.8	3	1	0.75	0.90	0.00	A
Special Event West Ramp Passageway	15.0	13.0	13	41	0.75	0.90	0.03	A

Note:
Methodology based on *2021 CEQR Technical Manual* guidelines
Surging factors only apply to exiting volumes. The surge factor for entry volumes is 1.0. At the Mezzanine Central Corridor Passageway, surging factors of 0.80 are applied to the entry and exit volumes during non-gameday and gameday peak hours. This is due to the passageway experiencing cross flows from both the platforms and station entrances due to its central location within the station.
Shading denotes significantly impacted subway element

Table 14-72 2030 With-Action Baseline Scenario Subway Station Fare Control Level of Service

Fare Control Element	15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	v/c Ratio	LOS
	In	Out				
Non-Gameday Weekday AM Peak Hour						
Main Control Area Turnstiles (R532)	294	279	0.80	0.90	0.28	A
Non-Gameday Weekday PM Peak Hour						
Main Control Area Turnstiles (R532)	637	849	0.80	0.90	0.70	B
Gameday Weekday PM Peak Hour						
Manhattan-bound East Ramp Turnstiles	83	201	0.75	0.90	0.10	A
Manhattan-bound West Ramp Turnstiles	313	69	0.75	0.90	0.16	A
Flushing-bound East Stair Turnstiles	166	946	0.80	0.90	0.31	A
Flushing-bound West Stair Turnstiles	195	1,189	0.80	0.90	0.51	B
Special Event High Entry/Exit	2	16	0.75	0.90	0.03	A
Gameday Saturday PM Pre-game Peak Hour						
Manhattan-bound East Ramp Turnstiles	110	233	0.75	0.90	0.12	A
Manhattan-bound West Ramp Turnstiles	305	144	0.75	0.90	0.19	A
Flushing-bound East Stair Turnstiles	208	756	0.80	0.90	0.27	A
Flushing-bound West Stair Turnstiles	80	665	0.80	0.90	0.27	A
Special Event High Entry/Exit	5	347	0.75	1.00	0.44	A
Gameday Saturday PM Post Game Peak Hour						
Manhattan-bound East Ramp Turnstiles	1,038	198	0.75	0.90	0.46	B
Manhattan-bound West Ramp Turnstiles	1,281	226	0.75	0.90	0.65	B
Flushing-bound East Stair Turnstiles	594	290	0.80	0.90	0.27	A
Flushing-bound West Stair Turnstiles	327	315	0.80	0.90	0.26	A
Special Event High Entry/Exit	12	39	0.75	0.90	0.08	A

Note:
Methodology based on *2021 CEQR Technical Manual* guidelines
Surging factors only apply to exiting volumes. The surge factor for entry volumes is 1.0.

With Improvements Scenario

As part of the With Improvements Scenario, a number of subway station improvements would be introduced to enhance passenger circulation conditions at the Mets Willets Point subway station. Key features include:

› The redesign and expansion of fare control arrays along the Manhattan and Flushing bound platforms. The fare control area (Location F) would be removed from the center of the mezzanine central corridor and replaced with new and expanded Manhattan and Flushing bound turnstile arrays (Locations O, P, Q, R, X, Y, Z), alleviating major congestion points at the subway

mezzanine. This would also allow for enhanced passenger distribution along the subway mezzanine.

- A new surface to station mezzanine stair (Location A (NE Stairs)) would be constructed on the north side of the station, providing access to the Area B development.
- The Mezzanine Manhattan bound stairs (P1) would be removed and the Mezzanine Central Corridor would be extended north meeting a landing that leads to the Development Site and Citi Field. This would allow for improved station accessibility and passenger circulation, removing a vertical element from the proposed unpaid passageway connecting the existing Passerelle (Location M) to the Development Site.
- A "Southfield Parking Structure Corridor" would be constructed to provide direct access to the mezzanine level from the Southfield Parking Structure at the east side of the station. This would alleviate pedestrian street crossings over Roosevelt Avenue, especially for Mets patrons on gamedays.
- A "Mezzanine Transfer Corridor" would be constructed to facilitate paid passenger transfers between the Manhattan and Flushing bound platforms. This passageway would be on the west side of the station left of the Mezzanine Central Corridor.
- Elevators would be constructed to provide ADA access to the station mezzanine from street level on the north and south sides of Roosevelt Avenue and from the mezzanine to the Manhattan bound, Flushing bound and Special Event platforms. These elevators would be located on the west side of the station. To provide the most conservative analysis of the station's vertical elements as compared to the Baseline Scenario, (stairs and ramps) no passengers were assigned to the elevators. Because the elevators are not the primary access elements of the station and are intended for ADA access, detailed analyses for the proposed elevators are not warranted.
- The West Manhattan bound ramp (Location G) would be replaced with a staircase to the platform level (Stairs P1) to provide space for the proposed elevator to provide accessible access to the platform level.
- The East Manhattan bound ramp (Location H) would be reconstructed to comply with ADA design specifications.

Figure 14-12 through **Figure 14-14** illustrate the locations of the described subway station improvements**. Table 14-73** through **Table 14-75** show the With Improvements Scenario station levels of service.

Figure 14-12 Mets – Willets Point With Improvements Scenario: Subway Station Elements – Street Level

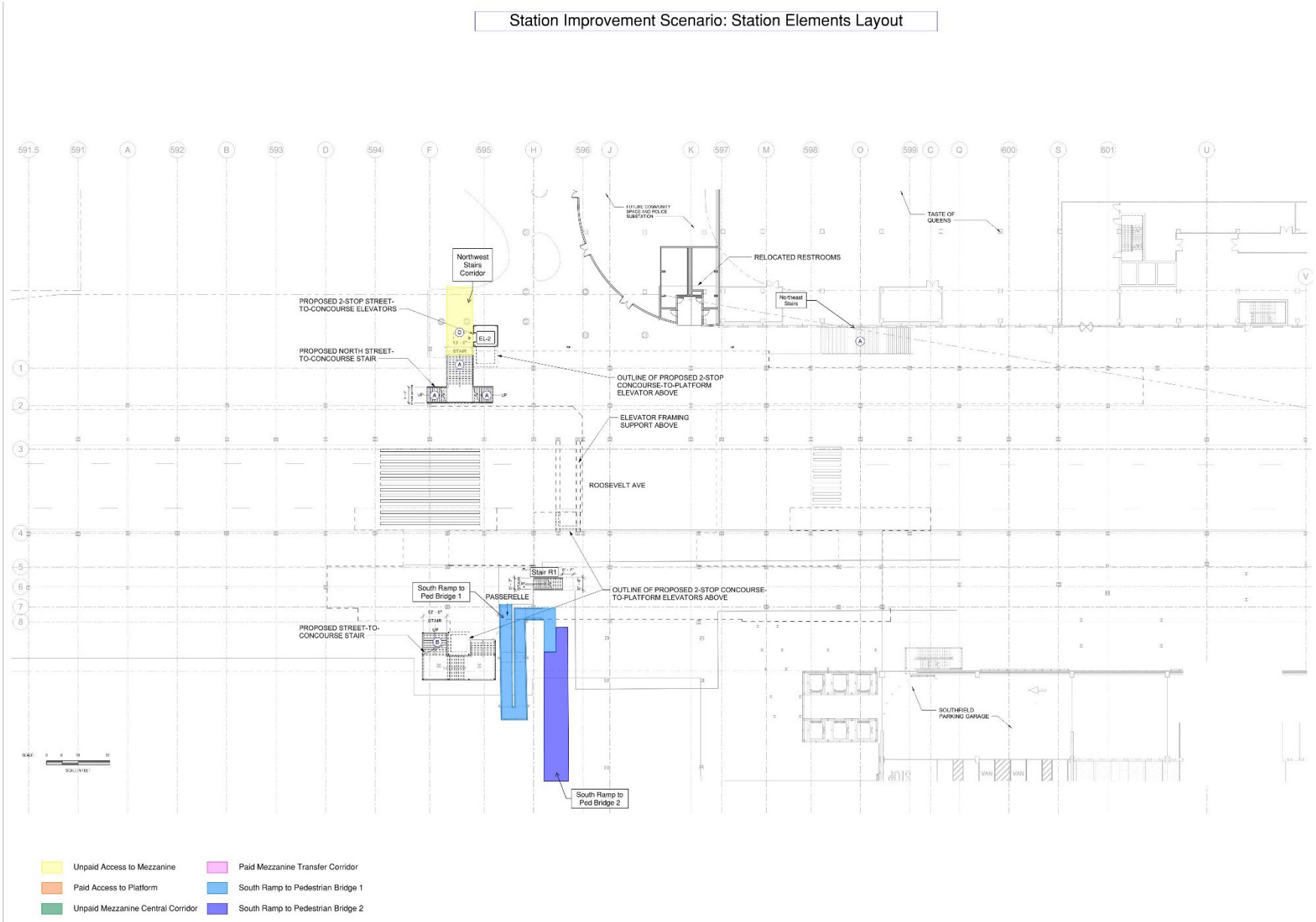


Figure 14-13 Mets – Willets Point With Improvements Scenario: Subway Station Elements – Mezzanine Level

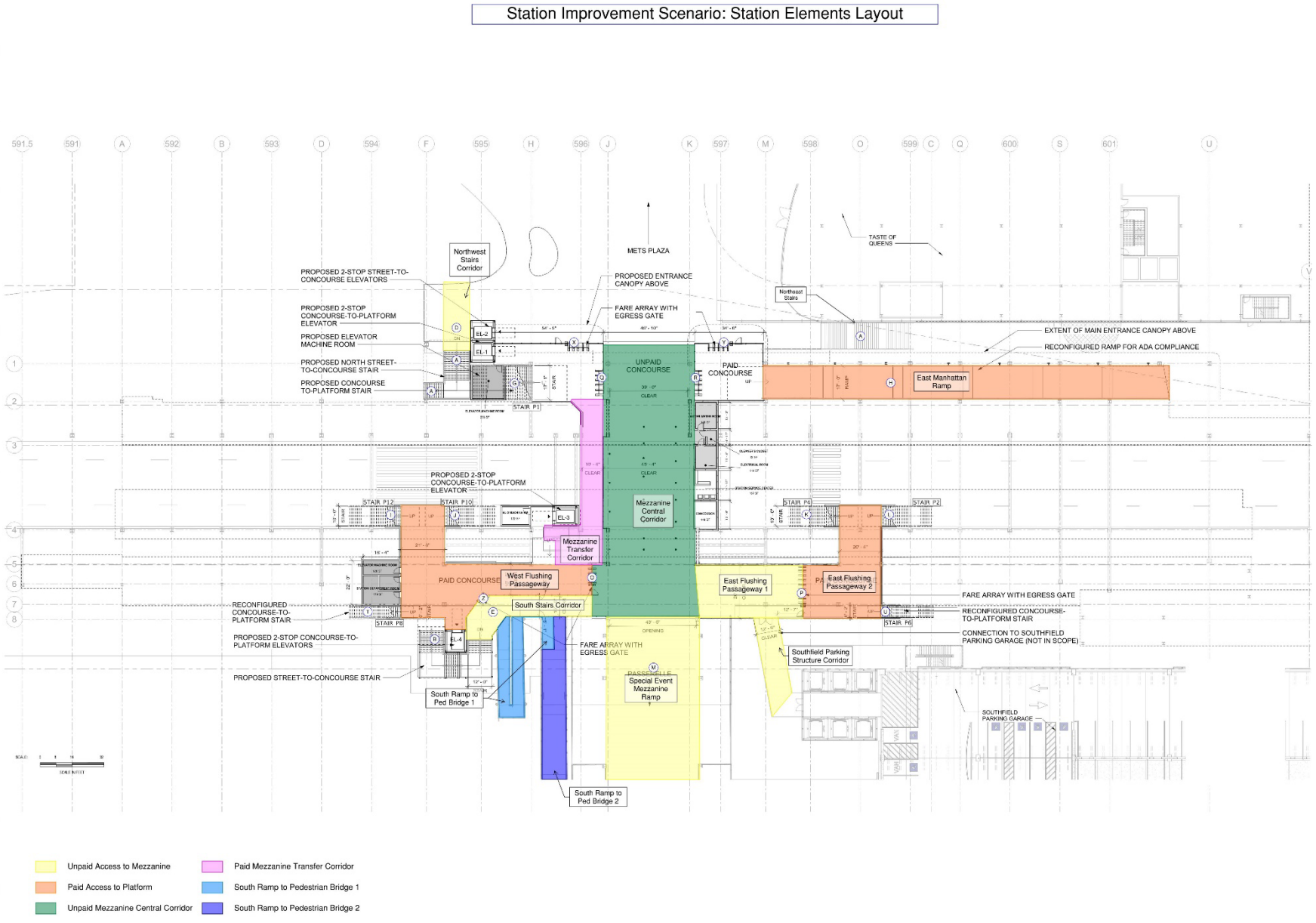


Figure 14-14 Mets – Willets Point With Improvements Scenario: Subway Station Elements – Platform Level

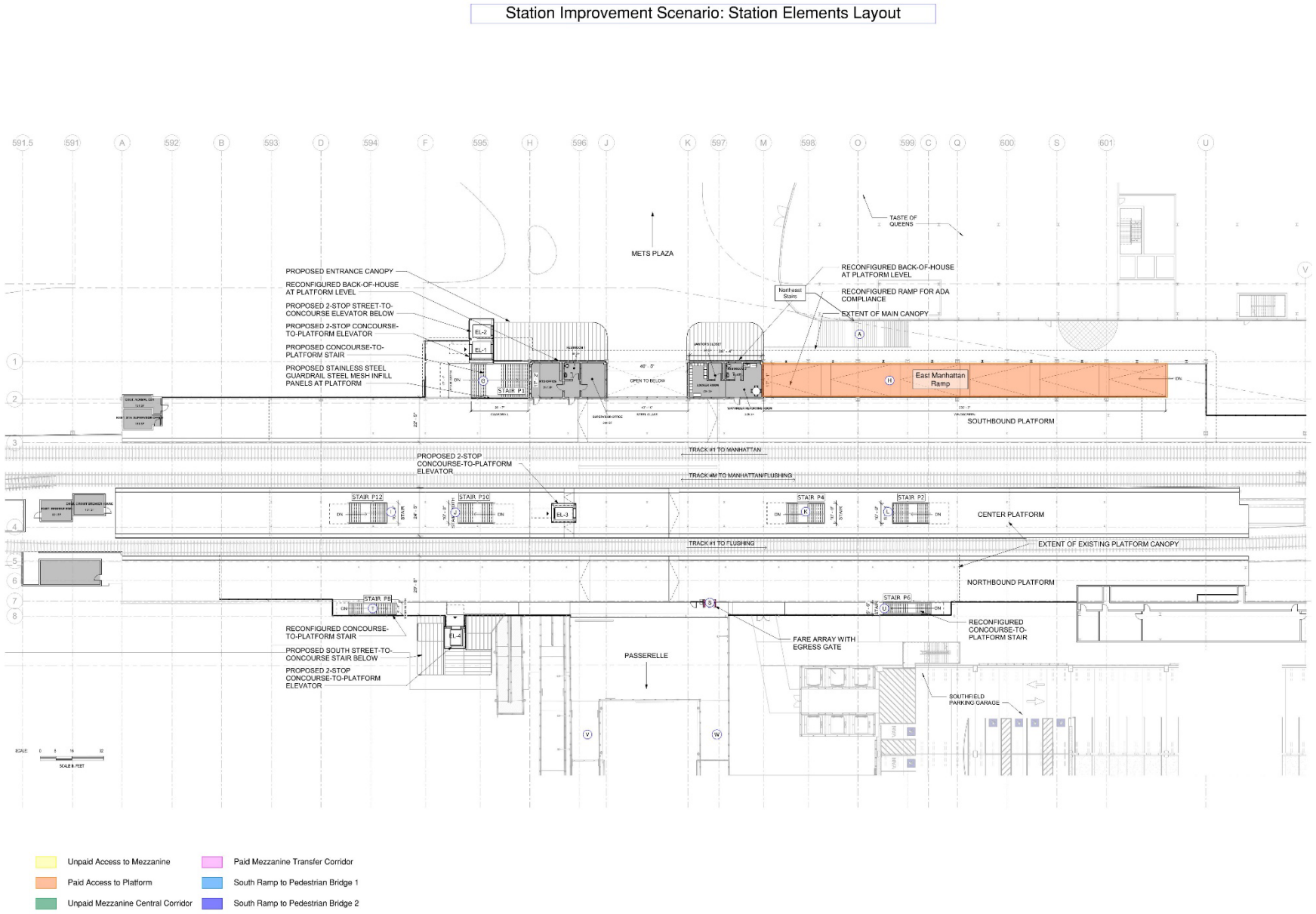


Table 14-73 2030 With-Action with Improvements Scenario Subway Station Vertical Circulation Level of Service

Vertical Circulation Element	Width (ft)	Effective Width (ft)	15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	v/c Ratio	LOS
			Up	Down				
Non-Gameday Weekday AM Peak Hour								
Roosevelt Avenue Northeast Stair	13.0	11.8	163	56	0.80	0.90	0.15	A
Roosevelt Avenue Northwest Stair (S2)	8.0	7	5	3	0.80	0.90	0.01	A
Roosevelt Avenue Northwest Stair (S3)	8.0	7	5	3	0.80	0.90	0.01	A
Northwest Mezzanine Stair (M4)	13.0	11.8	11	6	0.80	0.90	0.01	A
Roosevelt Avenue South Stair (S1)	12.0	10.8	35	23	0.80	0.90	0.04	A
Passerelle South Stair (R1)	5.6	4.6	4	18	0.80	0.90	0.04	A
Manhattan-bound West Stair (P1)	17.1	15.8	195	53	0.75	0.90	0.12	A
Flushing-bound East Stair (P2)	10.0	8.8	16	42	0.75	0.90	0.06	A
Flushing-bound East Stair (P4)	10.0	8.8	8	60	0.75	0.90	0.07	A
Flushing-bound West Stair (P10)	10.0	8.8	6	43	0.75	0.90	0.05	A
Flushing-bound West Stair (P12)	10.0	8.8	8	37	0.75	0.90	0.05	A
Non-Gameday Weekday PM Peak Hour								
Roosevelt Avenue Northeast Stair	13.0	11.8	89	124	0.80	0.90	0.15	A
Roosevelt Avenue Northwest Stair (S2)	8.0	7	5	2	0.80	0.90	0.01	A
Roosevelt Avenue Northwest Stair (S3)	8.0	7	5	2	0.80	0.90	0.01	A
Northwest Mezzanine Stair (M4)	13.0	11.8	11	4	0.80	0.90	0.01	A
Roosevelt Avenue South Stair (S1)	12.0	10.8	6	28	0.80	0.90	0.03	A
Passerelle South Stair (R1)	5.6	4.6	13	28	0.80	0.90	0.08	A
Manhattan-bound West Stair (P1)	17.1	15.8	240	74	0.75	0.90	0.16	A
Flushing-bound East Stair (P2)	10.0	8.8	199	183	0.75	0.90	0.37	A
Flushing-bound East Stair (P4)	10.0	8.8	61	156	0.75	0.90	0.23	A
Flushing-bound West Stair (P10)	10.0	8.8	69	155	0.75	0.90	0.23	A
Flushing-bound West Stair (P12)	10.0	8.8	26	160	0.75	0.90	0.20	A
Gameday Weekday PM Peak Hour								
Roosevelt Avenue Northeast Stair	13.0	11.8	95	128	0.80	0.90	0.16	A
Roosevelt Avenue Northwest Stair (S2)	8.0	7	5	14	0.80	0.90	0.02	A
Roosevelt Avenue Northwest Stair (S3)	8.0	7	4	14	0.80	0.90	0.02	A
Northwest Mezzanine Stair (M4)	13.0	11.8	9	29	0.80	0.90	0.03	A
Roosevelt Avenue South Stair (S1)	12.0	10.8	27	37	0.80	0.90	0.05	A
Passerelle South Stair (R1)	5.6	4.6	9	18	0.80	0.90	0.05	A
Manhattan-bound West Stair (P1)	17.1	15.8	313	69	0.75	0.90	0.19	A
Flushing-bound East Stair (P2)	10.0	8.8	108	499	0.75	0.90	0.65	B
Flushing-bound East Stair (P4)	10.0	8.8	57	448	0.75	0.90	0.55	B
Flushing-bound West Stair (P10)	10.0	8.8	103	510	0.75	0.90	0.66	B
Flushing-bound West Stair (P12)	10.0	8.8	93	679	0.75	0.90	0.84	C
Special Event East Stair (P6)	6.2	5.2	0	0	0.75	1.00	0.00	A

Table 14-73 2030 With-Action with Improvements Scenario Subway Station Vertical Circulation Level of Service

Vertical Circulation Element	Width (ft)	Effective Width (ft)	15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	v/c Ratio	LOS
			Up	Down				
Special Event West Stair (P8)	6.2	5.2	0	0	0.75	1.00	0.00	A
Gameday Saturday PM Pre-game Peak Hour								
Roosevelt Avenue Northeast Stair	13.0	11.8	52	47	0.80	0.90	0.07	A
Roosevelt Avenue Northwest Stair (S2)	8.0	7	4	14	0.80	0.90	0.02	A
Roosevelt Avenue Northwest Stair (S3)	8.0	7	3	14	0.80	0.90	0.02	A
Northwest Mezzanine Stair (M4)	13.0	11.8	7	28	0.80	0.90	0.03	A
Roosevelt Avenue South Stair (S1)	12.0	10.8	19	10	0.80	0.90	0.02	A
Passerelle South Stair (R1)	5.6	4.6	22	16	0.80	0.90	0.07	A
Manhattan-bound West Stair (P1)	17.1	15.8	305	144	0.75	0.90	0.23	A
Flushing-bound East Stair (P2)	10.0	8.8	96	141	0.75	0.90	0.24	A
Flushing-bound East Stair (P4)	10.0	8.8	110	455	0.75	0.90	0.60	B
Flushing-bound West Stair (P10)	10.0	8.8	40	318	0.75	0.90	0.39	A
Flushing-bound West Stair (P12)	10.0	8.8	40	347	0.75	0.90	0.42	A
Special Event East Stair (P6)	6.2	5.2	2	160	0.75	1.00	0.28	A
Special Event West Stair (P8)	6.2	5.2	1	14	0.75	0.90	0.03	A
Gameday Saturday PM Post Game Peak Hour								
Roosevelt Avenue Northeast Stair	13.0	11.8	77	68	0.90	0.90	0.10	A
Roosevelt Avenue Northwest Stair (S2)	8.0	7	65	13	0.90	0.90	0.08	A
Roosevelt Avenue Northwest Stair (S3)	8.0	7	65	13	0.90	0.90	0.08	A
Northwest Mezzanine Stair (M4)	13.0	11.8	131	26	0.90	0.90	0.10	A
Roosevelt Avenue South Stair (S1)	12.0	10.8	20	20	0.90	0.90	0.03	A
Passerelle South Stair (R1)	5.6	4.6	18	37	0.80	0.90	0.10	A
Manhattan-bound West Stair (P1)	17.1	15.8	1,281	226	0.75	0.90	0.74	C
Flushing-bound East Stair (P2)	10.0	8.8	320	124	0.75	0.90	0.41	A
Flushing-bound East Stair (P4)	10.0	8.8	250	144	0.75	0.90	0.37	A
Flushing-bound West Stair (P10)	10.0	8.8	125	183	0.75	0.90	0.31	A
Flushing-bound West Stair (P12)	10.0	8.8	203	132	0.75	0.90	0.32	A
Special Event East Stair (P6)	6.2	5.2	24	21	0.75	0.90	0.07	A
Special Event West Stair (P8)	6.2	5.2	0	1	0.75	1.00	0.00	A

Note:
Methodology based on *2021 CEQR Technical Manual* guidelines
Surging factors only apply to exiting volumes. The surge factor for entry volumes is 1.0. At the street level (Roosevelt Ave Northeast/S1/S2/S3) and mezzanine (M4) stairs during the gameday Saturday PM Post Game peak hour, a surging factor of 0.9 is applied for exit volumes, to account for the activation of the center special event track at the Flushing-bound platform.

Table 14-74 2030 With-Action with Improvements Scenario Subway Station Passageway Level of Service

Subway Station Element	Width (ft)	Effective Width (ft)	15-Minute Pedestrian Volumes In	15-Minute Pedestrian Volumes Out	Surging Factor	Friction Factor	v/c Ratio	LOS
Non-Gameday Weekday AM Peak Hour								
Within Mets – Willets Point Station								
Northwest Stairs Corridor Passageway	13.0	11.0	11	6	0.80	0.90	0.01	A
South Stairs Corridor Passageway	10.0	8.0	35	23	0.80	0.90	0.04	A
Southfield Parking Structure Corridor Passageway	12.0	10.0	0	0	0.80	1.00	0.00	A
Mezzanine Central Corridor Passageway	37.0	35.0	237	190	0.80	0.90	0.08	A
Mezzanine Transfer Corridor Passageway	10.3	8.3	23	2	1.00	0.90	0.02	A
Manhattan-bound East Ramp Passageway	16.0	14.0	86	78	0.75	0.90	0.07	A
Flushing-bound East Passageway 1	26.3	24.3	24	102	0.80	0.90	0.03	A
Flushing-bound East Passageway 2	20.3	18.3	24	102	0.80	0.90	0.04	A
Flushing-bound West Passageway	15.4	13.4	14	80	0.80	0.90	0.04	A
Outside Mets – Willets Point Station								
Roosevelt Avenue South Ramp to Pedestrian Bridge 1	5.7	3.7	4	18	1.00	0.90	0.03	A
Roosevelt Avenue South Ramp to Pedestrian Bridge 2	7.0	5.0	9	37	1.00	0.90	0.05	A
Pedestrian Bridge to Flushing Meadows Corona Park	38.0	36.0	18	47	1.00	0.90	0.01	A
Special Event Mezzanine Ramp Passageway	43.5	41.5	8	10	0.80	0.90	0.00	A
Non-Gameday Weekday PM Peak Hour								
Within Mets – Willets Point Station								
Northwest Stairs Corridor Passageway	13.0	11.0	11	4	0.80	0.90	0.01	A
South Stairs Corridor Passageway	10.0	8.0	6	28	0.80	0.90	0.03	A
Southfield Parking Structure Corridor Passageway	12.0	10.0	0	0	0.80	1.00	0.00	A
Mezzanine Central Corridor Passageway	37.0	35.0	690	576	0.80	0.90	0.22	A
Mezzanine Transfer Corridor Passageway	10.3	8.3	20	3	1.00	0.90	0.02	A
Manhattan-bound East Ramp Passageway	16.0	14.0	66	122	0.75	0.90	0.08	A
Flushing-bound East Passageway 1	26.3	24.3	260	339	0.80	0.90	0.14	A
Flushing-bound East Passageway 2	20.3	18.3	260	339	0.80	0.90	0.18	A
Flushing-bound West Passageway	15.4	13.4	95	315	0.80	0.90	0.18	A
Outside Mets – Willets Point Station								
Roosevelt Avenue South Ramp to Pedestrian Bridge 1	5.7	3.7	13	28	1.00	0.90	0.05	A
Roosevelt Avenue South Ramp to Pedestrian Bridge 2	7.0	5.0	26	55	1.00	0.90	0.08	A

Table 14-74 2030 With-Action with Improvements Scenario Subway Station Passageway Level of Service

Subway Station Element	Width (ft)	Effective Width (ft)	15-Minute Pedestrian Volumes In	15-Minute Pedestrian Volumes Out	Surging Factor	Friction Factor	v/c Ratio	LOS
Pedestrian Bridge to Flushing Meadows Corona Park	38.0	36.0	66	124	1.00	0.90	0.03	A
Special Event Mezzanine Ramp Passageway	43.5	41.5	40	69	0.80	0.90	0.02	A
Gameday Weekday PM Peak Hour								
Within Mets – Willets Point Station								
Northwest Stairs Corridor Passageway	13.0	11.0	9	29	0.80	0.90	0.02	A
South Stairs Corridor Passageway	10.0	8.0	27	37	0.80	0.90	0.05	A
Southfield Parking Structure Corridor Passageway	12.0	10.0	335	104	0.80	0.90	0.27	A
Mezzanine Central Corridor Passageway	37.0	35.0	3159	689	0.80	0.90	0.68	B
Mezzanine Transfer Corridor Passageway	10.3	8.3	121	0	1.00	1.00	0.08	A
Manhattan-bound East Ramp Passageway	16.0	14.0	83	201	0.75	0.90	0.12	A
Flushing-bound East Passageway 1	26.3	24.3	269	1281	0.80	0.90	0.38	A
Flushing-bound East Passageway 2	20.3	18.3	165	947	0.80	0.90	0.36	A
Flushing-bound West Passageway	15.4	13.4	195	1189	0.80	0.90	0.62	B
Outside Mets – Willets Point Station								
Roosevelt Avenue South Ramp to Pedestrian Bridge 1	5.7	3.7	9	18	1.00	0.90	0.04	A
Roosevelt Avenue South Ramp to Pedestrian Bridge 2	7.0	5.0	18	36	1.00	0.90	0.05	A
Pedestrian Bridge to Flushing Meadows Corona Park	38.0	36.0	763	101	1.00	0.90	0.12	A
Special Event Mezzanine Ramp Passageway	43.5	41.5	726	89	0.80	0.90	0.10	A
Special Event East Ramp Passageway	15.8	13.8	1	1	0.75	0.90	0.00	A
Special Event West Ramp Passageway	15.0	13.0	4	18	0.75	0.90	0.01	A
Gameday Saturday PM Pre-game Peak Hour								
Within Mets – Willets Point Station								
Northwest Stairs Corridor Passageway	13.0	11.0	7	28	0.80	0.90	0.02	A
South Stairs Corridor Passageway	10.0	8.0	19	10	0.80	0.90	0.02	A
Southfield Parking Structure Corridor Passageway	12.0	10.0	709	122	0.80	0.90	0.51	B
Mezzanine Central Corridor Passageway	37.0	35.0	3014	722	0.80	0.90	0.66	B
Mezzanine Transfer Corridor Passageway	10.3	8.3	63	0	1.00	1.00	0.04	A
Manhattan-bound East Ramp Passageway	16.0	14.0	110	233	0.75	0.90	0.15	A
Flushing-bound East Passageway 1	26.3	24.3	329	1464	0.80	0.90	0.44	A
Flushing-bound East Passageway 2	20.3	18.3	208	755	0.80	0.90	0.31	A
Flushing-bound West Passageway	15.4	13.4	81	678	0.80	0.90	0.34	A

Table 14-74 2030 With-Action with Improvements Scenario Subway Station Passageway Level of Service

Subway Station Element	Width (ft)	Effective Width (ft)	15-Minute Pedestrian Volumes In	15-Minute Pedestrian Volumes Out	Surging Factor	Friction Factor	v/c Ratio	LOS
Outside Mets – Willets Point Station								
Roosevelt Avenue South Ramp to Pedestrian Bridge 1	5.7	3.7	22	16	1.00	0.90	0.05	A
Roosevelt Avenue South Ramp to Pedestrian Bridge 2	7.0	5.0	44	32	1.00	0.90	0.08	A
Pedestrian Bridge to Flushing Meadows Corona Park	38.0	36.0	570	241	1.00	0.90	0.11	A
Special Event Mezzanine Ramp Passageway	43.5	41.5	843	160	0.80	0.90	0.12	A
Special Event East Ramp Passageway	15.8	13.8	3	9	0.75	0.90	0.01	A
Special Event West Ramp Passageway	15.0	13.0	7	363	0.75	1.00	0.17	A
Gameday Saturday PM Post Game Peak Hour								
Within Mets – Willets Point Station								
Northwest Stairs Corridor Passageway	13.0	11.0	131	26	0.80	0.90	0.07	A
South Stairs Corridor Passageway	10.0	8.0	20	20	0.80	0.90	0.03	A
Southfield Parking Structure Corridor Passageway	12.0	10.0	28	1156	0.80	1.00	0.66	B
Mezzanine Central Corridor Passageway	37.0	35.0	729	4207	0.80	0.90	0.87	C
Mezzanine Transfer Corridor Passageway	10.3	8.3	38	0	1.00	1.00	0.03	A
Manhattan-bound East Ramp Passageway	16.0	14.0	1038	198	0.75	0.90	0.46	B
Flushing-bound East Passageway 1	26.3	24.3	1750	318	0.80	0.90	0.44	A
Flushing-bound East Passageway 2	20.3	18.3	594	290	0.80	0.90	0.26	A
Flushing-bound West Passageway	15.4	13.4	328	316	0.80	0.90	0.27	A
Outside Mets – Willets Point Station								
Roosevelt Avenue South Ramp to Pedestrian Bridge 1	5.7	3.7	18	37	1.00	0.90	0.07	A
Roosevelt Avenue South Ramp to Pedestrian Bridge 2	7.0	5.0	36	73	1.00	0.90	0.11	A
Pedestrian Bridge to Flushing Meadows Corona Park	38.0	36.0	163	1077	1.00	0.90	0.17	A
Special Event Mezzanine Ramp Passageway	43.5	41.5	163	1047	0.80	0.90	0.18	A
Special Event East Ramp Passageway	15.8	13.8	3	1	0.75	0.90	0.00	A
Special Event West Ramp Passageway	15.0	13.0	13	41	0.75	0.90	0.03	A

Note:
Methodology based on *2021 CEQR Technical Manual* guidelines
Surging factors only apply to exiting volumes. The surge factor for entry volumes is 1.0. At the Mezzanine Central Corridor Passageway, surging factors of 0.80 are applied to the entry and exit volumes during non-gameday and gameday peak hours. This is due to the passageway experiencing cross flows from both the platforms and station entrances due to its central location within the station.

Table 14-75 2030 With-Action With Improvements Scenario Subway Station Fare Control Level of Service

Fare Control Element	15-Minute Pedestrian Volumes In	15-Minute Pedestrian Volumes Out	Surging Factor	Friction Factor	v/c Ratio	LOS
Non-Gameday Weekday AM Peak Hour						
Manhattan-bound East Turnstiles	24	40	0.80	0.90	0.03	A
Manhattan-bound Northeast Turnstiles	61	38	0.80	0.90	0.06	A
Manhattan-bound West Turnstiles	146	27	0.80	0.90	0.09	A
Manhattan-bound Northwest Turnstiles	26	25	0.80	0.90	0.03	A
Flushing-bound East Turnstiles	24	102	0.80	0.90	0.04	A
Flushing-bound West Turnstiles	12	54	0.80	0.90	0.04	A
Flushing-bound Southwest Turnstiles	0	3	0.80	0.90	0.00	A
Non-Gameday Weekday PM Peak Hour						
Manhattan-bound East Turnstiles	28	62	0.80	0.90	0.04	A
Manhattan-bound Northeast Turnstiles	38	60	0.80	0.90	0.06	A
Manhattan-bound West Turnstiles	151	37	0.80	0.90	0.10	A
Manhattan-bound Northwest Turnstiles	68	34	0.80	0.90	0.06	A
Flushing-bound East Turnstiles	260	339	0.80	0.90	0.18	A
Flushing-bound West Turnstiles	91	285	0.80	0.90	0.21	A
Flushing-bound Southwest Turnstiles	0	9	0.80	1.00	0.01	A
Gameday Weekday PM Peak Hour						
Manhattan-bound East Turnstiles	43	100	0.80	0.90	0.07	A
Manhattan-bound Northeast Turnstiles	39	101	0.80	0.90	0.08	A
Manhattan-bound West Turnstiles	133	37	0.80	0.90	0.09	A
Manhattan-bound Northwest Turnstiles	59	32	0.80	0.90	0.06	A
Flushing-bound East Turnstiles	166	946	0.80	0.90	0.31	A
Flushing-bound West Turnstiles	195	1,057	0.80	0.90	0.70	B
Flushing-bound Southwest Turnstiles	0	11	0.80	1.00	0.01	A
Special Event High Entry/Exit	2	16	0.75	0.90	0.03	A
Gameday Saturday PM Pre-game Peak Hour						
Manhattan-bound East Turnstiles	63	118	0.80	0.90	0.08	A
Manhattan-bound Northeast Turnstiles	47	115	0.80	0.90	0.09	A
Manhattan-bound West Turnstiles	144	74	0.80	0.90	0.11	A
Manhattan-bound Northwest Turnstiles	98	71	0.80	0.90	0.10	A
Flushing-bound East Turnstiles	208	755	0.80	0.90	0.27	A
Flushing-bound West Turnstiles	81	612	0.80	0.90	0.38	A
Flushing-bound Southwest Turnstiles	0	3	0.80	1.00	0.00	A
Special Event High Entry/Exit	5	347	0.75	1.00	0.44	A
Gameday Saturday PM Post Game Peak Hour						
Manhattan-bound East Turnstiles	549	124	0.80	0.90	0.34	A
Manhattan-bound Northeast Turnstiles	488	75	0.80	0.90	0.36	A

Table 14-75 2030 With-Action With Improvements Scenario Subway Station Fare Control Level of Service

Fare Control Element	15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	v/c Ratio	LOS
	In	Out				
Manhattan-bound West Turnstiles	643	141	0.80	0.90	0.40	A
Manhattan-bound Northwest Turnstiles	600	85	0.80	0.90	0.44	A
Flushing-bound East Turnstiles	594	290	0.80	0.90	0.27	A
Flushing-bound West Turnstiles	326	277	0.80	0.90	0.36	A
Flushing-bound Southwest Turnstiles	1	2	0.80	0.90	0.00	A
Special Event High Entry/Exit	12	39	0.75	0.90	0.08	A

Note:
Methodology based on *2021 CEQR Technical Manual* guidelines
Surging factors only apply to exiting volumes. The surge factor for entry volumes is 1.0.

The above improvements would reduce passenger crowding and congestion and provide more unpaid circulation capacity in the Mezzanine Central Corridor compared to the Mezzanine Outside Fare Zone passageway in the Baseline Scenario With-Action conditions. As shown in **Table 14-73** through **Table 14-75** above, under the Station Improvements Scenario, all station elements would operate at acceptable levels of service during the analysis peak hours.

Subway-Line-haul Conditions

Table 14-76 below summarizes anticipated 2030 With-Action subway line-haul conditions at the maximum load point of the subway line in the peak directions. The subway line-haul analysis is unaffected by the proposed station improvements under the With Improvements Scenario; therefore, only one set of future With-Action results is shown. In the With-Action condition, the No. 7 subway line would operate at a v/c ratio of 1.23 during the Saturday PM peak period, compared to a v/c ratio of 1.14 in the No-Action condition. Although the line would operate at the v/c ratio above 1.0, the project would only result in an increase of 4.60 passengers per car in the northbound direction during this peak period; this increase is below the five subway passenger per car threshold that is considered a significant impact per the *CEQR Technical Manual* criteria. Therefore, significant subway line-haul impacts are not expected as a result of the project. However, it should be noted that due to the minimal degree to which the project-generated passengers fall under significant impact thresholds and high demand of uses of nearby station developments in the area, the increase of 4.60 passengers per car is likely to perceptible by passengers.

Table 14-76 With-Action Subway Line-Haul Analysis

Peak Hour	Route	Direction	Max Load Point (leaving station)	Average Passengers Per Hour[1,2]	Average Trains Per Hour[1,2]	Average Cars Per Hour[1]	Average Passengers Per Car[1,2]	Guideline Passengers Per Car	V/C Ratio[4]
AM	7 (local)	SB	40 St – Lowery St	14,640	15.0	165	89	110	0.81
	7 (express)	SB	61 St – Woodside	16,364	14.0	154	106	110	0.97
	7 (combined)	SB	Vernon Blvd – Jackson Av	28,101	29.0	319	88	110	0.80
PM	7 (local)	NB	Queensboro Plaza	11,732	14.0	154	76	110	0.69
	7 (express)	NB	Queensboro Plaza	13,975	14.0	154	91	110	0.82
	7 (combined)	NB	Queensboro Plaza	25,869	28.0	308	84	110	0.76
SAT PM	7 (local)	NB	74 St-Broadway	10,139	15.0	165	61	50	1.23

Notes:
[1] Weekday AM data is based on a three-year average of pre-pandemic ridership and 2023 train throughput data from NYCT
[2] Weekday PM data is based on 2017-2018 ridership and 2019 train throughput data from NYCT; Saturday PM is based on 2019 ridership and train throughout from NYCT (Saturday is based on 2018 modeled ridership)
[3] Guideline capacities are based on NYCT rush hour loading guidelines which vary by car type, line, and location based on frequency and type of service.
[4] Volume to guideline capacity ratio

Buses

The Proposed Project would generate 228 bus trips (196 "ins" and 32 "outs) during the weekday AM peak hour, a maximum of 735 bus trips (445 "ins" and 290 "outs) during the weekday PM peak hour, and a maximum of 412 bus trips (215 "ins" and 197 "outs") during the Saturday PM peal hour. As shown in **Table 14-77** below,

- During the weekday AM peak hour, the Q19 bus route demand is expected to increase by a maximum of five eastbound trips at the Northern Boulevard/126th Place maximum load point and the projected bus service would provide adequate supply.
- During the weekday PM peak hour, the Q19 bus route demand is expected to increase by two eastbound bus trips at the Roosevelt Avenue/108th Street maximum load point and the projected bus service would provide adequate supply.
- During the Saturday PM peak hour, the Q19 bus route demand is expected to increase by one eastbound trip at the Astoria Boulevard/ 49th Street maximum load point and the projected bus service would provide adequate supply.
- During the weekday AM peak hour, the Q48 bus route demand is expected to increase by a maximum of 61 eastbound trips at the Roosevelt Avenue/114th Street maximum load point and the projected bus service would provide adequate supply. Demand would be expected to increase by nine westbound trips at the 108th Street/34th Avenue maximum load point, and the projected bus service would provide adequate supply.
- During the weekday PM peak hour, the Q48 bus route demand is expected to increase by 70 eastbound trips at the 108th Street/37th Avenue maximum load point and increase by 126 eastbound trips at the Roosevelt Avenue/108th Street maximum load point. This would result in a shortfall of 18 and 23 passenger spaces, respectively. Demand on the Q48 bus route is expected to increase by 289 westbound trips at the Roosevelt Avenue/College Point Boulevard maximum load point, which would result in a shortfall of 259 passenger spaces.

- During the Saturday PM peak hour, the Q48 bus route demand is expected to increase by 130 eastbound trips at the Roosevelt Avenue/Willets Point Boulevard Station maximum load point, which would result in a shortfall of 26 passenger spaces. Demand on the Q48 bus route is expected to increase by 127 westbound trips at the Roosevelt Avenue/Grand Central Parkway maximum load point, which would result in a shortfall of 126 passenger spaces.
- During the weekday AM peak hour, the Q66 bus route demand is expected to increase by a maximum of five eastbound trips at the Northern Boulevard/126th Place maximum load point and the projected bus service would provide adequate supply.
- During the weekday PM peak hour, the Q66 bus route demand is expected to increase by two eastbound bus trips at the Northern Boulevard/54th Street maximum load point and the projected bus service would provide adequate supply.
- During the Saturday PM peak hour, the Q19 bus route demand is expected to increase by one eastbound trip at the Northern Boulevard/54th Street maximum load point and the projected bus service would provide adequate supply.

The With-Action condition analysis determined that there would be adequate supply for the Proposed Project's projected demand for the Q19 and Q66 bus routes in both the eastbound and westbound directions, as well as the Q48 bus route in both the eastbound and westbound directions during the weekday AM peak hour. However, the Proposed Project would result in a capacity shortfall for the Q48 bus route detailed below; this bus route would be significantly impacted.

- The Q48 bus route in the eastbound and westbound directions during the weekday PM and Saturday PM peak hours

Table 14-77 With-Action Local Bus Analysis

Peak Hour	Route	Direction	Maximum Load Point	Peak Hour Buses[1]	No-Action Available Capacity[3]	Project Increment	Available Capacity[3]
AM	Q19	EB	Astoria Blvd/108 St	5	77	4	73
			Northern Blvd/126 Pl	5	83	5	78
	Q48	EB	Roosevelt Av/108 St	4	109	55	54
			Roosevelt Av/114 St	4	120	61	59
		WB	108 St/34 Av	4	81	9	72
	Q66	EB	Northern Blvd/127 Pl	15	294	1	293
			Northern Blvd/126 Pl	15	283	5	278
PM	Q19	EB	Astoria Blvd/77 St	3	15	2	13
	Q48	EB	108 St/37 Av	3	52	70	-18
			Roosevelt Av/108 St	3	103	126	-23
		WB	Roosevelt Av/College Pt Blvd	4	30	289	-259
	Q66	EB	Northern Blvd/54 St	11	191	2	189
SAT PM	Q19	EB	Astoria Blvd/49 St	2	45	1	44
	Q48	EB	Roosevelt Av/Willets Pt Blvd Station	4	104	130	-26
		WB	Roosevelt Av/Grand Central Pkwy	3	1	127	-126
	Q66	EB	Northern Blvd/54 St	6	79	1	78

Notes:
[1] Based on most currently available timetables (September 2022)
[2] Based on most currently available data from NYCT (May 2023)
[3] Available capacities based on NYCT loading guidelines of 54 passengers per standard bus
[4]For load points where data provided by NYCT is for a half hour, the peak hour passenger volumes were prorated to reflect a full hour
Shading denotes significantly impacted bus route

Pedestrians

The project-generated pedestrian volumes were distributed through the pedestrian network and added to the 2030 No-Action volumes to develop the 2030 With-Action pedestrian volumes. Pedestrian analyses were performed based on these volumes and the With-Action pedestrian levels of service were determined for the analysis locations. The Proposed Project would also include improvements previously mentioned for the load roadway traffic analysis, as well as the following features:

- Consolidation of the east and west crosswalks at the intersection of Roosevelt Avenue and the Mets- Willets Point Subway Station; this intersection would be restriped with one central 70-ft wide crosswalk.
- A new signal at the intersection of 126th Street/Seaver Way and 35th Avenue, with proposed crosswalks on all approaches.
- A new signal at the intersection of Roosevelt Avenue and Stadium Place, which is analyzed in the With-Action condition.

› Sidewalk widenings along Roosevelt Avenue within the site, past the pedestrian right-of-way (ROW), in order to accommodate the proposed bicycle lanes along the corridor.

Details regarding the reconfiguration of the proposed bicycle lanes and pedestrian sidewalk space along Roosevelt Avenue will be finalized between the Draft EIS and Final EIS; however, the Applicant has committed that the redefined sidewalk width would be at minimum maintained as in existing conditions. Further sidewalk widening into the Development Site property line would improve these pedestrian elements. Therefore, no changes to sidewalk geometry have been made as part of the With-Action pedestrian analysis.

As a result of the roadway improvements proposed at the intersection of 126th Street/Seaver Way and 34th Avenue, the west crosswalk and southwest corner at this intersection would no longer exist in the With-Action condition. Due to reassignment of pedestrians utilizing the new crossings at 35th Avenue, the west sidewalk along 126th Street/Seaver Way between 34th Avenue and Citi Field Entrance 11 is not analyzed in the With-Action condition. The west sidewalk along 126th Street/Seaver Way between 35th Avenue and 36th Avenue is analyzed in the With-Action condition.

The With-Action pedestrian volumes are provided in **Appendix D. Table 14-78** through **Table 14-79** provide an overview of the pedestrian levels of service for the peak hours analyzed, and pedestrian levels of service for the peak hours analyzed are provided in **Table 14-80** through **Table 14-1**. The summary of the With-Action condition indicates that:

› All sidewalk elements would operate at acceptable LOS C or better during the non-gameday weekday AM, midday, and Saturday PM peak hours. One element would operate at LOS D during the non-gameday weekday PM peak hour, compared to LOS E in the No-Action condition. On gamedays, one sidewalk element would operate at LOS D during the weekday PM and Sunday midday peak hours, similar to the No-Action condition. Two sidewalk elements would operate at LOS D or E during the gameday Saturday PM Pre-game peak hour, compared to one element at LOS E in the No-Action condition. Three sidewalk elements would operate at LOS D or E during the gameday Saturday PM Post Game peak hour, compared to one element at LOS E in the No-Action condition. Four sidewalk elements would operate at LOS D or F during the gameday Sunday PM peak hour, compared to two elements in the No-Action condition.

› All crosswalks would operate at acceptable LOS C or better during the non-gameday weekday AM peak hour compared to one crosswalk element at LOS E in the No-Action condition. Two crosswalk elements would operate at LOS D or F during the non-gameday weekday midday, PM, and Saturday PM peak hours, compared to one crosswalk element at LOS E during the non-gameday weekday midday and PM peak hours and all crosswalk elements at LOS C or better during the non-gameday Saturday PM peak hour in the No-Action condition. On gamedays, three crosswalk elements would operate at D, E or F during the gameday weekday PM peak hour compared to one crosswalk element in the No-Action condition. Four crosswalk elements would operate at LOS D, E, or F during the Saturday PM Pre-game peak hour, compared to one crosswalk element at LOS F in the No-Action condition. Six crosswalk elements would operate at LOS D or F during the Saturday PM Post Game peak hour, compared to four crosswalk elements at LOS E or F in the No-Action condition. Two crosswalk elements operate at LOS D or F in the Sunday midday peak hour, compared to one crosswalk element at LOS F in the No-Action condition. Five crosswalk elements would operate at LOS D, E or F during the gameday Sunday PM peak hour, compared to two crosswalk elements at LOS E or F in the No-Action condition.

› All corners would operate at acceptable LOS C or better during the non-gameday peak hours. On gamedays, all corner elements would operate at acceptable LOS C or better during the

weekday PM peak hour. One corner element would operate at LOS F during the Saturday PM Pre-game and Sunday midday peak hours, compared to all corner elements at LOS C or better during the Saturday PM Pre-game and Sunday midday peak hours in the No-Action condition. Four corner elements would operate at LOS D or F during the gameday Saturday PM Post peak hour, compared to two corner elements at LOS D or F in the No-Action condition. Four corner elements would operate at LOS D, E, or F during the gameday Sunday PM peak hour, compared to two corner elements at LOS E or F in the No-Action condition.

Of the 41 pedestrian elements analyzed in the With-Action condition, the Proposed Project would result in significant impacts at:

- Two pedestrian elements (two crosswalks) during the non-gameday weekday midday, PM and Saturday PM peak hours
- Three pedestrian elements (one sidewalk, two crosswalks) during the gameday weekday PM hour
- Five pedestrian elements (two sidewalks, two crosswalks, and one corner) during the gameday Saturday PM Pre-game peak hour
- Six pedestrian elements (two sidewalks, two crosswalks, and two corners) during the gameday Saturday PM Post Game peak hour
- Three pedestrian elements (one sidewalk, one crosswalk, one corner) during the gameday Sunday midday peak hour
- Eight pedestrian elements (three sidewalks, three crosswalks, and two corners) during the gameday Sunday PM peak hour

Mitigation measures that could be implemented to mitigate these significant adverse pedestrian impacts are discussed in **Chapter 21, Mitigation**.

Table 14-78 2030 With Action Non-Gameday Pedestrian Levels of Service Summary

	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Saturday PM Peak Hour
Sidewalk Elements				
Sidewalks at LOS A/B/C	16	16	15	16
Sidewalks at Unacceptable LOS D	0	0	1	0
Sidewalks at LOS E	0	0	0	0
Sidewalks at LOS F	0	0	0	0
Number of significantly impacted sidewalk elements	0	0	0	0
Crosswalk Elements				
Crosswalks at LOS A/B/C	16	14	14	14
Crosswalks at Unacceptable LOS D	0	1	1	0
Crosswalks at LOS E	0	0	0	0
Crosswalks at LOS F	0	1	1	2
Number of significantly impacted crosswalk elements	0	2	2	2
Corner Elements				
Corners at LOS A/B/C	9	9	9	9
Corners at Unacceptable LOS D	0	0	0	0
Corners at LOS E	0	0	0	0
Corners at LOS F	0	0	0	0
Number of significantly impacted corner elements	0	0	0	0

Note: Includes 16 sidewalk, 16 crosswalk, and nine corner analysis locations

Table 14-79 2030 With-Action Gameday Pedestrian Levels of Service Summary

	Weekday PM Peak Hour	Saturday PM Pre-game Peak Hour	Saturday PM Post Game Peak Hour	Sunday Midday Peak Hour	Sunday PM Peak Hour
Sidewalk Elements					
Sidewalks at LOS A/B/C	15	14	13	15	12
Sidewalks at Unacceptable LOS D	1	1	2	0	3
Sidewalks at LOS E	0	1	1	1	0
Sidewalks at LOS F	0	0	0	0	1
Number of significantly impacted sidewalk elements	1	2	2	1	3
Crosswalk Elements					
Crosswalks at LOS A/B/C	13	12	10	14	11
Crosswalks at Unacceptable LOS D	1	2	3	1	1
Crosswalks at LOS E	1	1	0	0	1
Crosswalks at LOS F	1	1	3	1	3
Number of significantly impacted crosswalk elements	2	2	2	1	3
Corner Elements					
Corners at LOS A/B/C	9	8	5	8	5
Corners at Unacceptable LOS D	0	0	2	0	1
Corners at LOS E	0	0	0	0	1
Corners at LOS F	0	1	2	1	2
Number of significantly impacted corner elements	0	1	2	1	2

Note: Includes 16 sidewalk, 14 crosswalk, and eight corner analysis locations

Table 14-80 2030 With Action Non-Gameday Pedestrian Levels of Service – Sidewalks

		Weekday AM Peak Hour			Weekday Midday Peal Hour			Weekday PM Peak Hour			Saturday PM Peak Hour		
Sidewalk	**Effective Width, ft**	**Volume, ped/hr**	**Avg Ped Space, SF/P**	**LOS**	**Volume, ped/hr**	**Avg Ped Space, SF/P**	**LOS**	**Volume, ped/hr**	**Avg Ped Space, SF/P**	**LOS**	**Volume, ped/hr**	**Avg Ped Space, SF/P**	**LOS**
114th Street between 39th Avenue and Roosevelt Avenue (west side)	4.5	53	672.4	A	87	571.7	A	80	710.6	A	60	845.3	A
114th Street between Roosevelt Avenue and 41st Avenue (west side)	1.8	177	87.3	C	286	59.1	C	377	55.4	C	245	98.3	B

Table 14-80 2030 With Action Non-Gameday Pedestrian Levels of Service – Sidewalks

		Weekday AM Peak Hour			Weekday Midday Peal Hour			Weekday PM Peak Hour			Saturday PM Peak Hour		
Sidewalk	Effective Width, ft	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS
126th Street/Seaver Way between Northern Boulevard and 34th Avenue (east side)	7.5	309	213.3	B	299	181.1	B	403	147.0	B	243	293.0	B
126th Street/Seaver Way between 34th Avenue and 35th Avenue (east side)	7.5	587	100.7	B	449	86.7	C	650	68.7	C	385	76.4	C
126th Street/Seaver Way between 35th Avenue and 36th Avenue (west side)	6.5	924	40.5	C	608	98.2	B	915	36.1	D	517	48.7	C
126th Street/Seaver Way between 36th Avenue and Citi Field Entrance 1 (west side)	4.5	531	106.9	B	346	123.2	B	538	103.8	B	282	110.2	B
Roosevelt Avenue between 112th Street and 114th Street (north side)	3.0	213	162.7	B	314	116.2	B	477	87.9	C	257	123.9	B
Roosevelt Avenue between 112th Street and 114th Street (south side)	3.7	185	249.1	B	285	185.3	B	418	118.2	B	246	130.4	B
Roosevelt Avenue between 114th Street and Shea Road (north side)	4.0	232	212.2	B	301	107.5	B	481	94.0	B	277	180.2	B
Roosevelt Avenue between 114th Street and Shea Road (south side)	4.0	167	308.1	B	293	94.6	B	400	98.5	B	235	134.2	B
Roosevelt Avenue between Shea Road and Subway Station (north side)	10.1	339	386.9	B	514	216.2	B	797	161.1	B	490	227.2	B
Roosevelt Avenue between Shea Road and Subway Station (south side)	10.7	167	822.0	A	293	253.5	B	400	263.8	B	235	358.8	B

Table 14-80 2030 With Action Non-Gameday Pedestrian Levels of Service – Sidewalks

		Weekday AM Peak Hour			Weekday Midday Peal Hour			Weekday PM Peak Hour			Saturday PM Peak Hour		
Sidewalk	Effective Width, ft	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS
Roosevelt Avenue between Subway Station and 126th Street/Seaver Way (north side)	11.3	976	159.4	B	805	148.3	B	1,282	102.8	B	979	133.8	B
Roosevelt Avenue between Subway Station and 126th Street/Seaver Way (south side)	10.5	44	1,417.5	A	88	1,181.2	A	113	735.9	A	122	340.3	B
Roosevelt Avenue between 126th Street/Seaver Way and Flushing Creek (north side)	3.1	254	121.7	B	387	77.8	C	599	54.8	C	338	103.4	B
Roosevelt Avenue between 126th Street/Seaver Way and Flushing Creek (south side)	10.1	222	179.9	B	403	148.5	B	590	67.0	C	409	391.4	B

Table 14-81 2030 With-Action Gameday Pedestrian Levels of Service – Sidewalks

Sidewalk	Weekday PM Peak Hour			Saturday PM Pre-game Peak Hour			Saturday PM Post Game Peak Hour			Sunday Midday Peak Hour			Sunday PM Peak Hour		
	Effective Width, ft	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS
114th Street between 39th Avenue and Roosevelt Avenue (west side)	4.5	117	461.3	B	40	1,176.2	A	226	197.8	B	26	1,566.6	A	25	1,247.4	A
114th Street between Roosevelt Avenue and 41st Avenue (west side)	1.8	414	58.6	C	334	57.7	C	318	46.3	C	332	76.2	C	462	46.8	C
126th Street/Seaver Way between Northern Boulevard and 34th Avenue (east side)	7.5	484	192.6	B	910	100.9	B	1,169	50.7	B	780	113.5	B	1,263	42.0	C
126th Street/Seaver Way between 34th Avenue and 35th Avenue (east side)	7.5	730	98.7	B	959	29.2	D	2,103	26.7	D	972	63.9	C	1,266	43.8	C
126th Street/Seaver Way between 35th Avenue and 36th Avenue (west side)	6.5	975	57.3	C	1,096	56.0	C	1,979	27.3	D	1,109	81.2	C	1,412	32.8	D
126th Street/Seaver Way between 36th Avenue and Citi Field Entrance 1 (west side)	4.5	1,660	35.7	D	2,416	15.0	E	5,123	2.2	E	2,598	19.4	E	7,127	*	F
Roosevelt Avenue between 112th Street and 114th Street (north side)	3.0	469	83.8	C	427	98.1	B	491	71.6	B	410	90.8	B	603	48.6	C

Table 14-81 2030 With-Action Gameday Pedestrian Levels of Service – Sidewalks

Sidewalk	Weekday PM Peak Hour				Saturday PM Pre-game Peak Hour			Saturday PM Post Game Peak Hour			Sunday Midday Peak Hour			Sunday PM Peak Hour		
	Effective Width, ft	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS
Roosevelt Avenue between 112th Street and 114th Street (south side)	3.7	417	117.1	B	365	131.0	B	341	139.6	B	390	127.3	B	474	101.3	B
Roosevelt Avenue between 114th Street and Shea Road (north side)	4.0	524	102.9	B	451	109.0	B	762	55.2	B	485	97.9	B	853	44.5	C
Roosevelt Avenue between 114th Street and Shea Road (south side)	4.0	443	133.0	B	375	125.2	B	378	138.9	B	333	111.4	B	485	96.0	B
Roosevelt Avenue between Shea Road and Subway Station (north side)	10.1	853	163.0	B	1,482	79.8	C	810	132.9	C	1,551	58.5	C	1,843	42.2	C
Roosevelt Avenue between Shea Road and Subway Station (south side)	10.7	443	355.6	B	375	334.8	B	378	371.2	B	333	298.1	B	485	257.2	B
Roosevelt Avenue between Subway Station and 126th Street/Seaver Way (north side)	11.3	1,314	122.7	B	1,199	115.0	B	1,195	74.7	B	1,157	109.4	B	2,099	37.6	D
Roosevelt Avenue between Subway Station and 126th Street/Seaver Way (south side)	10.5	124	698.5	A	168	551.6	A	260	560.7	A	150	831.5	A	235	418.1	B

Table 14-81 2030 With-Action Gameday Pedestrian Levels of Service – Sidewalks

	Weekday PM Peak Hour				Saturday PM Pre-game Peak Hour			Saturday PM Post Game Peak Hour			Sunday Midday Peak Hour			Sunday PM Peak Hour		
Sidewalk	**Effective Width, ft**	**Volume, ped/hr**	**Avg Ped Space, SF/P**	**LOS**	**Volume, ped/hr**	**Avg Ped Space, SF/P**	**LOS**	**Volume, ped/hr**	**Avg Ped Space, SF/P**	**LOS**	**Volume, ped/hr**	**Avg Ped Space, SF/P**	**LOS**	**Volume, ped/hr**	**Avg Ped Space, SF/P**	**LOS**
Roosevelt Avenue between 126th Street/Seaver Way and Flushing Creek (north side)	3.1	651	58.8	C	657	62.0	C	314	154.3	B	609	70.4	C	832	24.7	D
Roosevelt Avenue between 126th Street/Seaver Way and Flushing Creek (south side)	10.1	589	67.1	C	462	346.4	B	1,200	66.1	C	441	362.6	B	642	249.0	B

Shading denotes significantly impacted pedestrian element

* The available sidewalk area would not be sufficient to accommodate all pedestrians; some pedestrians would need to use additional right-of way within the roadway to walk along the street.

Table 14-82 2030 With-Action Non-Gameday Pedestrian Levels of Service – Crosswalks

		Weekday AM Peak Hour			Weekday Midday Peak Hour			Weekday PM Peak Hour			Saturday PM Peak Hour		
Intersection	Crosswalk	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS
126th Street/Seaver Way and 34th Avenue	East	309	110.1	A	299	170.0	A	403	126.3	A	243	97.6	A
	South	0	-	A	0	-	A	0	-	A	0	-	A
126th Street/Seaver Way and 35th Avenue	East	716	48.8	B	620	67.0	A	870	45.9	B	521	39.8	C
	South	318	61.9	A	214	38.6	C	322	37.7	C	173	92.2	A
	West	615	26.8	C	400	54.2	B	595	125.4	A	346	61.1	A
126th Street/Seaver Way and Roosevelt Avenue	North	655	83.0	A	770	58.7	B	1,127	42.0	B	649	90.2	A
	East	167	39.9	C	241	20.1	D	351	16.6	D	225	2.0	F
	South	99	248.7	A	207	173.1	A	295	211.5	A	216	499.5	A
	West	72	309.4	A	155	*	F	217	5.9	F	109	*	F
Roosevelt Avenue and Subway Station	Center	218	225.8	A	413	120.5	A	713	80.8	A	490	87.3	A
Roosevelt Avenue and Stadium Place	East	0	-	A	0	-	A	0	-	A	0	-	A
	South	167	176.1	A	293	101.7	A	400	47.8	B	235	117.5	A
Roosevelt Avenue and 114th Street	North	251	195.9	A	396	90.4	A	605	59.2	B	374	98.5	A
	East	49	76.9	A	108	35.9	C	163	49.9	B	101	39.7	C
	South	208	135.6	A	388	62.7	A	538	60.4	A	338	73.6	A
	West	100	86.6	A	158	56.0	B	203	64.0	A	126	106.7	A

Shading denotes significantly impacted pedestrian element.

At Roosevelt Avenue and Subway Station the central crosswalk in the With-Action condition is compared to the east and west crosswalks in the No-Action condition and considers the more acceptable of the two elements for impact determination.

* The available crosswalk area would not be sufficient to accommodate all pedestrians; some pedestrians would need to use additional right-of way within the roadway to cross the street.

Table 14-83 2030 With-Action Gameday Pedestrian Levels of Service – Crosswalks

Intersection	Crosswalk	Weekday PM Peak Hour			Saturday PM Pre-game Peak Hour			Saturday PM Post Game Peak Hour			Sunday Midday Peak Hour			Sunday PM Peak Hour		
		Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS
126th Street/Seaver Way and 34th Avenue	East	484	87.7	A	910	44.3	B	1,169	19.4	D	780	44.6	B	1,263	11.2	E
	South	0	-	A	0	-	A	0	-	A	0	-	A	0	-	A
126th Street/Seaver Way and 35th Avenue	East	1,570	20.5	D	1,634	21.8	D	2,330	5.6	F	1,550	20.1	D	2,230	5.0	F
	South	415	44.6	B	660	24.0	D	1,033	21.8	D	624	24.5	C	832	24.3	C
	West	0	-	A	0	-	A	0	-	A	0	-	A	0	-	A
126th Street/Seaver Way and Roosevelt Avenue	North	1,176	58.4	B	953	73.1	A	1,025	43.8	B	903	80.0	A	1,282	36.3	C
	East	347	14.7	E	257	9.4	E	643	1.8	F	256	26.3	C	358	2.5	F
	South	297	132.1	A	271	252.9	A	652	69.0	A	243	225.9	A	347	132.1	A
	West	1,205	4.9	F	1,941	0.4	F	3,914	0.0	F	2,101	2.6	F	4,194	0.3	F
Roosevelt Avenue and Subway Station	Center	1,506	42.3	B	2,125	36.1	C	1,915	36.6	C	2,362	41.3	B	2,324	21.7	D
Roosevelt Avenue and Stadium Place	East	0	-	A	0	-	A	0	-	A	0	-	A	0	-	A
	South	443	47.0	B	375	56.7	B	378	71.2	A	333	65.4	A	485	51.2	B
Roosevelt Avenue and 114th Street	North	633	54.1	B	525	68.2	A	830	39.6	C	575	77.6	A	930	24.7	C
	East	165	39.0	C	146	53.4	B	141	55.7	B	140	55.8	B	236	46.3	B
	South	581	51.0	B	473	62.4	A	489	76.6	A	440	71.3	A	657	51.6	B
	West	220	49.0	B	173	84.2	A	386	22.9	D	170	83.5	A	280	51.5	B

Shading denotes significantly impacted pedestrian element.

At Roosevelt Avenue and Subway Station the central crosswalk in the With-Action condition is compared to the east and west crosswalks in the No-Action condition and considers the more acceptable of the two elements for impact determination.

* The available crosswalk area would not be sufficient to accommodate all pedestrians; some pedestrians would need to use additional right-of way within the roadway to cross the street.

Table 14-84 2030 With-Action Non-Gameday Pedestrian Levels of Service – Corners

		Weekday AM Peak Hour			Weekday Midday Peak Hour			Weekday PM Peak Hour			Saturday PM Peak Hour		
Intersection	Corner	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS
126th Street/Seaver Way and 34th Avenue	Southeast	39	229.3	A	29	236.6	A	33	175.4	A	15	144.8	A
126th Street/Seaver Way and 35th Avenue	Southeast	39	73.1	A	29	76.4	A	33	62.4	A	15	72.0	A
	Southwest	2	32.8	C	2	34.3	C	1	57.3	B	2	52.8	B
126th Street/Seaver Way and Roosevelt Avenue	Northeast	39	180.5	A	45	149.0	A	68	105.6	A	52	147.1	A
	Southeast	0	348.9	A	0	311.8	A	0	251.1	A	0	249.4	A
	Southwest	1	411.7	A	5	210.0	A	2	181.7	A	1	598.7	A
	Northwest	464	181.8	A	297	146.9	A	462	111.2	A	246	233.4	A
Roosevelt Avenue and 114th Street	Southwest	21	78.5	A	21	33.5	C	23	37.2	C	25	53.9	B
	Northwest	19	295.7	A	30	167.7	A	29	135.0	A	29	216.9	A

Shading denotes significantly impacted pedestrian element.

Table 14-85 2030 With-Action Gameday Pedestrian Levels of Service – Corners

		Weekday PM Peak Hour			Saturday PM Pre-game Peak Hour			Saturday PM Post Game Peak Hour			Sunday Midday Peak Hour			Sunday PM Peak Hour		
Intersection	Corner	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS	Volume, ped/hr	Avg Ped Space, SF/P	LOS
126th Street/Seaver Way and 34th Avenue	Southeast	41	157.7	A	27	92.2	A	53	39.0	C	35	90.6	A	31	23.5	D
126th Street/Seaver Way and 35th Avenue	Southeast	41	38.2	C	27	28.3	C	53	7.8	F	35	29.4	C	31	6.8	F
	Southwest	13	96.5	A	56	66.3	A	33	22.9	D	35	71.5	A	40	26.7	C
126th Street/Seaver Way and Roosevelt Avenue	Northeast	67	116.1	A	62	136.6	A	51	61.9	A	72	175.5	A	152	61.8	A
	Southeast	0	175.7	A	0	257.4	A	0	92.8	A	0	358.6	A	0	102.3	A
	Southwest	3	50.8	B	2	*	F	4	16.0	D	2	0.2	F	3	13.8	E
	Northwest	460	74.6	A	275	40.4	B	314	*	F	272	60.4	A	992	*	F
Roosevelt Avenue and 114th Street	Southwest	23	28.8	C	44	42.3	B	8	32.4	C	31	47.4	B	30	31.6	C
	Northwest	28	119.8	A	49	160.6	A	23	72.2	A	39	162.6	A	40	75.9	A

Shading denotes significantly impacted pedestrian element.

* The available corner area would not be sufficient to accommodate all pedestrians; some pedestrians would need to wait on the adjacent sidewalk area instead of the corner reservoir to cross the street.

Vehicular and Pedestrian Safety

Crash data were obtained for the study area intersections from NYC DOT for the most recent three-year period for which such data are available (2017 through 2019). This information is based on data provided by the New York State Department of Transportation (NYSDOT), New York State Department of Motor Vehicles (NYSDMV), and the New York City Police Department (NYPD).

The crash data details reported crashes (crashes resulting in death, injury, or property damage in excess of $1,000), fatalities, injuries, and pedestrian and bicycle injuries annually. According to New York City Department of Transportation (NYC DOT) criteria, an intersection is categorized as a high-crash location if one or more of the following conditions is true:

1. The intersection is designated as a Vision Zero priority intersection;
2. The intersection has experienced five or more pedestrian/bicyclist injury crashes in any consecutive 12 months during the most recent three-year period for which data are available;
3. The intersection is located along a Vision Zero priority corridor and has experienced three or more pedestrian/bicyclist injury crashes in any consecutive 12 months of the most recent three-year period for which data are available

Table 14-86 presents a summary of total crashes at the study area intersections during the three-year period of 2017 through 2019, and also shows total fatalities, injuries, and pedestrian and bicycle crashes. The crash data identified the following 11 intersections as high crash locations because they have been defined as Vision Zero priority intersections, or have at least five pedestrian/bicyclist injury crashes within a consecutive 12-month period:

- Northern Boulevard at Main Street
- Northern Boulevard at Union Street
- Northern Boulevard at Parsons Boulevard
- Union Street at Sanford Avenue
- Parsons Boulevard at Sanford Avenue
- Main Street at 41st Avenue/Kissena Boulevard
- Roosevelt Avenue and 108th Street
- Roosevelt Avenue at College Point Boulevard
- Roosevelt Avenue at Prince Street
- Roosevelt Avenue at Main Street
- Roosevelt Avenue at Union Street

In addition to the high crash locations listed above, there are seven Vision Zero corridors in the study area:

- Northern Boulevard
- Main Street
- Union Street
- Sanford Avenue
- Roosevelt Avenue
- Parsons Boulevard

› 108th Street

Along these corridors, three or more pedestrian/bicyclist injury crashes occurred at the following five locations and are therefore also identified as high-crash locations. Therefore, a total of 16 intersections are identified for further evaluation.

› 108th Street at Northern Boulevard
› 111th Street at Roosevelt Avenue
› 114th Street at Roosevelt Avenue
› 126th Street/Seaver Way at Roosevelt Avenue
› Parsons Boulevard at Roosevelt Avenue

Table 14-86 Vehicle and Pedestrian Crash Summary

Intersection		Total Crashes by Year					Pedestrian Crashes by Year			Bicycle Crashes by Year		
North-South Roadway	East-West Roadway	2017	2018	2019	Total Fatalities	Total Injuries	2017	2018	2019	2017	2018	2019
108th Street	Astoria Boulevard	3	8	8	0	25	0	0	0	0	0	2
111th Street	Astoria Boulevard	8	7	8	0	16	0	0	0	0	0	0
108th Street	Northern Boulevard	6	10	10	0	21	1	2	1	0	1	0
114th Street	Northern Boulevard	5	26	22	0	38	0	0	0	0	0	1
126th Place/ Van Wyck Expressway Southbound Entrance	Northern Boulevard	2	0	0	0	1	0	0	0	0	0	0
College Point Boulevard	Northern Boulevard	3	10	8	0	12	0	2	1	0	0	1
Prince Street	Northern Boulevard	10	25	34	0	26	0	0	1	0	0	0
Main Street	Northern Boulevard	6	9	20	3	38	0	0	3	0	0	1
Union Street	Northern Boulevard	10	20	37	0	38	2	2	4	1	0	0
Parsons Boulevard	Northern Boulevard*	15	34	28	0	40	2	5	3	0	0	2
114th Street	34th Avenue/Grand Central Parkway Eastbound	1	7	5	0	6	0	0	0	0	0	1

Table 14-86 Vehicle and Pedestrian Crash Summary

Intersection		Total Crashes by Year					Pedestrian Crashes by Year			Bicycle Crashes by Year		
North-South Roadway	East-West Roadway	2017	2018	2019	Total Fatalities	Total Injuries	2017	2018	2019	2017	2018	2019
126th Street/Seaver Way	34th Avenue/Grand Central Parkway Exit 9E Eastbound	4	29	28	0	24	0	0	1	0	0	0
126th Street/Seaver Way	35th Avenue	0	0	1	0	0	0	0	0	0	0	0
126th Street/Seaver Way	36th Avenue	2	1	4	0	1	0	0	0	0	0	0
College Point Boulevard	Sanford Avenue	5	10	5	0	11	0	0	1	1	1	0
Union Street	Sanford Avenue*	2	4	15	0	11	1	3	5	0	0	1
Parsons Boulevard	Sanford Avenue*	8	5	6	0	14	4	2	3	0	1	1
Main Street	41st Avenue/Kissena Boulevard*	8	14	18	0	19	4	5	4	0	1	1
108th Street	Roosevelt Avenue*	3	7	9	0	9	0	2	1	0	2	0
111th Street	Roosevelt Avenue	3	6	8	0	10	2	3	1	0	0	0
114th Street	Roosevelt Avenue	11	11	8	0	16	1	2	0	2	0	1
Stadium Place N	Roosevelt Avenue	0	0	2	0	1	0	0	0	0	0	0
126th Street/Seaver Way	Roosevelt Avenue	7	8	13	0	13	2	0	1	1	1	1
College Point Boulevard	Roosevelt Avenue*	9	30	21	0	28	0	4	0	1	2	0
Prince Street	Roosevelt Avenue*	7	5	14	0	10	2	0	2	3	0	2
Main Street	Roosevelt Avenue*	5	16	15	0	22	0	6	4	1	1	3

Table 14-86 Vehicle and Pedestrian Crash Summary

Intersection		Total Crashes by Year					Pedestrian Crashes by Year			Bicycle Crashes by Year		
North-South Roadway	East-West Roadway	2017	2018	2019	Total Fatalities	Total Injuries	2017	2018	2019	2017	2018	2019
Union Street	Roosevelt Avenue*	9	13	14	0	21	7	4	5	0	0	1
Parsons Boulevard	Roosevelt Avenue	5	7	11	0	9	1	0	0	2	0	2
Shea Road	Grand Central Parkway Westbound Entrance	0	0	1	0	0	0	0	0	0	0	0
Shea Road	Olmsted Drive	0	1	0	0	2	0	0	0	0	0	0
Shea Road	Meridian Road	1	5	3	0	1	0	0	0	0	0	0
Meridian Road	Grand Central Parkway Entrance 9 Westbound	0	0	1	0	1	0	0	0	0	0	1

Denotes a high crash location

* Intersection has five or more pedestrian-/bicyclist-related crashes in a consecutive 12-month period

Source: NYSDOT/NYSDMV (2017-2019)

The following four intersections are along the Northern Boulevard Vision Zero Priority Corridor and have been identified as high-crash locations.

Northern Boulevard and 108th Street

During the three-year period from 2017 to 2019, a total of 26 crashes, including 21 personal injuries, and five pedestrian/bicyclist-related crashes occurred at this intersection. Based on a review of the crash data, of the five pedestrian/bicyclist crashes that occurred from 2017 and 2019, two involved conflicts with turning vehicles, and two occurred during dark hours. The intersection is signalized and operates in four phases, including a protected eastbound/westbound left turn phase and a leading pedestrian interval crossing Northern Boulevard. There are high visibility crosswalks striped along each approach and pedestrian countdown signals. Both Northern Boulevard and 108th Street are two-way roadways. In the summer of 2022, improvements to the intersection were implemented by NYC DOT, including pedestrian curb extensions at the northeast and southwest corners of the intersection. As a result of these changes, the overall level of pedestrian and bicyclist safety should improve at this intersection.

Northern Boulevard and Main Street

During the three-year period from 2017 to 2019, a total of 35 crashes, including 38 personal injuries and four pedestrian/bicyclist crashes occurred at this intersection. Based on a review of the crash data, of the four pedestrian/bicyclist crashes that occurred from 2017 to 2019, one involved a pedestrian crossing against the signal and three involved conflicts with turning vehicles. The intersection is signalized and operates in four phases, including a leading westbound phase with high visibility crosswalks striped along all approaches and pedestrian countdown signals. Both Northern Boulevard and Main Street are two-way roadways at the intersection. In the fall of 2018, improvements to the intersection were implemented by NYC DOT, including curb extensions, and a new crosswalk and median for pedestrians crossing the north crosswalk along Northern Boulevard. As a result of these changes, the overall level of pedestrian and bicyclist safety should improve at this intersection.

Northern Boulevard and Union Street

During the three-year period from 2017 to 2019, a total of 67 crashes, including 38 personal injuries and nine pedestrian/bicyclist crashes occurred at this intersection. Based on a review of the crash data, of the nine pedestrian/bicyclist crashes that occurred from 2017 to 2019, one involved a pedestrian crossing against the signal and six involved conflicts with turning vehicles. The intersection is signalized and operates in four phases, including an exclusive left turn phase for the eastbound and westbound approaches concurrent with right turns for the northbound and southbound phases, with high visibility crosswalks and pedestrian countdown signals. Both Northern Boulevard and Union Street are two-way roadways at the intersection. In the fall of 2018, improvements to the intersection were implemented by NYC DOT, including a median tip extension for pedestrians crossing the west crosswalk. In addition, improvements to the signal timing were implemented in February 2020 to reduce speeds during the AM and PM to 25 mph. As a result of these changes, the overall level of pedestrian and bicyclist safety should improve at this intersection.

Northern Boulevard and Parsons Boulevard

During the three-year period from 2017 to 2019, a total of 77 crashes, including 40 personal injuries and 12 pedestrian/bicyclist crashes occurred at this intersection. Based on a review of the crash data, of the 12 pedestrian/bicyclist crashes that occurred from 2017 t0 2019, six involved conflicts with turning vehicles and three occurred during dark hours. The intersection is signalized and operates in four phases, including a protected left turn phase for the eastbound and westbound approaches, and a leading pedestrian interval crossing Northern Boulevard along with high visibility crosswalks and pedestrian countdown signals. Both Northern Boulevard and Parsons Boulevard are two-way roadways at the intersection. In the spring of 2019, improvements to the intersection were implemented by NYC DOT, including the installation of pedestrian ramps at all four corners of the intersection. In addition, improvements to the signal timing were implemented in February 2020 to reduce speeds during the AM and PM to 25 mph. As a result of these changes, the overall level of pedestrian and bicyclist safety should improve at this intersection.

The following two intersections are along the Sanford Avenue Vision Zero Priority Corridor and have been identified as high-crash locations.

Union Street and Sanford Avenue

During the three-year period from 2017 to 2019, a total of 21 crashes, including 11 personal injuries and ten pedestrian/bicyclist crashes occurred at this intersection. Based on a review of the crash data, of the ten pedestrian/bicyclist crashes that occurred from 2017 to 2019, seven involved conflicts with turning vehicles and four occurred during dark hours. The intersection is signalized and operates in three phases, including a leading pedestrian interval crossing all approaches, with high visibility crosswalks. Both College Point Boulevard and Sanford Avenue are two-way roadways at the intersection. In the fall of 2019, improvements to the intersection were implemented by NYC DOT, including restriping along Sanford Avenue and shared bike lanes along College Point Boulevard. In late 2022, the signal timing at the intersection was modified to implement an all-pedestrian phase at the intersection as an additional safety measure. As a result of these changes, the overall level of pedestrian and bicyclist safety should improve at this intersection.

Parsons Boulevard and Sanford Avenue

During the three-year period from 2017 to 2019, a total of 19 crashes, including 14 personal injuries and 11 pedestrian/bicyclist crashes occurred at this intersection. Based on a review of the crash data, of the 11 pedestrian/bicyclist crashes that occurred from 2017 to 2019, four involved pedestrians crossing in a section of roadway not marked by a crosswalk, and four involved conflicts with turning vehicles. The intersection is signalized and operates in four phases, including two leading pedestrian intervals crossing Sanford Avenue and Parsons Boulevard, respectively, with high visibility crosswalks. Both Parsons Boulevard and Sanford Avenue are two-way roadways at the intersection. In the summer of 2019, improvements to the intersection were implemented by NYC DOT, including pedestrian ramps at each of the four corners of the intersection. In addition, protected bike lanes were implemented along westbound Sanford Avenue and north of the intersection along Parsons Boulevard. As a result of these changes, the overall level of pedestrian and bicyclist safety should improve at this intersection.

Main Street and 41st Avenue/Kissena Avenue

The intersection of Main Street and 41st Avenue/Kissena Boulevard is along both the Main Street and Kissena Boulevard Vision Zero Priority corridors and is identified as a high-crash location. A total of 40 crashes, including 19 personal injuries and 15 pedestrian/bicyclist crashes occurred at this intersection between 2017 to 2019. Based on a review of the crash data, of the 15 pedestrian/bicyclist crashes that occurred from 2017 to 2019, six involved pedestrians crossing in a section of roadway not marked by a crosswalk, and three involved conflicts with turning vehicles. The intersection is signalized and operates in three phases with high visibility crosswalks and pedestrian countdown signals. At the intersection, Main Street and Kissena Boulevard are two-way roadways, and 41st Avenue is a one-way eastbound roadway. In the fall of 2022, improvements to the intersection were implemented by NYC DOT, including implementation of a busway along Main Street open to buses and trucks and prohibiting vehicular through traffic. In addition, all turns originating from Kissena Boulevard have been prohibited. As a result of these changes, the overall level of pedestrian and bicyclist safety should improve at this intersection.

The following nine intersections are along the Roosevelt Avenue Vision Zero Priority Corridor and have been identified as high-crash locations.

Roosevelt Avenue and 108th Street

During the three-year period from 2017 to 2019, a total of 19 crashes, including 9 personal injuries and five pedestrian/bicyclist related crashes occurred at the intersection. Based on a review of the crash data, of the 5 pedestrian/bicyclist crashes that occurred from 2017 and 2019, one involved a pedestrian crossing against a signal and two involved conflicts with turning vehicles. This intersection is signalized and operates in four phases, including a leading pedestrian interval for pedestrians crossing Roosevelt Avenue and 108th Street, respectively. There are also high visibility crosswalks striped along each approach. At the intersection, both Roosevelt Avenue and 108th Street are two-way roadways. On the fall of 2018, improvements to the intersection were implemented by NYC DOT, including shared bike lanes along 108th Street. Improved pedestrian ramps were also installed at the southeast and southwest corners in the summer of 2022. As a result of these changes, the overall level of pedestrian and bicyclist safety should improve at this intersection.

Roosevelt Avenue and 111th Street

During the three-year period from 2017 to 2019, a total of 17 crashes, including 10 personal injuries and six pedestrian/bicyclist related crashes occurred at the intersection. Based on a review of the crash data, of the six pedestrian/bicyclist related crashes that occurred from 2017 to 2019, three involved conflicts with turning vehicles and two occurred in wet conditions. This intersection is signalized and operates in two phases, with high visibility crosswalks striped along each approach and pedestrian countdown signals. At the intersection, Roosevelt Avenue is a two-way roadway. South of the intersection 111th Street is a two-way roadway; north of the intersection, 111th Street is a one-way northbound roadway. As part of the Willets Point Phase 2 development EIS, a leading pedestrian interval crossing Roosevelt Avenue is proposed. As a result of this change, the overall level of pedestrian and bicyclist safety would improve at this intersection.

Roosevelt Avenue and 114th Street

During the three-year period from 2017 to 2019, a total of 30 crashes, including 16 personal injuries and sic pedestrian/bicyclist related crashes occurred at the intersection. Based on a review of the crash data, of the six pedestrian/bicyclist related crashes that occurred from 2017 to 2019, one involved a pedestrian crossing at a section of roadway not marked by a crosswalk, and three involved conflicts with turning vehicles. This intersection is signalized and operates in three phases, including a leading pedestrian interval for pedestrians crossing Roosevelt Avenue, with high visibility crosswalks and pedestrian countdown signals. Both Roosevelt Avenue and 114th Street are two-way roadways at the intersection. In 2021, a leading pedestrian interval crossing Roosevelt Avenue was implemented. As a result of this change, the overall level of pedestrian and bicyclist safety should improve at this intersection.

Roosevelt Avenue and 126th Street/Seaver Way

During the three-year period from 2017 to 2019, a total of 28 crashes, including 13 personal injuries and six pedestrian/bicyclist related crashes occurred at the intersection. Based on a review of the crash data, of the six pedestrian/bicyclist related crashes that occurred from 2017 to 2019, four involved conflicts with turning vehicles. This intersection is signalized and operates in two phases with high visibility crosswalks and pedestrian countdown signals. Both Roosevelt Avenue and 126th Street/Seaver Way are two-way roadways at the intersection. In the summer of 2018, improvements to the intersection were implemented by NYC DOT, including upgrading the north and south

crosswalks to high visibility crosswalks. As part of the Willets Point Phase 2 development EIS, improvements to the intersections are proposed, including widening of all crosswalks as well as the normalization of corner reservoir spaces. In addition, the westbound channelized right turn would be removed, allowing right turns from the shared through lane. As a result of this change, the overall level of pedestrian and bicyclist safety would improve at this intersection.

Roosevelt Avenue and College Point Boulevard

During the three-year period from 2017 to 2019, a total of 60 crashes, including 28 personal injuries and seven pedestrian/bicyclist related crashes occurred at the intersection. Based on a review of the crash data, of the seven pedestrian/bicyclist related crashes that occurred from 2017 to 2019, four involved conflicts with turning vehicles, and three occurred during dark hours. Both Roosevelt Avenue and College Point Boulevard are two-way roadways at the intersection. The intersection is signalized and operates in four phases, including a protected northbound bound phase. The intersection also has high visibility crosswalks along all approaches, medians along the north, east and west approaches, and pedestrian countdown signals at all corners.

Roosevelt Avenue and Prince Street

During the three-year period from 2017 to 2019, a total of 26 crashes, including 10 personal injuries and nine pedestrian/bicyclist related crashes occurred at the intersection. Based on a review of the crash data, of the nine pedestrian/bicyclist related crashes that occurred from 2017 to 2019, six involved conflicts with turning vehicles. The intersection is signalized and operates in two phases with high visibility crosswalks and pedestrian countdown signals. Roosevelt Avenue is a two-way roadway at the intersection. North of the intersection Prince Street is a two-way roadway; south of the intersection it becomes a one-way roadway. As part of the Willets Point Phase 2 development EIS, a leading pedestrian interval crossing Prince Street is proposed. As a result of this change, the overall level of pedestrian and bicyclist safety would improve at this intersection.

Roosevelt Avenue and Main Street

During the three-year period from 2017 to 2019, a total of 36 crashes, including 22 personal injuries and 15 pedestrian/bicyclist related crashes occurred at the intersection. Based on a review of the crash data, of the 15 pedestrian/bicyclist related crashes that occurred from 2017 to 2019, five involved pedestrians crossing at a section of roadway not marked at a crosswalk, two involved conflicts with turning vehicles, and three occurred during dark hours. The intersection is signalized and operates in two phases with high visibility crosswalks and pedestrian countdown signals. Both Roosevelt Avenue and Main Street are two-way roadways at the intersection. In the fall of 2022, improvements to the intersection were implemented by NYC DOT, including implementation of a busway along Main Street open to buses and trucks and prohibiting vehicular through traffic. As a result of these changes, the overall level of pedestrian and bicyclist safety should improve at this intersection.

Roosevelt Avenue and Union Street

During the three-year period from 2017 to 2019, a total of 36 crashes, including 21 personal injuries and 17 pedestrian/bicyclist related crashed occurred at the intersection. Based on a review of the crash data, of the 17 pedestrian/bicyclist related crashes that occurred from 2017 to 2019, three involved pedestrians crossing against a signal and seven involved conflicts with turning vehicles. The

intersection is signalized and operates in four phases including a leading pedestrian interval crossing Roosevelt Avenue and Union Street, respectively. The intersection also has high visibility crosswalks along all approaches. Both Roosevelt Avenue and Union Street are two-way roadways at the intersection. In the fall of 2019, improvements to the intersection were implemented by NYC DOT, including shared bike lanes along Union Street. As a result of this change, the overall level of pedestrian and bicyclist safety should improve at this intersection.

Roosevelt Avenue and Parsons Boulevard

During the three-year period from 2017 to 2019, a total of 23 crashes, including 9 personal injuries and five pedestrian/bicyclist related crashes occurred at the intersection. Based on a review of the crash data, of the five pedestrian/bicyclist related crashes that occurred from 2017 to 2019, two involved conflicts with turning vehicles and two occurred during dark hours. The intersection is signalized and operates in four phases, including a leading pedestrian interval crossing Roosevelt Avenue and Parsons Boulevard, respectively. The intersection also has high visibility crosswalks along all approaches. Both Roosevelt Avenue and Parsons Boulevard are two-way roadways at the intersection. In the Fall of 2019, improvements to the intersection were implemented by NYC DOT, including a protected bike lane along northbound Parsons Boulevard. As a result of this change, the overall level of pedestrian and bicyclist safety should improve at this intersection.