

A. INTRODUCTION

This analysis assesses whether the construction of Phase II of the Project under the Extended Build-Out Scenario and the changed background conditions would result in any significant adverse transportation related impacts not previously disclosed, and whether any additional mitigation measures beyond those identified in the 2006 Final Environmental Impact Statement (FEIS) and the Amended Memorandum of Environmental Commitments (MEC) would be warranted. The analyses presented in this chapter include a detailed construction traffic analysis, a discussion of permanent and temporary parking supply on-site and an assessment of interim parking conditions, qualitative assessments of transit and pedestrian conditions, and a discussion of how event patron circulation may be affected during construction.

PRINCIPAL CONCLUSIONS*TRAFFIC*

During peak construction under all three illustrative construction phasing plans, the project-generated trips would generally be fewer than what would be realized upon the full build-out of Phase II of the Project. An exception would be during the peak construction periods for Construction Phasing Plan 3, when multiple buildings and certain railroad yard platform segments would be under concurrent construction at the project site and a number of the Phase II buildings would also be in operation. The detailed construction traffic analysis of the peak construction periods for Construction Phasing Plan 3, which represent the reasonable worst case period for construction traffic impacts, shows that significant adverse traffic impacts would occur at numerous locations. While these analyses considered specific points in time during Phase II construction under Construction Phasing Plan 3 (primary worst-case in 2032 and secondary worst-case in 2027), the impact findings and determination of mitigation requirements would be applicable to other construction periods during which comparable activities would occur. Overall, significant adverse traffic impacts were identified at 36 intersections during the 1st quarter of 2032 (when Buildings 5, 9, and 10, and the platform segments for Buildings 6 and 7 are assumed to be under concurrent construction at the project site) and at 14 intersections during the 4th quarter of 2027 (when Buildings 11, 12, 13, and 15 are assumed to be under concurrent construction at the project site) under the illustrative construction schedule for Construction Phasing Plan 3. The proposed operational traffic mitigation measures as described in Chapter 5, "Mitigation," would mitigate most construction impacts during these peak periods. In some cases, variations of the operational mitigation measures or additional measures have been recommended to fully mitigate the impacts during construction. Similar to the operational traffic impact analysis and findings from the 2006 FEIS, there would be locations where impacts could not be mitigated or could only be partially mitigated. It should be noted that subsequent to the issuance of the DSEIS, the recommended traffic mitigation measures were further reviewed by NYCDOT, and additional measures were explored, resulting in the elimination or

Atlantic Yards Arena and Redevelopment Project FSEIS

modification of some of the measures included in the Project's traffic mitigation plan. The mitigation measures outlined in the DSEIS included a variety of signal timing changes, lane re-striping and changes to curbside parking regulations. Subsequent to the issuance of the DSEIS, NYCDOT determined that some of the parking regulation and lane re-striping measures should not be implemented. As a result, the traffic mitigation analysis in this FSEIS indicates that fewer of the intersections identified as impacted in the DSEIS would be fully mitigated. For the primary worst-case in 2032, no practicable mitigation measures would be available to fully mitigate the impacts at 17 intersections, and for the secondary worst-case in 2027, unmitigated impacts were identified for two intersections.

PARKING

Peak parking demand for construction workers is assumed to occur during the 1st quarter of 2032 under the illustrative construction schedule for Construction Phasing Plan 3 when, on average, 314 construction worker vehicles are projected to arrive at the project site during the 6 to 7 AM morning peak hour. Since this volume represents 80 percent of the total projected day shift vehicle trips, the total peak parking demand would be 392 vehicles. While some construction workers are expected to find nearby on-street and off-street parking, the overall projected demand could be accommodated by the permanent parking garage on Block 1129. Based on the off-street and on-street parking utilization in the ¼ mile study area of the Project, should fewer on-site parking spaces be provided on Block 1129 for construction workers, it is anticipated that the construction peak parking demand would have to be accommodated by the available off-street parking facilities in the ¼ mile study area of the Project. As the 300 on-site parking spaces available to accommodate Arena demand would generally be available to construction workers, most of the projected peak construction worker parking demand could also be accommodated by these 300 on-site parking spaces. Since all projected construction worker parking demand would be met, no parking shortfall is anticipated during Phase II construction of the Project under the Extended Build-Out Scenario. These findings are generally consistent with those of the 2006 FEIS.

TRANSIT AND PEDESTRIAN

Construction workers who do not travel via auto would be distributed among the various subway and bus routes, station entrances, and bus stops near the project site. These trips would also occur during construction peak hours that are outside of the typical commuter peak periods. Furthermore, appropriate measures for maintaining temporary sidewalks and overhead protections would be provided throughout Phase II construction of the Project. However, during construction on Blocks 1120 and 1121, due to the anticipated staging areas and Maintenance and Protection of Traffic (MPT) plans, there may be times when pedestrian access along the south side of Atlantic Avenue east of 6th Avenue would be restricted to facilitate construction activity. Consultation with the New York City Department of Transportation (NYCDOT) Office of Construction Mitigation and Coordination (OCMC) would be undertaken to determine the feasibility of closing pedestrian access for the affected segments during periods of Phase II construction when Blocks 1120 and 1121 are under construction. Diverting pedestrian flow to other sidewalks in the area is not expected to result in a substantial increase in pedestrian traffic at those locations. At other sidewalks bordering the project site, more limited closures are anticipated and, where necessary, temporary sidewalks would be provided to maintain pedestrian flow. Therefore, no significant adverse construction-related transit or pedestrian impacts are

expected to occur during Phase II construction of the Project under the Extended Build-Out Scenario. These findings are generally consistent with those of the 2006 FEIS.

B. SUMMARY OF FINDINGS FROM PREVIOUS ENVIRONMENTAL REVIEWS

The 2006 FEIS examined the potential effects of Project construction (Phase I and Phase II). The construction impacts analysis concluded that significant adverse impacts from construction activities over the entire 10-year construction period would occur from construction-related traffic on the local street network. The findings of the 2006 FEIS construction transportation analyses for the entire construction period (Phase I and Phase II) are summarized below.

TRAFFIC

The detailed construction traffic analysis in the 2006 FEIS concluded that significant adverse traffic impacts would occur at numerous locations throughout the construction period. However, these impacts were attributed primarily to diversions associated with the permanent and temporary street closures required for Phase I of the Project rather than the added traffic from construction trucks and worker vehicles. The permanent closure of several streets within the project site, the lane disruptions during utility installation and rail yard improvements, and the reconstruction of two bridges over the rail yard were the main reasons for changes in area travel patterns and traffic diversions. The 2006 FEIS noted that these traffic diversions, when combined with construction-generated traffic, would concentrate traffic at specific intersections near the project site and would result in significant adverse traffic impacts.

The 2006 FEIS found significant adverse traffic impacts at outlying intersections along Atlantic Avenue west of the project site. Furthermore, as roadway disruptions associated with temporary lane and street closures would affect area intersections during construction peak hours, they were found to have similar effects on peak hour conditions when background and, following the completion of Phase I of the Project, operational traffic would be higher. Overall, significant adverse traffic impacts during construction were identified for 12 intersections in proximity to the project site and seven outlying intersections.

Measures proposed to mitigate Project operational impacts were evaluated in the 2006 FEIS to determine the appropriate strategies for addressing traffic impacts during construction. The FEIS noted that while the proposed mitigation measures would be appropriate for early implementation, some significant adverse traffic impacts during construction would remain unmitigated.

PARKING

Peak parking demand for construction workers was anticipated to occur during Phase I construction when, on average, 733 construction worker vehicles were projected to arrive at the project site during the 6 to 7 AM morning peak hour. Peak parking demand for construction workers during Phase II construction was projected to be 208 construction worker vehicles. While some construction workers were expected to find nearby on-street parking, the overall projected demand was found to exceed the potential 150 to 200 available on-street spaces for construction worker parking within ¼ mile of the project site. In addition, at the time of the 2006 FEIS, there were seven off-street parking facilities within ¼ mile of the project site with 325 spaces available for construction worker vehicles. The 2006 FEIS stated that if necessary, to

avoid overtaxing nearby on- and off-street facilities, the project sponsors would be required to provide on-site parking for construction workers at a fee that is comparable to other parking lots/garages in the area. This designated area could accommodate up to 800 vehicles, which would be adequate for the majority of the peak construction parking demand. By charging a fee and also limiting its parking capacity only to accommodate the anticipated demand, the on-site parking facility would help in minimizing the number of construction worker vehicles circulating for on-street parking in the area, while at the same time not encouraging the use of private automobiles as the means of travel to the project site. The 2006 FEIS noted that since all projected construction worker parking demand would be met, no parking shortfall was anticipated during any phase of construction at Atlantic Yards, and the Project was not expected to result in any potential significant adverse parking impacts during construction.

TRANSIT AND PEDESTRIANS

The 2006 FEIS found that construction workers who do not travel via auto would be distributed among the various subway and bus routes, station entrances, and bus stops near the project site. Only nominal increases in transit demand would be experienced along each of these routes and at each of the transit access locations during hours outside of the typical commuter peak periods. The 2006 FEIS noted that pedestrian trips generated by construction workers would similarly be made during off-peak hours and dispersed to various pedestrian routes. Furthermore, appropriate measures for maintaining temporary sidewalks and overhead protections would be provided throughout construction. Therefore, the 2006 FEIS concluded that no significant adverse transit and pedestrian impacts were expected to occur for the entire duration of Project construction.

C. SEIS ANALYSIS FRAMEWORK

This section of the Supplemental Environmental Impact Statement (SEIS) assesses whether the construction of Phase II of the Project under the Extended Build-Out Scenario and changed background conditions would result in any significant adverse transportation-related impacts not previously disclosed, and whether any additional mitigation measures beyond those identified in the 2006 FEIS and the Amended MEC would be warranted. The analyses presented in this chapter include a detailed construction traffic analysis, a discussion of permanent and temporary parking supply on-site and assessment of interim parking conditions, qualitative assessments of transit and pedestrian conditions, and a discussion of how event patron circulation may be affected during construction.

For purposes of this analysis, it is assumed that Phase II of the Project under the Extended Build-Out Scenario would be constructed from 2018 to 2035, and would generate construction worker and truck traffic during this period. Because of the lengthy duration of these activities, an evaluation of construction sequencing and worker/truck projections was undertaken to identify the periods when construction-related trips would be greatest, during the periods of peak activity, and to assess the potential transportation-related impacts. As described in Chapter 3A, “Construction Overview,” there are three illustrative construction phasing plans being analyzed: Construction Phasing Plan 1—continuous sequential phasing with Block 1129 first; Construction Phasing Plan 2—continuous sequential phasing with Building 15 on Block 1128 first; and Construction Phasing Plan 3—start and stop sequential phasing with a similar sequence as Construction Phasing Plan 1 but with a period when construction would be assumed to be suspended, followed by a period of more intense construction activities.

The analysis also assumes that under all three illustrative construction phasing plans, portions of Block 1129 would be used for construction staging activities and to provide temporary parking for construction workers during Phase II construction. Prior to the time when construction on Block 1129 is completed, the temporary surface parking lot on that block (accessible from Carlton Avenue, Dean Street, and Vanderbilt Avenue to facilitate efficient circulation and to minimize any potential vehicular and pedestrian conflicts) would provide varying numbers of parking spaces to accommodate the parking needs of construction workers during the workday and arena event traffic during the evenings and weekends. As the buildings and open space on Buildings 11, 12, 13, and 14 are developed on Block 1129, the areas for staging and temporary parking on that parcel would diminish. At that point in construction, staging activities would occur along the perimeters of the construction sites within delineated closed-off areas, and the temporary parking for construction workers may be provided in permanent parking lots under Project buildings that are already completed or at nearby off-street parking facilities.

Based on illustrative schedules developed for the three construction phasing plans, workforce and truck delivery projections, operational trip-making expected to be generated by completed Phase II buildings, a primary worst-case peak condition was selected for detailed analysis. Because of the proximity of Block 1129 to adjacent residential uses (along Carlton Avenue, Dean Street, and Vanderbilt Avenue), and its use for interim staging and parking activities, a secondary worst-case peak condition coinciding with construction of the Project buildings on Block 1129 was also selected for detailed analysis.

In addition, as described in Chapter 3A, “Construction Overview,” most of the Phase I construction elements are expected to be substantially completed before the start of the Phase II construction and are incorporated in the future background baselines. Building 1 and Site 5 of the Phase I Project may be constructed anytime during the overall construction period and could occur during Phase II construction. The operational trips that would be generated by the completion of Building 1 and Site 5 would be fewer than their corresponding construction-related activities during the construction traffic analysis peak hours. Therefore, for a conservative analysis, it was assumed that Building 1 and Site 5 would undergo concurrent construction with Phase II buildings and their peak construction-related activities would be overlaid onto the future construction No Build baselines.

D. FUTURE WITH PHASE II CONSTRUCTION ACTIVITIES

TRAFFIC

Under the Extended Build-Out Scenario, the construction of the various Phase II components of the Project is assumed to result in temporary curb-lane and sidewalk closures and trip-making associated with construction worker travel and truck deliveries over an approximately 18-year period from 2018 to 2035. Based on the construction sequencings and worker/truck projections presented in Chapter 3A, “Construction Overview,” detailed estimates were developed of the number of construction-related trips generated during the periods of peak construction activity. These estimates were then used as the basis for assessing the potential transportation-related impacts during construction. During peak construction under all three construction phasing plans, the project-generated trips would be fewer than what would be realized upon the full build-out of Phase II of the Project except for Construction Phasing Plan 3, as shown in **Tables 3H-1 to 3H-3**. Based on the detailed Construction Phasing Plan 3 trip projections in **Appendix A** (see **Exhibits A-1 through A-11**), construction generated trips are projected to exceed the

Atlantic Yards Arena and Redevelopment Project FSEIS

projected number of Phase II operational trips during two quarters—4th quarter of 2031 and 1st quarter of 2032 (the peak construction quarter selected for detailed analysis for this SEIS) when concurrent construction would be occurring at three Project buildings and at the platform segments for two other Project buildings. For cumulative construction and operational trips under Construction Phasing Plan 3, they would exceed the projected number of Phase II operational trips during four quarters—the 3rd quarter of 2031 to the 2nd quarter of 2032. During this construction period, construction-generated trips are projected to comprise approximately 90 and 60 percent of the cumulative construction and operational trips during the non-commuter 6 AM to 7 AM and 3 PM to 4 PM analysis peak hours, respectively. However, because the construction related trips are expected to occur during non-commuter hours, when background traffic levels are lower, the overall extent of the potential traffic impacts and the required mitigations during peak construction are expected to be within the envelope established for the operational traffic analysis, as described in Chapter 4D, “Operational Transportation,” and Chapter 5, “Mitigation.” The construction trip estimates summarized in these tables are further detailed in the next section of this chapter.

Table 3H-1
Comparison of Weekday Vehicle Trip Generation Construction Phasing Plan 1—
Cumulative Construction and Operational Trips

Time	Peak Construction in 2032 ⁽¹⁾									2035 Phase II Full Build-Out Operational Trips in PCEs		
	Construction Trips in PCEs (Q3 2032)			Phase II Operational Trips from Completed Buildings in PCEs			Total PCEs					
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
6-7 AM	257	104	361	27	72	99	284	176	460	41	110	151
7-8 AM	80	42	122	37	106	143	117	148	265	56	160	216
8-9 AM*	42	42	84	153	269	422	195	311	506	193	372	565
12-1 PM*	40	40	80	124	123	247	164	163	327	188	186	374
3-4 PM	0	153	153	148	118	266	148	271	419	194	150	344
4-5 PM	0	19	19	122	101	223	122	120	242	179	149	328
5-6 PM*	0	0	0	187	120	307	187	120	307	277	175	452

Notes: Traffic volumes summarized for the 8-9 AM, 12-1 PM, and 5-6 PM account for a conservative overlap of construction-related traffic during these hours and operational trips during the operational analysis peak hours.
PCEs = passenger car equivalents where 1 truck trip equals 2 PCEs.
(1) Buildings 8, 9, 10, 11, 12, 13, 14, and 15 operational. Buildings 5 and 6, and the platform segments for Buildings 6 and 7 under concurrent construction.

Table 3H-2
Comparison of Weekday Vehicle Trip Generation for Construction Phasing Plan 2—
Cumulative Construction and Operational Trips

Time	Peak Construction in 2027 ⁽¹⁾									2035 Phase II Full Build-Out Operational Trips in PCEs		
	Construction Trips in PCEs (Q4 2027)			Phase II Operational Trips from Completed Buildings in PCEs			Total PCEs					
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
6-7 AM	298	92	390	13	36	49	311	128	439	41	110	151
7-8 AM	90	38	128	20	54	74	110	92	202	56	160	216
8-9 AM*	38	38	76	115	171	286	153	209	362	193	372	565
12-1 PM*	36	36	72	70	71	141	106	107	213	188	186	374
3-4 PM	0	206	206	104	89	193	104	295	399	194	150	344
4-5 PM	0	26	26	68	57	125	68	83	151	179	149	328
5-6 PM*	0	0	0	102	67	169	102	67	169	277	175	452

Notes: Traffic volumes summarized for the 8-9 AM, 12-1 PM, and 5-6 PM account for a conservative overlap of construction-related traffic during these hours and operational trips during the operational analysis peak hours.
PCEs = passenger car equivalents where 1 truck trip equals 2 PCEs.
(1) Buildings 5, 6, 14, and 15 operational. Buildings 7 and 8, and the platform segments for Buildings 8, 9, and 10 under concurrent construction.

**Table 3H-3
Comparison of Weekday Vehicle Trip Generation Construction Phasing Plan 3—
Cumulative Construction and Operational Trips**

Time	Peak Construction in 2032 ⁽¹⁾									2035 Phase II Full Build-Out Operational Trips in PCEs		
	Construction Trips in PCEs (Q1 2032)			Phase II Operational Trips from Completed Buildings in PCEs			Total PCEs					
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
6-7 AM	478	164	642	20	53	73	498	217	715	41	110	151
7-8 AM	144	66	210	28	79	107	172	145	317	56	160	216
8-9 AM*	66	66	132	133	217	350	199	283	482	193	372	565
12-1 PM*	64	64	128	94	93	187	158	157	315	188	186	374
3-4 PM	0	314	314	126	104	230	126	418	544	194	150	344
4-5 PM	0	39	39	96	80	176	96	119	215	179	149	328
5-6 PM*	0	0	0	144	94	238	144	94	238	277	175	452

Notes: Traffic volumes summarized for the 8-9 AM, 12-1 PM, and 5-6 PM account for a conservative overlap of construction-related traffic during these hours and operational trips during the operational analysis peak hours.
PCEs = passenger car equivalents where 1 truck trip equals 2 PCEs.
(1) Buildings 8, 11, 12, 13, 14, and 15 operational. Buildings 5, 9, and 10, and the platform segments for Buildings 6 and 7 under concurrent construction.

CONSTRUCTION TRIP GENERATION

Average daily construction worker and truck activities by quarter were projected for the entire construction period. Under the Extended Build-Out Scenario, construction for the three phasing plans is assumed to begin in the 2nd quarter of 2018 and to be completed by the end of 2035. Construction worker and truck trip projections were refined to account for worker modal splits and vehicle occupancy, arrival and departure distribution, and passenger car equivalent (PCE) factors for construction truck traffic. These estimates are detailed by hour and quarter of the year in **Tables 3H-4 to 3H-6**.

The effects of the Phase II construction activities from the Project were compared to the operational impacts identified for the full build-out of Phase II of the Project in 2035 to assess the potential transportation impacts during construction and the measures that can be implemented to mitigate these impacts. Critical worst-case periods for the three construction phasing plans were determined and analyzed based on the comparison of cumulative Phase II operational and construction traffic, consideration of roadway/lane closures, and interim parking conditions. Since the potential transportation impacts during construction are based on peak construction related activities, the first selected worst-case period represents the quarter with the highest level of construction trip generation—the 1st quarter of 2032 under Construction Phasing Plan 3 with 2,092 daily PCEs. A total of six Phase II buildings are assumed to be operational by the 1st quarter of 2032 including Buildings 8, 11, 12, 13, 14, and 15. During this same period, Buildings 5, 9, and 10, and the platform segments for Buildings 6 and 7 are assumed to be under concurrent construction at the project site.

As described above, a secondary worst-case period related to Block 1129 construction activities was also selected for analysis. Based on the construction trip projections presented above, the peak construction activities when buildings on Block 1129 would be under construction are expected to take place during the 4th quarter of 2027 under Construction Phasing Plan 3 with 1,082 daily PCEs. Building 14 is assumed to be operational by the 4th quarter of 2027. During this same period, Buildings 11, 12, 13, and 15 are assumed to be under concurrent construction

at the project site. Therefore, this secondary worst-case period, along with the overall peak construction primary worst-case period during the 1st quarter of 2032 under Construction Phasing Plan 3, were selected for the assessment of potential construction transportation related impacts.

Daily Workforce and Truck Deliveries

For a reasonable worst-case analysis of potential transportation-related impacts during construction, the daily workforce and truck trip projections in the peak quarter were used as the basis for estimating peak hour construction trips. Based on a schedule of commencing construction in the 2nd quarter of 2018, the combined construction worker and truck traffic peak would occur in the 1st quarter of 2032 under Construction Phasing Plan 3. This first primary worst-case period represents the maximum peak in construction activities out of the three construction phasing plans. The daily average numbers of construction workers and truck deliveries during this construction peak quarter were estimated at 1,356 workers and 327 truck deliveries per day (see **Appendix A**). The secondary worst-case period, which represents the maximum peak construction activities with construction on Block 1129, the combined construction worker and truck traffic peak would occur in the 4th quarter of 2027 under Construction Phasing Plan 3. The daily average numbers of construction workers and truck deliveries during this secondary worst-case period construction peak quarter were estimated at 395 workers and 214 truck deliveries per day (see **Appendix A**). Additionally, portions of the Phase II buildings would be completed and would also generate operational traffic by the peak quarters of these two worst-case periods. This operational traffic is combined with the construction traffic to assess the worst-case traffic impacts during both periods. Estimates of the construction activities are further discussed below.

Construction Work Shifts and Activities

Under the Extended Build-Out Scenario analyzed in this SEIS, Phase II construction of the Project would be carried out in accordance with New York City laws and regulations, which, in general, allow construction activities between 7 AM and 6 PM. Construction work would begin at 7 AM on weekdays, with most workers arriving between 6 AM and 7 AM. Normally, weekday work would end by 3:30 PM, but it can be expected that, in order to meet the construction schedule or to complete certain critical tasks, the workday may occasionally be extended beyond normal work hours. Any extended workdays would generally last until approximately 6 PM and would not include all construction workers on-site, but only those involved in the specific task requiring additional work time.

Weekend work would not be scheduled regularly, but may occur from time to time to make up for weather delays, unforeseen circumstances, or special activities such as erecting/dismantling tower cranes. In such cases, appropriate work permits from the New York City Department of Buildings (DOB) would be obtained. Similar to an extended workday, the numbers of workers and pieces of equipment in operation would be limited to those needed to complete the particular task at hand. The duration of a typical weekend workday would be on a Saturday from approximately 7 AM to 5 PM. However, these hours could be extended to address special circumstances in limited instances.

Table 3H-4
Construction Phasing Plan 1 - Trip Generation

Vehicle PCEs (Autos + Trucks)	2018				2019				2020				2021				2022			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
6 AM - 7 AM	0	55	55	55	47	61	69	91	107	140	190	204	196	172	181	207	196	144	179	167
7 AM - 8 AM	0	22	22	22	18	24	28	32	42	50	66	70	70	62	66	72	66	50	64	60
8 AM - 9 AM	0	20	20	20	16	20	24	28	32	36	44	48	52	52	48	52	40	36	52	40
9 AM - 10 AM	0	20	20	20	16	20	24	28	32	36	40	48	52	52	44	52	40	36	52	40
10 AM - 11 AM	0	20	20	20	16	20	24	28	32	36	40	48	48	52	44	52	40	36	52	40
11 AM - 12 PM	0	20	20	20	16	20	24	28	32	36	40	44	48	52	44	52	40	36	52	40
12 PM - 1 PM	0	20	20	20	12	20	20	28	32	36	40	44	48	52	44	52	40	32	52	40
1 PM - 2 PM	0	20	20	16	12	16	20	24	32	32	40	44	48	52	44	52	40	32	52	40
2 PM - 3 PM	0	9	9	9	9	10	14	18	19	23	31	35	33	29	33	34	31	23	30	28
3 PM - 4 PM	0	7	7	7	11	13	13	19	23	52	86	88	72	44	69	79	92	56	51	67
4 PM - 5 PM	0	1	1	1	1	2	2	2	3	7	11	11	9	5	9	10	11	7	6	8
5 PM - 6 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily Total	0	214	214	210	174	226	262	326	386	484	628	684	676	624	626	714	636	488	642	570
Vehicle PCEs (Autos + Trucks)	2023				2024				2025				2026				2027			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
6 AM - 7 AM	214	194	180	192	212	248	234	198	191	91	111	104	57	63	93	138	116	219	282	243
7 AM - 8 AM	76	68	64	72	76	88	78	66	68	30	38	36	22	24	36	48	44	74	92	82
8 AM - 9 AM	56	48	44	56	56	64	52	44	52	20	28	28	16	20	32	32	36	52	56	48
9 AM - 10 AM	56	44	40	56	56	64	52	44	52	20	28	28	12	20	32	28	36	52	56	48
10 AM - 11 AM	56	44	40	56	56	64	52	44	52	20	28	28	12	20	32	28	32	52	52	48
11 AM - 12 PM	52	44	40	56	56	60	52	40	52	16	28	28	12	20	28	28	32	52	52	48
12 PM - 1 PM	52	44	40	56	56	60	52	40	48	16	24	28	12	16	28	28	32	52	52	48
1 PM - 2 PM	52	44	40	56	56	60	48	40	48	16	24	28	12	16	28	28	32	48	52	48
2 PM - 3 PM	38	34	30	34	36	44	41	31	32	13	17	16	11	10	18	24	20	35	46	39
3 PM - 4 PM	78	78	76	48	68	92	102	90	63	43	43	36	25	15	17	62	32	91	146	119
4 PM - 5 PM	10	10	10	6	8	12	13	11	8	5	5	4	3	2	2	8	4	11	18	15
5 PM - 6 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily Total	740	652	604	688	736	856	776	648	666	290	374	364	194	226	346	452	416	738	904	786
Vehicle PCEs (Autos + Trucks)	2028				2029				2030				2031				2032			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
6 AM - 7 AM	252	323	256	211	219	168	127	215	167	275	356	264	252	339	313	263	256	270	361	320
7 AM - 8 AM	78	104	86	66	68	48	38	76	52	90	118	88	88	116	104	82	86	90	122	110
8 AM - 9 AM	40	64	60	36	36	16	16	56	28	56	72	56	56	84	68	44	52	56	84	76
9 AM - 10 AM	40	64	60	36	36	16	16	56	28	56	68	56	56	84	68	44	52	52	84	72
10 AM - 11 AM	40	64	60	36	36	16	16	52	28	56	68	56	56	84	68	44	48	52	84	72
11 AM - 12 PM	40	64	56	32	36	16	16	52	24	56	68	56	56	80	68	40	48	52	84	72
12 PM - 1 PM	40	64	56	32	36	12	16	52	24	56	68	56	56	80	68	40	48	52	80	72
1 PM - 2 PM	40	64	56	32	36	12	16	52	24	56	68	52	56	80	64	40	48	52	80	72
2 PM - 3 PM	39	52	41	31	32	24	19	38	24	45	59	44	42	56	50	39	41	45	59	53
3 PM - 4 PM	152	163	108	123	131	128	87	79	99	135	184	128	108	131	145	155	132	138	153	136
4 PM - 5 PM	19	20	13	15	16	16	11	10	12	17	23	16	14	16	18	19	17	17	19	17
5 PM - 6 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily Total	780	1,046	852	650	682	472	378	738	510	898	1,152	872	840	1,150	1,034	810	828	876	1,210	1,072
Vehicle PCEs (Autos + Trucks)	2033				2034				2035											
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q								
6 AM - 7 AM	203	113	186	137	175	186	157	139	111	86	93	77								
7 AM - 8 AM	66	40	68	46	56	60	48	38	34	28	36	30								
8 AM - 9 AM	40	24	52	28	32	32	20	12	8	8	28	28								
9 AM - 10 AM	40	20	52	28	32	32	20	12	8	8	24	28								
10 AM - 11 AM	36	20	48	28	32	32	20	12	8	8	24	28								
11 AM - 12 PM	36	20	48	28	28	28	20	12	8	8	24	24								
12 PM - 1 PM	36	20	48	28	28	28	16	12	8	8	24	24								
1 PM - 2 PM	36	20	48	28	28	28	16	8	8	8	24	24								
2 PM - 3 PM	33	20	32	21	28	30	22	21	15	12	16	13								
3 PM - 4 PM	107	61	62	69	99	110	109	107	91	62	29	9								
4 PM - 5 PM	13	8	8	9	12	14	14	13	11	8	4	1								
5 PM - 6 PM	0	0	0	0	0	0	0	0	0	0	0	0								
Daily Total	646	366	652	450	550	580	462	386	310	244	326	286								

Atlantic Yards Arena and Redevelopment Project FSEIS

Table 3H-5
Construction Phasing Plan 2 - Trip Generation

Vehicle PCEs (Autos + Trucks)	2018				2019				2020				2021				2022			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
6 AM - 7 AM	0	51	65	103	94	124	205	193	199	253	287	258	249	173	168	250	104	106	126	132
7 AM - 8 AM	0	20	28	36	36	48	72	66	68	86	98	86	84	58	58	88	38	36	44	50
8 AM - 9 AM	0	20	24	28	28	36	56	48	44	60	72	60	56	36	36	64	28	24	32	32
9 AM - 10 AM	0	20	20	28	28	36	56	48	40	60	72	60	56	36	36	60	28	20	32	32
10 AM - 11 AM	0	20	20	28	28	36	56	48	40	60	72	60	56	36	36	60	24	20	32	32
11 AM - 12 PM	0	20	20	28	24	36	56	48	40	60	72	60	56	36	32	60	24	20	28	32
12 PM - 1 PM	0	20	20	28	24	36	56	48	40	60	68	60	52	36	32	60	24	20	28	32
1 PM - 2 PM	0	20	20	24	24	36	52	44	40	60	68	56	52	32	32	60	24	20	28	32
2 PM - 3 PM	0	8	14	20	16	24	36	33	32	41	49	45	42	27	27	44	17	18	22	23
3 PM - 4 PM	0	3	13	31	30	32	65	73	95	105	107	106	113	85	84	98	40	50	50	52
4 PM - 5 PM	0	0	2	4	4	4	8	9	12	13	13	13	14	11	11	12	5	6	6	7
5 PM - 6 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily Total	0	202	246	358	336	448	718	658	650	858	978	864	830	566	552	856	356	340	428	456
Vehicle PCEs (Autos + Trucks)	2023				2024				2025				2026				2027			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
6 AM - 7 AM	179	91	111	67	76	146	171	236	249	184	148	249	157	150	150	120	171	234	246	390
7 AM - 8 AM	62	34	38	24	24	50	60	82	86	66	48	80	52	50	50	38	54	74	80	128
8 AM - 9 AM	48	28	28	16	12	36	44	60	60	40	24	48	32	32	32	20	32	40	48	76
9 AM - 10 AM	48	28	28	16	12	36	40	60	60	40	20	48	32	32	32	20	32	40	48	76
10 AM - 11 AM	48	24	28	12	12	36	40	60	60	40	20	48	28	32	32	20	32	40	48	76
11 AM - 12 PM	48	24	28	12	8	36	40	56	60	40	20	48	28	28	28	20	32	36	48	72
12 PM - 1 PM	44	24	28	12	8	36	40	56	60	40	20	44	28	28	28	20	32	36	44	72
1 PM - 2 PM	44	24	28	12	8	36	40	56	60	40	20	44	28	28	28	16	28	36	44	72
2 PM - 3 PM	31	15	21	12	10	27	28	39	41	31	24	40	26	25	25	17	27	37	40	62
3 PM - 4 PM	59	27	39	31	52	54	67	92	101	84	96	129	81	74	74	72	91	138	126	206
4 PM - 5 PM	7	3	5	4	6	7	8	11	13	11	12	16	10	9	9	9	11	17	16	26
5 PM - 6 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily Total	618	322	382	218	228	500	578	808	850	616	452	794	502	488	488	372	542	728	788	1,256
Vehicle PCEs (Autos + Trucks)	2028				2029				2030				2031				2032			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
6 AM - 7 AM	361	200	236	384	273	179	166	118	187	295	202	229	205	215	279	230	199	171	160	222
7 AM - 8 AM	122	68	76	122	88	58	58	38	56	96	68	80	72	70	90	78	70	60	56	74
8 AM - 9 AM	84	48	44	68	52	36	32	16	24	56	44	56	48	44	56	56	40	36	52	52
9 AM - 10 AM	84	48	44	68	52	36	32	12	24	52	44	56	44	44	56	56	40	36	52	52
10 AM - 11 AM	84	44	44	68	52	36	32	12	24	52	44	52	44	44	56	56	40	32	52	52
11 AM - 12 PM	84	44	40	64	52	36	32	12	24	52	40	52	44	40	56	56	40	32	52	52
12 PM - 1 PM	84	44	40	64	52	36	32	12	20	52	40	52	44	40	56	52	40	32	52	52
1 PM - 2 PM	80	44	40	64	48	32	32	12	20	52	40	52	44	40	56	52	40	32	48	48
2 PM - 3 PM	63	34	36	59	46	31	27	19	28	48	32	40	36	33	45	39	35	28	26	39
3 PM - 4 PM	149	84	132	216	141	87	86	86	131	163	94	93	93	107	139	90	59	67	76	90
4 PM - 5 PM	19	10	16	27	18	11	11	11	16	20	12	12	12	13	17	11	7	8	10	11
5 PM - 6 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily Total	1,214	668	748	1,204	874	578	540	348	554	938	660	774	686	690	906	776	702	574	528	744
Vehicle PCEs (Autos + Trucks)	2033				2034				2035											
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q								
6 AM - 7 AM	157	193	172	172	199	166	129	124	85	137	60	60								
7 AM - 8 AM	58	70	62	60	66	54	44	44	28	50	24	24								
8 AM - 9 AM	40	56	48	44	44	36	32	32	16	32	24	24								
9 AM - 10 AM	40	56	48	40	44	36	32	32	12	32	24	24								
10 AM - 11 AM	40	56	48	40	44	36	32	32	12	32	24	24								
11 AM - 12 PM	40	52	48	40	44	36	32	32	12	32	20	24								
12 PM - 1 PM	40	52	44	40	44	36	28	28	12	32	20	20								
1 PM - 2 PM	40	52	44	40	40	36	28	28	12	32	20	20								
2 PM - 3 PM	27	35	31	28	31	29	22	22	14	23	12	12								
3 PM - 4 PM	57	57	56	68	91	74	49	48	49	53	4	4								
4 PM - 5 PM	7	7	7	8	11	9	6	6	6	7	0	0								
5 PM - 6 PM	0	0	0	0	0	0	0	0	0	0	0	0								
Daily Total	546	686	608	580	658	548	434	428	258	462	232	236								

Table 3H-6
Construction Phasing Plan 3 - Trip Generation

Vehicle PCEs (Autos + Trucks)	2018				2019				2020				2021				2022			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
6 AM - 7 AM	0	55	55	55	47	61	69	91	100	106	118	113	103	124	0	0	0	0	0	0
7 AM - 8 AM	0	22	22	22	18	24	28	32	36	36	40	40	32	44	0	0	0	0	0	0
8 AM - 9 AM	0	20	20	20	16	20	24	28	28	24	28	24	20	32	0	0	0	0	0	0
9 AM - 10 AM	0	20	20	20	16	20	24	28	28	20	28	24	20	28	0	0	0	0	0	0
10 AM - 11 AM	0	20	20	20	16	20	24	28	28	20	28	24	20	28	0	0	0	0	0	0
11 AM - 12 PM	0	20	20	20	16	20	24	28	28	20	28	24	20	28	0	0	0	0	0	0
12 PM - 1 PM	0	20	20	20	12	20	20	28	28	20	24	24	20	28	0	0	0	0	0	0
1 PM - 2 PM	0	20	20	16	12	16	20	24	28	20	24	24	20	28	0	0	0	0	0	0
2 PM - 3 PM	0	9	9	9	9	10	14	18	16	18	18	18	18	22	0	0	0	0	0	0
3 PM - 4 PM	0	7	7	7	11	13	13	19	32	50	50	49	51	48	0	0	0	0	0	0
4 PM - 5 PM	0	1	1	1	1	2	2	2	4	6	6	6	6	6	0	0	0	0	0	0
5 PM - 6 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily Total	0	214	214	210	174	226	262	326	356	340	392	370	330	416	0	0	0	0	0	0
Vehicle PCEs (Autos + Trucks)	2023				2024				2025				2026				2027			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
6 AM - 7 AM	0	0	0	0	0	0	0	0	0	45	61	69	120	163	171	200	235	226	264	307
7 AM - 8 AM	0	0	0	0	0	0	0	0	0	16	24	28	46	58	58	72	84	78	90	110
8 AM - 9 AM	0	0	0	0	0	0	0	0	0	12	20	24	36	48	44	56	60	52	64	88
9 AM - 10 AM	0	0	0	0	0	0	0	0	0	12	20	24	36	48	44	52	60	52	64	84
10 AM - 11 AM	0	0	0	0	0	0	0	0	0	12	20	24	36	48	44	52	60	48	64	84
11 AM - 12 PM	0	0	0	0	0	0	0	0	0	12	20	20	36	48	44	52	60	48	64	84
12 PM - 1 PM	0	0	0	0	0	0	0	0	0	12	20	20	36	48	44	52	60	48	64	84
1 PM - 2 PM	0	0	0	0	0	0	0	0	0	8	20	20	36	44	44	52	60	48	64	84
2 PM - 3 PM	0	0	0	0	0	0	0	0	0	10	10	14	23	29	31	36	42	37	45	55
3 PM - 4 PM	0	0	0	0	0	0	0	0	0	13	13	13	28	43	59	64	83	102	104	91
4 PM - 5 PM	0	0	0	0	0	0	0	0	0	2	2	2	3	5	7	8	10	13	13	11
5 PM - 6 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily Total	0	0	0	0	0	0	0	0	0	154	230	258	436	582	590	696	814	752	900	1,082
Vehicle PCEs (Autos + Trucks)	2028				2029				2030				2031				2032			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
6 AM - 7 AM	272	276	298	296	238	334	396	398	326	370	413	384	485	400	520	549	642	466	349	333
7 AM - 8 AM	95	94	103	102	86	112	138	136	110	122	136	126	164	134	166	178	210	150	110	102
8 AM - 9 AM	72	60	72	76	64	76	100	96	76	76	84	76	112	88	96	104	132	88	56	52
9 AM - 10 AM	72	60	68	76	60	76	100	96	76	76	84	76	112	88	96	100	132	88	56	52
10 AM - 11 AM	72	60	68	76	60	76	100	96	76	76	84	72	112	88	96	100	132	88	56	52
11 AM - 12 PM	72	60	68	76	60	76	96	96	76	76	84	72	112	88	96	100	132	88	52	52
12 PM - 1 PM	72	60	68	76	60	76	96	96	76	76	84	72	112	84	92	100	128	84	52	52
1 PM - 2 PM	72	60	68	72	60	72	96	92	72	72	80	72	112	84	92	100	128	84	52	48
2 PM - 3 PM	48	48	51	53	43	58	67	68	53	59	66	61	82	67	83	89	103	75	55	53
3 PM - 4 PM	92	124	122	104	86	142	148	158	138	182	205	200	205	184	284	293	314	250	213	201
4 PM - 5 PM	12	16	15	13	11	18	19	20	17	23	26	25	26	23	35	37	39	31	27	25
5 PM - 6 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily Total	951	918	1,001	1,020	828	1,116	1,356	1,352	1,096	1,208	1,346	1,236	1,634	1,328	1,656	1,750	2,092	1,492	1,078	1,022
Vehicle PCEs (Autos + Trucks)	2033				2034				2035											
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q								
6 AM - 7 AM	419	211	218	250	198	150	116	103	94	98	139	158								
7 AM - 8 AM	140	70	68	84	68	50	38	30	26	30	46	58								
8 AM - 9 AM	92	40	36	52	44	32	20	12	8	8	28	52								
9 AM - 10 AM	92	40	36	52	44	32	20	12	8	8	28	52								
10 AM - 11 AM	92	40	36	52	44	32	16	12	8	8	28	52								
11 AM - 12 PM	88	40	36	48	40	28	16	12	8	8	24	52								
12 PM - 1 PM	88	40	36	48	40	28	16	12	8	8	24	52								
1 PM - 2 PM	88	40	36	48	40	28	16	8	8	8	24	48								
2 PM - 3 PM	68	33	32	40	32	25	17	17	13	13	21	31								
3 PM - 4 PM	195	107	130	126	94	74	72	71	74	74	75	26								
4 PM - 5 PM	24	13	16	16	12	9	9	9	9	9	9	3								
5 PM - 6 PM	0	0	0	0	0	0	0	0	0	0	0	0								
Daily Total	1,386	674	680	816	656	488	356	298	264	272	446	584								

At limited times during the construction period when foundation and construction work for the platform deck over the existing Long Island Rail Road (LIRR) yard is required, nighttime and/or weekend work may be scheduled to avoid interference with the LIRR train schedule. In such

cases, construction activities would be scheduled to start after the Yard has been vacated to meet the evening rush hour and be completed before trains return from the morning rush hour.

Since extended hours, nighttime work, and weekend construction would not be scheduled regularly for the Phase II construction activities, the detailed construction traffic analysis presented in the sections below only considers the weekday morning worker arrival and the afternoon worker departure time periods.

Construction Worker Modal Splits and Vehicle Occupancy

Similar to the 2006 FEIS, approximately 55 percent of construction workers are assumed to travel to the sites by private autos at an average occupancy of 1.90 persons per vehicle. The remaining 45 percent would use public transit.

Peak Hour Construction Worker Vehicle and Truck Trips

Construction activities would mostly take place during the typical construction shift of 7:00 AM to 3:30 PM. While construction truck trips would be made throughout the day (with more trips made during the early morning), most trucks would remain in the area for short durations and construction workers would typically commute during the hours before and after the work shift. For analysis purposes, each worker vehicle was assumed to arrive in the morning and depart in the afternoon or early evening, whereas each truck delivery was assumed to result in two truck trips during the same hour (one “in” and one “out”). Furthermore, in accordance with the *City Environmental Quality Review (CEQR) Technical Manual*, the traffic analysis assumed that each truck has a PCE of 2.0.

The estimated daily vehicle trips were distributed throughout the workday based on projected work shift allocations and conventional arrival/departure patterns of construction workers and trucks. For construction workers, the majority (approximately 80 percent) of the arrival and departure trips were assumed to take place during the hour before and after each shift. For construction trucks, deliveries were assumed to occur throughout the day when the construction site is active. Construction truck deliveries typically peak during the early morning (approximately 25 percent), overlapping with construction worker arrival traffic. The peak construction hourly trip projections are summarized in **Tables 3H-7** and **3H-8** for the 1st quarter of 2032 and the 4th quarter of 2027, respectively, both under Construction Phasing Plan 3. The projected construction activities in the 1st quarter of 2032 under Construction Phasing Plan 3 would result in 642 PCEs between 6 and 7 AM and 314 PCEs between 3 and 4 PM on weekdays. Similarly for the 4th quarter of 2027 under Construction Phasing Plan 3, the projected construction activities would result in 307 PCEs between 6 and 7 AM and 91 PCEs between 3 and 4 PM on weekdays. Since some of the Phase II buildings would have already been completed and occupied, operational traffic generated by those completed buildings together with the projected construction traffic were considered for the construction traffic impact analysis. The analysis results are presented below.

Table 3H-7
Construction Phasing Plan 3 - 1st Quarter of 2032
Peak Construction Vehicle Trip Projections

Hour	Auto Trips			Truck Trips			Total					
	Regular Shift			Regular Shift			Vehicle Trips			PCE Trips		
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
Weekday (1st Quarter of 2032)												
6 AM - 7 AM	314	0	314	82	82	164	396	82	478	478	164	642
7 AM - 8 AM	78	0	78	33	33	66	111	33	144	144	66	210
8 AM - 9 AM	0	0	0	33	33	66	33	33	66	66	66	132
9 AM - 10 AM	0	0	0	33	33	66	33	33	66	66	66	132
10 AM - 11 AM	0	0	0	33	33	66	33	33	66	66	66	132
11 AM - 12 PM	0	0	0	33	33	66	33	33	66	66	66	132
12 PM - 1 PM	0	0	0	32	32	64	32	32	64	64	64	128
1 PM - 2 PM	0	0	0	32	32	64	32	32	64	64	64	128
2 PM - 3 PM	0	39	39	16	16	32	16	55	71	32	71	103
3 PM - 4 PM	0	314	314	0	0	0	0	314	314	0	314	314
4 PM - 5 PM	0	39	39	0	0	0	0	39	39	0	39	39
Daily Total	392	392	784	327	327	654	719	719	1,438	1,046	1,046	2,092

Notes: Hourly construction worker and truck trips were derived from an estimated quarterly average number of construction workers and truck deliveries per day, with each truck delivery resulting in two daily trips (arrival and departure). Construction peak hours are shaded in this table.

Table 3H-8
Construction Phasing Plan 3 - 4th Quarter of 2027
Peak Construction Vehicle Trip Projections

Hour	Auto Trips			Truck Trips			Total					
	Regular Shift			Regular Shift			Vehicle Trips			PCE Trips		
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
Weekday (4th Quarter of 2027)												
6 AM - 7 AM	91	0	91	54	54	108	145	54	199	199	108	307
7 AM - 8 AM	22	0	22	22	22	44	44	22	66	66	44	110
8 AM - 9 AM	0	0	0	22	22	44	22	22	44	44	44	88
9 AM - 10 AM	0	0	0	21	21	42	21	21	42	42	42	84
10 AM - 11 AM	0	0	0	21	21	42	21	21	42	42	42	84
11 AM - 12 PM	0	0	0	21	21	42	21	21	42	42	42	84
12 PM - 1 PM	0	0	0	21	21	42	21	21	42	42	42	84
1 PM - 2 PM	0	0	0	21	21	42	21	21	42	42	42	84
2 PM - 3 PM	0	11	11	11	11	22	11	22	33	22	33	55
3 PM - 4 PM	0	91	91	0	0	0	0	91	91	0	91	91
4 PM - 5 PM	0	11	11	0	0	0	0	11	11	0	11	11
Daily Total	113	113	226	214	214	428	327	327	654	541	541	1,082

Notes: Hourly construction worker and truck trips were derived from an estimated quarterly average number of construction workers and truck deliveries per day, with each truck delivery resulting in two daily trips (arrival and departure). Construction peak hours are shaded in this table.

CONSTRUCTION TRAFFIC CAPACITY ANALYSIS

Vehicles generated by construction activities were assigned to the street network (see **Exhibits A-12 through A-15** in **Appendix A**). Fifty-five key intersections were identified for the 1st quarter of 2032 under Construction Phasing Plan 3 analysis and shown in **Table 3H-9** and **Figure 3H-1**. The intersections selected for detailed analysis are the ones previously analyzed in the 2006 FEIS construction traffic analysis, additional intersections that have been identified as impacted during one or more peak hours in the Build condition in Chapter 4D, “Operational Transportation,” and intersections that would experience 50 or more construction peak hour

Atlantic Yards Arena and Redevelopment Project FSEIS

PCEs. Based on these criteria, a subset of these intersections was selected for analysis for the 4th quarter of 2027 under Construction Phasing Plan 3 as shown in **Table 3H-9**. These intersections were analyzed for 6 AM to 7 AM and 3 PM to 4 PM for both the 1st quarter of 2032 and the 4th quarter of 2027, which correspond to the hours of peak vehicular traffic generated by construction.

The operations at these intersections were analyzed using the Highway Capacity Software (HCS+) Version 5.5, which is based on the methodologies presented in the *2000 Highway Capacity Manual (HCM)*. A discussion of the analysis methodology can be found in Chapter 4D, “Operational Transportation.”

**Table 3H-9
Construction Analysis Locations**

Analysis Intersection	2032	2027	Analysis Intersection	2032	2027
Tillary Street and Flatbush Avenue Extension	✓	✓	Atlantic Avenue and 4th Avenue	✓	
Myrtle Avenue and Gold Street / Flatbush Avenue Extension	✓	✓	Atlantic Avenue and Fort Greene Place	✓	
Willoughby Street and Flatbush Avenue Extension	✓	✓	Atlantic Avenue and 6th Avenue / South Portland Avenue	✓	✓
Dekalb Avenue and Flatbush Avenue Extension	✓	✓	Atlantic Avenue and Carlton Avenue	✓	
Fulton Street and Flatbush Avenue Extension	✓	✓	Atlantic Avenue and Clermont Avenue	✓	
Livingston Street and Flatbush Avenue	✓	✓	Atlantic Avenue and Vanderbilt Avenue	✓	✓
Lafayette Avenue / Schermerhorn Street and Flatbush Avenue	✓	✓	Atlantic Avenue and Clinton Avenue	✓	✓
4th Avenue and Flatbush Avenue	✓	✓	Atlantic Avenue and Waverly Avenue	✓	
Atlantic Avenue and Flatbush Avenue	✓	✓	Atlantic Avenue and Underhill Avenue / Washington Avenue	✓	✓
Pacific Street and Flatbush Avenue	✓	✓	Atlantic Avenue and Grand Avenue	✓	✓
5th Avenue and Flatbush Avenue	✓	✓	Pacific Street and 6th Avenue	✓	✓
Dean Street and Flatbush Avenue	✓	✓	Pacific Street and Carlton Avenue	✓	✓
Bergen Street and Flatbush Avenue	✓	✓	Pacific Street and Vanderbilt Avenue	✓	
Tillary Street and Adams Street / Brooklyn Bridge	✓		Dean Street and 4th Avenue	✓	✓
Myrtle Avenue and Vanderbilt Avenue	✓		Dean Street and 5th Avenue	✓	✓
Dekalb Avenue and Vanderbilt Avenue	✓		Dean Street and 6th Avenue	✓	✓
Fulton Street and Vanderbilt Avenue	✓		Dean Street and Carlton Avenue	✓	✓
Schermerhorn Street and Boerum Place	✓		Dean Street and Vanderbilt Avenue	✓	✓
State Street and Boerum Place	✓		Bergen Street and 4th Avenue	✓	✓
Atlantic Avenue and Hicks Street	✓	✓	Bergen Street and 5th Avenue	✓	✓
Atlantic Avenue and Henry Street	✓	✓	Bergen Street and Carlton Avenue	✓	✓
Atlantic Avenue and Clinton Street	✓	✓	Bergen Street and Vanderbilt Avenue	✓	✓
Atlantic Avenue and Boerum Place	✓	✓	Saint Marks Place and 4th Avenue	✓	✓
Atlantic Avenue and Smith Street	✓	✓	Saint Marks Avenue and Vanderbilt Avenue	✓	
Atlantic Avenue and Hoyt Street	✓		Prospect Place and Vanderbilt Avenue	✓	
Atlantic Avenue and Bond Street	✓	✓	Eastern Parkway and Washington Avenue	✓	
Atlantic Avenue and Nevins Street	✓	✓	6th Avenue and Bergen Street	✓	✓
Atlantic Avenue and 3rd Avenue	✓				

CONSTRUCTION PEAK TRAFFIC VOLUMES AND CONDITIONS

To assess the potential impacts resulting from construction-generated traffic, baseline conditions were developed with which conditions during construction could be compared. Using the existing automatic traffic recorder (ATR) data and the future No Build peak period traffic volumes projected for the operational traffic analysis in Chapter 4D, “Operational Transportation,” baseline conditions were established for the weekday morning 6 AM to 7 AM and weekday afternoon 3 PM to 4 PM construction analysis peak hours.

The ATR volume comparison showed that background traffic volumes during the 6 AM to 7 AM construction peak hour are approximately 25 percent lower than the typical 8 AM to 9 AM commuter peak hour. Similarly, background traffic volumes during the 3 PM to 4 PM construction peak hour are approximately 4 percent lower than the typical 5 PM to 6 PM commuter peak hour.

Future Without Construction of Phase II

The future 2032 construction No Build traffic volumes were conservatively based on the 2035 No Build operational traffic volumes presented in Chapter 4D, “Operational Transportation” and adjusted based on the ATR volume comparison ratios described above.

The future 2027 construction No Build traffic volumes were similarly based on the 2035 No Build operational traffic volumes. For the future 2027 construction No Build volumes, the 2035 No Build operational baseline traffic volumes (without the traffic generated by future No Build projects) were first adjusted by scaling back the background growth to 2027 levels. Traffic generated by future No Build projects (including from the completed Buildings 2, 3, and 4 from Phase I) were then overlaid on top of the 2027 No Build baseline traffic volumes to generate the 2027 No Build traffic volumes. The 2027 No Build traffic volumes were then adjusted based on the ATR volume comparison ratios described above to arrive at the 2027 construction No Build traffic volumes for 6 AM to 7 AM and 3 PM to 4 PM.

As described above, Building 1 and Site 5 of Phase I may be constructed any time during the overall construction period and could occur during Phase II construction. For a conservative analysis, their peak construction-related activities have also been accounted for in 2032 and 2027 construction No Build traffic volumes.

The projected construction activities during the peak construction quarter for Building 1 would result in 160 PCEs between 6 AM and 7 AM and 108 PCEs between 3 PM and 4 PM on weekdays. Similarly, the projected construction activities during the peak construction quarter for Site 5 would result in 183 PCEs between 6 AM and 7 AM and 51 PCEs between 3 PM and 4 PM on weekdays.

The 2032 and 2027 construction No Build traffic volumes are shown in **Exhibits A-16** and **A-17** and **Exhibits A-18** and **A-19**, respectively.

Future With Construction of Phase II

According to projections presented above (see **Tables 3H-7** and **3H-8**), peak construction activities would generate 314 autos and 164 trucks during the 6 to 7 AM construction peak hour and 314 autos and 0 trucks during the 3 to 4 PM construction peak hour during the 1st Quarter of 2032. Peak construction activities would also generate 91 autos and 108 trucks during the 6 to 7 AM construction peak hour and 91 autos and 0 trucks during the 3 to 4 PM construction peak hour during the 4th Quarter of 2027. Similar to the 2006 FEIS, auto trips were assigned along roadways leading to available on-street parking and off-site parking facilities in the study area, and trucks were assigned to NYCDOT-designated truck routes. The 2032 and 2027 construction Build traffic volumes are shown in **Exhibits A-20** and **A-21** and **Exhibits A-22** and **A-23**, respectively.

Level of Service Conditions for Construction Phasing Plan 3 – 1st Quarter of 2032

It should be noted that subsequent to the issuance of the DSEIS, the recommended traffic mitigation measures were further reviewed by NYCDOT, and additional measures were explored, resulting in the elimination or modification of some of the measures included in the

Atlantic Yards Arena and Redevelopment Project FSEIS

Project’s traffic mitigation plan. As a result, the traffic mitigation analysis in this FSEIS indicates that fewer of the intersections identified as impacted in the DSEIS would be fully mitigated. As described above, during the 1st quarter of 2032 under Construction Phasing Plan 3, a total of six Phase II buildings are assumed to be operational including Buildings 8, 11, 12, 13, 14, and 15. During this same period, Buildings 5, 9, and 10, and the platform segments for Buildings 6 and 7 are assumed to be under concurrent construction at the project site. An analysis of the 55 construction study area intersections for 2032 showed that 14 of the 55 intersections would be significantly impacted during the 6 to 7 AM construction peak hour, and 36 would be significantly impacted during the 3 to 4 PM construction peak hour. Overall, significant adverse traffic impacts were identified at 36 out of the 55 analyzed intersections during one or both of the analysis time periods. A summary of the analysis results and the recommended mitigation measures are presented in **Table 3H-10. Exhibits A-24 and A-25** summarize the detailed capacity analysis results and mitigation recommendations for the 6 to 7 AM and 3 to 4 PM construction peak hours for the 1st quarter of 2032, respectively. The recommended mitigation measures would be similar to those proposed to mitigate the intersection impacts associated with the Project’s full build-out. A discussion of these results and the mitigation measures that could be implemented to address identified significant adverse impacts for each of the impacted intersections is provided below.

Table 3H-10

Construction Phasing Plan 3 - 1st Quarter of 2032

Significantly Impacted Locations and Recommended Mitigation Measures

Intersection	Weekday 6-7 AM		Weekday 3-4 PM	
	Impacted Lane Group	Recommended Mitigation	Impacted Lane Group	Recommended Mitigation
Tillary Street at Flatbush Avenue Extension	WB - L	Implement operational mitigation	WB - L	Implement operational mitigation
Dekalb Avenue at Flatbush Avenue Extension			SB - TR	<u>Shift 1 second of green time from the WB phase to the NB/SB phase</u>
Fulton Street at Flatbush Avenue/Flatbush Avenue Extension			NB - T	Unmitigated
Lafayette Avenue/Schermerhorn Street at Flatbush Avenue			NB - TR	Unmitigated
4th Avenue at Flatbush Avenue			NB - T	Implement operational mitigation
Atlantic Avenue at Flatbush Avenue	WB - R	Shift 2 seconds of green time from the NB/SB phase to the EB/WB phase	WB - R	Unmitigated
Bergen Street at Flatbush Avenue			WB - LT	Unmitigated
Tillary Street at Adams Street/Brooklyn Bridge			NB - T (Mainline)	Unmitigated
Myrtle Avenue at Vanderbilt Avenue	SB - LTR	Implement operational mitigation	NB - LTR	Implement operational mitigation
Dekalb Avenue at Vanderbilt Avenue			SB - LTR	
Fulton Street at Vanderbilt Avenue			NB - LT	<u>Unmitigated</u>
Schermerhorn Street and Boerum Place			SB - TR	
State Street at Boerum Place			NB - L	Unmitigated
Atlantic Avenue at Clinton Street			SB - LT	<u>Shift 1 second of green time from the EB phase to the NB/SB phase</u>
			EB - LT	<u>Shift 1 second of green time from the NB phase to the EB/WB phase</u>

Table 3H-10 (cont'd)
Construction Phasing Plan 3 - 1st Quarter of 2032
Significantly Impacted Locations and Recommended Mitigation Measures

Intersection	Weekday 6-7 AM		Weekday 3-4 PM	
	Impacted Lane Group	Recommended Mitigation	Impacted Lane Group	Recommended Mitigation
Atlantic Avenue at Boerum Place	EB - TR WB - LT	Implement operational mitigation <u>Partially mitigated</u>	EB - TR WB - LT	Implement operational mitigation
Atlantic Avenue at Smith Street	EB - LT	<u>Unmitigated</u>	EB - LT	<u>Unmitigated</u>
Atlantic Avenue at Nevins Street			WB - LT	Implement operational mitigation
Atlantic Avenue at 4th Avenue			EB - T	<u>Unmitigated</u>
Atlantic Avenue at 6th Avenue/South Portland Avenue	NB - L NB - TR SB-L	Implement operational mitigation Shift 1 additional second of green time from the WB phase to the NB/SB phase	NB - L NB - TR SB - L	<u>Shift 4 seconds of green time from the WB phase to the NB/SB phase</u> Partially mitigated
Atlantic Avenue at Carlton Avenue	NB - LTR	<u>Unmitigated</u>	WB - L NB - LTR	<u>Unmitigated</u>
Atlantic Avenue at Clermont Avenue	EB - L	<u>Unmitigated</u>	EB - L SB - LR	<u>Unmitigated</u>
Atlantic Avenue at Vanderbilt Avenue			EB - TR WB - L NB - L SB - TR	<u>Unmitigated</u>
Atlantic Avenue at Clinton Avenue			SB - LR	Shift 2 seconds of green time from the EB/WB phase to the SB phase
Atlantic Avenue at Washington Avenue/Underhill Avenue			EB - TR	Implement operational mitigation Shift 1 additional second of green time from the WB phase to the EB/WB phase
Dean Street at 5th Avenue	EB - LTR NB - TR	<u>Unmitigated</u>	EB - LTR NB - TR	Implement operational mitigation
Dean Street at 6th Avenue	EB - L	Implement operational mitigation <u>Shift 2 additional seconds of green time from the NB/SB phase to the EB phase</u>	EB - L	Implement operational mitigation
Dean Street at Carlton Avenue	EB - LT	<u>Shift 3 seconds of green time from the NB phase to the EB phase</u>	EB - LT	Implement operational mitigation
Dean Street at Vanderbilt Avenue			EB - TR	Implement operational mitigation
Bergen Street at 4th Avenue			WB - LTR	Implement operational mitigation
Bergen Street at 5th Avenue	WB - TR	Implement operational mitigation	WB - L WB - TR	Implement operational mitigation
Bergen Street at Carlton Avenue	WB - TR	Implement operational mitigation	WB - TR	Implement operational mitigation Shift 2 additional seconds of green time from the NB phase to the WB phase
Bergen Street at Vanderbilt Avenue	WB - TR	Implement operational mitigation	WB - TR SB - TR	Implement operational mitigation
Saint Marks Avenue at Vanderbilt Avenue			SB - T	Implement operational mitigation Shift 1 additional second of green time from the EB phase to the NB/SB phase

Table 3H-10 (cont'd)
Construction Phasing Plan 3 - 1st Quarter of 2032
Significantly Impacted Locations and Recommended Mitigation Measures

Intersection	Weekday 6-7 AM		Weekday 3-4 PM	
	Impacted Lane Group	Recommended Mitigation	Impacted Lane Group	Recommended Mitigation
Prospect Place at Vanderbilt Avenue			SB - TR	Implement operational mitigation Shift 1 additional second of green time from the WB phase to the NB/SB phase
Eastern Parkway at Washington Avenue			NB - LTR SB - TR	<u>Unmitigated</u>
Bergen Street at 6th Avenue			WB - LTR	Shift 1 second of green time from the NB/SB phase to the WB phase
Notes: EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound L = Left-turn; T = Through; R = Right-turn				

Tillary Street and Flatbush Avenue Extension

The significant adverse impact at the westbound left-turn of this intersection during the 6 to 7 AM and 3 to 4 PM construction peak hours could be fully mitigated by implementing the operational mitigation measures of shifting of 1 second of green time from the northbound phase to the eastbound/westbound left-turn phase.

Dekalb Avenue and Flatbush Avenue Extension

The significant adverse impact at the southbound approach of this intersection during the 3 to 4 PM construction peak hour could be fully mitigated by shifting 1 second of green time from the westbound phase to the northbound/southbound phase.

Fulton Street and Flatbush Avenue/Flatbush Avenue Extension

The significant adverse impact at the northbound approach of this intersection during the 3 to 4 PM construction peak hour could not be mitigated by implementing the operational mitigation measures. Due to the concentration of departing construction worker traffic at the end of the workday, the northbound approach would experience greater vehicle trip increments during the 3 to 4 PM construction peak hour than those projected for the 2035 weekday PM operational peak hour. Although the northbound approach would not be impacted during the 2035 weekday PM operational peak hour (it would be impacted during the weekday AM and Saturday midday operational peak hours), one or more lane groups at each of the intersection approaches operate at congested levels of service. No practicable mitigation measures would be available during construction and this intersection would be unmitigated.

Lafayette Avenue/Schermerhorn Street and Flatbush Avenue

The significant adverse impact at the northbound approach of this intersection during the 3 to 4 PM construction peak hour could not be mitigated.

4th Avenue and Flatbush Avenue

The significant adverse impacts at the northbound approach and the southbound through-right during the 3 to 4 PM construction peak hour could be fully mitigated by implementing the operational mitigation measure of shifting 1 second of green time from the pedestrian phase to the northbound/southbound phase.

Atlantic Avenue and Flatbush Avenue

The significant adverse impact at the westbound right-turn of this intersection during the 6 to 7 AM construction peak hour could be fully mitigated by shifting 2 seconds of green time from the northbound/southbound phase to the eastbound/westbound phase. This significant adverse

impact during the 2035 Future With Phase II weekday AM operational peak hour would be unmitigated.

The significant adverse impact at the westbound right-turn of this intersection during the 3 to 4 PM construction peak hour could not be mitigated. This impact is likewise unmitigated during the 2035 Future With Phase II weekday PM operational peak hour.

Bergen Street and Flatbush Avenue

The significant adverse impact at the westbound left-through of this intersection during the 3 to 4 PM construction peak hour could not be mitigated.

Tillary Street and Adams Street/Brooklyn Bridge

The significant adverse impact at the northbound mainline approach of this intersection during the 3 to 4 PM construction peak hour could not be mitigated. This impact is likewise unmitigated during the 2035 Future With Phase II weekday PM operational peak hour.

Myrtle Avenue and Vanderbilt Avenue

The significant adverse impact at the southbound approach of this intersection during the 6 to 7 AM construction peak hour could be fully mitigated by implementing the operational mitigation measure of shifting 1 second of green time from the eastbound/westbound phase to northbound/southbound phase.

The significant adverse impacts at the northbound and southbound approaches of this intersection during the 3 to 4 PM construction peak hour could similarly be fully mitigated by implementing the operational mitigation measure of shifting 1 second of green time from the eastbound/westbound phase to northbound/southbound phase.

Dekalb Avenue and Vanderbilt Avenue

The significant adverse impacts at the northbound and southbound approaches of this intersection during the 3 to 4 PM construction peak hour could not be mitigated.

Fulton Street and Vanderbilt Avenue

The significant adverse impacts at the northbound left-turn and southbound through-right of this intersection during the 3 to 4 PM construction peak hour could not be mitigated.

Schermerhorn Street and Boerum Place

The significant adverse impact at the northbound left-turn of this intersection during the 3 to 4 PM construction peak hour could not be mitigated.

State Street and Boerum Place

The significant adverse impact at the southbound approach of this intersection during the 3 to 4 PM construction peak hour could be fully mitigated by shifting 1 second of green time from the eastbound phase to the northbound/southbound phase.

Atlantic Avenue and Clinton Street

The significant adverse impact at the eastbound approach of this intersection during the 3 to 4 PM construction peak hour could be fully mitigated by shifting 1 second of green time from the northbound phase to the eastbound/westbound phase.

Atlantic Avenue and Boerum Place

The significant adverse impacts at the eastbound through-right and westbound left-through of this intersection during the 6 to 7 AM construction peak hour could be partially mitigated by shifting 1 second of green time from the southbound phase to the eastbound/westbound phase.

Atlantic Yards Arena and Redevelopment Project FSEIS

The significant adverse impacts at the eastbound through-right and westbound left-through of this intersection during the 3 to 4 PM construction peak hour could be fully mitigated by shifting 1 second of green time from the eastbound left-turn phase to the eastbound/westbound phase.

Atlantic Avenue and Smith Street

The significant adverse impact at the eastbound approach of this intersection during the 6 to 7 AM and 3 to 4 PM construction peak hours could not be mitigated.

Atlantic Avenue and Nevins Street

The significant adverse impact at the westbound approach of this intersection during the 3 to 4 PM construction peak hour could be fully mitigated by implementing the operational mitigation measures including installing “No Standing Anytime” for 100 feet on the west curb of the southbound approach; and shifting 3 seconds of green time from the southbound phase to the eastbound/westbound phase.

Atlantic Avenue and 4th Avenue

The significant adverse impact at the eastbound through of this intersection during the 3 to 4 PM construction peak hour could not be mitigated.

Atlantic Avenue and 6th Avenue/South Portland Avenue

The significant adverse impacts at the northbound left-turn, northbound through-right, and southbound left-turn of this intersection during the 6 to 7 AM construction peak hour could be fully mitigated by shifting 3 seconds (1 additional second as compared with the operational mitigation measures) of green time from the westbound phase to the northbound/southbound phase.

The significant adverse impacts at the northbound left-turn, northbound through-right, and southbound left-turn of this intersection during the 3 to 4 PM construction peak hour could only be partially mitigated by shifting 4 seconds of green time from the westbound phase to the northbound/southbound phase.

Atlantic Avenue and Carlton Avenue

The significant adverse impact at the northbound approach of this intersection during the 6 to 7 AM construction peak hour could not be mitigated.

The significant adverse impacts at the westbound left-turn and northbound approach of this intersection during the 3 to 4 PM construction peak hour could not be mitigated.

Atlantic Avenue and Clermont Avenue

The significant adverse impact at the eastbound left-turn of this intersection during the 6 to 7 AM construction peak hour could not be mitigated.

The significant adverse impacts at the eastbound left-turn and southbound approach (the impact would occur during Phase II construction but not under the 2035 Future With Phase II condition) of this intersection during the 3 to 4 PM construction peak hour could not be mitigated.

Atlantic Avenue and Vanderbilt Avenue

The significant adverse impacts at the eastbound approach, westbound left-turn, northbound left-turn, and southbound approach of this intersection during the 3 to 4 PM construction peak hour could not be mitigated.

Atlantic Avenue and Clinton Avenue

The significant adverse impact at the southbound approach of this intersection during the 3 to 4 PM construction peak hour would occur during Phase II construction but not under the 2035

Future With Phase II condition. However, another lane group at this intersection is significant adversely impacted during the weekday AM operational analysis peak hour. This significant adverse impact during construction could be fully mitigated by shifting 2 seconds of green time from the eastbound/westbound phase to the southbound phase.

Atlantic Avenue and Washington Avenue/Underhill Avenue

The significant adverse impact at the eastbound approach of this intersection during the 3 to 4 PM construction peak hour could be fully mitigated by implementing the operational mitigation measure of shifting 2 seconds of green time (1 additional second as compared to the operational mitigation measures) from the westbound phase to the eastbound/westbound phase.

Dean Street and 5th Avenue

The significant adverse impacts at the eastbound approach and northbound approach of this intersection during the 6 to 7 AM construction peak hour could not be mitigated.

The significant adverse impacts at the eastbound approach and northbound approach of this intersection during the 3 to 4 PM construction peak hour could be fully mitigated by shifting 1 second of green time from the southbound phase to the northbound/southbound phase; and shifting 2 seconds of green time from the southbound phase to the eastbound phase.

Dean Street and 6th Avenue

The significant adverse impact at the eastbound left-turn of this intersection during the 6 to 7 AM construction peak hour could be fully mitigated by shifting 3 seconds of green time from the northbound/southbound phase to the eastbound phase.

The significant adverse impact at the eastbound left-turn of this intersection during the 3 to 4 PM construction peak hour could be fully mitigated by shifting 1 second of green time from the northbound/southbound phase to the eastbound phase.

Dean Street and Carlton Avenue

The significant adverse impact at the eastbound approach of this intersection during the 6 to 7 AM construction peak hour could be fully mitigated by shifting 3 seconds of green time from the northbound phase to the eastbound phase.

The significant adverse impact at the eastbound approach of this intersection during the 3 to 4 PM construction peak hour could be fully mitigated by implementing the operational mitigation measure of shifting 4 seconds of green time from the northbound phase to the eastbound phase.

Dean Street and Vanderbilt Avenue

The significant adverse impact at the eastbound through-right of this intersection during the 3 to 4 PM construction peak hour could be fully mitigated by implementing the operational mitigation measures including installing “No Standing Anytime” for 150 feet on the south curb of the eastbound approach; extending the left-turn bay on the eastbound approach to 150-feet; and restriping the eastbound approach as one 12.5-foot left-turn bay; one 10.5-foot left-through lane, and one 11-foot right-turn bay.

Bergen Street and 4th Avenue

The significant adverse impact at the westbound approach of this intersection during the 3 to 4 PM construction peak hour could be fully mitigated by implementing the operational mitigation measure of installing “No Standing 7 AM to 7 PM Except Sunday” for 100 feet on the north curb of the westbound approach.

Atlantic Yards Arena and Redevelopment Project FSEIS

Bergen Street and 5th Avenue

The significant adverse impact at the westbound through-right of this intersection during the 6 to 7 AM construction peak hour could be fully mitigated by shifting 2 seconds of green time from the northbound/southbound phase to the westbound phase.

The significant adverse impact at the westbound left-turn and through-right of this intersection during the 3 to 4 PM construction peak hour could be partially mitigated by shifting 4 seconds of green time from the northbound/southbound phase to the westbound phase.

Bergen Street and Carlton Avenue

The significant adverse impact at the westbound approach of this intersection during the 6 to 7 AM construction peak hour could be fully mitigated by implementing the operational mitigation measure of shifting 3 seconds of green time from the northbound phase to the westbound phase.

The significant adverse impact at the westbound approach of this intersection during the 3 to 4 PM construction peak hour could be fully mitigated by implementing the operational mitigation measure of shifting 4 seconds of green time (2 additional seconds as compared to the operational mitigation measures) from the northbound phase to the westbound phase.

Bergen Street and Vanderbilt Avenue

The significant adverse impacts at the westbound through-right of this intersection during the 6 to 7 AM construction peak hour could be fully mitigated by implementing the operational mitigation measures including restriping the westbound approach with one 11-foot left-turn lane, 1-foot of hatching, one 5-foot bike lane, one 11-foot through lane, and one 11-foot right-turn lane; and installing “No Standing Anytime” for 100 feet on the north curb of the westbound approach.

The significant adverse impacts at the westbound through-right and southbound approach of this intersection during the 3 to 4 PM construction peak hour could be fully mitigated by implementing the operational mitigation measures including restriping the westbound approach with one 11-foot left-turn lane, 1-foot of hatching, one 5-foot bike lane, one 11-foot through lane, and one 11-foot right-turn lane; and installing “No Standing Anytime” for 100 feet on the north curb of the westbound approach.

Saint Marks Avenue and Vanderbilt Avenue

The significant adverse impact at the southbound through of this intersection during the 3 to 4 PM construction peak hour could be fully mitigated by shifting 2 seconds of green time from the eastbound phase to the northbound/southbound phase. This would be 1 additional second of green time shift as compared to the operational mitigation measures.

Prospect Place and Vanderbilt Avenue

The significant adverse impact at the southbound approach of this intersection during the 3 to 4 PM construction peak hour could be fully mitigated by implementing the operational mitigation measures including installing “No Standing Anytime” for 100 feet on the north curb of the westbound approach; restriping the westbound approach as one 13-foot left-through lane, and one 13-foot right-turn lane; and shifting 2 seconds of green time from the westbound phase to the northbound/southbound phase. This would be 1 additional second of green time shift as compared to the operational mitigation measures.

Eastern Parkway and Washington Avenue

The significant adverse impacts at the northbound approach and southbound through-right during the 3 to 4 PM construction peak hour could not be mitigated.

Bergen Street and 6th Avenue

The significant adverse impact at the westbound approach during the 3 to 4 PM construction peak hour could be fully mitigated shifting 1 second of green time from the northbound/southbound phase to the westbound phase.

Analysis Summary

Most of the impacted intersections during the 1st quarter of 2032 construction discussed above could be fully mitigated by implementing the proposed operational mitigation measures as described in Chapter 5, “Mitigation.” In some cases, variations of the operational mitigation measures or additional measures have been recommended to fully mitigate the impacts during construction. However, due to the concentration of arriving and departing construction worker and truck traffic during the analysis time periods, no other practicable mitigation measures would be available to fully mitigate the impacts at seventeen intersections: Fulton Street at Flatbush Avenue/Flatbush Avenue Extension, Lafayette Avenue/Schermerhorn Avenue at Flatbush Avenue, Atlantic Avenue at Flatbush Avenue, Bergen Street at Flatbush Avenue, Tillary Street at Adams Street/Brooklyn Bridge, DeKalb Avenue at Vanderbilt Avenue, Fulton Street at Vanderbilt Avenue, Schermerhorn Street at Boerum Place, Atlantic Avenue at Boerum Place, Atlantic Avenue at Smith Street, Atlantic Avenue at 4th Avenue, Atlantic Avenue at 6th Avenue/South Portland Avenue, Atlantic Avenue at Carlton Avenue, Atlantic Avenue at Clermont Avenue, Atlantic Avenue at Vanderbilt Avenue, Dean Street at 5th Avenue, and Eastern Parkway at Washington Avenue during construction. Therefore, these seventeen intersections would be unmitigated or be only partially mitigated during construction. All of these intersections would similarly be unmitigated or only partially mitigated under the 2035 Future With Phase II full build-out condition except for Fulton Street at Flatbush Avenue/Flatbush Avenue Extension and Schermerhorn Street at Boerum Place. The implementation timing for the proposed operational traffic mitigation measures under the three illustrative construction phasing plans are discussed in Chapter 5, “Mitigation.”

Level of Service Analysis for Construction Phasing Plan 3 – 4th Quarter of 2027

It should be noted that subsequent to the issuance of the DSEIS, the recommended traffic mitigation measures were further reviewed by NYCDOT, and additional measures were explored, resulting in the elimination or modification of some of the measures included in the Project’s traffic mitigation plan. As a result, the traffic mitigation analysis in this FSEIS indicates that fewer of the intersections identified as impacted in the DSEIS would be fully mitigated. As described above, during the 4th quarter of 2027 under Construction Phasing Plan 3, Building 14 is assumed to be operational. During this same period, Buildings 11, 12, 13, and 15 are assumed to be under concurrent construction at the project site. An analysis of the 38 construction study area intersections for 2027 showed that 8 of the 38 intersections would be significantly impacted during the 6 to 7 AM construction peak hour, and 11 would be significantly impacted during the 3 to 4 PM construction peak hour. Overall, significant adverse traffic impacts were identified at 14 out of the 38 analyzed intersections during one or both of the analysis time periods. A summary of the analysis results is presented in **Table 3H-11**. **Exhibits A-26** and **A-27** summarize the detailed capacity analysis results and mitigation recommendations for the 6 to 7 AM and 3 to 4 PM construction peak hours for the 4th quarter of 2027, respectively. The recommended mitigation measures would be similar to those proposed to mitigate the intersection impacts associated with the Project’s full build-out. A discussion of these results and the mitigation measures that could be implemented to address identified significant adverse impacts for each of the impacted intersections is provided below.

Table 3H-11

Construction Phasing Plan 3 - 4th Quarter of 2027
Significantly Impacted Locations and Recommended Mitigation Measures

Intersection	Weekday 6-7 AM		Weekday 3-4 PM	
	Impacted Lane Group	Recommended Mitigation	Impacted Lane Group	Recommended Mitigation
Tillary Street at Flatbush Avenue Extension	WB - L	Implement operational mitigation		
Atlantic Avenue at Flatbush Avenue			WB - R	Shift 1 second of green time from the NB/SB phase to the EB/WB phase
Atlantic Avenue at Boerum Place	EB - TR	<u>Unmitigated</u>	WB - LT	Implement operational mitigation
Atlantic Avenue at Smith Street	EB - LT	<u>Unmitigated</u>	EB - LT	<u>Unmitigated</u>
Atlantic Avenue at Nevins Street			WB - LT	Implement operational mitigation
Atlantic Avenue at Clinton Avenue			SB - LR	Shift 1 second of green time from the EB/WB phase to the SB phase
Dean Street at 5th Avenue	EB - LTR NB - TR	Implement operational mitigation		
Dean Street at Carlton Avenue			EB - LT	Implement operational mitigation
Dean Street at Vanderbilt Avenue	EB - TR	Implement operational mitigation	EB - TR	Implement operational mitigation
Bergen Street at 4th Avenue			WB - LTR	Implement operational mitigation
Bergen Street at 5th Avenue	WB - TR	Implement operational mitigation	WB - TR	Implement operational mitigation
Bergen Street at Carlton Avenue	WB - TR	Implement operational mitigation	WB - TR	Implement operational mitigation
Bergen Street at Vanderbilt Avenue			SB - TR	Implement operational mitigation
Saint Marks Place at 4th Avenue	SB - L	Implement operational mitigation Shift 1 additional second of green time from the EB phase to the NB/SB phase		

Notes: EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound
L = Left-turn; T = Through; R = Right-turn

Tillary Street and Flatbush Avenue Extension

The significant adverse impact at the westbound left-turn of this intersection during the 6 to 7 AM construction peak hour could be fully mitigated by implementing the operational mitigation measure of shift of 1 second of green time from the northbound/southbound phase to the eastbound/westbound phase would also be needed.

Atlantic Avenue and Flatbush Avenue

The significant adverse impact at the westbound right-turn of this intersection during the 3 to 4 PM construction peak hour could be fully mitigated by shifting 1 second of green time from the northbound/southbound phase to the eastbound/westbound phase.

Atlantic Avenue and Boerum Place

The significant adverse impact at the eastbound through-right of this intersection during the 6 to 7 AM construction peak hour could not be mitigated.

The significant adverse impact at the westbound left-through of this intersection during the 3 to 4 PM construction peak hour could be fully mitigated by shifting 1 second of green time from the eastbound left-turn phase to the eastbound/westbound phase.

Atlantic Avenue and Smith Street

The significant adverse impact at the eastbound approach of this intersection during the 6 to 7 AM and 3 to 4 PM construction peak hours could not be mitigated.

Atlantic Avenue and Nevins Street

The significant adverse impact at the westbound approach of this intersection during the 3 to 4 PM construction peak hour could be fully mitigated by implementing the operational mitigation measures including installing “No Standing Anytime” for 100 feet on the west curb of the southbound approach; and shifting 1 second of green time from the southbound phase to the eastbound/westbound phase.

Atlantic Avenue and Clinton Avenue

The significant adverse impact at the southbound approach of this intersection during the 3 to 4 PM construction peak hour would occur during Phase II construction but not under the 2035 Future With Phase II condition. However, another lane group at this intersection is significantly adversely impacted during the weekday AM operational analysis peak hour. This significant adverse impact during construction could be fully mitigated by shifting 1 second of green time from the eastbound/westbound phase to the southbound phase.

Dean Street and 5th Avenue

The significant adverse impact at the eastbound and northbound approaches of this intersection during the 6 to 7 AM construction peak hour could be fully mitigated by implementing the operational mitigation measure of shifting 3 seconds of green time from the southbound phase to the eastbound phase; and by shifting 1 second of green time from the southbound phase to the northbound/southbound phase.

Dean Street and Carlton Avenue

The significant adverse impact at the eastbound approach of this intersection during the 3 to 4 PM construction peak hour could be fully mitigated by implementing the operational mitigation measures of shifting 4 seconds of green time from the northbound phase to the eastbound phase.

Dean Street and Vanderbilt Avenue

The significant adverse impact at the eastbound through-right of this intersection during the 6 to 7 AM and 3 to 4 PM construction peak hours could be fully mitigated by implementing the operational mitigation measures including installing “No Standing Anytime” for 150 feet on the south curb of the eastbound approach; extending the left-turn bay on the eastbound approach to 150-feet; restriping the eastbound approach as one 12.5-foot left-turn bay; one 10.5-foot left-through lane, and one 11-foot right-turn bay.

Bergen Street and 4th Avenue

The significant adverse impact at the westbound approach of this intersection during the 3 to 4 PM construction peak hour could be fully mitigated by implementing the operational mitigation measure of installing “No Standing 7 AM to 7 PM Except Sunday” for 100 feet on the north curb of the westbound approach.

Bergen Street and 5th Avenue

The significant adverse impact at the westbound through-right of this intersection during the 6 to 7 AM construction peak hour could be fully mitigated by shifting 1 second of green time from the northbound/southbound phase to the westbound phase.

The significant adverse impact at the westbound through-right of this intersection during the 3 PM to 4 PM construction peak hour could be fully mitigated by implementing the operational mitigation measure of shifting 3 seconds of green time from the northbound/southbound phase to the westbound phase.

Atlantic Yards Arena and Redevelopment Project FSEIS

Bergen Street and Carlton Avenue

The significant adverse impact at the westbound approach of this intersection during the 6 to 7 AM and 3 to 4 PM construction peak hours could be fully mitigated by implementing the operational mitigation measure of shifting 3 and 2 seconds of green time, respectively, from the northbound phase to the westbound phase.

Bergen Street and Vanderbilt Avenue

The significant adverse impact at the southbound approach of this intersection during the 3 to 4 PM construction peak hour could be fully mitigated by implementing the operational mitigation measures including restriping the westbound approach with one 11-foot left-turn lane, 1-foot of hatching, one 5-foot bike lane, one 11-foot through lane, and one 11-foot right-turn lane; installing “No Standing Anytime” for 100 feet on the north curb of the westbound approach; and shifting 1 second of green time from the westbound phase to the northbound/southbound phase.

Saint Marks Place and 4th Avenue

The significant adverse impact at the southbound left-turn of this intersection during the 6 to 7 AM construction peak hour could be fully mitigated by implementing the operational mitigation measures of shifting 2 seconds of green time (1 additional second as compared to the operational mitigation measures) from the eastbound phase to the northbound/southbound phase.

Analysis Summary

Most of the impacted intersections during the 4th quarter of 2027 construction discussed above could be fully mitigated by implementing the proposed operational mitigation measures as described in Chapter 5, “Mitigation.” In some cases, variations of the operational mitigation measures or additional measures have been recommended to fully mitigate the impacts during construction. However, due to the concentration of arriving and departing construction worker and truck traffic during the analysis time periods, no other practicable mitigation measures would be available to fully mitigate the impacts at two intersections: Atlantic Avenue at Boerum Place and Atlantic Avenue at Smith Street. Therefore, these two intersections would be unmitigated during construction. These two intersections would similarly be unmitigated or only partially mitigated under the 2035 Future With Phase II full build-out condition. The implementation timing for the proposed operational traffic mitigation measures under the three illustrative construction phasing plans are discussed in Chapter 5, “Mitigation.”

Construction-Related Traffic Conditions under Construction Phasing Plans 1 and 2 and during other periods of Construction Phasing Plan 3

The analysis presented above for the 1st quarter of 2032 under Construction Phasing Plan 3 represents worst-case peak construction conditions out of the three illustrative construction phasing plans. The analysis presented for the 4th quarter of 2027 under Construction Phasing Plan 3 represents worst-case construction conditions related to Block 1129 construction. With 2,092 daily construction PCEs, potential construction-related traffic impacts are projected to occur at 36 intersections during one or both of the analysis time periods during the 1st quarter of 2032 under Construction Phasing Plan 3. With 1,082 daily construction PCEs, potential construction-related traffic impacts are projected to occur at 14 intersections during one or both analysis time periods during the 4th quarter of 2027 under Construction Phasing Plan 3. When comparing the construction trip projections and impact findings associated with the 4th quarter of 2027 to those of the 1st quarter of 2032, the construction PCEs and the number of potential construction-related impacted traffic intersections would be approximately 52 percent and 39 percent of those projected for the 1st quarter of 2032, respectively. **Table 3H-12** presents a

comparison of the quarterly average daily PCEs and the peak construction quarter daily PCEs for the three construction phasing plans considered in this SEIS. Based on the analysis findings described above for the two construction peak periods analyzed for Construction Phasing Plan 3, a qualitative discussion of anticipated levels of potential traffic impacts is provided below for Construction Phasing Plans 1 and 2, as well as other periods of Construction Phasing Plan 3.

Table 3H-12
Comparison of Construction Daily PCEs - All Three Construction Phasing Plans ⁽¹⁾

Phasing Plan	Quarterly Averages				Peak Construction Quarter
	2018 to 2023	2024 to 2029	2030 to 2035	Overall	
Construction Phasing Plan 1	499	599	688	596	1,210
Construction Phasing Plan 2	532	674	592	600	1,256
Construction Phasing Plan 3	295	791	994	763	2,092

Notes:
 Construction Phasing Plan 1 peak construction quarter is the 3rd quarter of 2032, during which Buildings 8, 9, 10, 11, 12, 13, 14, and 15 are assumed to be operational while Buildings 5 and 6, and the platform segments for Buildings 6 and 7 would be under concurrent construction.
 Construction Phasing Plan 2 peak construction quarter is the 4th quarter of 2027, during which Buildings 5, 6, 14, and 15 are assumed to be operational while Buildings 7 and 8, and the platform segments for Buildings 8, 9, and 10 would be under concurrent construction.
 Construction Phasing Plan 3 peak construction quarter is the 1st quarter of 2032, during which Buildings 8, 11, 12, 13, 14, and 15 are assumed to be operational while Buildings 5, 9, and 10, and the platform segments for Buildings 6 and 7 would be under concurrent construction.
 (1) The same methodology, as described above under "Construction Trip Generation," is applied to all three construction phasing plans to project peak hour construction worker vehicle and truck trips.

For Construction Phasing Plan 1, the peak construction quarter of 1,210 PCEs and overall quarterly average of 596 PCEs would be approximately 58 percent and 28 percent, respectively, of that projected for the 1st quarter of 2032 under Construction Phasing Plan 3. Therefore, the number of potential construction-related impacted traffic intersections is expected to be considerably lower than that projected for the 1st quarter of 2032 under Construction Phasing Plan 3.

For Construction Phasing Plan 2, the peak construction quarter of 1,256 PCEs and overall quarterly average of 600 PCEs would be approximately 60 percent and 29 percent, respectively, of that projected for the 1st quarter of 2032 under Construction Phasing Plan 3. Therefore, the number of potential construction-related impacted traffic intersections is expected to be considerably lower than that projected for the 1st quarter of 2032 under Construction Phasing Plan 3.

For Construction Phasing Plan 3, the overall quarterly average of 763 PCEs would be approximately 36 percent of that projected for the 1st quarter of 2032. Therefore, the number of potential construction-related impacted traffic intersections is expected to be considerably lower than that projected for the 1st quarter of 2032.

As discussed above, with 1,082 daily construction PCEs, potential construction-related impacts are projected to occur at 14 intersections during one or both analysis time periods during the 4th quarter of 2027 under Construction Phasing Plan 3, all of which could be fully mitigated by implementation of the mitigation measures described above except for two intersections. This level of daily construction trip-making would be comparable to the peak quarter daily construction trip-making under Construction Phasing Plans 1 and 2 with approximately 1,210 and 1,256 daily construction PCEs, respectively. Therefore, the number of potential construction-related impacted traffic intersections that could occur during peak construction

under Construction Phasing Plans 1 and 2 is expected to be comparable to the 4th quarter of 2027 under Construction Phasing Plan 3.

Overall, the number of potential construction-related impacted traffic intersections during peak construction under Construction Phasing Plans 1 and 2 and during other construction periods under Construction Phasing Plan 3 is expected to be within the envelope of impacts identified for the worst-case peak 1st quarter of 2032 under Construction Phasing Plan 3. As needed, the same or a subset of the mitigation measures identified to address impacts for peak construction under Construction Phasing Plan 3 could be implemented to address conditions during periods of comparatively lower construction activities under Construction Phasing Plans 1 and 2 and during other construction periods under Construction Phasing Plan 3.

Comparison of SEIS Findings and Previous Findings

As discussed in detail in Chapter 4D, “Operational Transportation,” the traffic analysis in this SEIS and the analyses in previous environmental reviews differ with respect to the Project development program, background conditions, travel demand factors, and impact criteria, and the fact that this SEIS examines the incremental effects of Phase II of the Project whereas previous environmental analyses assessed the incremental effects of Phase I and Phase II combined. The analyses also differ with respect to the guidelines for determining whether an impact is mitigated. Subsequent to the publication of the 2006 FEIS and as a result of new guidance from the updated *CEQR Technical Manual* (2010 & 2012 editions and related updates), there is now a more formalized procedure in determining when a detailed construction traffic analysis is warranted and what locations should be selected for analysis. For the 2006 FEIS, critical traffic intersections in proximity to the project site and at outlying intersections along the Flatbush Avenue and Atlantic Avenue corridors (based on the analysis at two representative portal locations), which were impacted and/or operating at congested levels of service in the operational analysis, were selected for analysis. For this SEIS, the selection of traffic analysis locations considered the intersections previously analyzed in the 2006 FEIS construction traffic analysis, additional intersections that have been identified as impacted during one or more peak hours in the Build condition in Chapter 4D, “Operational Transportation,” and intersections that would experience 50 or more construction peak hour PCEs (based on the *CEQR Technical Manual* Level 1 trip generation and Level 2 trip assignment screening assessment criteria). For the 2006 FEIS, the projected construction generated trips were less than the Phase I and Phase II operational trips and the construction analysis analyzed up to 16 traffic intersections in proximity to the project site and two sets of outlying intersections (Phase 1B), for which significant adverse impacts were identified at 12 intersections in proximity to the project site and seven outlying intersections. For this SEIS, the projected construction generated trips during peak construction under Construction Phasing Plan 3 would exceed the Phase II operational trips (Phase I operational trips are accounted for as part of the background condition) and the construction analysis analyzed up to 55 traffic intersections (primary peak in the 1st quarter of 2032), for which significant adverse impacts were identified at 36 intersections. For the secondary peak in the 4th quarter of 2027, a subset of these intersections was selected for analysis.

The 2006 FEIS construction traffic analysis analyzed both Phase I and Phase II construction of the Project, while this SEIS includes Phase I of the Project in the construction background conditions. Additionally, the sequencing and duration of construction for various development components (i.e., individual buildings or platforms) between what were analyzed in the 2006 FEIS are different among the construction phasing plans considered for this SEIS.

Notwithstanding the updated analysis methodology and different background conditions, the 2006 FEIS and this SEIS both concluded that significant adverse impacts would occur during construction. The majority of these impacted locations could be mitigated by implementing the operational mitigation measures. However, some impacted locations would require additional/slightly modified mitigation measures, would be unmitigated, or could only be partially mitigated during construction.

CURB LANE CLOSURES AND STAGING

Similar to many other construction projects in New York City, temporary curb-lane and/or sidewalk closures would be required adjacent to any given Phase II construction site for varying lengths of time during construction. Along with the closures, bus stops would have to be temporarily relocated. Three street segments were permanently closed during Phase I construction and have been incorporated into the project site. These street segments would remain closed during Phase II construction.

MPT plans would be developed for any temporary curb-lane, sidewalk, or bicycle lane closures and would be developed as each building is constructed to adequately accommodate access and circulation of vehicular and pedestrian traffic, as well as, to protect the safety of motorists, bicyclists, and pedestrians. **Exhibit A-28** shows the current curbside parking regulations and bicycle lanes adjacent to the Phase II construction site. Approval of these plans and implementation of the closures would be coordinated with NYCDOT's OCMC. For the most part, sidewalks and curb-lanes immediately adjacent to the eastern portion of the project site on Blocks 1120, 1121, 1128, and 1129 would be intermittently closed during construction. Specifically, the sidewalks and curb-lanes along the south side of Atlantic Avenue east of 6th Avenue, Carlton Avenue between Atlantic Avenue and Pacific Street, and 6th Avenue between Pacific Street and Dean Street would be closed for varying periods of time. These sidewalks and curb-lanes would be reopened as the buildings are completed. To facilitate pedestrian flow through these areas, temporary sidewalks or sidewalk bridges would be maintained in most cases. However, if necessary, the south side of Atlantic Avenue east of 6th Avenue may be closed to pedestrians at certain times during construction on Blocks 1120 and 1121. As MPT plans typically entail the closing of up to and including curb-lanes, they are not expected to greatly affect the bicycle flows along the Dean Street and Carlton Avenue (between Dean Street and Pacific Street) bicycle lanes, which are outside of the curb-lanes. However, since the bicycle lanes on the east side of Carlton Avenue between Atlantic Avenue and Pacific Street and the west side of Vanderbilt Avenue between Atlantic Avenue and Dean Street are immediately adjacent to the curb, if temporary curb-lane closures are needed along these frontages, the current Class II bicycle lanes could be temporarily displaced or restriped to Class III shared bicycle lanes (with the appropriate signage alerting both motorists and cyclists) with the adjacent vehicular travel lane to facilitate vehicular and bicycle flow. As with the curb lane and sidewalk closures, NYCDOT's OCMC is expected to provide the appropriate MPT stipulations to ensure that loss of or diminished traffic capacities would be minimized to the extent practicable.

Flag-persons would be present at active driveways, where necessary, to manage the access and movement of trucks, as needed, and to ensure the safety of pedestrians. Within Block 1129, the designated equipment staging area would be used as needed to accommodate certain truck deliveries that may arrive earlier than their scheduled times. Trucks staging in this area, while arriving at different times, would also be managed by flaggers and would be dispatched and travel across Pacific Street at the appropriate times to their originally destined blocks under construction.

PARKING

Construction worker vehicles are expected to be accommodated at various locations near the project site, including within the temporary parking facility on Block 1129, on the surrounding streets, and at nearby public parking facilities. Extended-day, nighttime, and weekend construction shifts are anticipated to be infrequent and would not be scheduled regularly during Phase II construction. Furthermore, parking utilization levels during non-weekday daytime hours are typically lower and curbside regulations are less stringent, resulting in a larger supply of on-street spaces. Hence, the analysis and discussions that follow consider conditions related to the regular weekday day shift only.

BASELINE CONDITIONS

Comprehensive surveys of available on- and off-street parking were conducted to determine existing utilization and available supply during different time periods, curbside regulations, and general parking patterns. The data gathered from these surveys were used to evaluate parking needs from construction-generated demand and to identify potential parking impacts.

Off-Street Parking

Within ¼ mile from the perimeters of the Project site, there are twelve off-street parking facilities, as shown in **Table 3H-13** and **Exhibit A-29**, with a total capacity of 1,725 spaces. The largest of these facilities (650 spaces) is located within Atlantic Center across the street from the project site. On a typical weekday, the overall parking utilization levels at these facilities were determined to be 42 percent in the early morning (983 spaces available), a peak of 70 percent in the midday (510 spaces available), and 55 percent during the afternoon commuting hours (766 spaces available). Within the Atlantic Center parking facility, most of the spaces were available (608 spaces available) during the early morning hours. Its occupancy was observed to peak in the afternoon at 55 percent, leaving nearly 288 available parking spaces.

On-Street Parking

Several surveys of on-street parking conditions were conducted for an area within ¼ mile from the perimeters of the Project site. Curbside parking in this area is regulated by a variety of on-street parking rules. These rules include parking prohibition at all times, meter parking, fixed weekday street-cleaning, nighttime regulations, and residential alternate-side street-cleaning. For the construction parking analysis, the focus is on the area's parking supply and utilization during the early morning hours when construction workers who travel via auto would arrive at the project site. **Exhibit A-30** provides an illustration of the parking characteristics within the ¼ mile parking study area, reflecting early weekday morning (5:30 AM to 7 AM) conditions. The on-street surveys were conducted on days (Wednesday) when the fewest curbside restrictions apply. These surveys demonstrate that out of 3,866 free on-street parking spots within ¼ mile from the project site, up to 377 spaces (10 percent) are available during the early morning hours. However, only approximately 160 of the available spaces would be legal parking for the entire day as a result of alternate-side street-cleaning regulations. There are also 138 meter spaces, most of which are subject to either weekday or alternate-side street-cleaning rules. Of the meter spaces, 18 spaces (13 percent) were observed to be available during the early morning hours. Overall, the early morning parking availability was determined to be approximately 10 percent (395) of the total area on-street parking supply.

**Table 3H-13
Existing Off-Street Parking - ¼ Mile of the Project Site
Weekday Utilization**

Map #	Name/Operator and Address/Location	License Number	Licensed Capacity	Utilization Rate			Utilized Spaces			Available Spaces		
				AM	MD	PM	AM	MD	PM	AM	MD	PM
1	Amber Car Park LLC - 258 Ashland Place/9 Lafayette Avenue	1021922/ 1021919	60	61%	86%	92%	36	51	54	23	8	5
2	Fulton Car Park LLC - 622 Fulton Street	1026759	95	52%	72%	72%	48	67	67	45	26	26
3	Park Qwik LLC - 10 Lafayette Avenue	1468455	124	76%	86%	86%	93	105	105	29	17	17
4	556 State Street LLC - 556 State Street	1328826	25	72%	92%	52%	18	23	13	7	2	12
5	Ochre Car Park LLC - 625 Atlantic Avenue	1242325	650	5%	55%	45%	29	349	289	608	288	348
6	Imperial Parking - 212 S. Oxford Street	1383522	45	61%	82%	82%	27	36	36	17	8	8
7	470 Vanderbilt Parking LLC - 454 Vanderbilt Avenue	1449148	162	61%	87%	23%	97	138	36	62	21	123
8	A&P Parking Corp. - 525 Clinton Avenue	1472099	55	67%	81%	72%	36	44	39	18	10	15
9	Enterprise Washington Garage LLC - 545 Washington Avenue	1460723	67	52%	52%	52%	34	34	34	32	32	32
10	Pacific Parking LLC - 700 Pacific Street	1244293	170	61%	61%	61%	102	102	102	65	65	65
11	Bobby Car Park LLC - 105 Underhill Avenue	1126972	160	71%	92%	61%	112	144	96	45	13	61
12	Country Wide Car Park Inc. - 288 St. Marks Avenue	1004164	112	71%	82%	51%	78	90	56	32	20	54
TOTAL			1,725	42%	70%	55%	710	1,183	927	983	510	766
Notes: MD = Midday; Typical weekday peak hours include 8 AM to 9 AM, 12 PM to 1 PM, and 5 PM to 6 PM. Assumes parking facility is full at 98% of licensed capacity as per CEQR Technical Manual guidelines. Sources: Survey conducted by AKRF Inc.; October 2013. September 2013 and October 2013 data from the operator of the Atlantic Center garage.												

Observations of midday parking conditions revealed that many of the spaces available in the early morning hours were occupied. The overall parking availability was determined to diminish to as low as 2 percent (fewer than 90 spaces) of the area’s total parking supply.

PARKING CONDITIONS DURING CONSTRUCTION

Future Without Construction of Phase II

As discussed above, Building 1 and Site 5 of Phase I may be constructed any time during the overall construction period and occur during Phase II construction. For a conservative analysis, their associated construction-related parking demands have also been accounted for and the parking supply planned for these sites were assumed to be unavailable. During Building 1’s peak construction for Building 1, its construction workers would generate, on average, a daily total parking demand of 134 vehicles. During the peak construction for Site 5, its construction workers would generate, on average, a daily total parking demand of 63 vehicles.

Future With Construction of Phase II

As discussed above under “Construction Trip Generation,” Phase II construction peak parking demand is anticipated to occur during the 1st quarter of 2032 under Construction Phasing Plan 3 when, on average, 314 construction worker vehicles are projected to arrive at the project site during the 6 AM to 7 AM morning peak hour. Since this volume represents 80 percent of the total projected day shift vehicle trips, the total peak parking demand would be 392 vehicles. While some construction workers are expected to find nearby on-street parking, the overall projected peak demand exceeds what would be available on-street. To avoid overtaking nearby on-street and off-street parking facilities, the project sponsors would, as with Phase I construction, provide, to the extent practicable, on-site parking on Block 1129 for construction workers at a fee that is comparable to other parking lots/garages in the area. By the 1st quarter of

2032 under Construction Phasing Plan 3, Buildings 11 through 14 would be completed on Block 1129 and the temporary on-site parking would be replaced by the completed permanent parking garage on the block. The permanent parking garage on Block 1129 would provide up to 1,846 spaces.

As discussed in Chapter 4D, “Operational Transportation,” fewer on-site parking spaces are now expected to be provided on Block 1129 for Arena patrons than were assumed in the 2006 FEIS, though there is expected to be 300 parking spaces available to accommodate Arena demand during all phases of construction. These 300 parking spaces would generally be available to construction workers, because Arena events do not typically coincide with the hours during which construction activities would occur at the project site.

Based on the existing off-street and on-street utilizations presented above, there are approximately 1,143 off-street and on-street parking spaces available during the weekday morning period and diminishing to approximately 600 spaces during the weekday midday peak period. Based on No Build projects currently planned within the ¼ mile study area, it is anticipated that three existing parking facilities with a combined capacity of 346 spaces (facilities 1, 3, and 7 in **Table 3H-13**) will be displaced by new development by 2035, and a total of 1,132 new off-street parking spaces will be created. This would result in an increase of 786 off-street parking spaces within the ¼ mile study area in the future conditions. The parking analysis also conservatively assumes the overlapping construction parking demand from Building 1 and Site 5, which may be constructed anytime during the overall construction period. Accounting for the construction parking demand generated by Building 1 (134 vehicles) and Site 5 (63 vehicles), the available off-street and on-street parking spaces would decrease to 1,732 and 1,189 spaces during the weekday morning and midday periods, respectively. The peak construction worker parking demand of 392 vehicles during the 1st quarter of 2032 under Construction Phasing Plan 3 could be fully accommodated by the available off-street parking spaces in the ¼-mile study area during the weekday midday peak period. In addition, as noted above, on most days, the 300 parking spaces available to accommodate Arena demand would also be available to accommodate most of the projected peak construction worker parking demand. Therefore, no parking shortfall is anticipated during Phase II construction of the Project under the Extended Build-Out Scenario.

Comparison of SEIS Findings and Previous Findings

The above findings on parking conditions during Phase II construction are generally consistent with those of the 2006 FEIS. The 2006 FEIS concluded that peak construction parking demand could be accommodated by a combination of on-street parking, temporary parking on Block 1129, and other off-street parking facilities in the study area and therefore would not result in any parking shortfalls and would not be expected to result in any potential significant adverse parking impacts during construction.

TRANSIT

With 55 percent of the construction workers projected to travel via auto, the bulk of the remaining 45 percent would travel to and from the project site via transit. During peak construction in the 1st quarter of 2032 under Construction Phasing Plan 3 (maximum of 1,356 average daily construction workers), this distribution would correspondingly represent up to 610 daily workers traveling by transit. With 80 percent of these workers commuting during the peak travel hours (6-7 AM arrival and 3-4 PM departure), the estimated number of peak hour transit trips would be 488 for the Phase II Build construction condition. Distributed among the various

subway lines and bus routes, station entrances (including the availability of the new Atlantic Avenue-Barclays Center subway entrance on the Arena Block), and bus stops near the project site, only nominal increases in transit demand would be experienced along each of these routes and at each of the transit access locations during hours outside of the typical commuter peak periods. Therefore, the projected construction worker trips by transit would not result in any significant adverse transit impacts.

Lane and sidewalk closures during construction would necessitate the temporary relocation of several bus stops bordering the project site, a majority of which are located along the south side of Atlantic Avenue between 6th and Vanderbilt Avenues. These include three bus stops on Atlantic Avenue (Blocks 1120 and 1121) and two bus stops on Vanderbilt Avenue (Blocks 1121 and 1129). These bus stops would be temporarily relocated to nearby areas along the bus routes, usually within one block. The relocations would be subject to the review and approval of New York City Transit (NYCT) and NYCDOT to ensure proper access is maintained.

Comparison of SEIS Findings and Previous Findings

The above findings on transit services during Phase II construction are generally consistent with the findings of the 2006 FEIS. The 2006 FEIS concluded that because travel by construction workers would be distributed among the various subway and bus routes, station entrances, and bus stops near the project site and would occur outside of the typical commuter peak hours, no significant adverse construction related transit impacts were expected to occur during Project construction.

PEDESTRIANS

As summarized above, up to 1,356 average daily construction workers were projected for peak construction during the 1st quarter of 2032 under Construction Phasing Plan 3. With 80 percent of these workers arriving or departing during the construction peak hours (6 to 7 AM and 3 to 4 PM), the corresponding numbers of peak hour pedestrian trips traversing the area's sidewalks, corners, and crosswalks would be up to 1,085 under the 2032 peak construction condition. Most of those traveling via the subway or LIRR would approach the site from various entrances at Atlantic Terminal and the Bergen Street subway station, with the remainder using the other area subway stations. Those traveling via bus would alight from the nearest bus stops. Workers traveling by car would either walk from the temporary parking facility and/or permanent parking garage at Block 1129 or from other on- and off-street locations nearby. These trips are expected to have minimal effects on pedestrian operations during the construction peak hours and would not result in any significant adverse pedestrian impacts.

As shown in Figures 3A-4 to 3A-12 in Chapter 3A, "Construction Overview," sidewalks and curb-lane closures would occur throughout Phase II construction, including the south side of Atlantic Avenue east of 6th Avenue, Carlton Avenue between Atlantic Avenue and Pacific Street, and 6th Avenue between Pacific Street and Dean Street. During Phase II construction of the Project, most of the proposed roadway and pedestrian improvements would have been completed. With the exception of limited sidewalk closures, all area sidewalks would be available for pedestrian traffic. To facilitate pedestrian flow at the limited sidewalk closure locations, overhead sidewalk protections or temporary sidewalks would be provided in most cases except on the south side of Atlantic Avenue east of 6th Avenue during construction on Blocks 1120 and 1121. During construction on Blocks 1120 and 1121, due to the anticipated staging areas and MPT plans, there may be times when pedestrian access along the south side of Atlantic Avenue would be restricted to facilitate construction activity. As shown in Chapter 4D,

“Operational Transportation,” 2035 Future Without Phase II pedestrian traffic along the south side of Atlantic Avenue east of 6th Avenue was projected to be fewer than 140 pedestrians during peak 15-minute periods. Consultation with NYCDOT’s OCMC would be undertaken to determine the feasibility of closing pedestrian access for the affected segments during periods of Phase II construction when Blocks 1120 and 1121 are under construction. Diverting pedestrian flow to other sidewalks in the area is not expected to result in a substantial increase in pedestrian traffic at those locations. At other sidewalks bordering the project site, more limited closures are anticipated and, where necessary, temporary sidewalks would be provided to maintain pedestrian flow.

In addition, field observations were conducted for a typical Brooklyn Nets basketball game during pre-game and post-game time periods to assess how event patron circulation near the Barclays Center may be affected by Phase II construction. The field observations showed that the streets east of the Arena (6th Avenue, Atlantic Avenue, Pacific Street, and Dean Street) were very lightly used by Arena patrons during pre-game and post-game time periods. This low level of patron activities east of the Arena is generally consistent with the survey and parking accumulation data collected from Arena patrons and at the current Arena parking lot on Block 1129. Data from surveys of Arena patrons indicate that the majority of Nets spectators using off-street parking are selecting other public parking facilities in the vicinity of the Arena instead of the parking lot provided on Block 1129. Peak parking accumulation data during a Nets game at the Arena parking lot on Block 1129 typically totals fewer than 300 autos (less than 53 percent of its current capacity of 565 spaces) and on average totals approximately 150 utilized parking spaces. The livery cab area along the south curb of Atlantic Avenue just east of 6th Avenue was also observed to be very lightly utilized by livery cabs and Arena patrons during both pre-game and post-game time periods. Based on these observations and prevalent conditions during typical daytime hours as shown in the 2035 Future Without Phase II sidewalk conditions presented in Chapter 4D, “Operational Transportation,” which are also akin to generally low pedestrian traffic along streets bordering the Phase II development sites, the anticipated temporary curb lane and sidewalk disruptions would not be expected to adversely affect nearby pedestrian access and circulation.

Comparison of SEIS Findings and Previous Findings

For the same reasons provided on transit operations, the findings of this SEIS with regards to pedestrian operations during Phase II construction are generally consistent with those of the 2006 FEIS. The 2006 FEIS concluded that because travel by construction workers would be distributed among the area’s various pedestrian elements (i.e., sidewalks, corners, and crosswalks) and would occur outside of the typical commuter peak hours, no significant adverse construction related pedestrian impacts were expected to occur during Project construction. *