

CHAPTER 12: TRAFFIC AND PARKING

Comment 12-1: All of the development planned for Downtown Brooklyn will impact an already overburdened transportation infrastructure. (30, 31, 107, 151, 312, 347, 380, 384, 397, 399)

Large projects such as the Brooklyn Bridge waterfront development and the expansion of the Red Hook Cruise Ship Terminal, IKEA in Red Hook, the new Fairway and the Whole Foods supermarket in Gowanus were not included. Large buildings such as those at 9 MetroTech, the new Federal Courthouse, and the Marriott Hotel Expansion were simply left out. (151)

The DEIS doesn't consider any development resulting from the Downtown Brooklyn Development Plan until 2016 because "no plans for new development have been finalized." The background growth rate should be adjusted for the 2010 Build year to account for projects in the development pipeline, but not yet announced. This is a serious and unacceptable flaw in the DEIS that should be addressed in the FEIS. (24, 55)

The DEIS fails to include projects operating in 2006 but not accounted for in the traffic counts. It fails to include others in the pipeline or approved as-of-right up to 2016 in Downtown Brooklyn. These and other projects add up to 53 percent more trips than assumed in the No Build alternative. In total, the DEIS accounted for just 23 percent of total No Build development that will impact Downtown Brooklyn. (55)

The DEIS data was collected in 2003, 2004, 2005, and 2006. Fort Greene is changing and even without the largest development ever built, traffic in Fort Greene will be epidemic by 2010. (289)

The projections leave out 13 million square feet of proposed development expected by 2016. About half of current development is also omitted so that No Build trips are grossly understated. (180, 324)

The DEIS fails to include significant new development in the Future No Build Condition; approximately 11 million square feet of proposed development was not included. This accounts for about 50 percent of the total development planned for the study area. This oversight results in an understatement of the extent of No Build traffic conditions and therefore understates the potential for gridlock that will prevail when the project is built. (37, 55, 68, 105, 406)

Fourth Avenue is undergoing a residential housing boom and this will continue south along 4th Avenue. New zoning rules beginning at 15th

Street south on 4th Avenue have an “inclusionary housing” component. (406)

The amount of development in the surrounding neighborhoods, which is projected to increase, will have a staggering effect on traffic and transit. The developer’s intention to further develop the Atlantic Center Mall site would increase the density in the immediate vicinity of the project site to extreme conditions. (102, 103)

The DEIS makes the assumption commercial traffic does not exist for the City’s Downtown Brooklyn Plan, and Williamsburg/Greenpoint upzonings. (53)

The traffic studies only look at the possible impact of the Atlantic Yards project, not taking into account that this is only one of many new developments being built or planned. (574)

Response 12-1:

In addition to background growth, the EIS transportation analyses include the travel demand from a total of 33 discrete No Build sites in and around the project site and Downtown Brooklyn that are expected to be developed by the proposed project’s 2016 analysis year. (For the 2010 analysis year, 14 discreet No Build sites were included.) These projects, which comprise approximately 6,254 dwelling units, 5.19 million sf of office space, 1.15 million sf of retail space and 2.43 million sf of other space (community facility, academic, hotel, court, etc.), include the anticipated development resulting from the Downtown Brooklyn Development project, Brooklyn Bridge Park, Pier 12, the new IKEA store in Red Hook, the Atlantic Center development, and the new Federal Courthouse and the Marriott Hotel expansion in Downtown Brooklyn. Three developments (a charter school on Waverly Avenue, residential development at 306-313 Gold Street, and the Fairway market in Red Hook) totaling 517 D.U. and 310,000 sf of office, retail and other space have been added to the transportation analyses in the FEIS in response to recent information and agency and public comments on the DEIS. Much of the additional development cited in the comments can be attributed to projects that (1) were completed prior to Fall 2005 and are therefore already reflected in the EIS 2006 traffic baseline condition; (2) fall below minimum threshold densities for inclusion as discrete No Build sites; (3) are distant from the Atlantic Yards project site (such as the Greenpoint-Williamsburg Rezoning project which includes sites located up to four miles from the project site); or (4) are speculative sites.

The Brooklyn Piers 7-12 project would involve the redevelopment of Piers 7-11 into a mix of maritime, industrial, commercial and retail uses by 2014, along with a second cruise ship terminal on Pier 10. (Pier 12 was redeveloped into a cruise ship terminal in 2006 and is included as a

discrete No Build site.) This project is not expected to contribute materially to traffic in the Atlantic Yards study area during critical peak hours. In addition, this project's public scoping process is not complete, and the program itself has not been finalized. The project is in a preliminary stage of its environmental review, which will take Atlantic Yards' projected traffic volumes into account as part of its traffic analysis. Accordingly, this project was not included as a discrete No Build site.

Comment 12-2: Lastly, a 0.5 percent per year background growth rate, consistent with the *CEQR Technical Manual*, was applied to the entire Existing baseline network for the 2006 through 2010 and 2006 through 2016 periods to account for travel demand from smaller developments, as-of-right developments not reflected in the list of discrete No Build sites, and general background growth. Further information is provided in Appendix C to the FEIS. Plans to ensure the adequate traffic flow and safe pedestrian circulation should be implemented before new development adds excess demands. Additional steps to address traffic and pedestrian circulation should be systemic, creative, and utilize state-of-the-art approaches. (37)

Response 12-2: The proposed project incorporates a number of operational changes to the study area street system to facilitate traffic and pedestrian flow, and the proposed traffic mitigation plan includes a broad range of additional physical roadway improvements and traffic operational improvements designed to address the project's potential impacts on traffic and pedestrian circulation. These measures would be implemented with development of the proposed project.

Comment 12-3: The project does not fully provide any solution for dealing with the dramatic increase in traffic in an already congested area (in fact, we will lose streets, including a length of 5th Avenue that is a bus route and crucial to good traffic flow) between Atlantic and Flatbush Avenues. (206, 212, 250, 268, 284, 332, 307, 339, 345, 347, 351, 356, 398, 431, 438)

Already Washington Avenue, which is not supposed to have bus or truck traffic on it, has become a virtual highway with constant use by buses and trucks. There is an elementary school on Washington Avenue between Gates and Greene, and the safety of these children and the intense traffic is an issue. (119)

Plans to ensure the adequate traffic flow and safe pedestrian circulation should be implemented before new development adds excess demands.

Additional steps to address traffic and pedestrian circulation should be systemic, creative, and utilize state-of-the-art approaches. (37)

An additional 20,000 vehicle trips a day in an already congested area is a terrible idea. (135, 343)

Adding vehicle trips from the project to an already congested area will overwhelm the area with traffic. (477, 487, 489, 490, 493, 495, 539, 547, 563, 571, 577, 543)

Crossing Flatbush is difficult as the amount of traffic in both directions is heavy. Because of the high volume of traffic, cars often get stuck in the middle of the intersection causing gridlock and making it dangerous for pedestrians to cross even when they have the right of way. The situation is similar crossing Atlantic Avenue. With the proposed project this can only get worse. Demapping 5th Avenue between Atlantic and Pacific will force cars to make a left turn onto Flatbush, then an additional left turn onto Atlantic one block later when these two streets intersect. This will add a dangerous volume of cars, trucks, and buses to these streets. (236)

The DEIS includes only limited street modifications in the project, including widening Flatbush and Atlantic Avenues, restriping Atlantic Avenue between Flatbush and 6th Avenues, widening 6th Avenue between Atlantic and Flatbush Avenues to provide two-way circulation, and widening Pacific Street between 6th and Carlton Avenues to provide for two-way circulation. (470)

I am concerned about the impact on the already congested traffic at the intersections along Flatbush, Atlantic, Fulton and Lafayette Street. These intersections and the traffic on the adjacent streets is terrible for anyone crossing the street. (487)

Response 12-3:

The DEIS acknowledges that there would be unmitigated traffic impacts from the proposed project, including along the corridors referenced in the comment. However, the proposed project incorporates a number of operational changes to the study area street system to facilitate traffic and pedestrian flow, including street closures, changes in street direction, and the widening of sidewalks. For example, 6th Avenue would be converted to two-way operation between Atlantic and Flatbush Avenues to facilitate traffic flow around the project site and to provide an alternate route for traffic diverted from the closure of 5th Avenue between Flatbush and Atlantic Avenues. A left turn prohibition on northbound Flatbush Avenue at Atlantic Avenue would be modified to permit left turns by buses in order to accommodate the diversion of the B63 bus from the closed section of 5th Avenue. In addition, the project's proposed traffic mitigation plan includes a broad range of

additional physical roadway improvements and traffic operational improvements designed to address the project's potential significant impacts on traffic and pedestrian circulation. These include a major reconfiguration of the Atlantic Avenue/Flatbush Avenue/4th Avenue intersection, and geometric improvements at the intersection of Atlantic and Vanderbilt Avenues. These measures would be implemented concurrently with development of the proposed project. The proposed project is not expected to add appreciable numbers of auto trips to Washington Avenue north of Atlantic Avenue. Fewer than 45 additional auto trips (and no bus or truck trips) would be added in any peak hour (less than one car per minute). Consistent with *CEQR Technical Manual* methodology, the traffic analysis in the DEIS analyzed 7 peak hours to assess reasonable worst-case traffic conditions resulting from the proposed project and was not based on total vehicle trips per day since that figure is not appropriate for assessing worst-case conditions.

Comment 12-4: I live in Park Slope, on St. Mark's Avenue between 5th and 6th Avenues. Currently, we have a traffic problem, particularly with small and large trucks moving at high speed up the block to Flatbush. Quite often they get blocked by double-parked cars, creating a wall of a traffic jam. Other times, they rush to make the very long light at 6th Avenue, and set off car alarms with their heavy rumbles as they pass. What measures are you taking to divert extra traffic from this street? (492)

Response 12-4: The proposed project is expected to add from 22 to 164 peak hour auto trips (and no truck trips) on St. Mark's Place between 5th and 6th Avenues, with the highest numbers occurring in the weekday and Saturday pre-game peak hours. However, as demonstrated by the analyses in Chapter 19 of the DEIS, with implementation of the proposed project's traffic mitigation plan, there would be no unmitigated significant traffic impacts along St. Mark's Place at any analyzed intersection in any peak hour, including the intersections at 5th and 6th Avenues.

Comment 12-5: An increase in traffic on Atlantic Avenue is a truly frightening prospect. The fact that some of the increased traffic will be related to sporting events attended by people who tend to drink too much and who do not live in the community heightens this fear. (206, 448)

Response 12-5: The DEIS analyzes the effects of traffic increases on Atlantic Avenue resulting from the proposed arena. Drunk driving is illegal and is expected to be enforced appropriately by the NYPD.

- Comment 12-6:** The development will lead to overcrowding in the Atlantic and Flatbush area and continual traffic nightmares. (31, 265, 350, 422, 465, 469, 482, 492, 497, 502, 519, 548, 553, 557, 562, 570, 575, 580)
- Traffic coming to the Atlantic Avenue, Flatbush Avenue, and 4th Avenue intersection will be a nightmare. (102, 145, 147, 179, 219, 238, 241, 243, 363, 406, 427, 437, 443, 450, 461, 541)
- The intersection of Atlantic and Flatbush Avenues is already hard to get to, without the addition of the project. (152, 195, 204, 324, 380, 406, 439, 519, 530)
- As a result of this development, 25,000 more cars are expected in the intersection of Atlantic and Flatbush each day. (247, 248, 365)
- The suggested mitigations at the intersection of Atlantic and Flatbush Avenues are wholly inadequate (e.g., high visibility crosswalks) to address the serious vulnerability of pedestrians at this intersection. We recommend a comprehensive range of solutions, including, but not limited to a raised central meridian on Atlantic Avenue, an underpass connecting the north and south sides of Flatbush Avenue with access to the subway and LIRR, and a pedestrian bridge over Atlantic Avenue at the eastern edge of the arena. (108)
- Response 12-6:** As discussed in the DEIS, the proposed project would result in significant adverse traffic impacts at the intersection of Atlantic and Flatbush Avenues. As described in detail in Chapter 19 of the DEIS, the proposed project's traffic mitigation plan includes a major reconfiguration of the Atlantic Avenue/Flatbush Avenue/4th Avenue intersection to eliminate a northbound "triangular constraint" that severely limits the individual capacities of each of the three major arterials. The effectiveness of this proposed reconfiguration is demonstrated in the results of the level of service analyses provided in Appendix C and summarized in Chapter 19. However, as indicated in the chapter, some significant adverse traffic impacts would remain.
- A range of pedestrian improvement measures have also been proposed at the Atlantic Avenue/Flatbush Avenue/4th Avenue intersection to accommodate increased pedestrian flows. In addition to wider sidewalks, high visibility crosswalks and improved lighting, pedestrian improvements proposed for this intersection include implementation of an all-pedestrian phase at Flatbush Avenue/4th Avenue, substantial expansion of the pedestrian space at Times Plaza to accommodate increased pedestrian volumes, and construction of a major new on-site entrance to the Atlantic Avenue/Pacific Street subway station complex at the southeast corner of Atlantic and Flatbush Avenues. This new entrance would eliminate the need for subway passengers using this

complex to cross Atlantic Avenue en route to and from the project site and neighborhoods to the south. Implementation of raised medians on Atlantic Avenue at Flatbush Avenue was not considered practicable due to geometric constraints and the need to provide sufficient capacity to accommodate the heavy traffic flows through this intersection. (The proposed traffic mitigation plan does, however, include an expanded median and pedestrian refuge on Atlantic Avenue at Vanderbilt Avenue, which would be accommodated through the proposed elimination of the eastbound left-turn lane.) The construction of a pedestrian overpass on Atlantic Avenue at Carlton Avenue (at the east side of the arena) is not proposed given that this intersection has not been identified as a high pedestrian accident location, that peak 15-minute volumes on the crosswalks would number fewer than 60 in any analyzed peak hour in 2016, and that the crosswalks on Atlantic Avenue would operate at LOS A during these periods. New high visibility crosswalk striping would be installed at this location to enhance pedestrian safety. Lastly, a serviceable pedestrian underpass beneath Flatbush Avenue is considered to be impracticable given the number of subway lines under the street, requiring an underpass to be below the subway lines.

Comment 12-7: There is concern about the likelihood of spillback traffic at the major intersections along Flatbush and Atlantic Avenues. The skewed geometry results in short stacking lanes on Livingston, Pacific, and Dean Streets where they intersect with Flatbush Avenue. (24)

Response 12-7: The concerns of the commentor were considered in the traffic analysis presented in the DEIS and FEIS. A review of the mitigation plan described in Chapter 19, "Mitigation," shows a major emphasis on physical and operational improvements to the key study area streets, especially the arterials. It is proposed to reconfigure the critical intersection of Atlantic Avenue/Flatbush Avenue/4th Avenue to eliminate the recurring spill-back at that location. Flatbush Avenue northbound is being widened to provide a new curb lane, freeing up all three (instead of two) lanes for traffic flow between Dean Street and Atlantic Avenue. However, as also presented in the mitigation analysis in Chapter 19, "Mitigation," there would continue to be game-day congestion and unmitigated impacts in the study area. These congested conditions would be concentrated in the weekday peak hours, and some spill-back to adjacent intersections can be expected, mainly along portions of Atlantic Avenue, as well as on other roadways including Vanderbilt Avenue and Flatbush Avenue. On non-game days (85 percent of all weekday days), the physical changes outlined above would measurably improve traffic flow on these key arterials versus

conditions without the proposed project. Additional discussion of the effects of spill-back and related traffic congestion is included in Chapter 19, "Mitigation," of the FEIS.

Comment 12-8: The number of traffic lanes on Atlantic Avenue going to and from the arena should be increased during game days. (23)

Response 12-8: As discussed in Chapter 12 of the DEIS, with implementation of the proposed project, Atlantic Avenue would be reconfigured adjacent to the project site to increase the number of eastbound travel lanes from two to three between Flatbush Avenue and Ft. Greene Place, eliminating a major constraint point. To accommodate the additional lane, sidewalks along the south side of the avenue would be set back, and the double parking lane along the north curb adjacent to the Atlantic Center mall would be reduced in width from 21 feet to 10 feet. With this reconfiguration, Atlantic Avenue would operate with a minimum of three travel lanes plus a parking lane in each direction at all times from Flatbush Avenue to Vanderbilt Avenue.

Comment 12-9: Vanderbilt has become a bottleneck during much of the day as vehicles try to gain access to Atlantic Avenue or try to move to Prospect Heights or Park Slope. (119)

I don't believe the traffic issues have been adequately addressed and mitigated. It is already a slow car ride to travel down Vanderbilt Avenue. I believe that truck and vehicular traffic will also greatly increase on Clinton Avenue. (575)

Response 12-9: The proposed project's traffic mitigation plan includes geometric and operational improvements to the intersection of Atlantic and Vanderbilt Avenues to reduce the delays and congestion at this location resulting from the proposed project, including measures that were added subsequent to issuance of the DEIS. This is discussed in detail in Chapter 19 of the FEIS. However, even with these measures, there would continue to be unmitigated significant adverse impacts at intersections along the Vanderbilt Avenue corridor. The proposed project is not expected to add appreciable amounts of new traffic to Clinton Avenue.

Comment 12-10: The short block of 5th Avenue between Flatbush and Atlantic Avenues serves as an invaluable detour from the intersection of Flatbush and Atlantic Avenues. It would be a grievous error to close it. (402, 457)

The DEIS describes the closure of 5th Avenue between Flatbush and Atlantic Avenues but fails to present any mitigation for this closure.

How will this affect access to the Pathmark grocery store on Ft. Greene Place for traffic approaching from the south? How will this affect local traffic from Park Slope to Fort Greene that currently uses this route to travel between adjacent neighborhoods? (108)

Streets should not be demapped. Creative use of pedestrian and/or vehicular walkways and skyways should be incentivized. (37)

To substantiate the claim that eliminated roadways will enhance safety, the EIS should provide data to corroborate this claim. Demapped streets will lead to more congestion, will significantly increase traffic around the project site and thereby increase the number of automobile-related accidents. (24, 299)

Instead of closing streets, the project should follow the *CEQR Technical Manual*, which states, “The first option considered should be to reroute the traffic that is causing the significant impact.” Auto, truck, and bus traffic must follow established routes that don’t disrupt the project’s neighbors. Unnecessary street closures must be rethought. (48, 260, 460, 461)

The closing of Pacific Street will block or impede access to buildings with frontage on Pacific Street, which includes a 107 car public parking garage. (281, 461)

The DEIS has failed to account for the traffic that will be diverted as a result of the proposed street closings and has minimized the impacts of disruption of the existing network. (24, 571, 577)

Demapping will decapitate the transformation of 5th Avenue. (166, 368)

Building over 5th Avenue between Atlantic and Flatbush will make pedestrian and automotive traffic much heavier and more circuitous. The Fort Greene Place to 5th Avenue is especially useful and heavily trafficked. (231)

Response 12-10:

The permanent closure of 5th Avenue between Flatbush and Atlantic Avenues, and Pacific Street from Flatbush Avenue to 6th Avenue is necessary to accommodate the footprint of the proposed arena, as well as the proposed new subway entrance on Block 1118. The segment of Pacific Street between Carlton and Vanderbilt Avenues would be closed to accommodate development and open space on blocks 1121 and 1129. The use of pedestrian or vehicular overpasses would not offer a viable alternative to these closures. As discussed in the DEIS, the closures of these street segments would reduce the number of pedestrian crossing locations and the number of vehicle turning movements in the vicinity of the project site, thereby reducing the potential for vehicle/pedestrian conflicts at some locations. At other locations, however, it is

acknowledged in the DEIS that the proposed project would result in an increase in vehicle and pedestrian trips and therefore an increased potential for conflicts. The traffic analyses in the DEIS account for the traffic that would be diverted as a result of these closures, and the proposed project and its traffic mitigation plan include a range of design elements and physical and operational measures to improve traffic and pedestrian flow and enhance safety.

As also discussed in Chapter 12 of the DEIS, 6th Avenue would be converted to two-way operation between Atlantic and Flatbush Avenues, in part to provide an alternate route for traffic diverted as a result of the closure of 5th Avenue (including traffic en route between Park Slope and Ft. Greene). In addition, a new left-turn lane and leading left-turn phase are proposed for eastbound Atlantic Avenue at Ft. Greene Place under the project's traffic mitigation plan to accommodate diverted traffic. The conversion of 6th Avenue, along with the conversion of Carlton Avenue to two-way operation between Atlantic Avenue and Pacific Street, would provide for alternate access to land uses along the block of Pacific Street between Sixth and Carlton Avenues.

Comment 12-11: A high accident rate is recorded along Atlantic Avenue through the document, but there is no reason given for it. For these reasons the intersection at Atlantic and Vanderbilt is going to get worse, yet it is not addressed. (26, 402)

Response 12-11: As discussed in the DEIS, factors likely contributing to the relatively high number of accidents at the intersection of Atlantic and Vanderbilt Avenues are the skewed geometry of the intersection, the number of permitted turning movements and the presence of curb cuts for an automotive service station at the southwest corner leading to potential conflicts with entering and exiting vehicles. As further discussed in the DEIS, the development of the proposed project would displace the existing service station and eliminate the curb cuts in proximity to the intersection. Also proposed in the DEIS is the installation of new high visibility crosswalks and better lighting to enhance pedestrian safety. As discussed in the FEIS, additional mitigation measures to enhance vehicle and pedestrian flow and safety are being proposed, including the elimination of the eastbound left-turn from Atlantic Avenue to Vanderbilt Avenue, widening the median on the eastbound Atlantic Avenue approach to provide a pedestrian refuge, and the realignment of the traffic lanes on the northbound Vanderbilt Avenue approach to better align the northbound and southbound legs of the intersection. It should also be noted that NYCDOT, based on data presented in the DEIS, recently reduced the number of turning movements at this

intersection by prohibiting the southbound left-turn movement from Vanderbilt Avenue to Atlantic Avenue, improving pedestrian safety at this location. The traffic analyses in the FEIS have been updated to reflect this change.

Comment 12-12: Standard HCS worksheets are not included in any appendix so no one can check the assumptions made for LOS estimates, and the accuracy of the reported LOS. (54)

Response 12-12: HCS worksheets are typically not included as part of an EIS appendix. All HCS worksheets were submitted to NYCDOT and reviewed by the agency for accuracy.

Comment 12-13: The volume diagrams for the Build condition provide no differentiation of the added trips due to Atlantic Yards from the diversion of all other traffic due to street closings or changes in travel direction. The DEIS must provide volume diagrams showing the effects of street closures on No Build trips. (54)

Response 12-13: The DEIS fully described the impacts that would occur to traffic as a result of the proposed project. Spreadsheets showing both added trips due to the proposed project and the diversions of No Build traffic as a result of proposed street closures and changes in street direction have been incorporated into Appendix C for the FEIS.

Comment 12-14: The 2001 Downtown Brooklyn Traffic Calming Project (Ove Arup & Partners) recommends reducing peak-hour through traffic by improving traffic operations on Atlantic Avenue and slowing traffic on parallel living streets such as Pacific, Dean, and Bergen Streets. It also recommends facilitating pedestrian crossings, and improving the street environment for pedestrians, bicyclists, businesses, and residents on streets such as DeKalb Avenue, Fulton Street, and Lafayette Avenue. It is doubtful that these measures will ever be carried out and the traffic in Downtown Brooklyn will be a nightmare. (147)

It does not seem that any of the recommendations outlined in the Downtown Brooklyn Traffic Calming Project have been implemented. (31, 324)

The DEIS ignores all the recommendations of the Downtown Brooklyn Traffic Calming Project on the specious grounds that NYCDOT has not issued concrete implementation plans. In fact, it was in coordination with the more detailed analyses of the complex 4th/Atlantic/Flatbush Avenue intersection and the approaches that the traffic calming recommendations were expected to be investigated further. (54)

The Downtown Brooklyn Traffic Calming Project (DBTCP), conducted by NYCDOT with the assistance of the DBTCP Task Force in response to community needs, was developed to protect residential areas adjacent to the civic and commercial core of Downtown Brooklyn from the effects of increased traffic. NYCDOT is implementing the DBTCP results. The DEIS states that “no specific measures have been identified for implementation within the study area at this time.” In fact, the NYCDOT website includes a listing of such improvements. As the City is committed to implementing the DBTCP by 2009, the effects of these improvements on the performance of the traffic network should be incorporated as part of the FEIS analyses for both (2010 and 2016) build years. (12)

NYCDOT should implement traffic calming measures within a one-mile radius of the intersection of 4th, Flatbush and Atlantic Avenues, as one measure to deal with the increased vehicular traffic that will result from the redevelopment. The increased surface traffic from Atlantic Yards would have an adverse effect on the limited amount of traffic calming that has been achieved in Downtown Brooklyn. (470)

Response 12-14:

Recommendations from NYCDOT’s *Downtown Brooklyn Traffic Calming Project* are subject to further detailed evaluation, analysis of impacts, and community review. In 2001, a pilot program was implemented to evaluate various candidate traffic calming measures. Measures implemented within the study area (and included in the baseline conditions) included the widening of the median refuges on Tillary Street at Adams Street to reduce north-south crosswalk distance; and the introduction of a pedestrian refuge (subsequently removed in summer 2002) and a new left-turn lane on Atlantic Avenue at Bond Street, along with curb extensions on Bond Street at Atlantic Avenue. In addition, in November 2003, DOT converted Smith Street from two-way to one-way northbound operation between Atlantic Avenue and Schermerhorn Street. As discussed in the DEIS, with the exception of the conversion of Smith Street from two-way to one-way northbound operation, recommendations from the DBTCP were not incorporated into the traffic analyses as no other specific measures have been identified by NYCDOT for implementation at this time. The proposed project’s traffic analyses and traffic mitigation plan, including the assumptions regarding the future implementation of traffic calming measures and the proposed reconfiguration of the Atlantic Avenue/Flatbush Avenue/4th Avenue intersection, were developed in consultation with, and reviewed by, NYCDOT.

Comment 12-15:

The DEIS does not appear to recognize that all travelers to the arena will not be coming from Manhattan by train, despite the incentives

being offered. Those who will be driving in from Queens, Nassau, and Suffolk will more than likely turn off at Washington Avenue and/or Vanderbilt Avenue, rather than tackle the congestion at the Flatbush intersection. Adverse impacts on these and other areas east of the project have not been studied. (24)

The inconveniences involved in traveling to the project and arena will encourage people to take cars or cabs. (504)

Everyone will drive to the basketball game. (523)

Response 12-15:

As discussed in the DEIS, the modal split assumptions for the proposed arena reflect the anticipated origin/destination distribution of arena spectators and the excellent accessibility by transit of the proposed arena site and were developed in consultation with NYCDOT and MTA NYCT. The assumptions were developed from trip origin and modal split data for Madison Square Garden, along with data specific to Downtown Brooklyn, and estimate that from 30 to 35 percent of arena trips would travel by the auto and taxi modes, even with the proposed transit incentives and other demand management strategies. The assignment of project generated arena traffic does assume that some trips would utilize Vanderbilt and Washington Avenues en route to and from on-site and off-site parking facilities. Intersections to the east of the project site along Vanderbilt and Washington Avenues were included in the DEIS analyses.

Comment 12-16:

The DEIS shows the substantial increases in traffic that the proposed project will bring to Vanderbilt Avenue and Flatbush Avenue at the intersections of DeKalb and Myrtle Avenues, at virtually all times of the day, but it fails to consider the increased traffic on DeKalb or Myrtle Avenues themselves. (70)

We're concerned about increased traffic on the perimeter streets of DeKalb and Myrtle Avenues. Commuters seeking to avoid the bottlenecks of Atlantic and Flatbush Avenues already use these arteries, and the usage will increase in proportion to increases in traffic on Vanderbilt, Flatbush, and Atlantic Avenues. (70)

The streets which parallel Atlantic Avenue (Fulton, Gates, Greene, Lafayette, DeKalb, and Myrtle) are already experiencing the overflow as Atlantic Avenue has become so congested that vehicles cannot move at an acceptable speed during extended rush hours. (119)

Response 12-16:

The proposed project is not expected to add an appreciable number of new vehicle trips along Myrtle Avenue, DeKalb Avenue, or Greene Avenue. Project-generated trips along Gates Avenue and Lafayette Avenue would total fewer than one car per minute in any peak hour.

New peak hour trips along Fulton Street would total 102 or fewer, with the highest numbers of peak hour trips occurring in the weekday 10-11 PM and Saturday 4-5 PM post-game peak hours (and not during the AM and PM commuter peak hours). Overall, as demonstrated by the analyses in Chapter 19 of the DEIS, there would be no unmitigated traffic impacts at analyzed intersections along any of these corridors with implementation of the proposed project and its traffic mitigation plan.

Comment 12-17: On game and event nights there should be traffic officers located at intersections at or near the arena. (13)

Response 12-17: As discussed in Chapter 19 of the DEIS, on days when a basketball game or other major event is scheduled at the arena, police and traffic control officers would be deployed at key intersections in the vicinity of the arena during the pre-game and post-game periods, as currently done at other major event venues in the City.

Comment 12-18: Page 12-4 mentions deployment of police and traffic control officers at key intersections. Is this a financial commitment from the project sponsors to mitigate these impacts by paying for NYCDOT and NYPD staff time and materials? If not, these impacts would not be mitigated and impacts remain attributable to project-generated conditions. (24, 95)

The use of publicly paid employees should not be included in the EIS as a method to reduce accidents. Instead, the project should address the source of the unsafe streets: an arena in an already congested part of Brooklyn. (24, 299)

The DEIS states that the project sponsor is committed to working with DOT and NYPD to ensure that needed resources are available to place police and traffic control officers at key intersections when major events are scheduled for the arena. The EIS should provide an explanation of what this means. We would expect the developer to be responsible for the expense of these resources. (108)

There should be a police presence during most hours to direct traffic, thereby increasing public safety as well as keeping traffic moving through the area. (470)

Particularly at peak periods, such as just before or after an event at the arena, what temporary or permanent traffic control measures will be implemented to accommodate vehicular traffic? (483)

Response 12-18: It is anticipated that on days when a basketball game or other major event is scheduled at the arena, police or traffic control officers would be deployed at key locations to maintain traffic flow and minimize

conflicts between vehicles and pedestrians, as is standard practice at many major event venues in the City. The project sponsor is committed to working with DOT and NYPD to ensure that needed resources are available for this purpose. Deployment of police resources during other periods would be at the discretion of NYPD. While the deployment of police or traffic control officers on game days is acknowledged in the EIS, no credit is taken in the traffic mitigation analyses for the effects on traffic flow of the anticipated presence of NYPD or traffic control officers at key intersections.

Comment 12-19:

The DEIS fails to study critical traffic access points, including the East River crossings and the Brooklyn-Queens Expressway. (102, 108, 324)

The study area should include the Brooklyn Queens Expressway and its five interchanges to which is assigned approximately 30 percent of project trips. (54, 452)

The DEIS does not mention the effects of traffic flow on major roadways (BQE, Belt Parkway, Prospect Expressway, Gowanus Expressway). (48, 108, 168, 324, 325, 345, 350, 357, 575)

The DEIS didn't analyze 4th Avenue or the BQE, which is the same as saying the blood clot in someone's chest won't affect their arms or legs. The BQE is a main artery that goes around Brooklyn, and 4th Avenue is one of the key veins to connect Flatbush. The DEIS has assumed that every street is an island unto itself without any impact on others. (312)

The DEIS only analyzes traffic on 4th Avenue as far as Union Street. As a minor example now, if there is any backup on 4th Avenue caused by deliveries to businesses on 4th Avenue, it will take 7 minutes to drive four blocks. This area cannot handle the additional traffic in either peak or non-peak hours that will occur with the projected increase in population and traffic. (406)

The traffic study area doesn't include most of Park slope (Union Street is the southern cut off to the study area). And because Ocean Parkway is not included, there is no analysis of the impact on Park Slope of traffic coming from the southern neighborhoods of Brooklyn. (108)

The BQE is the main route for traffic to move into Clinton Hill from the north and south. The Kent Avenue entrance/exit is a complete bottleneck during most of the day as trucks fill the entrance and surrounding streets trying to gain access. (119)

The DEIS does not include any of the major highways, parkways, or expressways which would be affected by the increased traffic of the residents or arena attendees. (160)

Considering that most of the analyzed intersections were located within a half mile of the project site, what adverse traffic and congestion impacts will the project have on Manhattan? (24, 299, 324)

The business plan for the Nets arena includes 20 percent of game goers traveling by car from New Jersey. Yet the DEIS did not even assess the impact of Atlantic Yards on Manhattan Bridge or the BQE. (350, 451, 524)

The DEIS fails to study intersections running north and south on Clermont Avenue. (53)

The traffic study did not take into account a broad enough area. Flatbush Avenue traffic extends all the way to the Bowery in Manhattan. (474)

The scope of the traffic studies is not wide enough. Traffic will adversely impact intersections in a radius much larger than the one use in the EIS. I am concerned about traffic along 4th Avenue all the way down to the Verrazano. A tunnel option should be considered along this route. In addition, the BQE/Gowanus mess should be widened. (569)

Response 12-19:

The traffic study area extends upwards of 1.2 miles from the project site and encompasses a total of 93 intersections along corridors expected to be used by concentrations of traffic en route to and from the proposed project. Given the numerous corridors providing access to the project site, including Atlantic, Flatbush, Carlton, Vanderbilt, Washington, 3rd, 4th, 5th, and 6th Avenues, project-generated traffic is expected to be dispersed to the north, south, east, and west, and is expected to become rapidly less concentrated with increasing distance from the project site. For these reasons it is expected that there would not be significant impacts on the regional access corridors. The traffic impact analysis therefore focuses on locations where new traffic is expected to be most concentrated, and does not include more distant locations such as Manhattan, and along Ocean Parkway, or regional access corridors such as the BQE, Brooklyn-Battery Tunnel, Belt Parkway, Prospect Expressway, or Gowanus Expressway. Union Street was identified in consultation with NYCDOT as the southern boundary of the study area, given the anticipated dispersion of traffic with distance from the project site. The analysis does, however, assess conditions at intersections along corridors connecting regional access routes and the project site. These include seven intersections along 4th Avenue, intersections along Carlton and Vanderbilt Avenues as far north as Park Avenue which would provide access to the BQE, and all intersections along Flatbush Avenue Extension as far north as Tillary Street. A tunnel option for traffic en route along 4th Avenue between the Verrazano Narrows Bridge and the project site is not considered warranted based on the

proposed project's impacts along this corridor, and would likely be impractical given the presence of an existing subway line beneath 4th Avenue. The analysis of existing and future traffic conditions at study area intersections used methodologies recommended in the *CEQR Technical Manual*, and were reviewed by NYCDOT. A discussion of the potential for queuing and spill-back along major corridors was included as part of the traffic analyses in the DEIS and further discussed in the FEIS.

Chapter 12 of the DEIS includes a screening analysis of the potential for impacts on the Brooklyn and Manhattan Bridges. Based on the results of the analysis, no significant impacts to traffic flow on the two bridges are anticipated to result from the proposed project, although some future queuing would likely occur (as is presently the case) due to congestion at the metering intersections during peak periods, such as Flatbush Avenue and Tillary Street, and Adams and Tillary Streets.

Comment 12-20:

The study area designated in the DEIS does not consider some of the recommendations previously made by the Borough President. In order to accurately assess the proposed project's traffic mitigations, the Borough President recommends the NYCDOT analyze all the intersections in the DEIS and the additional intersections listed below six months after the completion of Phase 1I:

Cadman Plaza West / Tillary Street

Jay Street/Tillary Street

Jay Street/Joralemon Street

Jay Street/Schermerhorn Street

Pacific Street/Hoyt Street

Pacific Street/ Nevins Street

Lafayette Street/Fulton Street

Plaza Street/Vanderbilt Avenue

Lafayette Street/Vanderbilt Avenue

Park Avenue/Washington Avenue

Myrtle Avenue/Washington Avenue

DeKalb Avenue/Washington Avenue

Fulton Street/Washington Avenue

There are streets outside the study area that link communities to the study area that will be affected by the project. The Borough President

also suggests the NYCDOT analyze the following streets within Community Boards 2, 6 and 8 six months after the completion of Phase II.

Court Street	Classon Avenue
Smith Street	Park Avenue
Third Avenue	Myrtle Avenue
Fourth Avenue	DeKalb Avenue
Prospect Park West	Lafayette Avenue
Flushing Avenue	Eastern Parkway
Vanderbilt Avenue	Bedford Avenue
Washington Avenue	Nostrand Avenue (12)

Response 12-20: During the first year of arena operations, the project sponsors would be responsible for undertaking a program to monitor and advise NYCDOT of traffic conditions at the locations identified in the FEIS as having unmitigated significant traffic impacts. A similar monitoring program would be undertaken after full build out of the proposed project.

Comment 12-21: Page 12-5 states that: "On weekdays, for example, it is anticipated that a Nets basketball game or other event at the arena would typically start at 7:30 PM or 8 PM. A seven to 8 PM peak hour was therefore selected for the analysis of a weekday pre-game condition as it is with during this period that residual commuter demand and peak demand en route to the basketball game or other event at the arena would most likely overlap." This is just plain nonsense. East Coast NBA games start at 7:30 PM, unless they're on national TV, and such games represent a small fraction of the total. So 6 PM to 7 PM, or 6:30 to 7:30 PM should have been studied for peak demand. This is an enormous flaw in the DEIS since failure to address what may truly be the peak traffic period for transit demand very likely significantly underestimates the impact of the project in so many areas. (102)

The DEIS ignores the second part of rush hour from 6 PM to 7 PM. The projected 40 percent of arena attendees arriving by car, that's 2,400, will not show up in the 7 to 8 PM hour for a 7:30 PM tip off. (37, 574)

The appropriate pre-game peak hour should be 6:30 PM to 7:30 PM, which would better account for arena-generated trips. (95)

The proposed arena would increase traffic congestion throughout the central Brooklyn District. While in the DEIS traffic is analyzed between

5 PM to 6 PM, as well as 7 PM to 8 PM for a 7:30 PM Nets game, it wholly ignores the prime commuting time of 6 PM to 7 PM. (160)

The DEIS fails to measure the time period that would likely generate the greatest amount of traffic demand. (102, 347)

The DEIS states that traffic impacts would be at their worst during the peak hours of 7 AM to 8 AM and 5 PM to 6 PM during the week, and for one hour pre- and post-game on game nights and Saturdays. Everyone knows that rush hour does not last one hour—it lasts two or three at a minimum. Pre- and post-game congestion does not last for an hour—it lasts an hour and a half or more. (48)

The assertion that residents commute home between 5 PM and 6 PM is absurd. The regular commuter crush lasts from 5 PM to 8 PM and sometimes beyond. (312)

Response 12-21:

As discussed in Chapter 12 of the DEIS, a total of seven peak hours are analyzed for potential traffic impacts, including the weekday 8-9 AM, 12-1 PM (midday), 5-6 PM, 7-8 PM (pre-game), 10-11 PM (post-game), Saturday 1-2 PM (pre-game) and Saturday 4-5 PM (post-game) periods. On weekday evenings, a Nets basketball game would typically start around 7:30 PM or 8:00 PM, and would, therefore, not coincide with the 5-6 PM peak hour for commuter trips. The EIS traffic analysis therefore examines both the weekday 5-6 PM peak hour, and a 7-8 PM pre-game peak hour. The traffic analyses in the DEIS were appropriate even if all weekday Nets games were scheduled for 7:30 PM. The 7-8 PM peak hour was selected for the analysis of the weekday pre-game condition as it is during this period that residual commuter demand and peak demand en route to a basketball game or other event at the arena would most likely overlap. For example, survey data from Madison Square Garden reported in the August 26, 2003 *Madison Square Garden Modal Split Analysis* study (Sam Schwartz LLC) indicate that for a weekday Knicks basketball game with a 7:30 start time, approximately 71 percent of fans arrive during the 7-8 PM hour, with 42 percent arriving between 7 PM and 7:30 PM, and 29 percent arriving between 7:30 PM and 8 PM. By contrast, only 19 percent of fans were found to arrive between 6:30 PM and 7:00 PM. (It should be noted that for the proposed project's travel demand forecast, a conservative 75 percent of Nets fans were assumed to arrive at the arena during the 7-8 PM peak hour.) Although the AM and PM commuter peak periods are spread over more than one hour, traffic impact analyses typically examine the peak one hour within each period.

Comment 12-22:

The insufficient size of the DEIS study area is brought clearly into focus on page 12-24 of the traffic study which deals with queuing. What it

appears to be saying is that traffic within the study area may be so bad that it will cause gridlock outside the study area thereby occasionally reducing traffic volume within the vicinity of the project. That is one reason that the Park Slope Civic Council, and many other groups, called for a study area much greater than the ½-mile radius analyzed in this DEIS. (102, 103)

The study area should cover the entirety of three community districts. (54, 55)

The study area is too small and so excludes much of the affected area. As a result the entire traffic study is inadequate to assess the impacts of the proposal. A supplemental study is necessary before approval of the DEIS. (180)

Significant impacts are not limited to the streets surrounding the arena but occur as far away as Boerum Place and Atlantic and Flatbush Avenues and Tillary Street. (24)

The DEIS fails to analyze traffic adequately because of poor methodology. The intersection studies were too few and too close to the project sites. In fact, forty intersections within ¼ mile of the project site were not even looked at. It is not acceptable to plan for an additional 15,000 people and fail to analyze important intersections just two blocks away from the project, such as Fulton Street and Clinton Avenue. (24, 299)

The traffic on Flatbush Avenue just after the Manhattan Bridge is already packed and that is despite being six to eight lanes. Also, traffic is only being accounted for the surrounding area and the BQE. There is no account for traffic heading in other directions. Traffic congestion should be taken into account for the Belt Parkway, Prospect Expressway, Gowanus Expressway, Staten Island Expressway, FDR Drive, West Side Highway, and the bridges and tunnels that connect them. (152)

Response 12-22:

The traffic analysis in the DEIS and FEIS was performed in accordance with *CEQR Technical Manual* methodologies. The traffic study area extends up to 1.2 miles from the project site and encompasses a total of 93 intersections along corridors expected to be used by concentrations of traffic en route to and from the project site. It includes intersections along Boerum Place and Tillary Street. Given the numerous corridors providing access to the project site, including Atlantic, Flatbush, Carlton, Vanderbilt, Washington, 3rd, 4th, 5th, and 6th Avenues, project-generated traffic is expected to be dispersed to the north, south, east, and west, and is expected to become rapidly less concentrated with increasing distance from the project site.

Table 19-4 in Chapter 19, "Mitigation," in the FEIS clearly shows the effect of this dispersion with respect to intersections with unmitigated impacts along the key Atlantic Avenue and Flatbush Avenue corridors. As shown in the table, along these corridors, all intersections on the periphery of the study area except one (Flatbush Avenue and Tillary Street) were fully mitigated in the weekday peak hours on game days. Lastly, it should be noted that this traffic study area was reviewed by DOT during both the DEIS and FEIS process and found to be acceptable to adequately describe project impacts. Accordingly, it is not expected that the proposed project would result in gridlock conditions outside of the study area.

Comment 12-23: The percentage assignments of No Build trips are not provided and there is no accounting for any mitigation for the No Build. (54)

Response 12-23: Vehicle trips generated by individual No Build sites were assigned to the traffic networks on a site-by-site basis. As discussed in Chapter 12 of the EIS, physical and operational changes (mitigation measures) to the study area street system as a result of No Build developments have been incorporated in the 2010 and 2016 No Build traffic networks. New volume tables that reflect these No Build site trips have been incorporated into Appendix C for the FEIS.

Comment 12-24: The DEIS study area excludes a significant portion of the functional Downtown Brooklyn and the surrounding neighborhoods and arbitrarily leaves out significant trip generators. (54)

The radius for the traffic transportation and pedestrian analysis must be increased to at least a two-mile radius so that all the building projects nearby are included. (26)

The DEIS ignores half the development that's underway or approved in the study area. (54, 102, 154)

The DEIS fails to account for development outside the Atlantic Yards study area that will impact travel through Downtown Brooklyn and along the BQE. (54)

Response 12-24: In addition to a 0.5 percent per year growth rate to account for smaller development projects and background growth, the transportation analyses in the DEIS also reflect the anticipated travel demand from a total of 33 discrete No Build developments in Brooklyn, comprising approximately 6,281 dwelling units, 5.19 million sf of office space, 1.14 million sf of retail space and 2.43 million sf of other space (community facility, academic, hotel, court, etc.). These developments were selected for inclusion as discrete No Build sites based on their size, anticipated

completion date and proximity to the project site, and were not limited to sites within the ¼-mile perimeter of the land use study area reflected in Table 2-1 in the DEIS. Several developments were included at the request of NYCDOT which was consulted in developing the list of No Build sites, and three recent developments not reflected in the DEIS have been added to the FEIS analyses. The estimates of future travel demand used for the DEIS transportation analyses therefore reflect not only a 0.5 percent per year background growth rate, but the demand that would be generated by development reasonably likely to be developed in and around Downtown Brooklyn by 2016.

Comment 12-25: Based on trip origins assumed in the DEIS, approximately 28 percent of Build trips should have been assigned to the BQE (237 vehicles to or from the south and 217 to or from the north in the PM peak hour in 2016), with commensurate increases on parallel local streets, e.g., 3rd or 5th Avenues. (54)

While the text discussion of trip assignments suggests a significant number of vehicles assigned to the BQE, analysis of Figures C-38a and C-38b displaying traffic volumes show very few vehicles using the BQE. (54)

A further non-disclosed impact of these omissions is the huge cost burden on NYSDOT to undertake post facto construction to accommodate this traffic. (54)

Response 12-25: The assignment of project-generated traffic to regional access routes such as the BQE, and to local streets and arterials, was based on anticipated trip origins, expected destinations at the project site (Site 5, arena block, residential blocks, off-site parking) and existing travel patterns. These assignments, reflected in figures included in the Transportation Planning Assumptions technical memorandum provided in Appendix C, were developed in consultation with NYCDOT. The weekday 5-6 PM peak hour project increment traffic volumes shown in Figures C-38a and C-38b reflect a total of 210 vehicles en route to or from the BQE via Vanderbilt Avenue, Carlton Avenue, Hanson Place, and Flatbush Avenue/Tillary Street, and a further 104 vehicles en route via Atlantic Avenue. A portion of the trips assigned to 4th Avenue are also assumed to be en route to and from points south via the BQE. Given the proposed project's relatively high transit mode share and the fact that project-generated traffic using the BQE would be distributed both northbound and southbound and dispersed among four access points, a need for major capacity improvements to the BQE attributable to the proposed project is not anticipated. As noted in the DEIS, NYSDOT is undertaking a long range study to identify potential

intermediate (15 to 20 years) and long range (20+ years) alternatives for improvements to the BQE. This study will include demand from the proposed project as one component in its long-term forecasts of regional growth.

Comment 12-26:

The traffic impact analysis states that 73 percent of the intersections studied will be adversely affected by the time the project is completed in 2016. What about before 2016? Many intersections will surely be adversely impacted when streets are demapped before construction even begins. (24, 299)

In a project which the document claims is transit-oriented, the DEIS acknowledges that 75 percent of the intersections analyzed would be significantly adversely impacted with over half of those intersections having unmitigated impacts. (108)

Response 12-26:

Chapter 12 of the DEIS includes a detailed analysis of the proposed project's traffic impacts with the opening of the arena and completion of development of Site 5 and the arena block in 2010. A detailed analysis of the proposed project's traffic impacts with the closures of streets on the project site during construction is provided in Chapter 17 of the DEIS. The DEIS acknowledges that significant adverse impacts would occur before 2016 and proposes implementation of mitigation measures prior to that date.

As discussed in the DEIS, the proposed project would be accessible via a total of seven subway stations served by a dozen subway routes. Ten of these routes serve the Atlantic Avenue/Pacific Street subway station complex that is located immediately adjacent to the proposed arena, and the proposed project would include construction of a major new on-site subway entrance and other internal circulation improvements at this complex. In addition, the project site is served by 11 NYCT local bus routes and the Long Island Rail Road. As a result of this excellent transit access, the proposed project is expected to have a relatively high transit mode share (up to 75 percent combined subway/bus mode share for residential uses, for example). However, as demonstrated by the traffic analyses in the DEIS, the proposed project would still generate substantial numbers of vehicle trips. The number of intersections with unmitigated significant impacts reflects both this fact and the existing congested conditions in the study area.

Comment 12-27:

Increased vehicular traffic on already unbearably congested intersections in major thoroughfares is due to further exacerbate it despite feeble measures at mitigating those as described in the DEIS. This has been proven in the past with the traffic mitigation measures

implemented that do not work at intersections impacted by Atlantic Center and Atlantic Terminal Mall. (425)

The recent multi-million dollar, publicly funded traffic improvement project has done little to alleviate the unbearable congestion occurring frequently at many points in the day. (180)

Even though the project will cause traffic problems, there are already traffic problems. (46)

Already the amount of traffic on Flatbush and Atlantic Avenues is intolerable. Adding the additional traffic from the added residents and commercial activity would make the area one of the worst congested in the city. (528)

I am extremely concerned about traffic and crowding once the proposed project is completed. The added traffic to an area that already has some of the most congested roadways in the country will be unbearable. (560)

Response 12-27:

Existing congestion in the study area is well documented in the EIS and has been factored into the analyses of future traffic conditions without and with the proposed project. The proposed project's traffic mitigation plan includes a broad range of physical roadway improvements, demand management strategies, and traffic operational improvements to reduce the project's significant adverse traffic impacts. The project sponsor has committed to funding and cooperating with NYCDOT in implementing these measures.

Comment 12-28:

The disruptions from the loading dock entrance slotted for Dean Street, the displaced cars from the street closures, and the construction interim parking lots slotted for Blocks 1120, 1121, and 1129 will redirect and channel more cars onto Dean Street. (461)

Page 12-33 states that the greatest change will occur on Dean Street between Flatbush and Vanderbilt Avenues. Dean Street isn't supposed to be in the footprint of the project. What exactly is planned for Dean Street? (57)

The eight-berth loading dock entrance for the arena is proposed for Dean Street, and the DEIS projects "no anticipated on-street queuing of delivery vehicles." This seems an extremely optimistic assumption, particularly considering that Dean Street is already often double-parked during certain hours of the day. The addition of a massive loading dock will almost certainly worsen a traffic situation that is already acknowledged in the DEIS to generate "significant adverse impacts" at both Dean Street intersections. Not to mention that the loading dock

will be only a few hundred feet from both the police precinct house and the fire station. (281, 461)

Response 12-28: As disclosed in the DEIS, the proposed project would increase traffic along Dean Street and result in significant adverse impacts at a total of ten intersections along the corridor. With implementation of the proposed traffic mitigation plan, unmitigated significant impacts to Dean Street would remain at six intersections in at least one peak period, primarily as a result of trips en route to and from proposed interim and permanent parking facilities at the project site during the pre-game and post-game peak periods on days when there is a Nets game at the arena. It should be noted, however, that the proposed off-street loading dock serving the arena block would be located below-grade beneath the site (and not on Dean Street itself). Access would be via a ramp from an entrance on Dean Street, and all truck movements at this entrance would be head-in and head-out, and back-up movements would typically be unnecessary. The facility has been designed with sufficient capacity to accommodate projected peak demand without queuing on the ramp or at street level.

Comment 12-29: Two-way tolls should be implemented on the Verrazano-Narrows Bridge. (23, 470)

Tolling of the East River Bridges should be implemented to ease congestion. (54, 102, 103, 167, 470)

The replacement of the Gowanus Expressway with a tunnel, the imposition of tolls on the East River Bridges, and improvements to street transportation, subway and LIRR service other than what is identified in the DEIS will be necessary whether or not the Atlantic Yards redevelopment occurs in its proposed form. The fact that this and other measures are needed to make this project work make them indirect costs, attributable to the project, that the developer alone cannot be expected to bear. A supplementary solution to the construction of the Gowanus Tunnel is the redirection of New Jersey-bound traffic away from Flatbush Avenue and the Manhattan Bridge. (470)

Response 12-29: Implementation of new tolls on the East River Bridges, changes in the current toll system at the Verrazano-Narrows Bridge, and replacement of the Gowanus Expressway with a tunnel are beyond the scope of this project. Any implementation of new tolls would be subject to an independent environmental review.

Comment 12-30: People should be encouraged to use the Brooklyn Battery Tunnel by perhaps introducing a discount rate for these users. (23)

- Response 12-30:** The proposed project's traffic mitigation plan includes a comprehensive package of demand management strategies focused on reducing auto trips in the vicinity of the arena. Introducing a measure that would reduce the costs associated with travel to the arena by auto could be counterproductive to this effort.
- Comment 12-31:** The 68 congested traffic stops is a quantification of what will be a daily nightmare for residents. (227, 327)
- Weak vague mitigation measures offer little relief in the case of the 68 adversely affected intersections. The tables on pages 12-14 and 12-75 compare congested intersections, defined as saturated conditions, with queuing. During different times of the day current conditions indicate that Dean Street is congested at 5th Avenue (scheduled to close) four times per day and at Carlton once per day. After the project these figures jump to seven times per day at 5th Avenue and six times per day at Carlton. (57, 88)
- Response 12-31:** As noted in the comment, with completion of the proposed project in 2016, a total of 68 intersections would be significantly adversely impacted, including intersections along Dean Street. To address these significant impacts, a traffic mitigation plan that includes a broad range of physical roadway improvements, demand management strategies, and traffic operational improvements was developed. With implementation of this plan, unmitigated impacts would remain in one or more peak hours at a total of 39 intersections in 2016.
- Comment 12-32:** The EIS states that the Dean Street approach to Carlton would be impacted in all weekdays except from 10-11 PM. So if I want to get off of my block easily, I will have to always leave at 11 PM to stand a chance. (57)
- There are concerns about traffic on Carlton Avenue because of its position as a through street and a point-of-entry to the interim surface parking and Phase II underground parking. (48, 402)
- Carlton Avenue, being the only north-south street in the project area, should not be widened and denuded of its trees (except Pacific to Atlantic over the bridge) to improve the traffic flow to the project's garage. (287)
- Response 12-32:** As discussed in Chapter 19 of the DEIS, the proposed project's traffic mitigation plan would fully mitigate all weekday peak hour impacts on the Dean Street approach to Carlton Avenue. Impacts to this approach would remain during the pre-game and post-game peak hours on a Saturday.

Under the proposed project, the bridge carrying Carlton Avenue over the LIRR rail yard between Atlantic Avenue and Pacific Street would be reconstructed. The roadway would be widened to 38 feet flanked by 16-foot-wide sidewalks, and converted from one-way northbound to two-way operation to facilitate traffic circulation at the project site. The DEIS disclosed that with the implementation of improvement measures, all but two impacts along Carlton Avenue would be mitigated. Widening Carlton Avenue north of Atlantic Avenue or south of Pacific Street is not proposed and no trees will be removed.

Comment 12-33: How will people south of the project site drive to Downtown Brooklyn or Manhattan? (228, 229)

Response 12-33: Drivers traveling to Manhattan from south of the project site would continue to use Flatbush Avenue and other north-south corridors to reach Downtown Brooklyn and Manhattan. The proposed project's traffic mitigation plan includes measures to help maintain traffic flow along these corridors.

Comment 12-34: ESDC has no equivalent of the NYC CEQR staff to critically review the transportation element of EISs prepared by consultants it retains. NYCDOT may review traffic impact and mitigation, but would not be in a position to assess the planning assumptions that are the basis for estimating travel patterns. (54)

Response 12-34: ESDC, in carrying out its role as lead agency, consulted extensively with appropriate NYCDOT and NYCT staff in the development of all aspects of the EIS' transportation analyses. Additionally, ESDC retained professional transportation consultants to assist the agency in its analyses. The transportation planning assumptions used for the traffic, transit and pedestrian analyses were thoroughly reviewed by staff from both NYCDOT and NYCT. Substantial comments from both agencies were considered and incorporated where appropriate, and are summarized in Chapter 12 of the DEIS and detailed in the Transportation Planning Assumptions memorandum, which was included in Appendix C of the DEIS.

Comment 12-35: As a State agency, ESDC should be turning to the NYS Department of Transportation (NYSDOT), which has specific methodologies for analyzing traffic impacts and complying with SEQRA and other State and federal regulations. (54)

Response 12-35: The NYSDOT does not have jurisdiction over New York City streets and does not have any actions related to this proposal. Moreover, the

analysis methodology employed by NYCDOT is more stringent than that used by NYSDOT.

Comment 12-36: Using Highway Capacity Software is crude for the heavily congested study area of the DEIS. HCS assess delay at each intersection in isolation and allows adding vehicles to a road even if it is already at capacity. HCS does not account for the resulting spill back from one intersection to the next. Thus, it underreports the actual severity and extent of the congestion. These effects are illustrated far more accurately with simulation models that apply HCM principles to an entire road network. (54)

The simulation model requested by the community and conducted for the study was not released. This deprives the public of valuable information and is indefensible. Studies of isolated intersections do not reflect what we all know—that in aggregate these delays lead to whole neighborhoods paralyzed in gridlock. (54, 180)

It is recommended that a traffic model be prepared as part of the FEIS and for post-approval monitoring. (24)

Traffic congestion is a major concern and one that has not been handled with the precision and dexterity that we would have preferred. (10, 26, 122, 424, 411)

The DEIS does not propose a traffic plan, nor are there discussions with civic groups about how to mitigate the problems of traffic and pollution for the neighborhoods that are outside of the AY study area. The DEIS seems to represent the narrowest possible environmental impact without regard to the fact that all of the surrounding neighborhoods share major traffic arteries. (14)

The fact that traffic was analyzed on an individual intersection basis does not account for vehicular queuing to upstream intersections. There are 40 intersections with at least one movement currently operating with a V/C ratio of 1 and above. The overall roadway network begins to fail as a system. The DEIS indicates the traffic network is already overtaxed on Page 12-13. On Page 12-24, the DEIS suggests the limited effectiveness of an analysis based on individual intersections, but does not offer to complete a more appropriate network analysis. (95)

Trips are assigned based on “professional judgment;” new trips are added to already overcrowded roadways, instead of the way drivers behave—where there is available capacity. Trip assignments must be capacity constrained. (54)

Auto and taxi trips have been assigned to major corridors (12-39) “based on their origin and destination as well as the most direct routes to major access points.” All things being equal, vehicles probably do use the most direct route but not when the direct route is as highly congested as the DEIS predicts. (24)

Given the magnitude of the project and the underlying growth, a micro-assignment model that assigns trips based on demand and capacity should really be undertaken. (54)

The DEIS looks at 90 separate intersections but does not look at all of them together – as a whole system. (324)

Response 12-36:

As noted in Chapter 12, “Traffic and Parking,” the traffic impact analyses utilize the methodology detailed in the nationally applied Transportation Research Board’s *Highway Capacity Manual* (HCM) for both signalized and unsignalized intersections. The use of HCM is directed by the *CEQR Technical Manual* because it is the most appropriate methodology for impact analysis under CEQR. Adherence to this methodology provides a consistent basis for land use and environmental determinations by City agencies.

It is questionable as to whether a local or area-wide traffic simulation analysis would prove more accurate at assessing the potential traffic impacts of the proposed actions than the standard HCM analysis. The HCM methodology expresses quality of flow at individual intersections in terms of level of service (LOS), which is based on the amount of delay that a driver typically experiences at an intersection. Levels of service range from A, with minimal delay (10 seconds or less per vehicle), to F, which represents long delays (greater than 80 seconds per vehicle). Changes in delay of as little as one second can be identified using this methodology. This sensitivity is critical to identifying impacts under the 2001 *CEQR Technical Manual* criteria which specify very low thresholds for determining the significance of an impact (e.g., delay changes of three to five seconds for any specific traffic movement).

Network simulation models are primarily planning tools, intended to optimize traffic flows in a given network. Applied to the proposed project, these models would reflect the diversion of traffic away from congestion and portray less conservative impacts at intersections of concern. By contrast, an impact analysis using the HCM methodology conservatively assumes that all project traffic would traverse those intersections along the most direct routes to and from a development site, regardless of prevailing conditions. The full potential effects of new project-generated trips on individual intersections are therefore not as readily apparent in a network simulation as they are using the more conservative HCM methodology. Professional judgment is used to

formulate the traffic assignments for No Build site demand and for project-generated traffic which serve as inputs to the HCM analysis.

Overall, for a heavily traveled network such as Downtown Brooklyn, the HCM methodology provides a greater sensitivity to changes in delay at individual intersections, and is more likely to produce conservative results with respect to potential traffic impacts than would an area-wide simulation analysis. The HCM methodology is therefore the appropriate methodology for assessing impacts from the proposed actions.

It should also be noted that, in addition to employing the HCM methodology for the intersection capacity analyses, consistent with the *CEQR Technical Manual*, the potential for future queuing and spill-back is also examined in the EIS, and traffic simulation using the Synchro/SimTraffic 6.0 software program was employed to facilitate planning and to evaluate the feasibility and effectiveness of different options for facilitating traffic circulation in and around the project site. Synchro/SimTraffic simulation was also employed in developing the mitigation plan for addressing the proposed project's significant adverse traffic impacts in and around the project site. These simulations were reviewed by NYCDOT and provided to the Council of Brooklyn Neighborhoods on August 25, 2006.

Comment 12-37:

The DEIS identifies several local arterials and streets having the potential for queuing and spill-back along the principal streets serving the project site. On these streets, over capacity conditions would hamper the movement of vehicles, and contribute to the diversion of vehicles onto local residential streets. The DEIS identifies potential overcapacity conditions on Flatbush Avenue, Fourth Avenue, Atlantic Avenue, and Vanderbilt Avenue, and at the Adams Street/Tillary Street intersection. However, the DEIS does not adequately address the effects of traffic spillover onto residential streets. To address these effects, the FEIS should examine the NYCDOT's traffic calming proposed measures to reduce thru-traffic on residential streets. (12)

The DEIS did not address the traffic flow and how it will operate once the main thoroughfares are filled to capacity. For example, if Atlantic or Flatbush are totally backed-up, will more traffic come into our neighborhood as a way to skirt the hot spots? (491)

Proposed changes in traffic patterns will redirect traffic through surrounding residential neighborhoods – but the DEIS does not offer any solutions to the severe increase in traffic. (324)

The DEIS makes the assumption car drivers are unfamiliar with neighborhoods and will not seek alternative routes, in order to avoid congestion of the Flatbush Avenue corridor. (53)

Response 12-37: An expanded discussion of the potential effects of the proposed project and its traffic mitigation plan on the local street system has been incorporated into Chapter 19 of the FEIS.

Comment 12-38: To oversee the increasing congestion in Downtown Brooklyn that is likely to result in the future, it is recommended that an area-wide traffic surveillance system, incorporating closed circuit television (CCTV) and other technologies, be implemented for quick reaction traffic management. (12)

Response 12-38: The proposed project includes a broad range of mitigation measures to help address significant traffic impacts, including a comprehensive package of demand management strategies. While implementation of an area-wide traffic surveillance system for Downtown Brooklyn could be a useful tool for NYCDOT, it would not specifically address significant traffic impacts from the proposed project.

Comment 12-39: An exception for arena suite patrons, the ones most likely to come by car, undermines the effectiveness of the HOV restriction for on-site parking. Not mentioned is if black car chauffeurs count as one of the requisite three people. (54)

Response 12-39: Of the approximately 1,100 parking spaces that would be available on-site for use by fans at a Nets basketball game, up to approximately 500 would be dedicated to suites and premium seating. It is anticipated that the remaining at least 600 spaces (55 percent of the total available) would be subject to the HOV parking requirements included as a demand management strategy in the proposed project's traffic mitigation plan. Substantial numbers of black cars are not expected to use the on-site parking garages.

Comment 12-40: If there is more drop-off activity than can be accommodated in the 63 (passenger car) spaces assumed available in the lay-by lanes on Flatbush and Carlton Avenues and Fulton and Dean Streets, queues of vehicles will spill into the moving lanes. TV vans monitoring celebrity arrivals will also occupy curbside space. (54)

The whole issue of black car and bus layovers is entirely ignored in the DEIS, which is an issue not just for charter buses but also for the mini-buses serving remote parking. (54)

The 750 foot drop off lane for the arena would encourage people to come by car instead of using mass transit. (445)

Response 12-40:

As discussed in the DEIS, there would be a total of approximately 63 (passenger-car) spaces available in lay-by lanes adjacent to the arena block on Dean Street and Atlantic, Flatbush and 6th Avenues. While some of this substantial amount of curbside space may be used for parking broadcast trucks during a Nets game, it is anticipated that sufficient curbside space would be available to accommodate the short-term pick-up and drop-off activity from taxis/black cars, shuttle buses serving remote parking, and buses serving Staten Island park & ride facilities. In addition, it should be noted that a substantial amount of curbside space would also be available for black car and bus storage along the proposed lay-by lane on Atlantic Avenue adjacent to blocks 1120 and 1121. Curbside space would also likely be available for this purpose along the north curb of Pacific Street adjacent to Block 1120. It should also be noted that on event days, there would likely be a substantial police presence to enforce curbside regulations. The lay-by lanes adjacent to the arena block are necessary to accommodate taxi/black car pick-up and drop-off activity, and would facilitate transit access by accommodating bus stops, and stops for proposed shuttle buses and buses serving park and ride facilities. They would not be available for parking by private auto and are not expected to encourage people to come to the arena by car instead of mass transit.

Comment 12-41:

The Atlantic Yards DEIS uses a patchwork of traffic counts taken in 2003 and 2004 that was partially updated in 2005. It shows less traffic in Downtown Brooklyn than was reported for 2002 in the FEIS for the Downtown Brooklyn Development Plan. (54)

In theory, the Atlantic Yards DEIS No Build traffic volumes in 2016 should be greater than reported for 2013 in the Downtown Brooklyn Development project FEIS. However, the DEIS reports between 4 percent less and as high as 23 percent less traffic in 2016. (54, 55)

The baseline date was taken too long ago so current traffic conditions are grossly understated and spare capacity is grossly overstated. (55, 180)

Response 12-41:

Due to September 11th-related effects on the Downtown Brooklyn traffic system in 2002, the 2002 baseline traffic networks developed for the *Downtown Brooklyn Development EIS* were based on existing data sources, some dating from as early as 1995. In addition, as discussed in that EIS, although the collected data indicated that traffic volumes in Downtown Brooklyn had declined in recent years independent of the events of September 11, 2001, the higher traffic levels from year 2000

were assumed as a relatively conservative baseline condition for 2002. By contrast, the baseline traffic networks used for the *Atlantic Yards Arena and Redevelopment EIS* analyses are based on an extensive count program that was expanded and updated into early 2006, and accurately reflects current conditions in the traffic study area. The traffic networks used for the two EISs are therefore not directly comparable. The planning assumptions and analysis methodologies utilized in the DEIS were developed in consultation with NYCDOT.

Comment 12-42:

The trip generation factors used for the DEIS are based on data collected more than three decades ago in Manhattan, with very different demographics and travel patterns. The DEIS uses no local surveys; no original data for Brooklyn on which to base impacts. It does not distinguish between travel behavior of various income groups. The only documentation for modal split of many types of non-arena trips in the DEIS is the Downtown Brooklyn Development FEIS, but this is circular reasoning since the only reply when these assumptions were challenged in 2004 was “undisclosed surveys.” (54, 55, 180)

The DEIS assumes just 5 percent of all shoppers at the Atlantic Yards will use a car or taxicab. What is the basis for this estimate? Were Atlantic Center shoppers surveyed for mode choice? (54)

The analysis to show that the Atlantic Yards project conforms to the State air quality plan will employ a regional model that does not rely on 2000 Census data as does the DEIS. The trip generation and mode split assumptions and origin and destination data used for the Atlantic Yards DEIS will therefore be inconsistent with the assumptions used for this analysis. (54)

Mode split and trip origin and destination assumptions in the DEIS were based on 2000 Census data which has been discredited by NYMTC and does not accurately reflect travel patterns. (54, 55)

Inaccurate assumptions understate current traffic volumes by 17 percent and so overstate the unused capacity available for new development. (180)

Has a survey been done to see how Nets fans will come to Brooklyn from New Jersey? What about Queens and Northern Brooklyn where there is no subway service? (324)

It is unrealistic to believe that people will take the train to a basketball game. (521, 523)

Response 12-42:

As detailed in Chapter 12 and Appendix C of the DEIS, the trip generation rates, temporal distributions, and mode choice assumptions

for the proposed project's residential, office, hotel, and local retail components were based on a wide range of sources, including accepted *CEQR Technical Manual* criteria, standard professional references, and studies that have been done for similar uses in Downtown Brooklyn and Manhattan. For example, the travel demand forecast for the hotel that would be developed under the residential mixed-use variation was based on data developed for the expansion of the existing Marriott Hotel at Renaissance Plaza in Downtown Brooklyn. Employee Commute Options survey data from firms and governmental/educational institutions in Downtown Brooklyn was used to develop mode splits and vehicle occupancy rates for weekday office travel demand. The modal splits for local retail uses were developed from data reported in the *Downtown Brooklyn Development* FEIS and reflect the relatively high walk and transit shares common for local retail uses in Downtown Brooklyn. These sources were supplemented by data from the 2000 Census. The trip generation rates, temporal distributions, and mode choice assumptions for the proposed arena reflect the anticipated origin/destination distribution of arena spectators and the accessibility by transit of the proposed arena site. The assumptions were developed from survey data reported in the *Madison Square Garden Modal Split Analysis* study, along with data specific to Downtown Brooklyn developed for other studies. All of the travel demand and trip assignment assumptions used for the proposed project's transportation analyses were developed in consultation with NYCDOT and NYCT, which concurred with the conclusions of the analyses.

As part of the preparation of the DEIS, representatives of the New York City Department of City Planning (NYCDCP) and the New York Metropolitan Transportation Council (NYMTC) were contacted. NYCDCP indicated NYMTC had been informed of the project, and noted that individual projects, such as the Atlantic Yards redevelopment project, are considered to be included in the growth within the longer term regional growth projections utilized by NYMTC. NYMTC has demonstrated that these forecasts of employment and population growth (included in the latest transportation conformity determinations by NYMTC) are comfortably higher than all of the identified development projects in the short-term pipeline for the region. Under federal regulations, no specific modeling of the Arena would be required for the regional conformity determinations, but the Atlantic Yards Arena and Redevelopment project is accommodated in the regional growth estimates that were the basis for the regional emissions analysis in the latest conforming transportation plan and TIP determinations.

Comment 12-43: The DEIS claims that its forecast is conservative because it assumes no credit for the travel demand from the existing Modell's and P.C. Richards stores that will be displaced if the project is built. However, it fails to address the fact that much more new retail will be added at the site than will be removed by the closure of these two stores. There is no discussion of the additional travel demand this new retail will create. (108)

Response 12-43: As discussed in Chapter 12 of the DEIS and shown in tables 12-26, 12-27 and 12-28, the proposed project's travel demand forecast reflects the development of 247,000 gsf of retail uses on the project site by 2016. As discussed on page 12-65, some of these retail uses would replace 46,913 gsf of existing retail space on Site 5 (the Modell's and P.C. Richards stores). However, the travel demand forecast includes demand from all 247,000 gsf of proposed retail, and does not take credit for the trips generated by the 46,913 gsf of existing retail uses displaced by this new development.

Comment 12-44: The travel demand forecast assumes that non-basketball events would attract fewer spectators and therefore fewer vehicular trips. It is equally plausible, however, that attendees will judge their chances of finding local parking to be greater at non-basketball events (because audiences are smaller) and will therefore be more likely to drive to the arena, not less. (108)

Response 12-44: As discussed in Chapter 12 of the FEIS, a Nets basketball game would typically attract substantially more spectators than would a typical concert or other large event at the arena. In addition, data from Madison Square Garden indicates that concert attendees have a 16 percent lower auto/taxi mode share than basketball fans, and a correspondingly higher transit share. As demonstrated by the parking analyses in Chapter 12 of the FEIS, sufficient parking capacity would be available at both on-site garages and existing off-site public parking facilities in the vicinity of the arena to accommodate all project-generated parking demand during a Nets basketball game. The additional parking capacity that would be available at these facilities during other less well attended events at the arena is therefore not expected to be an incentive for an increased auto mode share relative to a Nets game.

Comment 12-45: Current traffic patterns already result in vehicles "blocking the box" at various hours of the day, on various days of the week. Traffic congestion does not increase linearly. Thus, given the large number of projected additional trips generated by the project, traffic will increase exponentially. (393)

Response 12-45: Existing traffic congestion in the vicinity of the project site is documented in the DEIS, which also includes detailed analyses of the proposed project's potential effects on a total of 93 intersections. The analyses identify those locations where significant adverse impacts are expected to occur from project-generated trips. The analyses also include discussion of the potential for future queuing and spill-back along key corridors serving the project site. Measures that would mitigate many of these impacts are discussed in Chapter 19 of the DEIS.

Comment 12-46: Arena-bound traffic may cause congestion in South Brooklyn Heights, as Atlantic Avenue, Court Street, Henry Street, and State Street are used as shortcuts. Traffic congestion may radiate well beyond the immediate project area unless meaningful improvements are made. (42)

Response 12-46: The proposed project is not expected to add an appreciable number of new vehicle trips along Court Street or Henry Street. Some arena trips would occur along State Street en route to parking facilities located along that corridor during the pre-game periods, however these would number from 60 to 80 (less than two cars per minute) in either pre-game peak hour. As is discussed in the DEIS, Atlantic Avenue west of Flatbush Avenue would be used by project-generated demand en route between the project site and the BQE, and these trips would result in significant adverse impacts at many of the intersections along this corridor in one or more peak hours. The proposed project's traffic mitigation plan includes a wide range of measures designed to mitigate many, but not all of these impacts, including intercepting some of the new trips that would otherwise traverse Atlantic Avenue by developing a remote parking facility with free shuttle bus service near the BQE (likely at Long Island College Hospital).

Comment 12-47: The analysis of Dean Street traffic is unrealistic. The DEIS projects congestion in 57 out of 90 intersections during "peak hours," defining this as 5 PM to 6 PM. We know from daily experience that these times are arbitrary and do not reflect the real situation, in which we experience serious congestion beginning at 3 PM on Dean Street and lasting well into the evening hours. Traffic congestion can extend for hours during the weekends. (461)

Overflow from the street closures on Pacific and on 6th Avenue and those avoiding Atlantic Avenue congestion, will certainly redirect more cars and people onto Dean Street. (461)

The DEIS underestimates the existing Dean Street through-traffic capacity and severely underestimates that the project will have little or no impact on traffic patterns. (461)

The proposed project will exacerbate the traffic situation beyond tolerable levels for vehicles, pedestrians, and businesses. Delivery (food and grocery), cleaning, repair, moving, gardening, car and taxi services, repair, and construction, all need unimpeded access to Dean Street. These businesses will be at a standstill for significant portions of the day and evening. (281, 461)

Response 12-47: The EIS traffic analyses examine a total of seven peak hours when demand from the proposed project is expected to be greatest. These include the traditional weekday 8-9 AM and 5-6 PM commuter periods and 12-1 PM lunch time period (when the proposed project's residential, office, hotel and local retail components are expected to generate their highest demand); the 7-8 PM and 10-11 PM peak hours (when trips en route to and from an evening arena event would be highest); and the Saturday 1-2 PM and 4-5 PM peak hours (when trips en route to and from a Saturday arena event would be highest). The proposed project's potential effects on Dean Street are discussed in detail in the EIS, which discloses that a total of ten intersections along the Dean Street corridor are expected to experience significant adverse impacts from project traffic. The proposed project's traffic mitigation plan includes measures to address many of these impacts.

Comment 12-48: The Pacific Street traffic impact is underestimated. Much of the vehicular overspill from Dean Street ends up on Pacific Street, which is also used as a shortcut for people trying to avoid the traffic jams just one block away on Atlantic Avenue. (281, 383, 461, 521)

Response 12-48: As discussed in the EIS, Pacific Street operates one-way westbound except within the project site where it is one-way eastbound from Flatbush Avenue to 6th Avenue and bi-directional from 6th Avenue to Washington Avenue. Field observations indicate that, given this discontinuity in street directions, Pacific Street primarily serves as a local access street for adjacent land uses, and existing traffic volumes are relatively low (from 90 to 300 vehicles per hour in the peak hours). The traffic impact analyses reflect the re-assignment of these trips to the most logical alternate routes.

Comment 12-49: Traffic conditions with regard to increased accidents have not been adequately studied and the proposed mitigations are vague and useless. (48, 165)

The question that does not get answered is how many deaths and injuries will result from the completion of this one project. The FEIS needs to be more explicit regarding how the combinations of density,

traffic congestion, construction, and security will contribute to “generating accidents.” (107)

Response 12-49: The EIS looks at the accident history at a total of 20 intersections in the vicinity of the project site, and examines in detail those locations that experience high accident rates or where the proposed project would result in the potential for increased vehicle/pedestrian/bicycle conflicts. A range of specific measures have been included in the project’s design and the proposed traffic mitigation plan to help reduce the potential for such conflicts and are discussed in Chapter 12, and Chapter 19 of the DEIS.

Comment 12-50: Traffic is caused by people unnecessarily buying cars, not by the project. (287)

Response 12-50: Comment noted.

Comment 12-51: Did the study address the influx of cars that comes to the area around Brooklyn Technical HS every time the City uses that space for a citywide exam for City employees or students? The congestion, with several people sitting in double-parked cars is for a few hours a few evenings a year. What of 250 game nights? (241, 289)

Response 12-51: While it is expected that the arena would host approximately 225 events a year, some events may take place on the same day and only 41 regular season games would occur in any one year. Conditions during a citywide exam at Brooklyn Technical High School are not reflected in the EIS traffic analyses as they would only occur a few evenings per year and are not a typical condition for the study area street system. The EIS traffic analyses examine typical weekday evening conditions during the pre-game and post-game peak hours on Nets game days.

Comment 12-52: There is insufficient analysis regarding how traffic patterns will be affected by locations of parking garage and service entrances. Some queuing will be inevitable, especially during arena events. (24)

Response 12-52: A total of six parking garages are proposed for the project site. All of these parking garages would be designed with sufficient reservoir spaces to comply with building code requirements and accommodate projected entering demand. In addition, all of these garages would be below grade with ramps that could be used for vehicle queuing leading down to cellar and sub-cellar levels. As discussed in Chapter 12 of the DEIS, it is also anticipated that for a Nets basketball game, over half of all off-street parking demand would be accommodated at existing off-site facilities within ½-mile of the arena, thereby spreading out peak

demand over a wide area. No queuing is therefore anticipated at the entrances to proposed on-site parking garages. Off-street loading facilities on the arena block and Site 5 would also be designed to accommodate projected demand without vehicles queuing on the street.

Comment 12-53:

The proposal to make 6th Avenue into a two-way street is unrealistic. The police precinct on this block currently uses it for perpendicular parking. Plus, this section between Bergen and Dean is regularly closed by the NYPD to any through-traffic, further exacerbating overflow through adjacent intersections and streets. (461)

Current street-parking at the 78th Precinct already negatively impacts neighborhood parking and traffic flow. The loss of this parking area will further push the police parking further into the adjoining residential streets, increasing its negative impact. This condition will be further exacerbated by any increase in staffing at the 78th required by the large increase in the residential population. (232)

The DEIS also identifies the loss of 24 parking spaces for police vehicles on 6th Avenue. These spaces must be replaced – preferably with a permanent police parking garage built and paid for by the developer – or they will inevitably reduce the pool of parking spaces available to local residents still further. The DEIS does not mention the significant impact under existing conditions caused by the presence on local streets of the personal vehicles of police officers working at the 78th Precinct. We therefore recommend that whatever parking facility the developer provides for official police vehicles also be large enough to allow for these personal vehicles. (108)

Response 12-53:

Approximately 24 spaces of parking for NYPD vehicles would be displaced by the conversion of 6th Avenue to two-way operation. As discussed in the FEIS, off-street parking located on the project site, at a location proximate and convenient to the 78th Precinct, would be provided for the displaced NYPD vehicles. The project sponsor is not responsible for providing additional parking for the personal vehicles of police officers at the 78th Precinct.

Comment 12-54:

The DEIS doesn't address how the Bear's garden and the residents of Pacific Street will be affected when 4th Avenue is essentially rerouted into Pacific Street, becoming the only route for all 4th Avenue traffic headed to the Manhattan Bridge. (39)

Part of the plan includes widening Pacific Street to make way for access to a 400-car parking complex planned for Site 5 right next to the garden, and to accommodate two-way traffic between Flatbush and 4th Avenue,

but it strikingly omits how this will impact the Bear's garden and this tiny stretch of residential homes. (39)

The plan to make Pacific Street between Flatbush and 4th Avenue a two-way street (all Flatbush Avenue northbound traffic on 4th Avenue will be redirected, turning right onto Pacific Street and then north on Flatbush) will create enormous new traffic volume on this block, the south side of which is heavily residential. There is also a Brooklyn Public Library branch on the southeast corner of 4th Avenue and Pacific, and patrons, many of whom are school students, will face newly hazardous conditions. (108)

Making Pacific Street a two-way street between 4th and Flatbush Avenues will mean tearing down the trees and tree guards. Also, the sidewalks are only six feet on each side. The proposal to shorten them by four feet to allow for two-way traffic will only allow two feet of sidewalk in many places. (510)

Response 12-54:

As disclosed in the DEIS, implementation of the proposed project would result in increased traffic volumes along Pacific Street between 4th and Flatbush Avenues as a result of new project demand as well as the conversion of the street to one-way eastbound operation in conjunction with the reconfiguration of the Atlantic Avenue/Flatbush Avenue/4th Avenue intersection under the proposed traffic mitigation plan. (Northbound 4th Avenue would be closed to traffic north of Atlantic Avenue under this plan.) It should be noted, however, that not all traffic diverted from northbound 4th Avenue would use Pacific Street as diversions to both 3rd Avenue and Atlantic Avenue are also expected. Overall, as disclosed in the EIS, traffic volumes along this block would increase by approximately 300 to 700 vehicles in each peak hour under Build with Mitigation conditions. However, with implementation of the proposed traffic mitigation plan (including the installation of a new traffic signal at Flatbush Avenue and Pacific Street), no unmitigated significant traffic impacts would remain on Pacific Street at either 4th or Flatbush Avenues. The proposed 400-space parking garage on Site 5 would have an entrance on Pacific Street west of the Bear's Garden. This garage would be designed with sufficient reservoir spaces to comply with building code requirements and accommodate projected entering demand. In addition, it would be below grade with ramps that could be used for vehicle queuing. On-street queuing on the block is therefore not anticipated. Curbside parking for 160 feet along the north curb adjacent to the Bear's Garden would be prohibited under the proposed traffic mitigation plan, however, curbside access would continue to be permitted along the north curb on the remainder of the block, as well as along the south side

of the street. Thus, the proposed reconfiguration of Pacific Street would not have a significant adverse traffic impact on the access to or operation of the Brooklyn Bear's Pacific Street Community Garden.

While the flow of traffic on Pacific Street would be increased from the existing condition, it is not expected that access to the Brooklyn Public Library branch on the southeast corner of the intersection would be compromised. As the design of the proposed project is finalized, it is expected that high visibility crosswalks would be installed at this location to maintain pedestrian safety.

To accommodate increased traffic flow, the block of Pacific Street between 4th and Flatbush Avenues would be widened by setting back the sidewalk on the north side of the street by approximately seven feet to accommodate a lay-by lane. The sidewalk would not be narrowed because the proposed building on Site 5 would be set back to maintain a 15-foot-wide sidewalk width along the north side of the block. The south sidewalk along this block would not be directly affected by the proposed widening of the street, nor would the trees or tree guards located along this sidewalk. Any trees on the north side of Pacific Street that are removed as a result of the widening will be replaced.

Comment 12-55: The DEIS assumes that most people attending arena events will take public transportation. The experience with Madison Square Garden shows that this isn't the case. And even though Yankee Stadium is surrounded by parking areas, the traffic after games is legendary. (45)

Response 12-55: As discussed in the EIS, trip origin and modal split assumptions for the Atlantic Yards Arena reflect the anticipated origin/destination distribution of arena spectators and the accessibility by transit of the proposed arena site. The assumptions were developed from trip origin and modal split data reported in the *Madison Square Garden Modal Split Analysis* study (which indicate that an average of 51 percent of people traveling to MSG for a weeknight sports event use transit), along with data specific to Downtown Brooklyn developed for other studies such as the *Downtown Brooklyn Development FEIS*. Yankee Stadium and the proposed Atlantic Yards arena are not directly comparable as the stadium is accessible by three subway routes compared to a dozen for the Atlantic Yards site, and it currently has no commuter rail access whereas the Atlantic Yards arena would be directly accessible by the LIRR.

Comment 12-56: The traffic and transit impacts are systematically understated and mitigations proposed will be inadequate. Furthermore, this project is the latest in a series of major new developments that require a new

approach to transportation, not tinkering with signal times or intersection geometry. (50)

If Brooklyn wants an arena then Downtown Brooklyn or the nearby area could make a good location because of its proximity to a transit hub. However, we are deeply concerned that, if built without the proper transportation policy, an arena could easily blight the surrounding area and bring nearby streets to a standstill. Our support of the concept of building an arena on the site is, therefore, entirely conditional on the necessary transportation mitigations being in place. (87)

Response 12-56: The EIS includes detailed impact analyses for a total 93 intersections during seven peak hours, and impacts are identified at a total of 68 of these intersections in 2016 for at least one movement in one peak hour. The EIS also presents a detailed traffic mitigation plan that, in addition to traffic operational improvements, includes substantial physical roadway improvements, recommendations for improved transit service, and a comprehensive package of demand management strategies for game days designed to achieve a shift in demand from the auto mode to transit. This comprehensive package of demand management strategies has been expanded for the FEIS

Comment 12-57: It is unlikely that the commercial component of the project would be entirely neighborhood-focused, so it is reasonable to expect that it would generate more vehicular traffic. (470).

Response 12-57: As discussed in Chapter 12 of the DEIS, the retail uses developed under the proposed project are expected to be local (or “neighborhood”) retail that would attract trips primarily from the residential and worker populations on-site and in surrounding neighborhoods. It is therefore anticipated that the majority of these trips would be via the walk mode. However, the proposed project’s travel demand forecast does assume that approximately five percent of retail trips would be by the auto and taxi modes.

Comment 12-58: It is highly likely that Atlantic Avenue truck route traffic will seek alternative routes through residential areas and pose risk for pedestrians, children, as well as negatively impact our roads, our trees, and our air quality. The traffic mitigation measures do not adequately address this. (474)

Response 12-58: New York City traffic rules and regulations require that all trucks in Brooklyn remain on designated through and local truck routes until they reach the intersection nearest to their destination from where they must proceed by the most direct route available to make their delivery or

pick-up. Departing trucks must also proceed by the most direct path to the nearest truck route. Trucks may not, therefore, divert off of designated truck routes (such as Atlantic Avenue) through residential streets unless their destination is located on such a street.

Comment 12-59: We are concerned about the increase in traffic and congestion in the vicinity of the Waldorf School located on St. Felix Street between Lafayette and Hanson Place, and the danger to pedestrians. (563)

Response 12-59: The proposed project is not expected to add appreciable numbers of vehicle trips to St. Felix Street between Lafayette Avenue and Hanson Place. The proposed project's traffic mitigation plan does, however, include a range of pedestrian improvement measures at the nearby Atlantic Avenue/Flatbush Avenue/4th Avenue intersection to accommodate increased pedestrian flows. In addition to wider sidewalks, high visibility crosswalks and improved lighting, pedestrian improvements proposed for this intersection include implementation of an all-pedestrian phase at Flatbush Avenue/4th Avenue, and substantial expansion of the pedestrian space at Times Plaza to accommodate increased pedestrian volumes,

TRAFFIC—BICYCLES

Comment 12-60: The DEIS says nothing about current bicycle use. There was not one bicycle count used to analyze existing bicycle transportation. How can this project address bicycle transportation without getting data on existing bicycle conditions? Bicycle storage for 400 bicycles cannot be judged sufficient without proper data on current bicycle commuters and their parking requirements. (24)

Up-to-date bicycle count data should be provided for: Dean Street bike lane, Bergen Street bike lane, DeKalb Avenue bike lane, Myrtle Avenue bike lane, Ashland Place/Navy Street bike lanes, Jay Street bike lane, Sands Street bike lane, Adams Street bike lane, Tillary Street Greenway, Henry Street bike lane, Clinton Street bike lane, Union Street bike lane, 3rd Street bike lane, 5th Avenue bike lanes, Brooklyn Bridge path, Manhattan Bridge paths. Projected bicycle volumes and the anticipated average trip length of event trips should be provided. The DEIS doesn't mention the massive potential for spectator/employee trips to be undertaken by bicycle. (55)

The DEIS is vague regarding projected increased bicycle traffic and how cyclists will be adversely affected by the increased and displaced vehicular traffic, which will exacerbate the risk of bicycle/vehicular accidents. (461)

The DEIS acknowledges not only that increased traffic volume will impact cyclists but also that existing traffic will be diverted onto streets currently used by cyclists. No mitigation is offered. (108)

Traffic congestion and confusion in the redeveloped area will lead to more vehicle-bicycle collisions. (554)

The conclusion that there would be more bicycle trips in peak hours and at weekends should be supported with an analysis similar to the vehicle traffic analysis. This should begin with counts and surveys of bicycle traffic to establish base levels of cycling in the area. Bike paths and bicycle lane systems at similar high-density urban developments in cities around the world and at other arena venues should be studied, including how many people would bicycle to an arena event in the winter months or during inclement weather. (125)

Response 12-60:

The examination of bicycle conditions in the EIS identifies existing and planned bicycle facilities in the study area, and assesses the potential effects on these facilities from project-related changes to the street system and from new project generated vehicle, pedestrian and bicycle demand. The focus of this assessment is on the functionality and safety of study area bicycle facilities, rather than on detailed projections of future bicycle usage or the likely characteristics (such as trip length) for these trips. Historical data on the numbers of accidents involving bicyclists at 20 intersections in the vicinity of the project site is presented in the EIS, and the potential for increased vehicle/pedestrian/bicycle conflicts as a result of the proposed project is assessed. The EIS discusses a range of measures that are included in either the project's design or its traffic mitigation plan that would reduce the potential for such conflicts.

Comment 12-61:

The DEIS does not define "bicycle facility." (55)

A bike parking facility should be built into the arena site. (23)

The DEIS does not include sufficient information about the location of the 400 bicycle parking spaces that are mentioned on Page S-30 of the DEIS. (55)

Who will have access to the bike parking? Residents, transit users, or the public at large? (55)

Response 12-61:

The proposed Atlantic Yards bicycle station would be a secured, staffed facility providing storage for 400 bicycles. It is anticipated that this facility would be located on the arena block in ground-floor space along the Sixth Avenue corridor. At this location it would be conveniently situated next to the arena and easily accessible from the bicycle lanes on

Dean and Bergen Streets. As currently contemplated, in addition to dedicated bicycle storage space, the facility would include amenities such as lockers, restrooms and a security desk, and an adjacent bicycle repair and accessory retail shop would provide services to both users of the facility and the surrounding community.

Comment 12-62: How wide will the sidewalk be adjacent to the lay-by on Atlantic Avenue between Flatbush Avenue and Fort Greene Place? An inappropriate width could affect bicycle circulation. (55)

Response 12-62: The arena and other proposed buildings would be set back to provide for 20-foot-wide sidewalks along Atlantic Avenue.

Comment 12-63: There is no plan to prevent double parking and driving in the Dean Street curbside bike lane east of Flatbush. Double parking effectively nullifies any benefit of these curbside bicycle lanes, and is particularly rampant during construction. (55)

Response 12-63: The heaviest demand for curbside space in the vicinity of the project site would typically occur during periods when there is a basketball game or other major event at the arena. On these days, it is anticipated that police and traffic control officers would be deployed at key locations in the vicinity of the arena to control traffic and minimize conflicts between vehicles, pedestrians and bicyclists, as is currently done at other major event venues in the City. The project sponsor is committed to working with NYCDOT and NYPD to ensure that needed resources are available for these purposes.

Comment 12-64: The impact analysis mentions the use of the *Highway Capacity Manual (HCM) Software 2000 Release 4.1f*. Analysis using this software assumes that the streets of Brooklyn are highways that must maximize the through-put of motor vehicle volume. It is not designed to take into account other modes of transportation. In addition, “Transportation Planning Assumptions” and “Travel Demand Forecasts” identified in various tables, do not include bicycles as a mode of transportation in the analysis. (125)

Response 12-64: The traffic impact analyses use the *Highway Capacity Manual (HCM) Software 2000 Release 4.1f* to determine the delays and levels of service experienced by drivers at individual intersections within the traffic study area. Among the factors accounted for in this methodology are the numbers of conflicting bus, pedestrian and bicycle movements. As the EIS includes quantitative impact analyses for the traffic, transit and pedestrian modes, the travel demand forecast conservatively assumes that all trips would occur on these modes. It is recognized in

the EIS, however, that the proposed project would also generate some commuter, recreational and discretionary trips by bicycle on both weekdays and weekends.

Comment 12-65: Because the bicycle path is located within Phase II of the proposed project, it would not be completed until the year 2016 (if at all) and, therefore, these “new off-street bike paths” would not make the connection between Cumberland Street/Carlton Avenue bike lanes, and the Dean and Bergen Street bike lanes until that time. NYCDOT said it already has a plan to route bicycle traffic heading south on Cumberland to the Dean and Bergen Street bike lanes. This plan is workable, could be altered, and in place before completion of Phase II. (125)

Response 12-65: As discussed in the EIS, NYCDOT has proposed introducing a bike lane along Carlton Avenue between Pacific Street and Flatbush Avenue to connect the existing Dean Street and Bergen Street bike lanes to the proposed bike lanes on Cumberland Street/Washington Park. It is assumed in the analyses that this bike lane would be implemented by 2010, and it is reflected in Figure 12-5 in the EIS. However, as shown in Figure 12-5 and discussed in the text, under this plan some cyclists will still be required to ride opposite the flow of traffic along Carlton Avenue between Pacific Street and Atlantic Avenue until the introduction of the proposed off-street bike paths through a portion of the project’s open space in 2016.

Comment 12-66: Once the new Sands Street bicycle path/entrance to the Manhattan Bridge opens (scheduled 2007), bicycle traffic is likely to increase on Cumberland Street/Carlton Avenue as the new Sands Street facility will be a much safer approach than the current one on Jay Street. Bicyclists traveling from Park Slope east of 6th Avenue, Prospect Heights, and those coming through Prospect Park from points south will likely use this route. (125)

Response 12-66: Comment noted. The proposed off-street bike paths planned for a portion of the proposed project’s open space in Phase II would improve access to the planned bike lane along Cumberland Street for bicyclists traveling from Park Slope east of 6th Avenue, Prospect Heights, and those coming through Prospect Park from points south.

Comment 12-67: After nine years of existing route use, it is unlikely that many bicyclists will chose a somewhat convoluted route to get from Cumberland Street to the Dean and Bergen Street bicycle lanes. (125)

Response 12-67: It is anticipated that bicyclists would find the proposed off-street bike paths through a portion of the proposed project’s open space to be a

convenient, safer and more attractive alternative to traveling on-street, and that many would therefore choose to use these proposed paths.

Comment 12-68: An analysis of the bicycle parking required for the projected number of residents and commercial tenants must also be made. If the eventual number of residents reaches 18,000 and even if only one half of one percent of the residents require bicycle parking, that's 90 bicycles that require safe and secure facilities. (125)

Response 12-68: It is anticipated that one bicycle space would be provided for every two residential units. Bicycle parking for commercial tenants would be available at the proposed 400 space bicycle station. .

Comment 12-69: Although demapping won't affect the existing bike network, not all bicyclists limit their travel to New York City's bicycle network. Pacific Street is often used by many bicyclists that live or work in East Brooklyn. Just because a street doesn't have a bike lane, doesn't mean its closure won't affect bicycle traffic. An analysis of bicycle traffic on Pacific Street, 5th Avenue, and any other streets proposed to be demapped or have their directions changed, is required. (125)

The DEIS does not present or discuss the option of allowing cyclists to ride on the closed portion of Pacific Street. (55)

Response 12-69: With the closure of Pacific Street between Flatbush Avenue and 6th Avenue and between Carlton and Vanderbilt Avenues, any bicyclists currently using this street would instead divert to parallel alternate routes, such as the existing bike lanes on Dean and Bergen Streets. The segment of Pacific Street between Flatbush and 6th Avenues would be closed to accommodate the footprint of the proposed arena and would not be available for cyclists to ride through. The segment between Carlton and Vanderbilt Avenues would be incorporated into the proposed project's open space. As described in the EIS, an off-street bike lane would be constructed through a portion of this open space.

Comment 12-70: What has not been analyzed is how "new vehicular traffic" and "traffic displaced because of project-related changes" will affect bicyclists. *Bicycle Fatalities and Serious Injuries in New York City 1996-2005* found that there are bicyclist fatality clusters—areas in which three or more bicyclist fatalities occurred within 1,000 feet of each other. One of those areas is just west of the majority of the proposed project site, but does include Site 5. (125)

Response 12-70: The report *Bicycle Fatalities and Serious Injuries in New York City 1996-2005* indicates that four bicyclist fatalities occurred at four

separate intersections in an area from Flatbush Avenue west to 3rd Avenue and from Atlantic Avenue south to Sackett Street over the ten year period from 1996 through 2005. For the DEIS analyses, accident data covering the 2002 through 2004 period were examined for a total of 20 individual intersections in the vicinity of the project site. Based on these data, presented in Table 12-3, one intersection – Flatbush Avenue and Dean Street – was identified as experiencing three bicycle injuries or fatalities over the three year period (all of which occurred in 2002). As discussed in the DEIS, the proposed project would increase traffic and pedestrian demand at this intersection, which is also traversed by an on-street bike lane. Measures to reduce the potential for conflicts between motor vehicles, pedestrians and bicyclists at this and other study area intersections identified as having relatively high accident rates are discussed in detail in Chapter 19 of the DEIS.

Comment 12-71: There is no explanation of the rationale for running the bike path through the development site and not on Carlton Avenue. (55)

Response 12-71: As discussed in Chapter 12 of the EIS, DOT plans to implement new on-street bike lanes along Cumberland Street/Washington Park and Carlton Avenue between Park and Flatbush Avenues to provide a north-south connection for bicyclists through Prospect Heights and Fort Greene. However, due to the lack of suitable north-south roadways, connections across Atlantic Avenue to and from the pair of east-west bike lanes on Dean and Bergen Streets will be awkward, requiring bicyclists to ride opposite the flow of traffic along a portion of Carlton Avenue. It is therefore proposed to provide bike paths through portions of the project's open space to improve the connection between the north-south and east-west bike lanes.

Comment 12-72: The information about the bike path plan doesn't include safety measures for cyclists crossing Carlton Avenue or for cyclists entering and exiting the planned bike path at Dean Street. There is nothing in the DEIS to ensure the safety of cyclists who will "ride opposite the flow of traffic along a portion of Carlton Avenue." (55)

There is no mention of design, width, or other specifications of the bike path that is planned to run through the development. (55)

Response 12-72: The design of the proposed off-street bike path has not been finalized. However, it would be designed to meet or exceed all relevant safety standards. The transitions from bike path to street would be designed in consultation with NYCDOT's bicycle and pedestrian safety group. The

proposed bike path would provide a safer alternative to riding opposite the flow of traffic along Carlton Avenue.

Comment 12-73: The DEIS proposes no improvements to bicycle safety on the heavily cycled streets mentioned in the DEIS. (55)

The DEIS neither specifies the “many study roadways....used by bicyclists,” nor does it specify mitigating bike improvements that will be made on and at intersections along these roadways. (55)

Response 12-73: As discussed in the DEIS, the proposed project would “generate new vehicular traffic along many study area roadways, including those used by bicyclists.” The EIS looks at the accident history at a total of 20 intersections in the vicinity of the project site, and examines in detail those locations that experienced high accident rates or where the proposed project would result in the potential for increased vehicle/pedestrian/bicycle conflicts. A range of specific measures have been included in the project’s design and the proposed traffic mitigation plan to help reduce the potential for such conflicts. These include a new off-street bike path through a portion of the proposed project’s open space on blocks 1120 and 1129.

Comment 12-74: Is there a specific design for the secure bike parking? What kind of parking is it? Will it be accessible 24-hours a day, or only during select hours? Will there be a charge to park a bike? If so, how much? (55)

Response 12-74: The design and hours of operation of the proposed bicycle station have not been finalized, but it is anticipated that it would encompass approximately 3,300 square feet of space, including 3,000 square feet of secure indoor bicycle storage space, and an additional 300 square feet for locker rooms, restrooms, a security desk and other amenities. It is anticipated that there would be a monthly membership fee for unlimited use of the proposed bicycle station, a practice used in other cities.

Comment 12-75: The EIS must include bike lanes that will be implemented between 2006 and 2010. (55)

Response 12-75: A discussion of bike lanes planned for implementation by NYCDOT during the 2006 through 2010 period was provided in Chapter 12 under “Future without the Proposed Project—2010” of the DEIS.

TRAFFIC--PARKING

Comment 12-76: Tables showing the number of vehicles entering and leaving the off-street parking facilities (required to estimate parking accumulation) are missing from the DEIS. (54)

Response 12-76: The estimated weekday and Saturday parking accumulation for each component of the proposed project is provided in Tables 12-17 through 12-20 (for the 2010 Build condition) and Tables and 12-33 through 12-36 (for the 2016 Build conditions) in the DEIS.

Comment 12-77: The DEIS does not account for the preference of motorists for free parking. Many new residents and arena goers will circulate looking for parking, which was not accounted for in the traffic analysis. (54, 471)

Parking will be daunting and will contribute to congestion. People driving to the project site, seeking cheaper parking than that available in the project's garages, would compete for scarce on-street parking with neighborhood residents and existing commercial customers. (470)

The on-street parking analyses in the DEIS do not analyze the 6-7 PM time period, in spite of the fact that this is when many local residents return home from work. They do not take into consideration the impact that pre-game on-street parking by ticket-holders will have on local residents. (108)

Response 12-77: As discussed in Chapter 12 of the DEIS, it is anticipated that sufficient parking capacity would be available at off-street facilities to accommodate all project demand. The analyses of current and future on-street parking conditions therefore focus on the potential effects of the loss of curbside spaces from street closures associated with the proposed project. However, as also discussed in Chapter 12 of the DEIS, it is anticipated that on-street parking in the vicinity of the project site would likely be fully utilized during major events at the arena such as a Nets basketball game. The analyses therefore examine conditions during the weekday 5-6 PM commuter peak period, and the weekday 7-8 PM and Saturday 1-2 PM pre-game periods when demand from the arena would be greatest. While there is the potential for some vehicle circulation by drivers looking for on-street parking, it should be noted, that many Nets fans would attend multiple games over the course of a season (especially season ticket holders) and would quickly become familiar with the locations of on-street parking, the availability of such parking in the pre-game periods, and the locations of (and quickest routes to) off-street parking facilities. (Residents would be even more familiar with parking conditions near the project site as well as have

access to on-site residential parking.) In addition, Nets fans purchasing tickets on-line would also have the option of reserving a parking space at a specific on-site garage or discounted remote parking facility, increasing the convenience of parking off-street. These factors are expected to reduce the number of drivers likely to circulate in search of on-street parking in the pre-game periods.

Comment 12-78: The suggestion that DOT extend the “no parking” restrictions until 8 PM will make it hard for businesses and restaurants to survive. The “Traffic Operational Improvement” for Atlantic Avenue will only benefit cars and trucks passing through the area. Customers, suppliers, pedestrians, and business owners will all have a more difficult time reaching their destinations, parking, loading, and unloading. (102, 103, 183)

Residents and local businesses are already negatively impacted by the 4 PM to 7 PM parking ban on Atlantic Avenue. (31)

Response 12-78: The mitigation proposals would extend the parking restrictions for an additional hour. Any potential loss in patronage associated with the additional parking restrictions would likely be off-set by the proposed project’s introduction of new residents, workers, and visitors to the site for many businesses.

Comment 12-79: If the project’s parking is shared between the arena and residential uses, won’t residents coming home during event hours (when parking will be taken up by event attendees) end up parking on the street? (206, 349)

Response 12-79: Sufficient parking capacity would be provided at on-site parking facilities to accommodate all of the proposed project’s non-arena parking demand. In addition, a further 1,100 spaces would be available on-site to accommodate a portion of the demand from the proposed arena. (Remaining arena demand would be accommodated at off-site parking facilities.) It is anticipated that many residential parkers would have reserved monthly spaces that would remain available for their use during arena events. In addition, it is anticipated that a system for reserving on-site parking at time of ticket purchase would be implemented to manage arena parking demand and further ensure that residential users would not be displaced. Additional discussion of this issue has been incorporated in Chapter 12 of the FEIS.

Comment 12-80: The project will only fill about one third to one half of the need for new parking spaces that will be created. (42, 152, 226, 250, 354, 484, 509, 556)

The DEIS asserts that reducing the amount of parking will reduce the number of people who drive to arena events. Such a severe shortage of parking will encourage people to come early and snap up the spaces, leaving others to circulate around the arena blocks and the surrounding residential streets, making gridlock worse. (312)

There will be a lack of parking. More parking needs to be built. (465, 504, 543)

Response 12-80: Chapter 12 of the EIS includes a detailed quantitative analysis of future parking conditions with the proposed project (both the commercial variation and the residential variation). As shown in the analysis, the proposed project would include sufficient off-street parking capacity to fully accommodate all project-generated parking demand in the weekday AM and midday peak periods. During weekday evening and weekend afternoon Nets basketball games, sufficient parking capacity would be available both on-site and at existing public off-street facilities within ½-mile of the arena to accommodate all project demand.

Comment 12-81: With regard to parking, the DEIS provides a study area of only one-quarter mile from the project site. As the demand for on-street parking by visitors to the development and arena are likely to overwhelm on-street parking and displace local residents and establishments, the FEIS should expand the study area for on-street parking to within one-half mile of the proposed project. (12)

Response 12-81: As discussed in Chapter 12 of the DEIS, as sufficient off-street parking capacity would be available both on-site and at existing off-site public facilities to accommodate all project parking demand in all peak periods, no significant impacts to parking conditions would result from implementation of the proposed project. However, as acknowledged in the EIS, on-street parking in the vicinity of the project site would likely be fully utilized during major events at the arena such as a Nets basketball game. A ¼-mile radius from the project site was selected as the study area for the on-street analyses as this is the area where project-generated demand for on-street parking would likely be most concentrated.

Comment 12-82: The DEIS fails to consider the advantages and benefits of permit parking, which would prevent arena patrons from cruising the adjacent neighborhoods in search of free parking spaces. Muni-meters in the permit area would generate municipal parking revenue that could be ear-marked for mass transit, bicycle, and pedestrian improvement projects. (102, 314)

A parking permit system in Downtown Brooklyn should be revisited. (12, 23, 135, 164, 324, 393)

The impact of the loss of parking on the local community is not reported, nor is there any mention of the only way to off-set the competition for spaces, residential parking permits, which are being studied by NYCDOT. (54)

Residential parking permits should be studied in the EIS and implemented. (5, 126, 135, 168, 560, 585)

To offset the stated loss of 180 on-street parking spaces in the study area as well as the likelihood that drivers to the arena would park on the street if spaces were available, we propose that a residential parking permit system be instated before construction begins. (108)

The project sponsors must strongly consider coordination with DOT and other appropriate City agencies to implement a residential parking program and to reduce the alternate side regulations to protect the communities surrounding the proposed development from the adverse parking impacts resulting from this development. (24)

Response 12-82:

The May 2006 *Downtown Brooklyn Residential Permit Parking Study*, released by the Downtown Brooklyn Council in conjunction with DOT, found that residential neighborhoods around Downtown Brooklyn present unique challenges for implementing a residential parking permit program, and presents a set of options (one including multi-space meters) for implementing various forms of such a program. If the City were to pursue a residential parking permit program, it could solely do so as a pilot program. Permanent residential parking permit programs are authorized by specific State legislation. The DEIS does include detailed quantitative analyses of the proposed project's potential impacts to both off-street and on-street parking. As discussed in Chapter 12, "Traffic and Parking," of the DEIS, as sufficient off-street public parking capacity would be available both on-site and at existing off-site public parking facilities to accommodate all project demand in all peak periods, no significant adverse impacts to parking conditions would result from implementation of the proposed project. However, on-street parking in the vicinity of the project site would likely be fully utilized during major events at the arena such as a Nets basketball game.

Alternative side of the street parking regulations are established to permit street cleaning by the Department of Sanitation (DSNY).

Comment 12-83:

Double-parking along the Atlantic Center retail space is proposed to be eliminated. How does FCRC expect to enforce this? (54)

Response 12-83: As shown in Figure 19-1 in the EIS, the existing 21-foot-wide double parking lane adjacent to Atlantic Center Mall would be reduced in width, and Atlantic Avenue would be reconfigured to operate with three travel lanes and a single 10-foot-wide parking lane in each direction east of Fort Greene Place. Enforcement of parking regulations is under the jurisdiction of the City.

Comment 12-84: The DEIS analysis of on-street parking seems fanciful. It states that the "utilization of these on-street parking spaces was found to be approximately 65 percent in the 5 to 6 PM period, 47 percent in the 7 to 8 PM period, and 65 percent in the Saturday 1 to 2 PM period..." For the DEIS to suggest that in the worst case, more than one-third of on-street parking spots are available, flies in the face of the real-world experience of the people living in these neighborhoods. (102, 103, 154, 328)

Two years ago you could find a parking space fairly easily in Fort Greene. Now people are afraid to drive because they would lose their parking space. The EIS states there is ample parking when this is simply untrue. (77, 241, 266, 284)

Table 12-5 that deals with on-street parking utilization indicates current on-street parking spaces filled to only 65 percent of capacity between 5 and 6 p.m. and 47 percent of capacity between 6 and 7 PM. This is just not possible and contradicts the recent Residential Parking Urban Study completed by the Downtown Brooklyn Council, which concluded that there is inadequate on-street parking to accommodate current community needs. (24)

The DEIS suggests low 47 percent to 65 percent current utilization rates for on-street parking in near proximity to the proposed arena. These numbers are unrealistic. There is so little on-street available parking that there is competition for double parking spaces between church-goers and police and fire department workers. Availability has been worsened by overflow parking from the Atlantic Center Mall. (461)

On Vanderbilt Avenue at the edge of the footprint of the proposed project, parking is never plentiful as stated in the DEIS. As more and more properties continue to convert to condos, on-street parking is more and more scarce. (312)

The DEIS woefully underestimates the existing capacity for on-street parking and incorrectly assumes the project will have little or no impact. (324)

Response 12-84: The estimates of on-street parking supply and utilization reported in the EIS were based on data collected during extensive field surveys

conducted in February and March of 2006. They included all blocks within ¼-mile of the project site. Much of the area surveyed was not included in the study areas for the Downtown Brooklyn Council's *Downtown Brooklyn Residential Permit Parking Study*.

Comment 12-85: Creative and progressive solutions to parking must be instituted and strictly enforced to accomplish the two goals of disincentivizing vehicular congestion and improving air quality. (37)

Rather than increasing parking, all efforts should be made to discourage driving into the arena—especially by the large numbers of people who would be attending special events in the arena. (328)

Response 12-85: The proposed project's traffic mitigation plan incorporates a comprehensive package of travel demand management strategies for game days designed to reduce the numbers of people who would drive to a Nets game at the arena. As described in the FEIS, these strategies include a free-fare transit incentive program and free charter bus service from park & ride facilities on Staten Island. Discounted parking and free shuttle buses would be provided at remote parking facilities located on the periphery of the study area. Although the proposed 3,670 spaces of on-site parking are needed to accommodate project demand that would otherwise impact existing parking facilities, it should be noted that a high-occupancy-vehicle (HOV) restriction of three or more occupants per car would be enforced for on-site arena parking in order to discourage single and two-person auto trips.

Comment 12-86: The DEIS should demonstrate that the parking system, especially the stacked parking garages will be effective. (111)

Response 12-86: The use of car-stackers is a proven and effective feature of many attendant-park facilities throughout the City, and the proposed parking garages are being designed to conform to all applicable codes and standards.

Comment 12-87: The EIS on Page 12-18 shows 18 parking facilities in a ½-mile range of the arena and goes on to cite the excess capacity. Closer scrutiny shows that 9 of the 18 parking lots are at the ½-mile mark, or 44 percent of the total available spots for arena parking. With no mention of a free shuttle, I doubt that arena visitors will walk a ½-mile to park. (57)

Response 12-87: While residents and workers would not be expected to walk more than ¼-mile on a regular basis to access parking, it is not unreasonable to assume that visitors to a Nets game or other major event at the arena would walk longer distances. An arena is cited in the *CEQR Technical*

Manual as an example of a land use with parking demands that would often extend beyond ¼-mile of the project site. A ½-mile study area was therefore selected for off-street parking to include those parking facilities likely to be used by arena demand.

Comment 12-88: Environmentally friendly shuttle buses should be used to link off-site parking with the arena. (23)

Response 12-88: The buses that would be used to shuttle people to and from the remote parking locations would be required to be compliant with all applicable environmental codes and regulations. Alternative fuel or hybrid vehicles would be used for this service.

Comment 12-89: A comprehensive transportation plan should include congestion pricing and improved transit capacity and access. (111, 202, 324, 420, 527)

The failure to consider congestion charging in the vicinity of Atlantic, Flatbush, and 4th Avenues and the Downtown Brooklyn core, as a serious measure to address traffic load, is a clear shortcoming of the DEIS. (102, 103)

Response 12-89: The proposed project includes a major new on-site entrance and internal circulation improvements at the Atlantic Avenue/Pacific Street subway station complex. In addition, the traffic mitigation plan proposed in the FEIS incorporates a comprehensive package of travel demand management strategies for arena trips that include a free-fare transit incentive program and free charter bus service from park & ride facilities on Staten Island, and a high-occupancy-vehicle (HOV) restriction of three or more occupants per car would be enforced for on-site arena parking in order to discourage single and two-person auto trips. In addition, congestion pricing has also been incorporated in the proposed mitigation plan in the form of a surcharge that would be imposed for on-site arena parking on game days.

Comment 12-90: There should be off-street loading and unloading areas for arena and residential development-related truck traffic. (23)

Response 12-90: Off-street loading and unloading areas would be provided on Site 5 and the arena block to service the arena and commercial uses on these blocks. Residential buildings typically do not require off-street truck loading and unloading facilities.

Comment 12-91: The cost of parking should be set at a premium to discourage people from driving to the arena for arena events. A portion of the fees should be returned to the community. (23, 95)

Response 12-91: As part of a comprehensive package of traffic demand management strategies for game days included in the proposed project's traffic mitigation plan, a surcharge would be imposed on game days for on-site arena parking and adjacent parking facilities controlled by the project sponsors. HOV parking would not be subject to this surcharge.

Comment 12-92: Will FCRC pay for residents to park off street, since this will be a new expense incurred as a result of the project? Why can't the project include parking for the current residents? The project makes more concessions to accommodate anticipated arrival of limousines than to the residents of Dean Street who will lose their parking and ability to drive on their local street. What are you doing to create parking for us? Parking is already very difficult near St. Mark's Place because we are so near the commercial corridor of Flatbush Avenue. (57, 492)

Residents, whose on-street parking would be displaced within ¼-mile of the project site, should be provided free or inexpensive parking in the project's off-street parking facilities on event nights. (12)

Residents arriving home during a game would be inconvenienced, having to either shell out for paid parking or locate free on-street parking well outside the area. (102, 142, 226)

Response 12-92: The DEIS acknowledges that it is likely that during an arena event, much of the on-street parking capacity available in the immediate vicinity of the arena would be utilized by project-generated demand. Parking demand would be satisfied by a combination of on- and off-site parking facilities, and therefore, there would be no significant adverse parking impacts resulting from the proposed project. It is not the responsibility of the project sponsors to pay for existing residents to park off-street or to provide them with off-street parking.

Comment 12-93: The reduction of 180 on-street parking spaces will result in lost parking revenue to New York City. Will the project sponsors reimburse the City for lost parking revenue being shifted to off-street garages? (95)

Response 12-93: Of the approximately 180 curbside parking spaces that would be displaced with implementation of the proposed project, only 10 are metered spaces. Of the up to 100 additional curbside spaces that would be displaced as a result of operational changes included in the proposed project's traffic mitigation plan, approximately 24 are metered spaces. The project sponsor does not intend to reimburse the City for the lost parking revenue from these 34 metered parking spaces.

- Comment 12-94:** How can a project that intends to introduce a population density of 500,000 people per square mile not have an adverse effect on parking in the area that surrounds it? (48)
- It is ridiculous to believe that adding 17 high-rise buildings will not cause parking to spill over into our local streets. (57, 417)
- Where does event parking overflow go? Numerous local residents have already been displaced from the parking facility under the Atlantic Center shopping mall, although original promises included increased access to off-street parking. (160)
- The estimated 23,000 more trips per day will place demands on local parking that can never be met. (479)
- Response 12-94:** As discussed in Chapter 12 of the DEIS, sufficient off-street public parking capacity would be available both on-site to accommodate all of the proposed project's non-arena parking demand. Sufficient parking capacity would also be available on-site and at existing off-site public parking facilities to accommodate all demand from a Nets Basketball game at the proposed arena. Therefore, no significant adverse impacts to parking conditions would result from implementation of the proposed project. However, as discussed in the DEIS, on-street parking in the vicinity of the project site would likely be fully utilized during a Nets game or other major event at the arena.
- Comment 12-95:** The project proposes building 4,000 parking spaces for the project. How many of these will be for the permanent use of permanent residents and how many will be set aside for Nets arena game attendees? (160)
- Any new residential building should coincide with 40 percent of those residences having assigned parking spots. (482)
- Response 12-95:** As discussed in the FEIS, with full build-out the proposed project would include approximately 3,670 parking spaces in six on-site parking garages. Approximately 1,100 of these spaces would be available to accommodate demand from Nets game at the arena, and the remaining 2,570 spaces would be used primarily to accommodate demand from the project's residential and commercial components.
- Comment 12-96:** The DEIS estimates that there will be 600 street vacancies even on game nights. The DEIS mentions nothing substantive about issuing resident parking permits; it makes no study of the private parking lots that are likely to crop up along our residential streets, thereby changing the neighborhood character for the work; and it suggests such improbable pricing schemes as discounting expensive tickets by a few

dollars to encourage people to park at MetroTech and take a shuttle bus.
(48)

Off-site parking provides only 596 spaces. Even with the construction of the parking garages included in the DEIS, more than 600 cars would not have access to parking within ½ mile radius of the development site.
(88)

New arena-driven, private off-site parking should be prohibited. There is no discussion about the potential for development of an off-site parking industry around the project area that could encourage more people to drive to the site, and further exaggerate already significant traffic impacts. The developer should work with the Department of City Planning to ensure that restrictions are put in place to prohibit new arena driven private parking garage construction within ½ mile of the site. (37, 87, 102, 126)

Response 12-96:

As discussed in Chapter 12 of the DEIS, as sufficient off-street public parking capacity would be available both on-site and at existing off-site public parking facilities to accommodate all project demand in all peak periods, no significant adverse impacts to parking conditions would result from implementation of the proposed project. As shown in Table 12-37, during a weekday evening Nets basketball game under the residential mixed-use variation, approximately 596 spaces would remain available at off-street public parking facilities within ½-mile of the arena after accounting for peak demand from the proposed project. Consideration of a residential parking permit program is beyond the scope of the proposed project.

In addition to the incentive of a 50 percent discount on parking fees for fans using the remote garages, it should be noted that there would also be a three-person high-occupancy-vehicle requirement to park at the on-site parking garages, increasing the attractiveness of the remote facilities to drivers of vehicles with only one or two occupants. The traffic mitigation analyses in the DEIS conservatively assume that the remote parking program would be only 50 percent effective (i.e., that only 250 of 500 spaces would be utilized).

Since there is sufficient off-street parking to accommodate the project's parking demand, the proposed project is not expected to significantly increase demand for new parking facilities in the vicinity of the project site. In addition, new public parking facilities are not permitted uses in residential districts.

As discussed in the FEIS, in Phase I of the proposed project, off-street surface parking for NYPD vehicles would be provided on the site of Building 15 (Block 1128) until construction of Building 15 begins.

Once the construction of this building is complete in Phase II, parking for police vehicles would be provided in the below-grade parking garage on this site.

Comment 12-97: The change from one-way to two-way streets would require either widening the street or eliminating on-street parking, both of which are significant adverse impacts. (232, 345)

Response 12-97: All locations where proposed changes in street direction would involve street widening or eliminating on-street parking are disclosed in the DEIS. As discussed in Chapter 12, street closures and operational changes are expected to result in a reduction of approximately 180 on-street spaces (plus an additional 24 spaces of NYPD parking along 6th Avenue). However, as discussed in Chapter 12, this would not constitute a significant adverse parking impact based on CEQR criteria.

Comment 12-98: Figure 12-3 details the locations of all the public parking facilities within ½ mile of the arena. It shows that there are six facilities in Fort Greene. In reality, there is only one parking facility in Fort Greene that is available for residential long-term parking. The others are all used by other facilities. (121)

One of the DEIS graphics shows 10 parking lots that are currently open to the public. Out of three in Fort Greene, only one of them is currently open. The other two have been bulldozed in order to build new buildings. An the one that is currently open that is located on Lafayette Avenue, is also scheduled to close and be bulldozed to make a new theatre as part of the BAM Arts District. So the 1,100 parking spots to go with the arena will be practically useless because there won't be enough other parking spots to offset the parking needs of the arena. (402)

The mapping of parking garages in Prospect Heights is incomplete. (296)

Response 12-98: The inventory of off-street parking capacity provided in the DEIS is based on extensive field surveys originally conducted in November 2004 and updated in January 2006, and reflect all public parking facilities located within ½ mile fo the arena. The analyses of No Build and Build parking conditions reflect the anticipated changes in parking supply associated with development of the BAM Cultural District and other planned developments in the parking study area. If there were additional parking facilities in the study area not reflected in the analyses, such parking would increase the available inventory and would not affect the analyses or conclusions presented in the DEIS.

Comment 12-99: The DEIS solution for local traffic gridlock seems to be to eradicate many existing parking spaces by rezoning to “No Parking” or “No Standing.” This is shown in Figure 12-4. (121)

Response 12-99: The proposed project’s traffic mitigation plan incorporates a wide range of mitigation measures to address significant traffic impacts. Where needed, the mitigation plan does include changes to curbside parking regulations at selected locations to provide additional throughput capacity. As discussed in Chapter 19 of the EIS, in 2016, mitigation-related parking restrictions would result in the displacement of approximately 70 curbside spaces during weekday peak periods, of which approximately 60 would be located within ¼ mile of the project site. This is not expected to result in a new significant adverse impact to on-street parking capacity.

Comment 12-100: Parking demand is not static. The DEIS offers limited discussion of this dynamic, instead of asserting how many parking spaces will be required to supply demand. This is an outdated method of planning transportation systems: predicting demand, and providing the necessary supply, without questioning how to influence the demand in the direction of a desired outcome. The Final EIS should use a supply side method. (126, 314, 392, 393, 452)

Response 12-100: The parking analyses in the EIS utilize the methodologies recommended in the *CEQR Technical Manual* and reflect the anticipated parking demand that would be generated by each of the proposed project’s components. The proposed project’s traffic mitigation plan does incorporate a package of traffic demand management measures for game days designed to reduce arena-related auto trips (and by extension parking demand) at the project site, including HOV restrictions and parking fee surcharges for on-site arena parking.

Comment 12-101: The EIS parking analysis is flawed in terms of gauging demand and considering how to provide parking. (167)

The FEIS should address the supply side of the traffic and parking equation and provide parking only for the number of vehicles that the street system will be able to handle—not the 3,800 spaces currently proposed. (102, 452)

Response 12-101: The EIS parking analyses are based on extensive field surveys, use the methodologies recommended in the *CEQR Technical Manual*, and have been reviewed by NYCDOT.

- Comment 12-102:** The developer should revisit parking supply and demand to provide less than 3,800 new parking spaces. Local zoning requirements should be changed to set maximum, rather than minimum, parking space requirements. (126, 330)
- Response 12-102:** The number of parking spaces that would be developed under the proposed project has been reduced to 3,670 in the FEIS as part of a reduction in the development program. The parking capacity proposed for the project site is based on the projected needs of its residential, commercial and arena components, and the availability of parking at off-site facilities. Reducing the amount of on-site parking would potentially result in a deficit of off-street parking capacity in the vicinity of the project site and increased demand for on-street parking spaces. Changing local zoning requirements with respect to parking is beyond the purview of the proposed project.
- Comment 12-103:** The interim surface parking lot should be eliminated. It will encourage arena attendees to drive to the site, have negative impacts on new and old businesses along Vanderbilt Avenue, and make the area less attractive and safe. A surface parking lot will hamper NYCDOT plans to implement traffic calming along Vanderbilt Avenue, and discourage the commercial redevelopment that is occurring along the street a few blocks south. The DEIS does not make the case for this lot because even in the busiest times in 2010, there are 800 vacant parking spaces within ½ mile of the project. (37, 87, 102, 126)
- Parking at Interim Lot 1129 should be limited and runoff should use remote parking. (167)
- Response 12-103:** As demonstrated in the EIS parking analyses, without the proposed 1,596 interim parking spaces on blocks 1120 and 1129, there would be a deficit of off-street parking capacity in the vicinity of the arena during a weekday or Saturday Nets basketball game in 2010, resulting in a significant adverse impact to off-street parking conditions and increased demand for on-street parking spaces during these periods.
- Comment 12-104:** Parking should be modeled on the system employed at the Empire State Building. (135)
- Response 12-104:** The Empire State Building does not have any on-site parking, and persons driving to the ESB use off-street public parking facilities in the surrounding area. There is sufficient off-street parking capacity in the vicinity of the proposed Atlantic Yards project site to accommodate all of its projected demand.

Comment 12-105: In the DEIS, off-street parking capacity and utilization leave out 5-6 PM peak hour data. This is the period when demand should be the highest and availability the lowest. Without these data, the DEIS may well misrepresent conditions. (54, 55)

Response 12-105: The periods selected for the analysis of off-street parking conditions better reflect periods of peak demand than would the 5-6 PM period. The periods selected for analysis include the weekday 7 AM period (as a measure of overnight residential demand), noon (a period of peak office and retail demand) and the weekday evening period (when demand from an evening arena event would occur). The Saturday midday period, when peak retail parking demand would coincide with demand from an afternoon arena event, is also analyzed. By contrast, 5-6 PM is a period when office parking demand would typically be decreasing at the end of the work day, while much of the residential overnight parking demand and demand from an evening event at the arena would not yet have developed.

Comment 12-106: Traffic enforcement is currently sporadic. Cars park three-deep at Junior's restaurant and no amount of enforcement moves them. This will get worse with the proposed project. (349)

Response 12-106: The staffing levels required for traffic enforcement after implementation of the proposed project would be determined by the NYPD after consideration of needs and available resources.

Comment 12-107: The parking package developed for the Downtown Brooklyn Plan applies to this project as well and makes the following suggestions:

Implement a residential parking permit program in the neighborhoods surrounding Downtown Brooklyn, using the same boundaries as the extended "no authorized permit" zone.

Extend the "no authorized permit" zone to the limits of the primary study area of the Downtown Brooklyn Traffic Calming Project plus DUMBO and Vinegar Hill.

Eliminate all on-street parking for agency personnel and make provisions for off-street parking for agency personnel.

Make more parking available to merchants and local businesses.

Reduce the number of planned parking garage spaces in the current rezoning by at least 25 percent to discourage induced traffic. (349)

Response 12-107: Restricting government parking permits, making provisions for off-street agency parking, introducing a residential parking permit program in and around Downtown Brooklyn, and reducing the number of

parking garage spaces planned under the Downtown Brooklyn Development project are all outside the purview of the proposed Atlantic Yards Arena and Redevelopment project. However, as noted in the FEIS, parking for NYPD vehicles displaced by the proposed two-way operation of 6th Avenue would be accommodated in an on-site parking facility. In addition, during periods when there is no Nets game or other major event scheduled at the arena, parking capacity would be available at proposed on-site facilities to accommodate parking demand from patrons of area merchants and businesses.

Comment 12-108: The Temple of Restoration requires accessibility, especially for our members who are wheelchair dependent. According to the DEIS, Dean Street will be congested all but one hour a day. (124)

Response 12-108: The DEIS discloses that the proposed project would result in significant adverse traffic impacts along the Dean Street corridor; however, with implementation of the proposed improvement measures, congregants would still be able to access the Church. The existing drop-off area in front of the church would not be affected by the proposed project.

Comment 12-109: Since the ESDC is already overriding numerous local zoning rules, it could certainly override minimum parking requirements in favor of maximum parking requirements. (102)

Response 12-109: As discussed in the DEIS, the proposed project provides adequate parking.

Comment 12-110: The DEIS offers no analysis, or even acknowledgement, of the existence of alternate side of the street parking restrictions. The statistics provided in the DEIS about the availability of on-street parking are seriously flawed. (108)

Response 12-110: The presence of alternate-side-of-the-street parking regulations in the study area is reflected in the discussion of on-street parking beginning on page 12-17 of the DEIS, as well as in Figure 12-4, "On-Street Parking Regulations." The analyses of existing and future on-street parking utilization in the study area accounts for existing parking regulations, including alternate-side-of-the-street regulations.

Comment 12-111: The DEIS anticipates that arena employees, players, coaches, team staff, and other non-spectator visitors to the arena would generate trips outside of the immediate pre-game and post-game periods, but the DEIS does not comment on the parking habits of this group. We would like to

see the developer and/or management of the arena mandate that these vehicles park in on-site parking facilities. (108)

Response 12-111: Tables 12-33 through 12-36 show the 2016 hourly parking demand throughout the day from each of the proposed project's components, and the non-spectator demand from the arena is reflected in these numbers. As discussed in Chapter 12 of the DEIS, the proposed project would include sufficient on-site parking to accommodate all of its projected demand with the exception of fans at a Nets game. Parking demand from Nets fans would be accommodated both on-site and at existing off-site public parking facilities. However, the project sponsor cannot practicably mandate that all arena employees and non-spectator visitors park on-site.

MITIGATION—TRAFFIC

Comment 12-112: There are no measures in the DEIS to remediate the destructive impact on traffic. (23, 262, 282)

There needs to be a serious traffic mitigation plan. (3)

The traffic mitigation solutions offered are insufficient. (5, 474, 475)

Traffic mitigations include simply shifting problems from one intersection approach to another creating massive gridlock in Downtown Brooklyn and throughout Central Brooklyn. (10, 411)

Response 12-112: An extensive traffic mitigation plan incorporating physical roadway improvements, demand management strategies, recommendations for improved transit service and traffic operational improvements has been developed to address significant adverse traffic impacts from the proposed project. This plan is described in detail in the EIS.

Comment 12-113: The only travel demand management strategies in the DEIS pertain to games at the arena, which represents about a third of Atlantic Yards vehicle trips over a day. (55)

Response 12-113: Travel demand management strategies focus on reducing trips generated by the proposed arena given the high auto-mode share (34 to 40 percent) and relatively high numbers of auto trips that would be generated by a Nets game (approximately 5,500), and the fact that almost all of these trips would be concentrated in only two peak periods (pre-game and post-game). The fact that Nets fans would need to purchase tickets (many via the internet) would also facilitate targeting such demand management measures to auto-oriented users. The proposed project incorporates a number of other measures that would help reduce auto demand from the project's residential and commercial

components as well as the arena. These include a major new on-site entrance and internal circulation improvements at the Atlantic Avenue/Pacific Street station complex, and secure, indoor parking for up to 400 bicycles near this proposed new entrance.

As a conservative measure, it is assumed in the DEIS and FEIS that the demand management strategies (DMS) and remote parking required for arena basketball games would not be also used for other arena events. With the imposition of DMS and remote parking mitigation, the basketball games would still typically generate the highest expected level of vehicular travel demand for arena events, and thus, would continue to represent the reasonable worst-case scenario.

The comprehensive traffic management plan included for the Nets basketball games is made possible because of the project sponsors' relationship with the basketball team and the nature of basketball games as an ongoing activity with a high percentage of repeat attendees. Other arena events would generally be operated by a variety of promoters who cannot be identified at this time. Marketing and sales efforts for non-basketball events would generally be carried out by the event promoter, so that the mechanism for marketing the traffic management measures would be out of the control of the project sponsors. In addition, the number of attendees at other events, their mode choice, and their place of origin would vary widely from event to event, making it difficult to determine the appropriate traffic management measures for any particular event. The attendees at the other events are likely to be less frequent attendees, so the ability to effectively market any traffic management program to the people who would actually attend is less certain. As part of arena operations, the project sponsors would provide the NYPD with a schedule of events and coordinate with NYPD for appropriate support from the police or traffic control officers during arena events. In addition, the project sponsors anticipate entering into arrangements with area garage operators, developing cross-marketing opportunities with area businesses, and developing other practicable game day measures that would be available to event promoters, which would serve to improve traffic flow and parking in the vicinity of the arena.

Comment 12-114: Traffic flow at the intersection of Flatbush and Atlantic Avenues should be completely reconfigured by constructing a below-grade traffic tunnel on 6th Avenue running from Flatbush to north of Atlantic Avenue. (23)

Response 12-114: Construction of a roadway tunnel beneath 6th Avenue crossing Atlantic Avenue would likely be infeasible. Such a tunnel would need to be deep enough to pass beneath the LIRR tunnel along Atlantic Avenue, and

would require long approach ramps that would act as a barrier to east-west vehicular and pedestrian flow. It is also unclear how such a tunnel would benefit the intersection of Atlantic and Flatbush Avenues, as much of the traffic at this intersection is through-traffic that would not necessarily make use of a tunnel providing access to local streets in Ft. Greene.

Comment 12-115:

Suggestions for reducing congestion on Flatbush include:

- Eliminating the left turn at Livingston Street and allowing for the jug handling along Ashland to Lafayette to Schermerhorn might help;
- Restricting pedestrian crossing points at Fulton Street and DeKalb Avenue;
- Opening the Myrtle Avenue subway station to keep all the new residents from crossing the street during rush hour; and
- Discouraging drivers from using Battery Tunnel. (349)

Response 12-115:

Although eliminating the northbound left-turn at the Flatbush Avenue/Livingston Street intersection would likely facilitate through traffic flow, this intersection would not be significantly impacted by project-generated traffic in any peak hour; therefore no project-sponsored mitigation is proposed for this location. Restricting pedestrian crossings along Flatbush Avenue at Fulton Street and at DeKalb Avenue was not considered reasonable mitigation given that these locations are pedestrian access corridors to the Fulton Street transit/pedestrian mall. Reopening the Myrtle Avenue subway station would require a substantial construction effort and would likely be of limited effectiveness at reducing project traffic impacts. Discouraging drivers from using the Battery-Tunnel is similarly outside the scope of practicable mitigation for this project.

Comment 12-116:

The DEIS doesn't explain what the effect of the proposed traffic mitigations will have on Fort Greene Place between Atlantic Avenue and Hanson Place, an already overcrowded and congested block due to the Atlantic Center and Atlantic Mall (24)

Response 12-116:

As indicated in the FEIS, under the proposed project's traffic mitigation plan, from 35 to 130 additional vehicle trips would be added to northbound Ft. Greene Place in each peak hour. To accommodate this traffic, a new left-turn lane and leading left-turn phase are proposed for eastbound Atlantic Avenue at Ft. Greene Place. Tables C-11 and C-12 in Appendix C show the expected redistribution of traffic to Ft. Greene

Place under the proposed traffic mitigation plan. The DEIS presented similar information pertaining to Ft. Greene Place.

Comment 12-117: Proposed mitigations are inadequate, for example changes in signal timing and dollar discounts for Metrocards for fans buying \$100 event tickets will not provide the alleged mitigations. (180)

The inclusion of transit fare discounts and a 400-space bicycle parking facility is laudable. However, there is the question about whether a \$2.00 price incentive on a round trip transit fare is going to encourage more people to use transit to relatively expensive arena events. The data used to come up with the resulting 20 percent reduction in auto trips may not apply to individual arena events. (126)

The DEIS falsely assumes a \$2.00 saving on the transit fare would be a sufficient offset of the game ticket price to compel auto users to give up driving. (55)

The principal demand management strategy is to reduce auto trips by offering a 50 percent discount on Metrocard limited time passes. Auto users would be more prevalent in the higher price tickets (upwards of \$85 and \$105 tickets) and the \$2 saving on the Metrocard is less than a 2 percent discount of the total price. The proper application of the price elasticity would be to provide a 10 percent discount on the Nets ticket price. (54)

Response 12-117: As discussed in Chapter 19, "Mitigation," of the FEIS, the demand management strategies described in the DEIS have been further developed and refined to achieve the 20 percent reduction in arena auto trips. These strategies include the transit fare incentive program (which has been expanded to provide free round-trip transit fares targeted to auto-oriented fans in areas accessible by transit); free charter bus service to the arena from park and ride facilities on Staten Island; on-site high-occupancy-vehicle parking requirements; free, secure indoor parking for up to 400 bicycles at a facility adjacent to the arena; and the cross-marketing of area businesses to reduce pre-game and post-game surges.

Comment 12-118: Signal timing changes proposed as part of the traffic mitigation plan have not been reviewed by the appropriate NYCDOT staff. (54)

Response 12-118: Contrary to the commentor's statement, all signal timing changes associated with the proposed project's traffic mitigation plan were distributed to all appropriate divisions at DOT, including DOT Signals Operations, prior to the release of the DEIS.

Comment 12-119: The DEIS provides no information on the extent of mitigation that is expected to be achieved by what measure. Why, for example, the benefit of game-night transit incentives is credited to reducing volumes at just a few isolated intersections: Clinton/Atlantic in 2016 and Henry/Atlantic in 2010, and just 3 other places? (54)

Response 12-119: As discussed in detail on pages 19-7 and 19-27 of the DEIS, the DEIS traffic mitigation analyses assumed that providing a 50 percent transit fare discount to Nets ticket purchasers would achieve a 20 percent reduction in the number of auto trips generated by a weekday or weekend basketball game. This 20 percent reduction was applied to all arena auto trips and is therefore reflected at intersections throughout the study area network where such trips would occur. The intersections cited in the comment are those locations identified in Tables 19-1 and 19-2 in the DEIS where the reductions in arena trips resulting from the transit fare discount would be sufficient to fully address all significant project impacts. At many other locations, the reduced volumes alone were not sufficient to fully address all significant impacts, and additional measures were needed as listed in Tables 19-1 and 19-2.

Subsequent to publication of the DEIS, the transit fare incentive was increased to a 100 percent discount (a free round-trip fare), and a comprehensive package of demand management strategies was developed. This is discussed in detail in the FEIS.

Comment 12-120: The DEIS provides no mitigation for the high hazard Dean and Vanderbilt intersection. (54)

Response 12-120: The proposed project's traffic mitigation plan in the DEIS does propose changes to signal timing and parking regulations at the intersection of Vanderbilt and Dean Streets to address significant traffic impacts, and new high visibility crosswalks would be installed at this intersection to enhance pedestrian safety, as at most key intersections adjacent to the project site. This intersection was not called out as a high hazard location in the DEIS as it experienced only eight reportable accidents from 2002 through 2004 (compared to 39 at the intersection of Atlantic and Vanderbilt Avenues, for example). Although further mitigation measures are not proposed, it should be noted that in 2006, DOT installed a flush center median with left-turn bays along the Vanderbilt Avenue corridor from Dean Street to Sterling Place to bring capacity more in line with demand, reduce vehicle speeds, and improve operations for cyclists. These improvements are reflected in the No Build and Build traffic analyses in the DEIS.

Comment 12-121: With the implementation of mitigation measures provided in the DEIS, traffic congestion would be decreased at less than half the impacted intersections. And even with the mitigation proposed in the DEIS, more than one-third of the neighborhood intersections surrounding the development would have significant, prolonged congestion as a result of development traffic flows and patterns. Sixty-three percent of these intersections would be operating over capacity at some point during weekday hours, while a full 88 percent would be operating over capacity either before or after Saturday games.

The DEIS acknowledges the inadequate scope of these mitigation measures, stating that more will be provided by the time of the final EIS. But both SEQRA and CEQRA require that large-scale development projects provide public opportunity to comment on project plans and their mitigation measures prior to the final EIS. Withholding complete mitigation strategies during the public review process or delaying the completion of such strategies until after the DEIS is approved is inconsistent with the law. (88)

The impact analysis describes a situation where the majority of intersections analyzed in the study would suffer from significant adverse impacts. It goes on to state that “additional measures to further address all unmitigated significant adverse traffic impacts will be explored between the DEIS and the FEIS.” It is a serious shortcoming of the DEIS that it makes no effort to offer mitigations. (108)

Response 12-121: A broad range of mitigation measures were developed to address the proposed project’s significant traffic impacts, including physical roadway improvements, demand management strategies, transit service recommendations and traffic operational improvements. The DEIS includes a detailed discussion and assessment of the effectiveness of these measures, and the public had an opportunity to review and comment on their adequacy. Additional measures were examined and the mitigation plan refined between the DEIS and FEIS; however, the measures set forth in the FEIS are similar to those set forth in DEIS and do not substantially alter the conclusions found in the DEIS. Mitigation measures described in a draft EIS are often refined before publication of a final EIS.

Comment 12-122: We would like to see the impacts the project causes meaningfully mitigated. Routing arena and project related truck, auto, and bus traffic away from Dean Street between 6th Avenue and Vanderbilt would help. (124)

Parking garage entrances and exits should be placed strategically so that they draw pedestrian and auto traffic away from our street. (124)

Response 12-122: The Dean Street, 6th Avenue, and Vanderbilt Avenue corridors would all provide direct access to and through the project site and the proposed on-site parking facilities. It is therefore not feasible to restrict project-generated traffic from these corridors. Entrances to the proposed project's on-site parking garages have been located to provide the necessary access to the facilities, to comply with curb cut restrictions on Atlantic and Flatbush Avenues, and to minimize the potential for conflicts with traffic and pedestrians. Additionally, an extensive traffic mitigation plan incorporating physical roadway improvements, demand management strategies, and traffic operational improvements has been developed to address significant adverse traffic impacts from the proposed project. This plan is described in detail in the DEIS.

Comment 12-123: As conditions before the 2010 and 2016 build years evolve, before and after studies should be conducted to verify projected conditions. An on-going traffic monitoring plan should be implemented so that changes in traffic volumes can be identified and their affect on the area's traffic projections analyzed, and plans modified, if necessary. (12)

Response 12-123: During the first year of arena operations, the project sponsors would undertake a program to monitor and advise DOT of traffic and pedestrian conditions at the locations identified in the FEIS as having unmitigated significant traffic impacts. A similar monitoring program would be undertaken after full build-out of the proposed project. Additionally, in accordance with Chapter 19, "Mitigation," in the FEIS, the project sponsors would conduct origin/destination and mode choice surveys of fans attending a Nets game midway through the first Nets season at the arena. The exact scope of the monitoring program would be developed in coordination with, and approved by DOT.

Comment 12-124: The simulation of traffic behavior on the area's street network is necessary to serve as a tool for managing it on an on-going basis. The NYC DOT should develop an area-wide computerized traffic simulation model that is linked to the Best Practice Model (BPM) managed by the New York Metropolitan Transportation Council (NYMTC). It would be used to confirm the effectiveness of all the above and establish a comprehensive traffic simulation of all changes in land use and the street network in greater Downtown Brooklyn. (12)

Response 12-124: Comment noted.

Comment 12-125: Market testing of demand management techniques needs to continue to obtain greater confidence in the assumptions and the effectiveness of the

options, and to assist in the refinement of measures after the FEIS is completed. (12)

Response 12-125: As discussed in the FEIS, the demand management strategies included as part of the proposed project's traffic mitigation plan would be monitored to determine their effectiveness at lowering the auto mode share for a Nets basketball game at the arena. This monitoring would include origin/destination and mode choice surveys of arena patrons midway through the first basketball season. Based on the data collected, the mix of demand management strategies and remote parking could be adjusted to improve the efficacy of the mitigation.

Comment 12-126: An overall redesign of traffic patterns at the intersection of Atlantic, Flatbush and 4th Avenues should be considered. The corner of Ashland and Hanson Places should be blocked off from Flatbush Avenue to improve conditions for pedestrians crossing Hanson Place, and enforcement of "Don't Block the Box" implemented at the intersection. Reconfiguration of the intersection as a traffic circle (similar to Grand Army Plaza) should be considered. Also, left turns from Flatbush Avenue between Atlantic Avenue and Grand Army Plaza should be banned – at least during certain busy hours as they are starting to do. (572)

Response 12-126: As discussed in Chapter 19 of the DEIS, the proposed project's traffic mitigation plan does include a major reconfiguration of the Atlantic Avenue/Flatbush Avenue/4th Avenue intersection to eliminate a northbound "triangular constraint" that severely limits the individual capacities of each of the three major arterials. This reconfiguration would accomplish many of the same benefits as the measures proposed by the commentor. Under this reconfiguration, the northbound 4th Avenue approach to Flatbush Avenue would be eliminated, reducing traffic through the intersection, including volumes turning onto Hanson Place/Ashland Place. An all-pedestrian signal phase would also be implemented at Flatbush Avenue/4th Avenue to provide pedestrians with a traffic-free period in which to cross all approaches. Additional pedestrian space would also be provided with the expansion of Times Plaza into the right-of-way currently occupied by the adjacent northbound lanes on 4th Avenue.

The proposed project and its traffic mitigation plan would also reduce the number of permitted left-turns from Flatbush Avenue. The left-turn from northbound Flatbush Avenue onto Bergen Street would be eliminated, as would the left-turn from southbound Flatbush Avenue onto Pacific Street. The conversion of Pacific Street to one-way eastbound operation (from the current one-way westbound) from 4th

Avenue to Flatbush Avenue under the proposed traffic mitigation plan would eliminate the illegal left-turns now made onto the block from northbound Flatbush Avenue. In addition, under the proposed traffic mitigation plan, the existing 7 AM to 7 PM left-turn prohibition from southbound Flatbush Avenue onto Dean Street would be extended to all times.

MITIGATION—PARKING

Comment 12-127: Eliminating parking on one side of Atlantic Avenue depending on the direction of rush hour traffic will not work because it does not currently work on Flatbush Avenue/Flatbush Avenue Extension by the 911 building. (349)

Response 12-127: Weekday regulations restricting parking on one side of Atlantic Avenue depending on the peak direction of traffic have already been implemented by DOT along much of the corridor, independent of the proposed project. The mitigation plan only recommends the extension of the existing weekday 4-7 PM parking restrictions until 8 PM in order to provide additional capacity to accommodate trips en route to the arena, and the analysis in the EIS shows that it would be effective in this regard.

Comment 12-128: Shuttle services from remote parking lots at MetroTech and western Atlantic Avenue will likely get stuck in traffic to and from the site. There is a question that a 50 percent parking price discount would provide a large enough incentive for people to use this option. (126)

The DEIS does not indicate where alternate parking sites will be located. (349)

The DEIS should demonstrate that shuttle vehicles to remote parking will be attractive to users. These vehicles will be subject to the same congestion issues as others. What are contingencies if these services fail? (111)

Response 12-128: The proposed project's traffic mitigation plan includes a variety of measures to reduce traffic delays within the study area, and it is anticipated that on game days, police or traffic control officers would be deployed along critical corridors in the pre-game and post-game periods to facilitate traffic flow. In addition to the incentive of a 50 percent discount on parking fees for fans using the remote garages, it should be noted that there would also be a three-person high-occupancy-vehicle requirement to park at the on-site parking garages, increasing the attractiveness of the remote facilities to drivers of vehicles with only one or two occupants. The traffic mitigation analyses in the EIS

conservatively assume that the remote parking program would be only 50 percent effective (i.e., that only 250 of 500 spaces would be utilized). It is anticipated that these spaces would be located at MetroTech and at Long Island College Hospital.

The proposed remote parking program is one of a number of demand management strategies designed to reduce auto trips in the vicinity of the project site. If this strategy is found to be ineffective, it is anticipated that resources would be reallocated to other measures found more effective at achieving reductions in auto trips.

Comment 12-129: The developer should extend the HOV requirements to all lots on the project site, not only the arena site. HOV restrictions should be required at any temporary parking that is constructed as part of Phase I. Who will run this? (126)

Response 12-129: Of the approximately 1,100 parking spaces that would be available on-site for use by fans at a Nets basketball game in both 2010 and 2016, up to approximately 500 would be dedicated to suites and premium seating. It is anticipated that the remaining 600 spaces (55 percent of the total available) would be subject to the HOV parking requirements included as a demand management strategy in the proposed project's traffic mitigation plan. All on-site facilities would be under the control of the project sponsors, who would be responsible for implementing the HOV restriction.

Comment 12-130: Even when the 3,800 planned spots are added to the limited, available off-street and on-street metered parking, the mitigation measures provided by the DEIS are inadequate to satisfy the parking demand that this project will create. In this area, too, the DEIS is inconsistent with the mitigation requirements of state law. (88, 345, 384)

The traffic and parking mitigation plans are flawed in their orientation toward gauging demand, and trying to provide an adequate amount of supply, rather than genuinely trying to reduce the demand for parking. (102)

Response 12-130: Chapter 12, "Traffic and Parking," of the EIS includes detailed quantitative analyses of future parking conditions with the proposed project (both the commercial variation and the residential variation). As shown in the analyses, the proposed project would include sufficient off-street parking capacity to fully accommodate all project-generated parking demand in the weekday AM and midday peak periods. During weekday evening and weekend afternoon Nets basketball games, sufficient parking capacity would be available both on-site and at

existing public off-street facilities within ½ mile of the arena to accommodate all project demand. As set forth in the DEIS, the proposed project would not result in significant adverse parking impacts. Thus, no parking mitigation is required.

The proposed project would be located at Brooklyn's largest transit hub, reducing auto trips and related parking demand in comparison to similar development at locations with less transit access.

Comment 12-131: The DEIS provides no technical support for the claimed effectiveness of the proposed reconfiguration of the 4th/Atlantic/Flatbush intersection. Traffic would be diverted through surrounding neighborhood streets. (54)

I do not support redirecting traffic from 4th Avenue east on Pacific in order to pass through Flatbush Avenue. (13, 439)

At the intersection of Flatbush and Atlantic Avenues, crosswalks should be realigned to run at right angles with streets instead of the current diagonal crossing. (23)

The traffic abatement plan is ridiculous and doesn't reflect real world conditions, especially at the corner of Atlantic and Flatbush Avenues. (204)

Response 12-131: As discussed in detail in Chapter 19 of the DEIS, the proposed project's traffic mitigation plan includes a major reconfiguration of the Atlantic Avenue/Flatbush Avenue/4th Avenue intersection to eliminate a northbound "triangular constraint" that severely limits the individual capacities of each of the three major arterials. The effectiveness of this proposed reconfiguration is demonstrated in the results of the level of service analyses provided in Appendix C and summarized in Chapter 19. In addition, detailed traffic simulation of the proposed reconfiguration was undertaken using the Synchro/SimTraffic 6.0 software program and reviewed with DOT as a planning tool to consider the effect of the change within the local street network and along major corridors. To enhance pedestrian safety, the sidewalk at the northeast corner of the intersection of Atlantic and Flatbush Avenues was extended to shorten the crossing distance on the north crosswalk from seven lanes of traffic to six lanes. The possibility of further realigning the crosswalks at this intersection was examined in consultation with DOT, but was not recommended as part of the traffic mitigation plan due to potential constraints on the amount of reservoir space available for vehicle queuing.

Comment 12-132: To accommodate for all the new school children, there would be an increase in school buses to drop off and pick up children from school. These buses would clog the local streets during the hours before and after school (8-9 AM and 3-4:30 PM), times which were not studied in the DEIS. (543)

Response 12-132: Queues of buses serving schools before and after school would be of relatively short duration and would typically occur only during the weekday mid-afternoon period (2-3 PM, and not during the peak periods for commuter or arena demand. In the AM, school buses typically discharge passengers and depart the site relatively quickly, and no significant queueing would be expected in the AM hours.

CHAPTER 13: TRANSIT AND PEDESTRIANS

TRANSIT

Comment 13-1: The proposed arena will cause many problems. The Atlantic Pacific subway stop does have many lines which could be used, but people would choose to drive to the arena. (292, 358)

Why place an arena in an area, which is inaccessible? It is faulty thinking, or purely misleading, to say that people coming to see the games will take mass transit. (236, 358, 450)

All feasible steps must be taken to make use of public transportation for visits to the area both practical and attractive. (470)

The DEIS estimates that 75 percent of the workers, residents, and visitors of Atlantic Yards would use some mode of public transportation or foot travel because of the area's close proximity to other neighborhoods and a major Brooklyn transit hub. But even if those projections for transit and pedestrian usage were correct, the impacts from added traffic would still be significant. (88)

Response 13-1: As discussed in the EIS, the area of the project site is served by one of the densest concentrations of subway lines in New York City and is the most accessible area in Brooklyn. Trips en route to and from the proposed project are expected to use a total of seven subway stations served by a dozen subway routes. Ten of these routes serve the Atlantic Avenue/Pacific Street subway station complex that would be located immediately adjacent to the proposed arena, and development of the proposed project would include construction of a major new on-site subway entrance and other internal circulation improvements at this complex. In addition, the project site is served by 11 NYCT local bus routes and the Long Island Rail Road. Given its excellent transit access, it is reasonable to assume that the proposed project would have a

relatively high transit mode share, and this is reflected in the travel demand assumptions. It should also be noted that the proposed project's traffic mitigation plan includes a comprehensive package of demand management strategies, many of which are designed to increase the transit (subway and bus) mode share for travel to a Nets game at the arena.

The percent transit mode share assumed for the forecast varies by proposed use. The DEIS does not indicate that 75 percent of the workers, residents, and visitors of Atlantic Yards would use public transportation or walk. As shown in Table 12-10 in the EIS, total weekday AM/PM peak hour transit mode shares (subway, bus and commuter rail) range from 25 percent for hotel trips to 83 percent for office trips. Even with this relatively high transit usage, the development of the proposed project would result in significant adverse traffic impacts, and these are discussed in detail in Chapter 12 of the EIS. NYCDOT and NYCT have reviewed and concurred with transportation planning assumptions used in DEIS

Comment 13-2:

How will the project address the effects on our already strained and under budgeted mass transit system? Will it be able to accommodate the increased passenger flows? Mitigations do not include any increase in capacity. (141, 174, 195, 268, 289, 324, 368, 380, 386, 404, 425, 482, 493, 503, 525, 557, 571, 577, 480, 543, 556, 573)

I often have to let a 2 or 3 train go by because it is too crowded to get onto, what will happen with tens of thousands more people using that subway each morning. Not only will it be extremely inconvenient, I worry about safety. (542)

Public transportation would need to be increased. It is already very difficult to get on a Manhattan bound 4 or 5 train during the morning rush hour. At the Nevins Street Station (the stop after Atlantic Ave.), it is already necessary to wait for several trains to pass before being able to board. Platforms would be dangerously crowded. (176)

The degree of crowding on the subways that is contemplated would not encourage the use of the subways to reach the project site. (470)

Crowded trains going into Manhattan are so frequent that they are often backed up. The proposed project will create worse back-ups. The tracks cannot handle existing conditions, let alone increased volume. (306)

Adding 18,000 new commuters plus evening arena visitors 240+ nights a year will utterly overwhelm the system. (239, 284, 289, 306, 311, 340, 382, 420, 461)

The project's stated goal of having the majority of Atlantic Yards visitors travel to the site by public transportation cannot be met by corresponding and required service improvements in the foreseeable future, making this goal questionable at best. (470)

Increased subway service in southern and eastern Brooklyn is required urgently to reduce vehicular traffic overall and especially through Atlantic Yards and Downtown Brooklyn. (470)

The subway system is already overcrowded and cannot handle an additional fourteen thousand-plus residents. On the B/Q line, the train I take, it is not uncommon to have to let one or two trains pass because they are too crowded to get on. How will the subways handle any more riders? (528)

Response 13-2:

The DEIS includes a detailed subway line haul analysis based on 2005 NYCT passenger counts that show that all subway routes serving the project site would continue to operate below capacity in the peak direction in the AM and PM peak hours at their maximum load points in both the 2010 and the 2016 future with the proposed project. As described in detail in the EIS, the proposed project would also include a major new on-site entrance and internal circulation improvements at the Atlantic Avenue/Pacific Street subway station complex to accommodate new demand from the proposed project. As also discussed in the EIS, during the weekday 10-11 PM and Saturday 4-5 PM post-game periods, when surges of subway trips generated by an event at the arena would be arriving on the subway platforms, the potential may exist for crowding on the platforms at the Atlantic Avenue/Pacific Street subway station complex under certain post-game conditions. Such crowding, if it were to occur, would constitute a significant adverse impact, which would be addressed by providing additional subway service (i.e., more trains) during post-game periods.

Comment 13-3:

As a benchmark of impacts, the DEIS replaces NYC Transit's traditional "guideline capacity" of 4 sq ft/passenger for instituting more service with the term "practical capacity," which at 3.5 sq ft/passenger is NYCT's "crush load." Even using the "crush load" criteria, the DEIS is wrong in concluding that no added service is needed. Without more subway service, at least six lines will severely exceed NYCT's "crush loading" standard and nine lines will greatly exceed NYCT's "guideline capacity." (10, 54, 411)

Given riders' concerns about overcrowding, the use of NYC Transit's loading guidelines may not be the best measure of successfully attracting additional riders and diverting them from auto use and reducing street congestion. The FEIS should evaluate a comfortable

level of service for all subway lines through Downtown Brooklyn since encouraging travel via public transit to and from the arena site and thereby reducing auto usage is one of the overarching goals of the project. (12)

Estimates of spare capacity on subways are not substantiated. By changing the NYC guidelines for space per person the DEIS wrongly concludes there is no need for additional service. (180)

The use of official NYCT subway loading guidelines to define subway trains practical capacity limits may understate subway crowding impacts as understood by everyday straphangers. That's because the official loading guidelines give riders only three-square-feet of standing room during rush hours. The EIS, however, claims that since no V/C ratio using these guidelines on any subway line exceeds 1, then no significant subway crowding impact is anticipated. (126)

The DEIS may not be using the correct loading guideline numbers and should reflect that looming MTA budgetary problems may cause longer waits and crowding on many subway lines. (126)

The DEIS suggests that 220 people could be jammed onto each car if necessary. This is totally unrealistic. In addition to being extremely uncomfortable, it is a public health risk and a safety risk. (119)

Response 13-3:

The DEIS properly used NYCT's loading guideline of three square feet per standing passenger. A standard of four square feet per standing passenger is not used by NYCT. The guidelines used in the DEIS are MTA Board-approved and are used consistently throughout the system. The FEIS has been revised to clarify this assumption. Service cuts are not currently under consideration by the MTA; thus, it would not be appropriate to reflect them in the analysis.

Comment 13-4:

The configuration of Atlantic Terminal limits the number of trains that can be dispatched to and from this location. The configuration of the storage yard should be changed to allow entry and exit by trains operating in either direction in order to allow improved service to and from Atlantic Terminal. Peak-hour service could be increased, and it is conceivable that the LIRR would run additional off-peak or reverse-peak trains between Atlantic Terminal and Jamaica on event days, just as the LIRR now runs trains between Pennsylvania Station and Belmont Park on race days. (470)

Response 13-4:

With regard to the LIRR, the largest numbers of new peak hour LIRR trips would be generated by a basketball game at the proposed arena, and would occur in the off-peak direction (inbound from Long island in the 5-6 PM and 7-8 PM peak hours, for example). It is therefore

anticipated that sufficient capacity would be available to accommodate arena demand, and these new trips are not expected to adversely affect LIRR line haul conditions. A description of the relocated and improved rail yard is set forth in Chapter 1, "Project Description." The proposed project would not increase the capacity of LIRR operations within the Atlantic Avenue Terminal; however, the improvements would facilitate LIRR train access into and out of the terminal.

Comment 13-5: The line haul analysis is based on a distribution of new riders that differs sharply from existing ridership patterns. Like everything else in the DEIS, there is only the vaguest indication of the basis of trip origins, the faulty 2000 Census and the wrong-headed notion that commuters to Downtown Brooklyn choose subway lines according to proximity of destinations, which are all within walking distance, rather than on proximity of a line to where they live. (54)

Response 13-5: The assignment of project-generated subway trips was prepared in consultation with NYC Transit and was based on a variety of sources including data provided by NYCT, census data, data developed for the Downtown Brooklyn Development project, and the anticipated origins/destinations for arena spectators. The proximity of a subway route to both trip origin and destination was considered in developing the assignment of subway trips. Detailed data on the anticipated trip origins for arena spectators by mode are presented in the "Transportation Planning Assumptions Technical Memorandum" included in Appendix C.

Comment 13-6: By severely underreporting (as does the traffic analysis) the future growth in riders without the project (the No Build Scenario), the DEIS gives Atlantic Yards an unrealistically generous margin of available subway capacity for added project trips. (54)

The DEIS assumes an annual growth of subway ridership of only 0.5% per year, the standard citywide for background growth in average times. NYC Transit Subway and Bus Rider Surveys report average weekday subway entries has grown in the last five (pre-boom) years at close to 2% a year from Brooklyn outside Downtown, and in 2004 to 2005 began an upward trajectory of 3.3%, which averages 3% for all Brooklyn. (24, 54)

The DEIS underestimates the future transit demand by ignoring recent trends. The DEIS used an annual "background growth rate" of 0.5 percent in estimating future demand, which translates to a cumulative growth rate of less than 13 percent by the year 2030. This appears to significantly underestimate transit demand given an examination of

growth in subway ridership over the last 10 years. If demand for peak subway travel is just a bit higher than what's forecasted by the DEIS, subway and platform crowding during peak times could be a real problem. (102, 324)

Because of all of the new development in Downtown Brooklyn, we should continue to see an annual subway growth rate of at least three percent a year for at least the next ten years. This would add thirty percent growth to passengers entering Downtown Brooklyn, thirty percent, not the five percent you assumed in the DEIS. This is a major flaw. (24)

It is not reasonable to assume a 0.5 percent growth rate for the No Build scenario, especially for the Atlantic Avenue Subway Station. In the DEIS, Table 13.3 shows that turnstile counts increased 12 percent in 2005 and 13 percent the previous year so the actual historical growth rate at this stage of ridership is 24 times greater than the growth rate assumes in the DEIS. (24, 299)

Within the study area, the DEIS reports that subway usage increased a staggering 16 percent from 2003 to 2005. Yet the DEIS ignores this historical rate of growth in its forecasts of future trends. (102)

Recent ridership trends indicate higher than anticipated future growth. (126)

Response 13-6:

The transportation analyses in the DEIS assume a 0.5 percent per year background growth rate for travel demand during the 2006 through 2016 period. This is the growth rate recommended in the 2001 *CEQR Technical Manual* to account for background increases in travel demand for Downtown Brooklyn. However, it is important to note that in addition to this background growth, the transportation analyses in the DEIS also reflect the anticipated travel demand from a total of 33 discrete No Build developments in Brooklyn, comprising approximately 6,281 dwelling units, 5.19 million sf of office space, 1.14 million sf of retail space and 2.43 million sf of other space (community facility, academic, hotel, court, etc.). These developments were selected for inclusion as discrete No Build sites based on their size, completion date and proximity to the project site, and include three recent developments not reflected in the DEIS but that have been added to the FEIS analyses. Several developments were included at the request of NYCDOT which was consulted in developing the list of No Build sites. The estimates of future travel demand used for the DEIS transportation analyses therefore reflect not only a 0.5 percent per year background growth rate, but the demand that would be generated by much of the development reasonably likely to be developed in and around Downtown Brooklyn by 2016.

- Comment 13-7:** When the correct No-Build numbers are inserted, every subway line in the DEIS is well over capacity. In 2004, the MTA told us that the Downtown Brooklyn subway stations are at saturation. So how do we make this project work now that we have more accurate numbers? The MTA must upgrade their switching system and expand the rail yards to allow for more trains throughout the City. At least one new subway line must be created that will serve Downtown Brooklyn. (24)
- The DEIS doesn't account for building projects already underway along the Flatbush and 4th Avenue corridors that also rely on public transport. (425)
- Response 13-7:** The transit analyses in the DEIS considered all development that is likely to occur in and around Downtown Brooklyn through the 2016 analysis year, and included a 0.5 percent per year growth rate to account for smaller projects and general background growth, consistent with the growth rate recommended for Downtown Brooklyn in the *CEQR Technical Manual*. The upgrading of the subway switching system, the expansion of subway rail yards, and the creation of a new subway line to serve Downtown Brooklyn are all beyond the scope of this project.
- Comment 13-8:** The subway planning model that NYC Transit maintains should be made available for the DEIS. Alternately, the NYMTC transit model should be used, recalibrated with the latest Brooklyn data and the elimination of an arbitrary job and population growth ceiling for each borough. (43, 54)
- Response 13-8:** The forecast and assignment of future transit demand used for the EIS analyses is based on accepted industry standards and criteria, reflects the proposed project's location near Downtown Brooklyn and its accessibility by transit, and was developed in consultation with both the MTA and NYCDOT.
- Comment 13-9:** Tighter frequencies on subway lines will result in severe congestion due to constraints on existing signal systems. (457)
- In order to increase the number of trains on the lines going through the Atlantic Terminal, the existing fixed-block automatic signal system would have to be replaced with an advanced moving-block system, such as Communications-Based Train Control (CBTC). (470)
- MTA officials have stated that our subways are currently running at full capacity, and the current system does not allow for more frequent runs. Is Mr. Ratner paying for a new signal system for the entire MTA? (57)
- Response 13-9:** As discussed in Chapter 13, "Transit and Pedestrians," of the DEIS, all subway routes would continue to operate with available peak direction

capacity in each peak hour with development of the proposed project. Increasing the frequency of subway service is identified as a way to address potential platform crowding at the Atlantic Avenue/Pacific Street subway station complex during the weekday 10-11 PM and Saturday 4-5 PM post-game peak hours. During these periods, subway service is typically less frequent than during commuter peak periods, and increased frequencies could be accommodated within the capacity limits of the existing signal system. Signal upgrades are not required to mitigate any adverse impact associated with the project.

Comment 13-10: The DEIS fails to measure the time period that would likely generate the greatest amount of transit demand. (102)

Response 13-10: As discussed in the EIS, the analyses of subway station conditions include the AM and PM commuter peak hours, and the weekday 7-8 PM pre-game peak hour when new demand at stations serving the project site would be highest. Although the proposed project would generate a higher level of new demand during the weekday 7-8 PM pre-game peak period (on days when a basketball game is scheduled), overall demand on the subway and local bus systems is typically lower during this period than during the commuter peak hours. Therefore, the analyses of subway line haul and local bus conditions focus on the weekday 8-9 AM and 5-6 PM commuter peak hours when overall demand on these systems is typically highest.

Comment 13-11: The DEIS estimates that the project would add 1,100 additional subway riders in the AM peak. But there will be 6,900 residential units, and we have to assume that there will be more than one person living in those apartments. So if we assume 12,000 new residents, then your number of 1,100 cannot be correct. (24)

Response 13-11: The reference to the 1,100 additional subway riders is unclear. As shown in Table 12-28 in the FEIS, it is estimated that the proposed project's commercial variation would generate 5,402 new subway trips in the AM peak hour (4,248 under the project's residential variation).

Comment 13-12: The current MTA Capital program will not add to the subway fleet serving Brooklyn, and given the oft-reported budget crunch facing the MTA, it's far from certain that the agency's 2009 to 2014 Capital program would do so either. (102)

Events at the arena will result in gridlock in the streets and a crush of people on public transportation at a time when the MTA may be acting on their recently proposed reduction in service due to budget shortfalls. (116, 484)

The cost of needed expansion of service should be included in the EIS. Following the recent announcement by the MTA that subway service will be cut back, supplemental analysis is needed. (180)

Analysis of the project's impact on bus crowding and waits does not account for pre-approved MTA bus service cuts. Under the new standards, buses will move from a standard of carrying an 80 percent seated load to a standard of carrying a 125 percent at the most crowded point on a route. (126)

Response 13-12: Expansion of the subway fleet and other issues related to funding of major capital improvement projects under the MTA Capital program has not been assumed in the DEIS transit analysis. NYCT currently has no plans to reduce service and will continue to monitor and adjust service as required and feasible.

Comment 13-13: Though the DEIS uses Nets games as worst-case scenario, arena capacity for concerts will be 20,500 seats from 2,500 and 14 percent greater than the capacity for basketball. Many of these can be expected to sell out. So it's possible that the worst-case scenario scene outlined in the DEIS understates the true worst-case scenario. (102)

Response 13-13: A Nets basketball game with an arena capacity of 18,000 was selected as a reasonable worst case scenario based on both the frequency of home games and the relatively high level of travel demand that such games are expected to generate compared to most other uses. For the largest concert or other events, additional space for seating could be available on the arena floor. However, such non-basketball events (concerts, ethnic shows, general fixed fee rentals, religious/motivational shows, other sporting events, family shows and community events), are each expected to occur with less frequency, would often attract fewer spectators, and would likely generate a lower level of travel demand than a Nets basketball game. In addition, when such factors as technical production requirements (stage size and placement, backdrop pieces, camera platforms, lighting, etc.), sightline restraints, and space requirements for wheelchair seating are accounted for, the actual capacity for most events at the arena would be less than the 18,000-seat capacity for a Nets basketball game. While there is the potential for additional seating capacity for non-game events (to 19,925 seats if wheelchair seating is replaced by regular seating), ADA accessibility, production equipment, and line of sight, operational and staging requirements would in almost all instances limit attendance at non-basketball events to well under 18,000. Non-game events are expected to attract fewer spectators than basketball events, with attendance ranging from 5,000 persons to 15,000 persons.

Comment 13-14: Would the subway platform be unsafe on game days due to overcrowding?

The DEIS does not provide sufficient data to substantiate the claim that, “crowding from the platforms at the Atlantic Avenue/Pacific Street Subway Station complex is not expected to be problematic.” An additional study needs to confirm this claim with more rigorous analysis. (24, 214, 299, 393)

No one seems concerned about the predicted “severe crush loads” on seven subway lines, or the inadequate capacity of platforms to handle post game commuters or the lack of lawful emergency evacuation plans. (55, 234)

The EIS should demonstrate that the surges of crowds before and after arena events will not create hazardous conditions on subway platforms, stairways, and escalators. (111, 226)

Overcrowding in our subways and trains now in rush hour are ignored in the document. The document ignores the current crushed conditions. (26, 179)

The staircases at the Atlantic Avenue/Pacific Street subway station are narrower than the old ones and at certain points on the platform the clearance is minimal and dangerous. With the additional residents of the proposed project, the subway traffic will be rush hour for many hours outside of rush hour. (214)

The Atlantic Avenue/Pacific Street subway station complex cannot accommodate the numbers of people that would be using it. (324, 519)

Response 13-14: As discussed in detail in Chapter 13, “Transit and Pedestrians,” of the EIS, the new on-site entrance and internal circulation improvements proposed at the Atlantic Avenue/Pacific Street subway station complex would be adequate to accommodate new project-generated demand at acceptable levels of service during periods of peak demand in both 2010 and 2016, as would existing analyzed stairways and fare arrays at this facility. All analyzed stairways and fare arrays at the Bergen Street IRT, Fulton Street IND, and Lafayette Avenue IND subway stations would also continue to operate at acceptable levels of service in the future with the proposed project. The proposed project is also not expected to result in significant adverse impacts to subway line haul conditions in Downtown Brooklyn under CEQR criteria. During the weekday 10-11 PM and Saturday 4-5 PM post-game periods, when surges of subway trips generated by an event at the arena would be arriving on the subway platforms, the potential may exist for crowding on the platforms at the Atlantic Avenue/Pacific Street subway station complex under certain post-game conditions. Such crowding, if it were to occur, would

constitute a significant adverse impact, which would be addressed by providing additional subway service (i.e., more trains) during post-game periods.

Comment 13-15: The DEIS calls the project transit-oriented development, but no new transit is provided, nor does it foster connections between the workplace and the residents - the two criteria the City has used in the past to define transit-oriented development. (50)

Though the applicant boasts that Atlantic Yards is an example of “transit oriented development,” no additional surface mass transit is proposed, nor is any additional rail transit proposed. (55, 206)

Response 13-15: Providing a new transit service is not necessarily a requirement for being considered a transit-oriented development (TOD). Many TODs take advantage of existing transit resources, as would be the case for the proposed project. The project’s design includes high density, high quality development within a 10-minute walk of a rail transit station; a mix of uses in close proximity, including residential, office retail and civic uses; improved access to transit via the proposed new Urban Room entrance; improvements to the pedestrian environment including substantial new open space and widened sidewalks and high visibility crosswalks; and features to facilitate the use of bicycles for daily transportation needs including new off-street bike paths and a bicycle station with secure, indoor parking for up to 400 bicycles in proximity of the arena and proposed Urban Room subway entrance. All of these design features are considered characteristics of a transit-oriented development.

Comment 13-16: The MTA should consider a trolley loop to bring people to and from the stadium. Park and ride would be a benefit. (353, 378)

The infrastructure exists to build a trolley loop. (408)

Response 13-16: The construction of a new trolley line is outside the purview of the proposed project. However, as discussed in Chapter 19 of the FEIS, as part of the proposed project’s traffic mitigation plan, a remote parking program with price incentives and free bus shuttle service for arena patrons would be established at two parking facilities on the periphery of the study area. In addition, a free charter bus service would be implemented to transport Nets fans to the arena from park & ride facilities on Staten Island.

Comment 13-17: The cost of mass transit should be built into the price of a game ticket and ticket-holders should receive transit tickets with their game tickets. (23)

Response 13-17: As discussed in Chapter 19, “Mitigation,” of the EIS, a transit fare incentive program would be implemented as part of the proposed project’s traffic mitigation plan. Under this fare incentive program, a free round-trip subway fare would be provided to Nets ticket purchasers, targeted to auto-oriented trips in areas accessible by mass transit.

Comment 13-18: On game nights there should be a free ferry service between the arena area and New Jersey. There should also be a free shuttle from the ferry terminal to the arena. (23, 43)

Response 13-18: Ferry service between the arena and New Jersey would not be effective due to the distance between the arena site and the ferry landing at the foot of Old Fulton Street (approximately two miles) and the availability of other transit modes. It should also be noted that under the proposed project’s traffic mitigation plan, free charter bus service would be provided to shuttle arena patrons between the arena and park & ride lots on Staten Island. As discussed in Chapter 19 of the FEIS, this service is also expected to be utilized by some residents of neighboring areas of New Jersey.

Comment 13-19: All New York City Transit 5-trains should go to Brooklyn during game days to increase ridership. (23)

Response 13-19: Increased weekday evening operation of subway service to Brooklyn and increased weekend service are recommended under the proposed project’s traffic mitigation plan. Such increases in service would be subject to review and approval by the NYCT.

Comment 13-20: While the commercial mixed-use variation would generate the most trips during the weekday peak periods, the residential mixed-use variation would generate the highest number of transit trips leaving the site during the AM peak period. This is supported on Page 13-87 of the DEIS. Therefore, transit conditions (especially peak loading) should be evaluated for the residential mixed-use scenario during the weekday peaks. (95)

Response 13-20: Prior to the issuance of the DEIS, a screening analysis was performed to determine the potential for significant adverse impacts from the project’s residential mixed-use variation. For this analysis, AM and PM peak hour project-generated subway trips from the residential mixed-use

variation were assigned to subway routes serving the project site, and all were assumed to pass through the maximum load point on each route in the peak direction, regardless of the actual direction of travel. Even under this maximum worst case condition, the residential mixed-use variation would not result in a capacity shortfall on any subway route in the AM or PM peak hours. No significant adverse impacts to subway line haul conditions are therefore anticipated under the proposed project's residential mixed-use variation in either of these periods.

Comment 13-21: There should be a LIRR link to Lower Manhattan from the Atlantic Terminal Station. (218)

Response 13-21: Providing a new LIRR link to Lower Manhattan from the Atlantic Terminal station is beyond the scope of this project.

Comment 13-22: It is unlikely that arena attendees would want to use public transportation because of safety concerns. How would people who live in Marine Park, East Flatbush, Gerritsen Beach, Brownsville, Sunset Park, East New York, Starrett City, or Cypress Hill get home from an event without having to wait up to 40 minutes for a subway and then another half hour on a dark street for a bus which may or may not take you close to your home? (349)

The assumption that everyone will take mass transit to the arena simply because there are several subway lines located nearby seems quite naïve. About one quarter of Brooklyn isn't served by any subway route (the southwest portion, including such neighborhoods as Marine Park) and the northernmost neighborhoods (Greenpoint, Williamsburg, and Bushwick) are only served by the J/M/Z and L trains that don't go anywhere near the proposed areas. (236)

Response 13-22: The mode split assumptions used to forecast travel demand from the proposed arena reflect the anticipated origin/destination distribution of arena spectators and the accessibility of the arena site by transit. As reflected in Appendix C of the DEIS, the planning assumptions used in the transportation analyses assumed a substantial auto share from Brooklyn.

Comment 13-23: The DEIS takes no account of the likelihood of "smart cards" which would eliminate swiping and most of the delay at turnstiles. (54)

Response 13-23: The implementation of "smart card" technology would likely result in a higher capacity for each subway turnstile. However, the analyses of subway station impacts in the EIS take a conservative approach by not assuming the implementation of such technology.

Comment 13-24: The justification for dense development around transit hubs cannot be used for this site because while there is ample transit there is insufficient spare capacity to support even a development of half this scale. (180)

Response 13-24: As demonstrated by the detailed quantitative analyses in the DEIS, with the exception of one bus route (the B38 in the AM peak hour), subway stations and subway and bus routes serving the project site would have sufficient capacity to accommodate project-generated demand.

Comment 13-25: The regular commuter crush lasts from 5-8 PM and sometimes beyond. (312)

The DEIS claim that arena and commuter traffic do not overlap is absurd. (590)

The DEIS defines 7-8 PM as the pre-game subway peak hour, and 5-6 PM as the evening commute subway peak. However, Nets games currently begin at 7:30 PM, suggesting that many subway trips to the arena would take place and/or begin during the 6-7 PM hour, where they will be added to still-significant evening commute demand. (126)

Response 13-25: In addition to the 8-9 AM commuter peak hour, the subway analyses in the EIS examine conditions during the 5-6 PM commuter peak hour and the 7-8 PM peak hour for trips en route to a Nets game at the arena. As discussed in Chapter 12 of the EIS, Nets games typically start at 7:30 PM or 8 PM, and a 7-8 PM peak hour was therefore selected for the analysis of the weekday pre-game condition as it is during this period that residual commuter demand and peak demand en route to a basketball game or other event at the arena would most likely overlap. For example, survey data from Madison Square Garden reported in the August 26, 2003 *Madison Square Garden Modal Split Analysis* study (Sam Schwartz LLC) indicate that for a weekday Knicks basketball game with a 7:30 start time, approximately 71 percent of fans arrive during the 7-8 PM hour, with 42 percent arriving between 7 PM and 7:30 PM, and 29 percent arriving between 7:30 PM and 8 PM. By contrast, only 19 percent of fans were found to arrive between 6:30 PM and 7:00 PM. (It should be noted that for the proposed project's travel demand forecast, a conservative 75 percent of Nets fans were assumed to arrive at the arena during the 7-8 PM peak hour.)

Comment 13-26: The comparison of the Atlantic station to Madison Square Garden is unrealistic. The Atlantic station has no large open areas for crowd management but rather a series of narrow stairways and corridors that are even now overloaded during rush hours. Dumping thousands of

arena attendees into this single station will create unmanageable situations. (461,590)

Response 13-26: As described in detail in the DEIS, the proposed project would include a major new on-site entrance and internal circulation improvements at the Atlantic Avenue/Pacific Street subway station complex to accommodate new demand from the proposed project. This new entrance would be located in a large, at least 10,000-sf publicly accessible atrium (the “Urban Room”) at the southeast corner of Flatbush and Atlantic Avenues that would provide a place for people to congregate.

Comment 13-27: Residents in Bay Ridge will be affected by the proposed project. Will the project increase R train service and create an express N stop at 95th Street. (352)

Response 13-27: Neither an increase in R train service nor the creation of an express N stop at 95th Street are included as part of the proposed project. The DEIS transit analysis does not indicate that service in Bay Ridge would be adversely impacted as a result of the proposed project.

Comment 13-28: All data in the analysis is post September 11, 2001, and may not actually reflect changes in LIRR transfers at Atlantic/Pacific Stations once the WTC is fully operational again. An analysis of the percent of transfers from the LIRR to each of the Atlantic/Pacific Street stations pre- and post-September 11 should be conducted. NYCTA and LIRR collect this data. (37)

Response 13-28: A comparison of the numbers of LIRR-subway transfers at the Atlantic Avenue/Pacific Street subway station complex pre- and post-September 11, 2001 would not necessarily be indicative of the future numbers of such transfers as redevelopment of the World Trade Center site progresses. Factors other than the loss of the World Trade Center have affected LIRR ridership through Atlantic Terminal in subsequent years.

Along with the estimated demand from a substantial amount of new development projected to occur in and around Downtown Brooklyn through 2016, the subway analyses also assume a 0.5 percent per year growth rate to account for background growth, including long-term increases in demand attributable to developments outside of the project’s study area.

Comment 13-29: New trips entering the Bergen Street Station will add cumulatively to the additional new trips on the No. 2/3 subway lines at Atlantic Avenue. This adds to the overcrowding already experienced on these lines. (37)

Response 13-29: The analysis of 2010 and 2016 Build subway line haul conditions includes trips from the proposed project that would board or disembark Nos. 2 and 3 trains at the Bergen Street station.

Comment 13-30: The peak load point on the No. 2/3 subway line is Clark Street and Borough Hall for the 4/5. Though there may be room for the additional passengers at Atlantic Avenue, the cumulative effect on the next few stations down the line may make it impossible for those passengers at the peak load stations to get onto trains. The already tight headways between trains leaves out the possibility for any additional service to be added. This accumulation effect is not limited to the IRT; some of the BMT lines also have this same issue. (37)

Response 13-30: The commentor is correct that the maximum load point for Manhattan-bound Nos. 4 and 5 trains is at Borough Hall in the AM peak hour, however based on NYC Transit data, the maximum load point for Manhattan-bound Nos. 2 and 3 trains in the AM is at Atlantic Avenue as reflected in the subway line haul analyses in the EIS. As demonstrated in these analyses, all subway routes (IRT, BMT and IND) serving the project site would continue to operate below capacity in the peak direction in the AM and PM at their maximum load points in the 2016 Build condition.

Comment 13-31: When developing the passenger loadings for the No. 3 train, the DEIS was using a 10-car train configuration. Due to constraints at 148th Street, the No. 3 runs 9-car trains. Therefore, these estimates have to be adjusted. (37)

Response 13-31: The comment is incorrect. No. 3 trains currently operate with a 10-car configuration.

Comment 13-32: The DEIS projects that most bus routes serving the project would generally operate below available capacity, but it makes no mention of bus speed. With the projected significant adverse traffic impacts outlined in the DEIS, the B63 route will get even slower, as will many others surrounding the project site. (102, 470)

The project's impact on bus speeds must be studied. (126)

Past experience has shown that the MTA/TA has been very slow when it comes to adjusting services to meet increased demands. Even if that were not the case, the question is whether it is even possible to offer increased service. Any additional busses will simply become an additional congestion factor in an already aggravated situation. (457)

The DEIS proposes more buses as mitigation for the slowdown in service. Unfortunately, the DEIS fails to acknowledge that additional buses would worsen congestion and compound the problem. (102, 126)

Buses in Brooklyn are inadequate and impossibly slow. Adding more buses seems the logical solution, but it will slow down car traffic. (168, 460, 461)

Response 13-32: As discussed in the DEIS, traffic congestion and significant adverse traffic impacts were identified in both 2010 and 2016 at a number of intersections along corridors used by local bus routes including Atlantic, Flatbush, 4th and Vanderbilt Avenues, and Dean and Bergen Streets. Although the proposed project's traffic mitigation plan would address many of these impacts, delays to bus travel may still occur, primarily on routes operating in the vicinity of the arena during the pre- and post-game peak periods on days when a Nets game is scheduled. Additional buses may therefore be needed during these periods to maintain the current headways and service schedules. With implementation of the proposed project, NYCT will evaluate actual field conditions and adjust bus service frequency to meet its service criteria, within fiscal and operating constraints. Any such increase in bus service frequency, likely amounting to one or two buses per hour on any one route, would be relatively insignificant with respect to increased congestion compared to the overall numbers of vehicles traversing the study area.

Comment 13-33: In contrast to the high bus use in Downtown Brooklyn now and in the Downtown Brooklyn Rezoning FEIS, only 157 inbound riders (2 percent) are expected to be added to the 11 bus routes that come into Downtown Brooklyn in the AM, and just 110 (1 percent) to take the reverse trip in the 5-6 PM hour, and just 407 pre-game (3 percent), with no appreciable effect on available capacity according to the DEIS. Using historic growth patterns of each line, the addition of Atlantic Yards bus trips will put 7 out of 10 bus lines over capacity. (54)

Bus ridership gets short shrift in the DEIS compared to the Downtown Brooklyn Rezoning FEIS. (55)

Response 13-33: The mode choice assumptions used to forecast bus trips generated by the proposed project's non-arena components are similar to those used for the analyses in the *Downtown Brooklyn Development FEIS*, which were developed in consultation with NYCDOT and NYCT. As discussed in the DEIS, the mode choice assumptions for the arena reflect the anticipated origin/destination distribution of arena spectators and the accessibility of the arena site by bus and other modes of transit. Overall, in 2016 the proposed project would generate an estimated 413 bus trips in the AM peak hour, 699 in the PM peak hour and 525 in the

weekday 7-8 PM pre-game peak hour. The analyses of local bus conditions reflect those project-generated bus trips that are expected to pass through the maximum load point in the peak direction on each route.

Comment 13-34:

A bus rapid transit program should be implemented on Atlantic Avenue. (23)

The rapid and high-frequency bus service along Flatbush Avenue should be fully designed into the project, and the drive-up auto/taxi access be re-routed and restricted to smaller streets such as 6th Avenue and Dean Street, or scrapped. (102, 126, 393)

No mention is made of bus advances under study, like Bus Rapid Transit. (54, 135, 314)

Drop off lanes could hinder NYCDOT's implementation of Flatbush Avenue Bus Rapid Transit. The EIS doesn't consider how the Flatbush Avenue drop-off lane is supposed to mesh with the current NYCDOT/NYCT effort that is considering a bus rapid transit line on Flatbush Avenue. (102, 126)

Bus lanes on Flatbush and therefore bus service to and from the project site will be significantly disrupted by taxi, limousine, and car traffic pulling across it to the planned drop-off area. The need for drop off lanes is not made clear in the DEIS and the one on Flatbush should be removed. (126)

One of the routes discussed for bus rapid transit in Brooklyn is Flatbush Avenue. At a minimum, bus-only lanes need to be established and enforced in the Atlantic yards area, especially on Fulton Street, Livingston Street, and Flatbush Avenue. (470)

The FEIS should analyze the implementation of a peak hour bus lane along Flatbush Avenue between Grand Army Plaza and Livingston Street, similar to the one currently on Livingston Street. Accordingly, the Bus Rapid Transit (BRT) study consideration of corridor improvements in this section of Flatbush Avenue should be accelerated. (12)

Response 13-34:

NYCDOT and MTA have recently proposed implementation of a pilot bus rapid transit program that would include implementation of a route in Brooklyn along Nostrand, Bedford and Rogers Avenues that does not traverse the project's study area. Though studied, there are no present plans to implement a pilot bus rapid transit program along Flatbush Avenue.

The proposed project, including the proposed lay-by lanes adjacent to the arena block, is not expected to preclude the installation of bus rapid transit lanes or stops should they be considered in the future. The purpose of the proposed lay-by lanes adjacent to the arena block is to provide space for bus stops and curbside pick-up and drop-off activity that would be generated by the arena and other proposed uses on the block. Sidewalks would be set back to create these lanes, thereby maintaining, and in some cases increasing the throughput capacity of the roadway. For example, the proposed lay-by lane along Flatbush Avenue would allow for three northbound travel lanes to be maintained at all times, whereas at present, curbside parking reduces northbound Flatbush Avenue to two travel lanes in all but the AM peak hour. There are currently no specific plans to implement bus lanes along Flatbush Avenue or additional bus lanes on Fulton Street in the vicinity of the project site. However, both curb lanes along Livingston Street in Downtown Brooklyn are currently designated as bus lanes, with the north (westbound) curb lane restricted to buses during the 7 AM to 10 AM period and the south eastbound lane similarly restricted to buses during the 4 PM to 7 PM period.

Comment 13-35: The subway line haul analysis shows that the expected increase in ridership from the proposed project could be accommodated with unused capacity in the existing service. However, the analysis does not reflect the numbers of subway trips at study area stations shown in Tables 13-22 and 13-42 of the DEIS. (470)

Response 13-35: Tables 13-22 and 13-42 show the total numbers of peak hour subway trips that would be generated by the proposed project at study area subway stations. However, as discussed in the DEIS, given the project site's location outside of the Manhattan CBD and the anticipated directions of travel for project-generated trips in each peak period, it is anticipated that the majority of this new demand would not occur at the maximum load points in the peak direction of travel. Overall, it is estimated that approximately 34 percent of peak direction subway trips generated by the proposed project in 2016 would occur at the maximum load points on routes serving the project site in the AM peak period, and 31 percent in the PM peak period. This is reflected in the line haul analyses which examine conditions at the maximum load points.

Comment 13-36: The project sponsor should study the feasibility of implementing the following to relieve pressure on the lines going through Atlantic Terminal: additional trains and signal improvements on the 8th Avenue-Fulton (A, C) line; express service and signal improvements on the Culver (F) line from Kings Highway to Jay-Street Borough Hall and

West 4th Street via the Rutgers Tunnel; and restoration of 6th Avenue-Broadway service via the Williamsburg Bridge. (470)

Response 13-36: As indicated in the DEIS, and in the response above, there is adequate line haul capacity to accommodate projected demand in the future with the proposed project. The suggested measures listed in the comment would not be necessary to address any significant adverse impacts and would be well beyond the scope of the proposed project.

Comment 13-37: The proposed project would add demand to the platforms at the 7th Avenue BMT B/Q station. This station should be included in the analyses. (481)

Response 13-37: As discussed in the DEIS, the proposed project would include a major new on-site entrance and internal circulation improvements to the Atlantic Avenue/Pacific Street subway station complex, including the Atlantic Avenue BMT B,Q station. Most project-generated subway trips on B and Q trains are expected to utilize this new on-site entrance which would be located immediately adjacent to the arena. In addition, compared to the 7th Avenue BMT station, the Atlantic Avenue BMT station is one stop closer to Manhattan, the destination for much of the peak period commuter demand that would be generated by the proposed project's residential components. The *CEQR Technical Manual* typically requires a detailed analysis of a subway station when the incremental increase in peak hour trips totals 200 persons per hour or more. No such detailed analysis was performed for the 7th Avenue subway station because the proposed project is not expected to add appreciable numbers of trips to the station.

Comment 13-38: Downtown Brooklyn subway stations currently without transfer capacity need improved connections to support anticipated growth. One option is to provide a Hoyt Street Connector to and from the Hoyt Street 2 and 3 station and the Hoyt-Schermerhorn A, C and G station. This passageway is one alternative to provide the missing connection between the two stations in Downtown Brooklyn. It would also provide a means for G train riders to transfer to the 2 and 3 trains for direct access to the "Urban Room." The proposed passageway would connect and widen the Livingston Street entrance of the Hoyt-Schermerhorn station with the Hoyt Street station on Fulton Street, or use the closed corridor to Macy's Department Store. (12)

Response 13-38: As noted in the FEIS, the project site would be accessible by C train via the Lafayette Avenue IND and Clinton-Washington Avenues IND stations, and by G train via the Fulton Street IND station. All three of these stations are less than ¼-mile from the project site. While a new

two-block-long passageway connecting the Hoyt Street IRT and Hoyt-Schermerhorn Streets IND stations would provide another option for IND subway riders en route to the project site, it is not necessary to mitigate a significant subway impact due to the proposed project.

Comment 13-39: With regard to the Long Island Rail Road, the DEIS does not discuss operating improvements for LIRR services between Jamaica and Flatbush Terminal. The FEIS should consider LIRR train frequency. (12)

Response 13-39: The LIRR schedule is discussed in Chapter 13, “Transit and Pedestrians” of the DEIS. The DEIS concludes that there would be sufficient capacity to accommodate project demand.

Comment 13-40: Over the last 35 years, the MTA has made significant strides in improving access for the elderly and physically-challenged, including making all buses ADA compliant, and developing its Key Station Plan to make 100 NYC Transit subway stations ADA compliant by 2020. The Atlantic Avenue/Pacific Street station complex is a Key Station that is currently ADA-compliant. However, wheelchair bound subway riders going to Atlantic Avenue station are advised to be in the 6th car on the 4, 5 trains. Therefore, 2 and 3 train riders are advised to change to the 4, 5 train at the Nevins Street Station. The FEIS should analyze improvements for handicapped elevator access from the platform. (12)

Response 13-40: All of the platforms at the Atlantic Avenue IRT station are currently accessible to the mobility impaired via elevators that connect each platform to the existing concourse below the northern end of the station. The proposed Urban Room subway entrance would include a new ADA elevator from street level to a new control area at the south end of the station. From this location, an ADA-compliant ramp would provide direct access to the Manhattan-bound 2,3 platform from where mobility impaired passengers would then have access to other platforms via elevators to the existing concourse.

Comment 13-41: The FEIS should examine the creation of a thru-ticketing arrangement for LIRR riders which enables them to pass through the paid zone for the subway to reach the Urban Room without payment of a subway fare. Otherwise, project generated trips via the LIRR would be required to use the existing entrance to LIRR’s street level concourse on Flatbush Avenue. (12)

Both a through-ticketing arrangement for LIRR riders and a connection between the Hoyt Street and Hoyt-Schermerhorn Streets subway

stations would require re-evaluation of proposed Urban Room escalators E1 and E2. (12)

Response 13-41: MTA NYC Transit has indicated that a through-ticketing arrangement for game days is not feasible with current MetroCard technology. In addition, it would not be practical to physically separate LIRR passengers walking through the paid area from subway passengers due to space and circulation constraints within the station. For the purposes of the traffic and pedestrian analyses in the DEIS, it is assumed that all of the LIRR demand would occur on sidewalks and crosswalks connecting the project site with street-level entrances to the LIRR's Atlantic Terminal.

Neither a new connection between the Hoyt Street and Hoyt-Schermerhorn Streets subway stations nor a through-ticketing arrangement for LIRR passengers is contemplated as part of the proposed project, nor are they required as mitigation or otherwise under consideration by NYC Transit.

Comment 13-42: The State is presently studying the possibility of operating LIRR trains from JFK Airport and from various points on Long Island to lower Manhattan, with the use of our rapid transit facilities as a serious option, further taxing rapid transit services in Downtown Brooklyn. (457)

Response 13-42: The proposed service between JFK International Airport and lower Manhattan via Downtown Brooklyn is still in the preliminary planning stage and is subject to its own environmental review.

PEDESTRIANS

Comment 13-43: This EIS is not sufficient to move forward because there is no credible traffic pedestrian model here that shows the results of intersections and mapping of one way and two lane traffic, closed crosswalks, community rooms, street crossings, et cetera. (26)

There is no serious plan to create an environment that improves conditions for pedestrians who would have longer waiting times and still face multiple dangerous intersections. (202, 241, 262, 527, 563)

Response 13-43: The EIS includes detailed pedestrian level-of-service analyses for key sidewalks, corner areas and crosswalks in the vicinity of the project site. These analyses reflect street closures and changes in street direction proposed as part of the project or as project mitigation. As described in detail in the EIS, the proposed project would incorporate a range of measures to improve the pedestrian environment including wider sidewalks, new high visibility crosswalks and lighting, the elimination

of some conflicting vehicular movements, a new all pedestrian signal phase at the Flatbush Avenue/4th Avenue intersection, shortened crossing distances at certain locations, and a major new on-site entrance to the Atlantic Avenue/Pacific Street subway station complex which would eliminate the need for subway riders to negotiate the Atlantic Avenue/Flatbush Avenue intersection, or cross Atlantic Avenue at other locations.

Comment 13-44: The width of sidewalks in the immediate vicinity of the arena should be tested for adequate pedestrian level of service. (111)

Streets should be narrower. (218)

Response 13-44: The DEIS includes detailed level of service analyses for all key sidewalks, crosswalks and corner areas on the project site, including all sidewalks adjacent to the arena. As demonstrated in the analyses, all sidewalks adjacent to the arena would operate at acceptable levels of service in all analyzed peak hours. Narrower streets were typically not considered for inclusion as part of the proposed project or its mitigation due to the need to accommodate heavy flows of vehicular traffic in the vicinity of the project site. However, the arena and other buildings on the project site would be set back to provide for sufficient sidewalk space to accommodate the anticipated pedestrian demand.

Comment 13-45: The amount of “red” time for traffic lights should be increased in the project area to give pedestrians more time to cross the street. (23)

Response 13-45: Traffic signals in the study are typically timed to optimize traffic flow while also providing sufficient time for pedestrians to cross streets. Allocating additional time to one phase or another to give pedestrians more crossing time would in many cases adversely affect traffic flow and progression between intersections. The proposed project’s traffic mitigation plan does, however, include the introduction of an all pedestrian phase at Flatbush and 4th Avenues as part of a total reconfiguration of the Atlantic/Flatbush/4th Avenue intersection.

Comment 13-46: The EIS does not account for pedestrians from other projects. (234)

Response 13-46: Pedestrian trips from discrete No Build developments in the vicinity of the project site, such as Atlantic Center and the redevelopment of the Williamsburgh Savings Bank building, were accounted for in the No Build and Build pedestrian analyses, in addition to a 0.5 percent per year growth rate to account for smaller developments and background growth.

Comment 13-47: The DEIS focuses only on potential safety improvements in close proximity to the project, but ignores the contribution of Atlantic Yards' traffic to growth in traffic and pedestrian volumes within the larger approach area and their impact on both vehicular accidents and pedestrian safety. (54)

The FEIS should include a pedestrian/traffic safety study, consistent with any applicable CEQRA/SEQRA thresholds for each intersection that has an increase in pedestrian and bicycle volumes attributable to this project, including those not currently disclosed. (12)

Response 13-47: The DEIS examines accident and safety issues at a total of 20 intersections in the vicinity of the project site. It is at these intersections where new vehicular, pedestrian and bicycle trips generated by the proposed project are expected to be most concentrated, and where the potential for increased conflicts between these modes would be greatest. The analysis focuses on those intersections with relatively high accident rates (such as Atlantic/Flatbush Avenues and Atlantic/Vanderbilt Avenues), as well as locations where the proposed project would alter traffic flow patterns (Flatbush Avenue/Pacific Street, for example). Traffic, and especially pedestrian flows generated by the proposed project, become increasingly dispersed with increasing distance from the project site. The potential for increased vehicle and pedestrian conflicts from these new trips would therefore also be lower at intersections more distant from the project site.

Comment 13-48: Eliminating crosswalks to accommodate proposed new traffic flow around the site will lead people to jaywalk across the eliminated crosswalks, resulting in increased crashes. (54)

Response 13-48: As described in the EIS, at locations where it is proposed to remove a crosswalk, such as on Atlantic Avenue at 4th Avenue, decorative fencing would be installed curbside at the corners to discourage pedestrians from crossing where there is no crosswalk.

Comment 13-49: Elimination of the west crosswalk on 4th Avenue at Atlantic Avenue will force pedestrians to the center island named Times Plaza. What will be the impact of pedestrians crossing from this island, since many more pedestrians will be forced there, at the confluence of Atlantic Avenue and Flatbush Avenue where there will be a higher risk of automobile/pedestrian accidents. (24, 299)

Response 13-49: Under the proposed project's traffic mitigation plan, pedestrian space at Times Plaza would be substantially expanded to accommodate increased pedestrian flows, by incorporating the three former

northbound travel lanes on 4th Avenue. This would also essentially halve the crossing distances for pedestrians crossing 4th Avenue. Pedestrians crossing to and from Times Plaza would also benefit from a reduction in the number of conflicting vehicular movements (due to the elimination of northbound 4th Avenue traffic), and the implementation of an all-pedestrian phase signal at Flatbush Avenue/4th Avenue.

Comment 13-50: The DEIS offers no analysis of the high number of pedestrian casualties at intersections, nor does it offer any remedy.

Response 13-50: Data on annual motor vehicle accidents at 20 intersections in the vicinity of the project site are presented in Chapter 12 of the DEIS, including historical data on the numbers of pedestrians killed or injured from 2002 through 2004 at these locations. Existing and future conditions with the proposed project at high accident locations are discussed in detail in Chapter 12, "Traffic and Parking," and a range of measures to reduce the potential for vehicle and pedestrian conflicts are presented in Chapter 19, "Mitigation."

Comment 13-51: The addition of a new subway access point to facilitate pedestrian access to the arena does not facilitate access to or from any place else. Pedestrians will still be unable to across Flatbush or Atlantic or 4th Avenues without taking their lives into their hands. Indeed, the proposed development will make the situation worse. (37)

Crossing the intersection at Atlantic Avenue, Flatbush Avenue, or 4th Avenue now is hazardous. (406)

Response 13-51: As discussed in detail in Chapter 19 of the EIS, the proposed project's traffic mitigation plan would include a major restructuring of the Atlantic Avenue/Flatbush Avenue/4th Avenue intersection designed to improve traffic flow and reduce the potential for vehicle pedestrian conflicts. A new pedestrian plaza would be constructed, some pedestrian crossing distances shortened, the number of vehicular movements conflicting with pedestrians would be reduced, and an all-pedestrian signal phase would be introduced at Flatbush Avenue/4th Avenue. In addition, on days when a basketball game or other major event is scheduled at the arena, police or traffic control officers would be deployed to this and other locations during the pre-game and post-game periods to minimize conflicts between vehicle and pedestrian flows to the extent possible.

Comment 13-52: It is already difficult for pedestrians to cross DeKalb and Myrtle Avenues to get to Fort Greene Park. Not every intersection has a traffic

light. The added traffic on these two arteries will make access to the Park even more perilous. (70)

Response 13-52: The proposed project is not expected to add appreciable numbers of new vehicle trips along either Myrtle Avenue or DeKalb Avenue.

Comment 13-53: Even without the proposed project, the Atlantic Yards site is an area of high pedestrian and bicyclist fatalities and injuries, primarily because of the traffic congestion at the intersection of Atlantic Avenue and Flatbush Avenue, and the close location of a major transit hub. But with full implementation of the proposed project, there would be a 5-15 percent increase of vehicular traffic at this intersection, as well as a potential increase of up to 2,700 pedestrian trips during peak weekday hours. Unfortunately the DEIS makes no attempt to estimate the specific number of people who would be killed or injured as a result of the vast additional traffic and lack of adequate parking at or around the project site. (88)

Response 13-53: Given the substantial changes to vehicle and pedestrian flow patterns, and physical changes to the street system, any estimate of the specific number of people who would be killed or injured after implementation of the proposed project in 2016 would be highly speculative. As discussed in detail in the EIS, the proposed project incorporates a number of design elements to reduce the potential for vehicle and pedestrian conflicts, including a major new on-site entrance to the Atlantic Avenue/Pacific Street subway station complex which would eliminate the need for subway riders to negotiate the Atlantic Avenue/Flatbush Avenue intersection, or cross Atlantic Avenue at other locations. As also discussed in the DEIS, sufficient off-street parking capacity would be available either on-site or in existing parking facilities within ½-mile of the arena to accommodate all parking demand from the proposed project.

Comment 13-54: Page 12-82 deals with the possibility of accidents at the corner of Atlantic and Flatbush Avenues. It states, “overall, the combination of new vehicular traffic and substantial numbers of new pedestrian trips on the crosswalks may increase the potential for vehicle/vehicle and vehicle/pedestrian conflicts at this intersection, and thereby potentially increase vehicular and pedestrian exposure to accidents.” If traffic increases substantially, and the number of pedestrians increases substantially, doesn’t that definitely increase the potential for conflicts? It’s possible that it may not actually lead to more accidents, but doesn’t it definitely increase their potential? (102)

Response 13-54: Comment noted.

Comment 13-55: The DEIS indicates, based on parking signage, a bus route that will be going west along Pacific Street. As Pacific Street will dead end at Vanderbilt, which way will the bus turn? Northbound, to contribute to the Vanderbilt/Atlantic Avenue intersection's deadly accident rate, southbound by making a more disruptive accident-creating left hand turn? The FEIS needs to calculate the effect of this and similar bus rerouting decisions on local streets, avenues, and intersections. (107)

Response 13-55: Figure 12-4 in Chapter 12 of the DEIS incorrectly indicated a bus stop on Pacific Street west of Vanderbilt Avenue. This bus stop should have been shown on Dean Street. No new bus route is being proposed for Pacific Street. Figure 12-4 has been revised for the FEIS.

MITIGATION—TRANSIT

Comment 13-56: The project should consider more stringent measures to increase the project's mass-transit orientation, such as fewer constructed parking spaces and reduction in the extensive set of drop-off zones. (126, 168)

Response 13-56: The proposed project does include a range of measures to promote and facilitate transit usage. In addition to a new on-site entrance and internal circulation improvements at the Atlantic Avenue/Pacific Street subway station complex, the traffic mitigation plan proposed in the FEIS incorporates a comprehensive package of travel demand management strategies for Nets games that include a free-fare transit incentive program and free charter bus service from park & ride facilities on Staten Island. Although the proposed 3,670 spaces of on-site parking (reduced from 3,800 in the DEIS) are needed to accommodate project demand that would otherwise impact existing off-site parking facilities, it should be noted that a high-occupancy-vehicle (HOV) restriction of three or more occupants per car would be enforced for approximately 600 spaces of on-site arena parking for Nets games in order to discourage single and two-person auto trips. (Approximately 500 spaces of on-site arena parking dedicated to suites and premium seating would be exempt from this requirement.) The proposed lay-by lanes are needed not only to facilitate traffic flow and access to adjacent residential, commercial and arena land uses, but also to facilitate access by bus, including NYC Transit buses (which would use the lay-by lanes along Atlantic and Flatbush Avenues) and charter buses serving the Staten Island park & ride facilities.

Comment 13-57: The DEIS has incorporated several elements into the plan that will encourage use of transit for trips to and from the arena. However, the real mitigations for the impact of this and other developments in the

Downtown Brooklyn regional area can only be carried out by the state and the city. These would include improvements to the capacity of Atlantic Avenue subway (and overall transit improvements to the station), roadway/congestion pricing, traffic calming in surrounding neighborhoods, residential parking permits and other measures beyond the scope of the developer to implement. (37, 87, 452)

Response 13-57: The proposed project does include a major new on-site entrance and internal circulation improvements that would increase the capacity of the Atlantic Avenue/Pacific Street station complex. However, as noted in the comment, measures such as congestion pricing and implementation of traffic calming and residential parking permit programs in surrounding neighborhoods are beyond the scope of this project.

Comment 13-58: On the IRT Brooklyn Line, it would not be possible to terminate trains at Atlantic Ave. without severely compromising the express service running through to Utica Avenue. The Flatbush Avenue Line to the south, in which the present B and Q Lines operate, is further severely handicapped by a tunnel that was built as a two track line; its expansion to four tracks would be prohibitively expensive due to the close proximity of the IRT Lines at that point. (457)

Response 13-58: Increasing subway service to the Atlantic Avenue/Pacific Street subway station complex during weekday evenings and on weekends to help accommodate new arena and residential demand is recommended for consideration by NYCT. The specific details of any service expansion, such as where trains would terminate, would be determined by NYCT.

Comment 13-59: Page 13-47 identifies post-game crowding on subway platforms as a significant adverse impact, and proposes adding trains as mitigation. But this may be very difficult, given that the station is not near a terminus, and that changes to MTA scheduling would be required, which may be impossible given project MTA deficits. (102, 103)

Need assurances from MTA that mitigation measures such as increased subway service during the rush hours can be accommodated. (5)

Response 13-59: MTA/NYCT has indicated that providing additional trains to selected lines to address potential platform crowding at the Atlantic Avenue/Pacific Street subway station complex in the post-game periods would be operationally feasible.

As shown in the DEIS, the subway lines serving the project site would have sufficient capacity during peak periods.

Comment 13-60: The MTA should make the “City Ticket” program permanent, and extend it to event days, thus encouraging use of the LIRR to go to and from events at Atlantic Terminal. (470)

Response 13-60: As described in Chapter 19, “Mitigation,” a comprehensive set of demand management measures have been developed to mitigate traffic impacts for arena game events. City-wide programs, such as the “City Ticket” program, are beyond the scope of the proposed project.

MITIGATION—PEDESTRIANS

Comment 13-61: The mitigation provides no leading pedestrian intervals (LPI) for pedestrians. (54)

Response 13-61: The introduction of leading pedestrian intervals (LPI) was considered in developing the project’s traffic mitigation plan, but was generally found to be infeasible as it would often necessitate reducing green time for traffic movements that are already projected to be congested or subject to queuing in one or more peak hours. As discussed in Chapter 19, “Mitigation,” of the DEIS, the introduction of an LPI was considered for the intersection of Atlantic and Vanderbilt Avenues, but was found to be infeasible for this reason. Alternative measures to enhance pedestrian safety at this intersection are proposed in the FEIS, including the installation of high visibility crosswalks and better lighting, and the elimination of the eastbound left-turn movement and installation of a pedestrian refuge on the median of the eastbound approach. It should also be noted that at the proposed reconfiguration of the intersection of Atlantic, Flatbush and 4th Avenues (which experienced the highest numbers of accidents from 2002 through 2004) under the proposed project’s traffic mitigation plan would include the introduction of an all-pedestrian phase at Flatbush and 4th Avenues.

Comment 13-62: There is no mention of a plan to make pedestrian and bicycle safety improvements at the following problematic intersections: Atlantic and Flatbush; Atlantic and 4th Avenue; 4th Avenue and Flatbush; and Flatbush and Dean. (55)

Response 13-62: As discussed in Chapter 19 of the DEIS, the proposed project’s traffic mitigation plan would include a major restructuring of the Atlantic Avenue/Flatbush Avenue/4th Avenue intersection designed to improve traffic flow and reduce the potential for vehicle and pedestrian conflicts. This restructuring would include a new pedestrian plaza (an expanded Times Plaza). The sidewalk at the northeast corner of Atlantic Avenue and Flatbush Avenue would be extended to shorten the crossing distance for pedestrians on the north crosswalk, reducing the number of

traffic lanes to be traversed from seven to six. The number of vehicular movements conflicting with pedestrians at Flatbush Avenue/4th Avenue would be reduced with the elimination of the 4th Avenue approach, and an all-pedestrian phase would be introduced. The west crosswalk on Atlantic Avenue at 4th Avenue would be eliminated to avoid conflicts between pedestrians and the heavy northbound left-turn movement from 4th Avenue. Decorative fencing would be installed curbside at the northwest and southwest corners to discourage pedestrians from crossing where there is no crosswalk. The crossing distance for pedestrians on the north leg of the intersection would be essentially halved with the westward expansion of Times Plaza.

At Flatbush Avenue and Dean Street, the existing prohibition on southbound left-turns from Flatbush Avenue to Dean Street would be extended to all periods reducing the potential for conflicts between turning vehicles and pedestrians on the west crosswalk. New high visibility crosswalks and improved lighting would be installed at this intersection, further enhancing pedestrian safety.

Comment 13-63:

By failing to provide mitigation measures sufficient to minimize the project's adverse impacts on pedestrian and bicyclist safety, the DEIS clashes with the statutory mandate. Furthermore, the project sponsor's promise to consider further mitigation measures in the FEIS deprives the public of its lawful right to review and comment on proposed mitigation measures, in violation of SEQRA and CEQRA. (88)

The trade-off for increased traffic flow under the proposed mitigation is diminished pedestrian movement and safety. (55)

Mitigation in the DEIS focuses on increasing vehicle movement through the area. ESDC should consider pedestrian phases at major intersections, and striping a pedestrian box through these intersections that a pedestrian can cross in any direction during the pedestrian phase. A pedestrian phase would eliminate the stress of crossing various intersections and may even facilitate vehicle movement through the intersections when the pedestrian/vehicle conflict is eliminated. Trying to mitigate traffic impacts by further restricting pedestrian movements will cause pedestrians to cross illegally, or will discourage walking. (224)

Response 13-63:

Although the proposed project's mitigation plan includes measures to accommodate increased traffic flow, it also includes substantial measures designed to reduce conflicts between vehicles and pedestrians and enhance pedestrian and bicycle safety. Examples of such measures include elimination of some vehicle turning movements, implementation of an all-pedestrian phase at Flatbush and 4th Avenues,

an expanded median to provide a pedestrian refuge on Atlantic Avenue (at Vanderbilt Avenue) and installation of new high visibility crosswalks and lighting at key intersections in the vicinity of the project site. The proposed project also includes new off-street bicycle paths through portions of the project's open space, and a major new on-site entrance to the Atlantic Avenue/Pacific Street subway station complex which would eliminate the need for subway riders to negotiate the Atlantic Avenue/Flatbush Avenue intersection, or cross Atlantic Avenue at other locations. The DEIS includes a detailed discussion of these measures, and the public had an opportunity to review and comment on their adequacy.

Additional measures were examined and the mitigation plan refined between the DEIS and FEIS; however, the measures set forth in the FEIS are similar to those set forth in DEIS and do not substantially alter the conclusions found in the DEIS. Mitigation measures described in a draft EIS are often refined before publication of a final EIS.

CHAPTER 14: AIR QUALITY

Comment 14-1: A plan for addressing increased exhaust pollution was not well-addressed in the DEIS. (250)

We are dubious that the project won't add more cars. Even if that claim is true, the increased delays at 68 intersections will spew much more particulate matter into the streets and into our lungs. This is because the buses and trucks will be idling 45 percent longer at the clogged intersections. (389)

There is a concern about traffic in terms of pollution. (5, 47, 212, 227, 270, 504, 541, 563)

The proposed project, during construction and afterward, will exacerbate pollution. The arena will exacerbate the congestion leading to increased pollution. (307, 349, 453)

Response 14-1: The analysis of traffic conditions indicates that additional vehicles would be added to the study area. The air quality analysis presented in the DEIS assessed the effects of this increased congestion and emissions due to the additional traffic anticipated to be generated by the proposed project. This analysis determined that overall increases in pollutant concentrations, including particulate matter, near affected roadways would not result in any violations of the National Ambient Air Quality Standards (NAAQS) or increases exceeding significant impact thresholds. Therefore the DEIS determined that the operation of the

proposed project would not result in any significant adverse air quality impacts.

Comment 14-2: The DEIS minimizes the increase in the amount of PM_{2.5} and any increase is too much because of its link with asthma. (389)

Response 14-2: The statement is incorrect. The DEIS did not minimize predicted PM_{2.5} increases. On the contrary, the DEIS conducted a detailed examination of potential PM_{2.5} levels from the proposed project, using conservative assumptions regarding future traffic volumes, engine emissions, and meteorological and ambient background conditions. These analyses determined that PM_{2.5} emissions would not exceed the 15 ton per year threshold currently used by the New York State Department of Environmental Conservation (NYSDEC) in assessing the potential significance of future PM_{2.5} concentrations from the proposed project. In addition, the DEIS presented a detailed review of the potential effects of proposed project on public health, which concluded that no significant adverse impacts on public health (or asthma) would be expected as a result of the increases in airborne emissions from operational activities.

Comment 14-3: The intersection of Atlantic and Flatbush Avenues was declared a “pollution hot spot” in the 1970s and again in the 1980s. It still exists and is worse now than it was then. (349)

Response 14-3: The previous “hot spot” characterization of the intersection of Atlantic and Flatbush Avenues was attributable to elevated CO levels at that location during the 1970s and 1980s. Overall, levels of CO pollution at intersections, even congested ones, have declined since the 1970s and 1980s due to the use of catalytic converter technologies and cleaner burning fuels. This trend is expected to continue into the future, as older model vehicles are phased out and replaced with newer, lower emitting vehicles. This is demonstrated in the DEIS by comparing existing and future levels of CO with the proposed project; in almost all cases, the future CO concentrations with the project are lower than modeled CO concentrations based on existing conditions.

Comment 14-4: The DEIS goes to unusual lengths to deny existence of significant air quality impacts. The Sponsor is obligated to mitigate violations of NAAQS identified by the SEQRA process, since this is one of the strategies that New York implemented to comply with the Clean Air Act. (55)

Response 14-4: The strategy referred to appeared in the attainment SIP for CO. The analysis included in the Air Quality Chapter of the DEIS fully analyzed

the potential for the proposed project to result in significant adverse impacts, including significant adverse impacts from increased levels of PM_{2.5}. The analysis concluded that PM_{2.5} emissions from the proposed project would not result in any significant adverse air quality impact, taking into account anticipated HVAC equipment operation, the locations where maximum concentrations would occur and the future maximum concentrations as compared to existing monitored concentrations in New York City. The analysis demonstrated that the proposed project would not result in a significant adverse air quality impact and, accordingly, would be deemed not to cause or contribute to a contravention of the NAAQS.

Comment 14-5: There is no discussion relative to whether the project will incorporate emergency electrical generators and if they will be diesel fired or natural gas units. How many fuel tanks of what capacity will be required? (108)

Response 14-5: The comment is incorrect. Chapter 14, "Air Quality," referenced and analyzed a 2-MW diesel fuel powered generator that would be located on the arena block (see pages 14-16 and 14-17 of the FEIS). It is anticipated that the associated fuel tank would have the capacity of 10,000 gallons.

Comment 14-6: The issue is not whether the city's overall air quality will fall within NAAQS standards, but rather the local levels around AY itself. (107)

Response 14-6: As presented in the DEIS, maximum predicted pollutant concentrations due to the proposed project, when added to background concentrations from the nearest monitoring sites in New York City, would not result in any violations of NAAQS for which the area is designated as in attainment. The background concentrations used in the DEIS are considered representative of background concentrations around the project site.

The air quality analysis presented in the DEIS demonstrates that for all pollutants other than PM_{2.5}, future concentrations with the proposed project would be well below NAAQS at receptor locations on the project site and the surrounding area. The NAAQS are established at levels that are considered safe for human exposure with a margin of safety. Currently, New York City is designated as non-attainment for PM_{2.5}, so any location within the city is considered to be in violation of the NAAQS. However, maximum predicted increases in PM_{2.5} concentrations from the proposed project are insignificant, and thus are deemed not to cause or contribute to a contravention of the NAAQS.

Comment 14-7: While the DEIS seeks to dismiss the added pollution that would be generated by the project as insignificant, its own data, on page 14-31, reveal that the project's full build-out would result in an increase in maximum 24-hour concentrations of mid-size PM_{10} from 55.5 micrograms per cubic meter of air to 65.2 micrograms per cubic meter of air at the Dean Street and 6th Avenue receptor site. Moreover, annual increases in even smaller $PM_{2.5}$ were projected in the DEIS on page 14-34, above state thresholds at a total of 26 locations on the upper floors of the exterior of three project buildings. These are just two examples of the added pollution burdens that the Downtown Brooklyn community would face as a result of the large increases in motor vehicle traffic and other pollution associated with the over-sized Atlantic Yards development. (88)

Response 14-7: The increase in PM_{10} concentrations is not considered significant since the maximum predicted future Build 24-hour concentration of 65.2 micrograms per cubic meter ($\mu g/m^3$) at Dean Street and 6th Avenue is well below the 24-hour NAAQS of $150 \mu g/m^3$. Furthermore, the analysis is a very conservative prediction of future concentrations since it assumes the maximum predicted concentration occurs simultaneous with the maximum background concentration measured over the most recent three-year period. Regarding the projected $PM_{2.5}$ concentrations predicted on project buildings, the comment is erroneous. First, $PM_{2.5}$ emissions from the proposed project are considered to be insignificant according to the New York State Department of Environmental Conservation's (NYSDEC) $PM_{2.5}$ guidance since PM_{10} emissions from the proposed project would be well below 15 tons per year (see "Principal Conclusions" on pages 14-1 to 14-2, and Table 14-4 on page 14-17). Second, these increases do not represent significant impacts since it is anticipated that future occupants of the proposed project would not be exposed to the maximum predicted concentrations since the analysis assumes that windows would be open at all times of the year, a condition that would not occur. In addition, no exceedances of the short-term or annual $PM_{2.5}$ significant impact thresholds were found at the locations of air intake manifolds on the proposed project's buildings. Finally, maximum predicted concentrations at off-site locations would be well below the NYSDEC and New York City Department of Environmental Protection (DEP) $PM_{2.5}$ guidance thresholds. Therefore, the proposed project would not result in any significant adverse air quality impact to the existing Downtown Brooklyn community.

Subsequent to the preparation of the DEIS, the program for the proposed project has been reduced in scope. The revised modeling results published in the FEIS show that with the revised program there

are a predicted 13 locations, rather than 26 locations, on the upper floors of the exterior of two buildings, rather than three buildings, with a modeled increment in excess of the significant impact threshold of $0.3 \mu\text{g}/\text{m}^3$.

Comment 14-8:

The DEIS relies on the argument that closed windows protect occupants of indoor spaces from outdoor levels of $\text{PM}_{2.5}$ to explain its determination that the Project's $\text{PM}_{2.5}$ impacts are not significant. The DEIS dismisses the impact of high $\text{PM}_{2.5}$ concentrations on Project and other buildings because "occupants would not be expected to have their windows open continuously and be exposed to outdoor concentrations throughout the year". As shown in the graph ..., which EPA considered in setting the NAAQS for $\text{PM}_{2.5}$, indoor PM concentration exceeds 80-85% of outdoor concentration over much of the $\text{PM}_{2.5}$ size range in the fall, when windows are generally closed. (55)

Response 14-8:

The commenter presents EPA data attempting to show that 80 to 85 percent of $\text{PM}_{2.5}$ emissions from the proposed project would infiltrate residential indoor areas during the fall months. However, these conclusions are misleading. The chart shows infiltration/leakage rates for older single family homes, which have a much higher air exchange rate than apartment buildings equipped with central air ventilation systems. In fact, the same quoted study studied a home with a central ventilation system, which determined that far lower air exchange rates occurred, which in turn led to lower levels of $\text{PM}_{2.5}$ as compared to the outside. Also missing in the chart referenced by the commenter are measurements during the winter period, which would be expected to have a lower infiltration/leakage rate. The study supports the assertion in the DEIS that, on an annual average basis, $\text{PM}_{2.5}$ concentrations from infiltration/leakage would be anticipated to be much lower at indoor locations located at the proposed project. Moreover, EPA has defined air at mechanical air intakes and operable windows as not being considered "ambient air" since studies such as the one quoted in the comment show varying ratios between indoor and outdoor pollution levels.

Comment 14-9:

The DEIS relies on the argument that the EPA-recommended "interim use of PM_{10} as a surrogate for $\text{PM}_{2.5}$ " in permitting decisions to explain its determination that the Project's $\text{PM}_{2.5}$ impacts are not significant. (55)

Response 14-9:

The DEIS references the PM_{10} significant impact level (SIL) to demonstrate that if EPA were considering to permit the facility with concentrations at the levels predicted for the project, it would not

require further analysis of PM_{2.5} and PM₁₀. Actions that would not violate NAAQS and SILs and that have been determined in the environmental review process to have no significant impacts are considered to be permissible from both a federal and state standpoint. In permitting major stationary sources, EPA and NYSDEC have relied on the PM₁₀ SIL to determine that a source's emissions would not cause or contribute to a contravention of the PM₁₀ and PM_{2.5} NAAQS.

Comment 14-10: Sponsor should examine ways of modifying the stack parameters (height, exit velocity, etc.) or the number and location of stacks to reduce those impacts. (55)

Response 14-10: The air modeling analysis included adjustments of stack parameters to minimize impacts, and made adjustment where feasible to reduce potential pollutant impacts. These adjustments are reflected in the analysis presented in the DEIS.

Comment 14-11: The DEIS claims that the Project causes no significant air quality impact because "maximum predicted PM_{2.5} concentration levels are comparable to ambient levels of PM_{2.5} measured at various locations in New York City over the past several years". Such justifications for not recognizing significant impacts run contrary to the purposes of the Clean Air Act and SEQRA. (55)

Response 14-11: The analysis presented in the DEIS determined that concentrations exceeding the PM_{2.5} guidance criteria were predicted to occur at a limited number of locations, and with limited actual exposure potential. The concentrations are within the levels experienced at various locations in New York City. The proposed project would therefore not result in any exacerbation of the PM_{2.5} NAAQS violations. The comment also incorrectly interprets SEQRA and the PM_{2.5} guidance. Impacts that exceed guidance thresholds, such as EPA SILs and the NYSDEC and DEP guidance criteria for PM_{2.5}, are considered to have a potentially significant impact. These impacts must be evaluated in the context of the project and its setting, utilizing the criteria established under SEQRA (see page 14-6 of the DEIS) for making decisions on whether there would be an impact. As presented in the DEIS, it was determined that, in accordance with the NYSDEC PM_{2.5} guidance policy, the proposed project's emissions would not exceed the level that would require further analysis; moreover, the NYSDEC PM_{2.5} guidance policy (and DEP's interim guidance) indicate that impacts exceeding the PM_{2.5} threshold criteria are considered to have a potential significant impact, requiring further review and analysis. This is precisely what was done in the DEIS.

Comment 14-12: It is disingenuous to aver that there will be no impact on air quality when the DEIS admits that there will be 29 traffic intersections that will be overwhelmed by AQ and another 39 that might be made a little less worse. The impact of all the added traffic must be looked at for its local effect on pollutant concentrations, right where it is being released into air that is inhaled by those in the vicinity of the implicated traffic. (107)

Although it might not be within the target scope of analysis, the FEIS should monitor other locations that might be affected by this project. The FEIS should examine areas such as Lafayette Avenue and Fulton Street or the Brooklyn Bears Garden. Other intersections include Washington Avenue and Fulton Streets and where Lafayette Street transverses St. Felix Street, Carlton Street and Vanderbilt Avenue. It would be useful to note whether the addition of these locations will prove to cause a significant adverse impact to the area. (12)

Response 14-12: As presented in the DEIS, a total of seven intersection locations were analyzed to determine maximum future pollutant concentrations from vehicular emission sources. These intersections were selected because they are the locations in the study area where the largest levels of project-generated traffic are expected and, therefore, where the maximum changes in the concentrations would be expected and the highest potential for air quality impacts would occur. At each of these intersections, multiple receptors were placed at nearby sidewalk or roadside locations near intersections with continuous public access. This demonstrates that the DEIS did indeed predict pollutant concentrations due to traffic at the nearest locations of public exposure. No significant air quality impacts from the traffic at these locations were identified, and no significant adverse impacts would be expected at other locations that would experience less project-generated traffic.

Comment 14-13: Provide for cleaning of emissions from underground parking in a manner and location acceptable to the communities. (37)

Response 14-13: The air quality analysis presented in the DEIS demonstrated that the proposed projects parking facilities would not result in any significant adverse impacts.

MITIGATION

Comment 14-14: On page 19-46, the DEIS says the proposed project would “not result in any significant air quality impacts” and therefore no air quality mitigation is required. But even the very brief description of air quality impacts above, as well as other public comments on the DEIS, raise questions as to the adequacy of that conclusion. For example, the DEIS,

on page 14-34, dismisses its finding of PM_{2.5} increments exceeding the State's pollution guidance based on the logic that exposure would be limited since occupants of the affected buildings "would not be expected to have their windows open continuously..." Such rationalizations offer dubious compliance with the SEQRA mandate for mitigation of adverse environmental impacts. (88)

Response 14-14: The DEIS is correct in concluding that the proposed project would not result in any significant adverse air quality impacts. As presented in the DEIS, the proposed project's annual emissions of PM₁₀ would be below the state's threshold of 15 tons per year due its use of clean burning natural gas, and consequently, PM_{2.5} emissions from the proposed project are considered to be insignificant. Nevertheless, both the NYSDEC and DEP interim guidance criteria were used for the purpose of evaluating the potential significance of predicted impacts of the proposed project on PM_{2.5} concentrations. The analysis concluded that impacts exceeding the PM_{2.5} annual interim guidance threshold were found at a limited number of locations, all on the project site. At these locations, it was determined that maximum predicted future concentrations would be within the range of PM_{2.5} concentrations that currently are experienced in New York City, and that actual exposures to mobile and stationary source emissions would be lower than modeled increments. In consideration of these factors, the impacts of PM_{2.5} are not considered to be a significant adverse air quality impact to the environment or the community, and therefore, mitigation is not required. NYSDEC, on a statewide basis, will examine measures to reduce emissions of PM_{2.5} and its precursors in an effort to bring PM_{2.5} non-attainment areas into compliance with the NAAQS through the state implementation plan process.

CHAPTER 15: NOISE

Comment 15-1: A significant number of residents work at home. Noise pollution causes tiredness and headaches, stress and hypertension, hearing impairment and is a significant issue affecting reduced productivity and concentration of day-time workers. (461)

Response 15-1: Comment noted. While increases in ambient noise levels due to the proposed project are not desirable, the magnitude of the noise levels produced by the proposed project would not be expected to cause reduced productivity and concentration of day-time workers at home in the project area. As discussed in Chapter 15, "Noise," the DEIS disclosed that there would be significant adverse noise impacts from project operations along certain corridor locations. The noise levels for existing and future baseline conditions are relatively low and project-

generated traffic would result in incremental noise increases that exceed the CEQR impact guidance with the resulting noise levels that fall in the CEQR “marginally acceptable” and “marginally unacceptable” range, which is not unusual for New York City residential areas.

Comment 15-2: The noise pollution that this particular project would create would cause in the end the loss of hearing for many of because it would be above 85 decibels. Noise over 85 decibels would definitely cause hearing loss. (391)

Response 15-2: The proposed project would not result in $L_{eq(1)}$ noise levels above 85 dBA and would not result in the loss of hearing.

Comment 15-3: People moved to Brooklyn to avoid the noise of Manhattan. The DEIS admits that noise will be greater and even deafening and offers no solutions for amelioration. (349, 358, 212)

Response 15-3: As discussed in Chapter 15, “Noise,” project-generated traffic would result in exceedances of the *CEQR Technical Manual* noise impact criteria and result in significant adverse noise impacts during one or more time periods at the locations on Flatbush Avenue near Dean Street, on Dean Street from approximately Flatbush to Vanderbilt Avenues (including the Dean Playground), and on 6th and Carlton Avenues from approximately Dean Street to Atlantic Avenue. While the increases in noise level at these locations would be significant under the *CEQR Technical Manual* guidance, they would not be deafening, and they would not result in significant adverse health impacts (i.e., loss of hearing). Additionally, as detailed in Chapter 19, “Mitigation,” the project sponsors have proposed mitigation measures to reduce the significant adverse noise impacts at residences in the project area.

Comment 15-4: Property values would be adversely affected as a direct result of excessive noise (mostly traffic related). (37)

Response 15-4: No significant reductions in property values are anticipated as a result of noise impacts from the proposed project, as ambient noise levels would be comparable to noise levels in many other residential areas in New York City.

Comment 15-5: Will Dean Playground be able to continue as a playground with added noise impacts? (26, 57, 460, 461)

Response 15-5: The DEIS disclosed that the project would cause significant adverse noise impacts on the Dean Playground. Nevertheless, the Dean Playground would be able to continue as a playground. Currently, the

Dean Playground is primarily an active, rather than a passive activity playground. The New York City Department of Parks and Recreation (DPR) currently has plans for the renovation of the playground to include a little league baseball field with artificial turf and some other improvements. The ballfield would be located along the Dean Street frontage. Potential passive areas would be located farther from Dean Street (along the Bergen Street frontage). Active recreational uses are not significantly affected by increased noise levels since they are usually noise generators themselves. Thus, the increase in noise levels at the playground, due to increased traffic along Dean Street, would not be expected to significantly affect the playground's function. Further, noise levels in this playground would be similar to noise levels in many other NYC parks and playgrounds located near populated areas. As discussed in Chapter 19, "Mitigation," the project sponsors have committed to work with DPR to contribute to park improvements that would partially mitigate the significant noise impacts at the park.

Comment 15-6:

The DEIS supposes that "noise from crowds attending events in the arena would not be expected to be a significant noise source that would affect ambient noise levels." Also "people attending events would not be expected to congregate in any significant numbers on Dean Street or other relatively quiet streets." This is highly suspect. Events would attract large amounts of people that do not live in the neighborhood. Significant tailgating and congregating would be expected before events. How would this be monitored? Would there be a "zero tolerance" policy for tailgating in residential neighborhoods vigorously enforced by NYPD? The DEIS states, "Any crowd noise surrounding the arena would be expected to be masked by noise from vehicles on adjacent streets." Basically the increased noise levels (already deemed significantly adverse) would drown out even more noise. (37, 108, 371, 521)

Vehicular traffic will only be one component of noise as arena-goers will use all possible routes and modes to reach that destination. Street traffic can become an issue as the arena will create huge crowds of people congregating to the area. By incorporating an analysis model which can factor in pedestrian travel, the FEIS will be able to cover more sources of noise than just vehicular. (12)

It should be analyzed how many new restaurant, bar, and nightclub goers will emanate from the arena and to what extent this could be a problem in sensitive residential neighborhoods. The EIS should also analyze which streets are likely to have significantly increased foot traffic going to remote parking facilities. (37, 39, 145, 281)

Response 15-6:

Tailgate parties would not be permitted in any on-site parking facilities and are illegal on City streets. The proposed project would not be expected to result in any tailgating or any significant increase in noise due to people congregating near the project site. The arena block has been intentionally designed to have mixed-use commercial and residential buildings flanking the arena with the main arena-related activities oriented along the commercial corridors of Flatbush and Atlantic Avenues. The Urban Room would serve as both the main entrance to the arena and would contain uses that would serve as a central meeting place. The proposed project would have a local retail component (approximately 247,000 gsf or 3 percent of the overall development program) located throughout the 22-acre project site, mostly to serve the local residential and worker populations.

The DEIS disclosed that the project would result in a large increase in pedestrian circulation on Dean Street and Atlantic Avenue in the vicinity of the project site as a result of patrons traveling to and from the arena and the on-site parking facilities. Noise from crowds attending events in the arena would not be expected to be a significant noise source that would affect ambient noise levels. The arena would be an indoor facility and no noise would emanate directly from it. Most event attendees would access the arena via Flatbush Avenue (a busy street which has limited residential land uses), Atlantic Avenue (another busy street), or the Urban Room. The only entrance on Dean Street would be for access to preferred seating. People attending events would not be expected to congregate in any significant numbers on Dean Street or other relatively quiet streets. There would be no planned activities or sidewalk vending associated with the arena use on Dean Street. No queuing would occur on the streets, since all security screening activity would take place internally. In general, any crowd noise surrounding the arena would be expected to be masked by noise from vehicles on adjacent streets, and would not be a major noise source requiring quantification. With respect to the Dean Street corridor, the DEIS discloses the potential for significant adverse noise impacts from project-related traffic, and identifies noise-related mitigation measures.

Off-site parking facilities that would be used by arena demand are predominantly located to the north and west of the project site along the Flatbush Avenue and Atlantic Avenue corridors. Pedestrian trips en route to and from these facilities would be most concentrated in the vicinity of the project site, and would become increasingly dispersed with increasing distance from the arena. Most, if not all, Nets fans using the remote parking facilities that would be established on the periphery of the study area as a demand management strategy for traffic mitigation would travel to the arena via a free shuttle bus service

established by the project sponsors. These trips are, therefore, not expected to add appreciable amounts of pedestrians or their noise generation along sidewalks outside of the project site.

Comment 15-7: Table 15-9 lists 2010 build noise levels. Receptor 3 indicates a 3.1 increase during weekday PM and a 6.8 increase in weekday evening noise levels. What is causing this? These are significant increases in dB and further mitigation is needed. Additionally, receptor 5 indicates a 3.5 increase in late night weekdays, and 3.7 and 3.1 increases during Saturday midday and night. Again, what is causing this? These are quiet, residential blocks and this increase in noise will greatly reduce quality of life on these blocks. (108, 371)

Response 15-7: The absolute noise levels are a function of traffic on adjacent and nearby streets. The increase in noise levels is based on comparisons of noise levels with the project to noise levels without the project. In general, ambient noise levels during late night and weekend analysis periods are less than ambient noise levels during weekday peak hours. At locations and time periods where existing noise levels are low, small increases in project-generated traffic can result in significant increases in noise levels.

Comment 15-8: The DEIS should address noise impacts from helicopters flying over arena during events. (205)

Table 15-1 does not include helicopters. (107)

Response 15-8: The proposed project would not result in increased helicopter operations over the project area. The proposed arena would be completely enclosed, and would not attract overhead flights. The project does not include any facilities to accommodate helicopter operations.

Comment 15-9: “Section L” discusses that mechanical systems and equipment (i.e., HVAC) will have a noise impact but the studies are only underway. We should have this data to review before proceeding. (371)

The DEIS notes that mechanical systems and equipment (e.g., HVAC systems) will have a noise impact but the studies are only underway. The EIS must include these studies, and propose appropriate mitigation for adverse impacts. Like parking garage emissions, these systems should be located in coordination with the proposed projects neighbors. (108)

Response 15-9: The design and specifications for mechanical equipment such as heating, ventilation, and air conditioning (HVAC) and elevator motors have not been finalized; however, this equipment would be designed to

incorporate sufficient noise reduction devices to comply with applicable noise regulations and standards, and to ensure that this equipment does not result in any significant increases in noise levels by itself or cumulatively with other project noise sources.

Comment 15-10:

The introduction to the Noise chapter acknowledges that “...noise detracts from the quality of the living environment and there is increasing evidence that excessive noise represents a threat to public health.” This statement is a partial truth and is inadequate as a premise to analyze the noise impacts of the Atlantic Yards project. Actually, noise does not only detract from the “quality of the living environment,” it diminishes the quality of life for individuals who are exposed to noises from their surrounding environment. The wording of this sentence reveals a failure to fully grasp how noise robs people of a decent quality of life, as well as being hazardous to their health and well-being. (55)

A toll that noise takes on the body is the way it can disrupt sleep, which is needed for physiological repair. Loss of sleep or changes in sleep patterns can lead to health problems. Noise can have an effect even if no overt physical ailments are identified in people who complain about noise. Good health is not merely the absence of symptoms. (55)

Unwanted and uncontrollable sounds below the 85 dBA level, generally viewed at the level when hearing loss may occur, can impact the body indirectly through stress. (55)

The DEIS fails to recognize the effects of noise on mental well-being. When new development fails to address ongoing noise issues and creates new noise risks, mental distress may be further magnified. (55)

The DEIS underestimates the impacts of noise. Research clearly demonstrates that noise has an adverse effect on mental and physical health. The DEIS fails to accurately describe these impacts and doesn’t adequately define the meaning of “significant noise impacts.” (26)

Response 15-10:

The DEIS assesses noise impacts of the proposed project based upon impact criteria and methodologies contained in the *CEQR Technical Manual* and does not underestimate project noise impacts.

Comment 15-11:

There are errors in the Noise Fundamentals paragraph. It says that if sufficiently loud, noise may affect people by interfering with various human activities. There are two errors:

1. Noise does not have to be loud to be bothersome, disturbing, and distressing; a dripping faucet can prevent one from falling asleep; and

2. By using “may” to describe the effects of noise on health, the DEIS minimizes the actual effects of noise on people as documented by the many studies examining the relationship between noise and health.

The Noise Fundamentals paragraph concludes by cautioning people to remember “...that all the stated effects of noise on people vary greatly with each individual.” In this line the DEIS actually dismisses any and all noise impacts on the mental and physical health of people. Even if these impacts vary, they are nonetheless impacts. Furthermore, in discussing variability among individuals with respect to impacts of noise, the DEIS appears to miss the meaning of the scientific principle of “significant findings,” which implies that the number affected warrants concern about the impact of the variable, not that all the people in a sample were influenced by the variable. In this case the findings can be generalized to the population that will be exposed to the noises from the proposed project. By failing to accurately describe the physiological and psychological impacts of noise, the analysis doesn’t give the reader the actual meaning of “significant noise impacts.” (55)

Response 15-11: The DEIS assesses noise impacts of the proposed project based upon impact criteria and methodologies contained in the *CEQR Technical Manual*.

Comment 15-12: The DEIS does not recognize the difference between sound and noise. Although sound and noise are used interchangeably, they are defined differently. It is in the interpretation of sound as being pleasant or unpleasant or wanted or unwanted that sound is transformed into noise. Noise is unwanted, unpredictable, and uncontrollable sound. Although tables such as Table 15-1 speak of Common Noise Levels, it would be more appropriate to just call the listed dBAs sound levels, recognizing that as the sound levels increase they may very well be labeled “noise” because of their intrusiveness and disruption. However, even a sound measured at a lower level, for example, a dripping faucet, may be called noise by someone trying to study, read, or fall asleep. Sounds do not have to be that loud to be disruptive and disturbing, in other words to be identified as “noises.” (55)

Response 15-12: In general, noise—in its simplest definition—is unwanted sound. Sound can be unwanted for a large variety of reasons—because of its intensity (loudness), tonal character, when it occurs, etc. The definition of unwanted sound is subjective. The commenter is correct that frequently sound and noise are used interchangeably. However, for purposes of assessing noise impacts, following accepted practice and recommendations in the City’s *CEQR Technical Manual*, impacts are determined based upon the change in the intensity (loudness) of the

sound (noise) level. A brief discussion of the effects of noise on people was provided in Chapter 15, “Noise” of the DEIS.

Comment 15-13:

The methodology and measurements cited in the DEIS are questionable and unreliable. For example, in Table 15-6, it appears that all of the noise receptor locations, except for one, were mid-block and near the project site. Measurements taken at a greater variety of locations, including street corners, would be far more useful and accurate. Sensitive receptors are located throughout the larger study area that would be negatively affected by traffic, yet most of these are not monitored in the DEIS. While sensitive receptors are more likely to be located at mid-block locations, this is not always the case. Louder noises at intersections are associated with acceleration, braking, and sirens of emergency vehicles attempting to break through gridlock. (55)

CEQR guidelines require that the microphones for measuring noise be placed by the most sensitive receptors. This means that where the noise is the great problem either because it is the loudest or by a school, residence, library, day care center, park, playground, etc. The receptors placement chosen in the DEIS is consistently mid-block of the studied streets, away from intersections. As a result, the most intense noise produced by vehicle acceleration and the noises from squeaky brakes seems to have been avoided in the modeling of noise levels. This distorts the results and the data-collection should be entirely redone. The receptors seem to have been placed to measure construction noise rather than traffic noise. (37)

Noise monitoring is not coordinated with the traffic and air quality analysis. No noise measurements are taken at any of the intersections identified in the DEIS as having a significant impact. (102, 103)

Traffic impacts are also a noise and quality of life impact and should be considered as such. The noise impact of acceleration, braking, and honking is significant. With increased car traffic directly associated with the proposed project, this impact will increase. Furthermore, due to timing of lights, it is common for a vehicle, including one of the long trucks or buses, to nearly completely block the intersection to traffic traveling in the east-west direction. This particular cause of noise is a significant worry. (451)

Truck traffic is loud and disruptive to the usually quiet area. (517)

Why have none of the 60 traffic intersections which will have significant adverse impacts been included in the noise impact analysis? By this serious omission, the DEIS wrongfully assumes that there will be no adverse noise impact as a result of additional traffic. The noise

analysis and selection of receptor sites must be coordinated with the traffic study. (37)

Though many of the mid-block receptors are located across from proposed parking lot entrances, additional receptors should have been placed at the adjacent intersections as well. (102, 103)

Receptors should also have been placed at intersections where “queuing” would occur. Even though the traffic load wouldn’t necessarily double, predictably, the average decibel level would increase with the number of idling vehicles, and the occurrence of peak-level events, such as car horn honking, sirens, braking and the occasional booming car-stereo, would correspondingly increase. (102, 103)

A broadening of the noise analysis parameters should also be considered. For example, the Council for Brooklyn Neighborhoods has outlined a number of additional ‘noise-sensitive’ areas to accompany the 12 locations used in the DEIS. It is believed that by gathering more noise level data, a truer conclusion can be drawn. (12)

Response 15-13:

As explained in Chapter 15, “Noise,” a selection of noise receptor locations identified areas that were representative of noise-sensitive receptors, principally residential uses. Mid-block locations were selected (In general, mid-block receptor locations yield higher project impacts than corner or intersection locations.) Specific receptor site locations were selected because they were expected to experience maximum project impacts from noise compared to No Build conditions. This is in accordance with standard professional practice for environmental impact assessment. Sufficient noise receptor sites were selected, so that potential project noise impacts at all nearby noise sensitive receptor sites could be assessed. The DEIS has accurately described the proposed project’s impacts on noise conditions in the project area, including impacts associated with traffic generated by the project. The noise analysis performed for assessing project impacts used methodologies and impact criteria as specified in the *CEQR Technical Manual*. The selection of receptor sites is consistent with the methodologies cited above.

Comment 15-14:

The DEIS uses the FHWA Traffic Noise Model Version 2.5. One must question whether this model can adequately assess the impact of urban traffic noise even with the added considerations noted in the DEIS, e.g., identifying the shielding provided by rows of buildings, analyzing the effects of different ground types, etc. This question must be raised. The adequacy of the model must be questioned because it ignores many noise generators unique to urban traffic, including braking of cars at red

lights, honking of horns, and sound enhancing mufflers on motorcycles and sports trucks. The model, relying on A-weighted scales also ignores the impacts of the low frequency noises generated by traffic. The World Health Organization believes that low frequency noise can disturb rest and sleep. In conclusion, the Traffic Noise Model employed underestimates the impact of traffic noise even though it concludes that there will be “significant adverse noise impacts.” (55)

The FHWA Traffic Noise Model (TNM) is inappropriate for determining noise impact in the given context. The model was developed to model highway traffic, where the greatest noise comes from the aerodynamic resistance and the tire noise. Noise engineers have confirmed that low speed, stop and go traffic in congestion conditions cannot accurately be predicted by the model. Furthermore, the model is unlikely to correctly predict the negative effects of sound reflections created by nearby tall buildings, the so-called canyon effect. (37, 108)

The FHWA Noise Model’s traffic noise source characterization process requires the user to supply the volumes and speeds for each vehicle class for each lane of roadway to be modeled. Using these parameters, along with algorithms developed from typical vehicle pass-by data, the program calculates the vehicle noise emission levels for each vehicle class. The accuracy of the user-supplied traffic parameter, therefore, affects the final noise level prediction. The DEIS provides no disclosure of any modeling assumptions. (37)

The TNM doesn’t include honking as a parameter. (37)

It is clear that the DEIS does not analyze noise caused by urban street traffic, which during congested conditions can be particularly noisy as cars and trucks constantly stop and go. In fact, a car or a truck accelerating away from a traffic light produces considerably more noise than a car or truck passing at a constant speed of 40 or even 50 mph. (37)

Response 15-14:

The FHWA TNM model is a state-of-the-art model for use in predicting noise due to vehicular traffic. It has been used throughout the country for a wide variety of projects to assess impacts of traffic noise, including for projects within urban areas of the country, and has been found to be an accurate noise assessment tool. It is one of the approved analysis techniques recommended for accessing noise impacts for a project such as the proposed project as noted in the *CEQR Technical Manual*. The TNM accounts for noise emissions based on: vehicle type, vehicular speed, different pavement varieties, vehicles on upgrades, effects of traffic controls including vehicles accelerating away from: stop signs, toll booths, traffic signals, and on-ramp start points;

atmospheric absorption, distance from source to receiver, divergence, intervening ground effects, shielding due to buildings, structures, noise barriers and berms, and attenuation due to heavy vegetation. For the proposed project adjustment factors were developed by comparing field measured and model predicted values to accurately account for site-specific conditions. The TNM does not account for non-typical events such as: the honking of horns, mufflers that have been retrofitted to make additional noise, or noise generated by emergency vehicles (such as an ambulance, police sirens, or fire trucks). Unusual events, non-typical events, as well as illegal actions are not typically included in assessing project impacts.

Comment 15-15: The DEIS uses old data. Table 15-4 is based on aircraft noise contours cited by DEP in 1983. Even disregarding the difficulty of generalizing from aircraft noise contours to noises generated by highway traffic, one would have to question whether assumptions made in 1983 still hold in 2006. There have been many criticisms in the past 20 years that the FAA thresholds for defining noise impacts in urban residential areas had been set too high, namely at the 65 dBA level. Today, the vast majority of complaints the FAA receives come from residents living below the 65 dBA contours, underscoring the FAA error in setting 65 dBA as the level. (55)

Response 15-15: The noise data used to characterize existing ambient conditions in the vicinity of the project site were collected in March, April, and October of 2006. These data are not old. The 65 dBA reference level is based on Table 3-R3 in the 2001 *CEQR Technical Manual*, which uses that threshold to identify levels at which urban noise becomes marginally acceptable general external exposure in residential areas. That reference level has been used by New York State and New York City agencies for many years because it is deemed to reasonably reflect resident's reaction to ambient noise level. Under the *CEQR Technical Manual* methodology used in the DEIS, the determination of significant adverse impacts is not related to the 65 dBA standard but rather to the incremental increase in the ambient noise levels resulting from the proposed project.

Comment 15-16: The DEIS concludes that noise at some schools in the study area would fall into the "Marginally Unacceptable category." Yet, the DEIS fails to discuss the potential impact of this with respect to reading and learning. The evidence is overwhelming that outside noises adversely affect learning in school. Additionally, the increased adverse noise impacts at residential locations noted in the DEIS will also affect the children living in these homes, potentially impeding cognitive and language

development as well as learning skills. These educational losses result in greater social costs later in life, for example, productivity losses and needs for health care and social services. The DEIS does not address these costs in both public and private sectors. (26, 55)

Response 15-16: The DEIS and FEIS present an analysis of noise impacts from both the construction and operation of the proposed project. As indicated in these analyses, no significant noise impacts are predicted at the location of any existing school and accordingly, the project is not expected to result in any significant noise-related impact on schools or children's learning. As discussed in Chapter 19, "Mitigation," the project sponsors have committed to making space available to DOE on the project site east of 6th Avenue for use as a school. As discussed in Chapter 19, the school would be designed to attenuate outdoor noise so that ambient levels within the school building would be at acceptable levels.

Comment 15-17: The plan lacks any attempt to provide specific designs that would ensure proper soundscaping and noise control in the surrounding street environment. (37)

Response 15-17: Chapter 19, "Mitigation," describes the improvement measures that would be implemented to mitigate significant adverse noise impacts resulting from the operation of the proposed project. As noted in Chapter 15, "Noise," of the DEIS, the mechanical equipment such as heating, ventilation, and air conditioning (HVAC) and elevator motors would be designed to incorporate sufficient noise reduction devices to comply with applicable noise regulations and standards, and to ensure that this equipment does not result in any significant increases in noise levels by itself or cumulatively with other project noise sources. Chapter 17, "Construction Impacts," describes in detail the committed practices that would be in place during construction to minimize and mitigate significant construction-related noise impacts to the extent feasible and practicable.

Comment 15-18: Illegal noise emissions must be adequately analyzed as it can become a significant quality of life issue to residents and sidewalk users. Examples include honking, mufflers on motorbikes and cars and over dimensioned audio equipment, none of which are included in the analysis. (37)

The June 2006 Baruch report revealed that the five noises most commonly causing adverse emotional impacts on individuals are: back-up beeps, honking horns, rowdy passersby, motorcycles, car stereos or boom cars. None of these noises with the highest degree of emotional

impact have been studied or included in the DEIS as the chosen model does not handle such analyses. (37)

Not only will background noise levels increase, transient, sudden or pulsating noises will occur more frequently. The noises seem to be more disturbing and harmful to both mental and physical health than constant noises known as background din. Therefore, the EIS must carefully examine the (negative) qualities of the new sounds (children's play at 65 dB is not the same as 65 dB traffic). (37)

The proposed project is neither an airstrip, nor a rest stop. It's a mixed use development that includes an arena adjacent to several existing residential neighborhoods. Atlantic Yards would generate a complex mix of pedestrian and traffic impacts that would increase the overall noise levels and the frequency of peak noise levels of the acoustic environment.

Basically this means that traffic will bring more idling engines, more honking horns, more emergency sirens, more souped-up car stereos and car alarms. Increased pedestrian uses will guarantee that pedestrians arriving and departing the arena and transit hub will make more noise.

The effect of these activities is very different from the effects of air traffic or steady traffic flow. Air traffic is regularly schedule, and its interruptions on the acoustic environment are planned, can be somewhat predicted, and thus expected. Steady traffic flow is a predictable drone. Conversely, car horns, emergency sirens, car alarms, brake squeals, gridlock, and crowds of pedestrians are not as easily planned for and predicted, and thus have a more interruptive effect on the acoustic environment.

The use of average decibel measurements based on air traffic or highway traffic noise contours also does not take into account repeated peak volumes that would occur with increased traffic and pedestrian uses. (102, 103)

Response 15-18:

The DEIS has accurately described the proposed project's impacts on noise conditions in the project area. The noise analysis performed for assessing project impacts used methodologies and impact criteria as specified in the *CEQR Technical Manual*. As discussed in Chapter 15, "Noise", a four step procedure was used to determine project impacts. For each analysis site and each analysis time period: 1) existing noise levels were determined based upon field measurements; 2) existing noise levels were calculated using the TNM model; 3) the calculated TNM existing noise levels were subtracted from measured existing noise levels and the remainder was assumed to be a correction factor which accounted for modeling inaccuracies, and some of the

phenomena cited above; and 4) future noise levels for No Build, and Build conditions were determined as the sum of calculated TNM model results and the calculated correction factor based on projected traffic conditions. Impacts are determined based upon typical conditions. Unusual events, non-typical events, as well as illegal actions are not typically included in assessing project impacts. (In fact, the *CEQR Technical Manual* recommends suspending noise measurements when unusual events occur during a measurement period.)

Comment 15-19: The DEIS clearly avoids using the spirit of the NYC Noise Code as a basis for its methodology and approach. (37)

Response 15-19: The New York City Noise Code does not have criteria for the assessment of noise impacts to be used for the purposes of environmental review under SEQRA or CEQR. Rather, it imposes performance standards for construction and other equipment and HVAC and other building mechanical systems. The construction equipment used at the project site would meet or exceed the Noise Code's performance standards. Similarly, the project buildings' mechanical systems will comply with the Noise Code's performance standards.

Comment 15-20: Of particular concern are the streets where noise levels will be doubled as a result of the proposed project. Both Carlton Avenue (between Pacific and Dean Streets) and Dean Street (between Flatbush and 6th Avenue) would see an increase of more than 8 dBA $L_{10(1)}$ at one or more times during the week. The noise level on this part of Dean Street would increase by 9.9 dBA $L_{10(1)}$ during weekday evenings. This is a doubling in the noise level that this quiet, brownstone-lined street currently experiences at that time. (88)

Response 15-20: At the locations cited, the proposed project would significantly increase noise levels. This is due to a combination of low existing ambient noise levels and the significant increase in traffic due to the proposed project. For residences at these locations (as well as residences at other locations where the proposed project would result in significant increases in noise levels), the project sponsors have proposed to make storm windows and/or alternative ventilation (i.e., air conditioning) available at no cost for purchase and installation to owners of residences to the extent that such measures are not already in place. This commitment is discussed in Chapter 19, "Mitigation."

Comment 15-21: Fort Greene Park is a big enough park that park-goers could remove themselves from the noise of the city for a short while. The proposed

open spaces are not large enough for this luxury, and the noise impacts of the surrounding development will affect it in a singular way. (88)

Response 15-21: While noise levels in the proposed new open space areas created on-site as part of the proposed project would exceed the 55 dBA $L_{10(1)}$ level recommended for outdoor areas in the *CEQR Technical Manual*, noise levels within these areas would be comparable to noise levels in a number of open space areas and parks that are adjacent to heavily trafficked roadways, including Hudson River Park, Riverside Park, Bryant Park, Fort Greene Park, etc. The project open space, except for the portion immediately adjacent to Atlantic Avenue, would be in the “marginally acceptable” range for residential areas and would experience noise levels similar to those experienced throughout the surrounding residential neighborhoods under Existing, No Build, and Build conditions.

Comment 15-22: It is unconscionable that the DEIS uses the outdated noise-exposure guidelines from the *CEQR Technical Manual*, which are not based upon the noise contours of real-life traffic. (88)

Response 15-22: The DEIS’s reliance on the *CEQR Technical Manual* methodology for analyzing potential noise impacts is not unconscionable, but rather reflects standard professional practices for noise analysis widely used or the preparation of environmental impact statements for projects located in New York City. These methodologies provide a fair and accurate assessment of project noise impacts.

Comment 15-23: The Temple of Restoration depends on our ability to provide a quiet place to worship. That means undisturbed services. A quiet Dean Street, free of traffic congestion is a critical factor in our Church remaining a welcoming and accessible place. Our church is being asked to absorb some of the project’s most adverse impacts, such as noise. We are also concerned about the noise pedestrians will cause walking to cars parked on the street and parking garages. (124)

Response 15-23: As discussed in the DEIS, project-generated traffic, as well as project-related construction activities, would result in significant adverse noise impacts at locations along the Dean Street corridor including at locations adjacent to the Temple of Restoration. Many of the windows of the building housing the Temple of Restoration are double-glazed windows. The large center stained glass window has a protective glass in front of the window that functions acoustically as a storm window. In addition, the building contains a number of window air conditioning units. As mitigation, similar to the mitigation proposed for residences on Dean Street that would be significantly impacted by noise resulting

from the proposed project, the project sponsors would make available to the Temple of Restoration storm windows for windows on the second level of the building façade facing Dean Street (above the Temple of Restoration sign), which currently do not have either double-glazed windows or storm windows, as discussed in Chapter 19, “Mitigation.” With this measure, maximum interior noise levels within the building would be in the range of 40-50 dBA L₁₀, which would satisfy CEQR interior noise level requirements for this church use.

Comment 15-24: The DEIS does not provide any viable rerouting of traffic which might mitigate noise impacts. (37, 108)

Response 15-24: The DEIS in Chapter 19, “Mitigation,” provides a thorough analysis of noise mitigation measures for the proposed project. Rerouting traffic to mitigate noise would not be feasible and practicable for the proposed project.

NOISE—MITIGATION

Comment 15-25: The proposed mitigation of double-glazed windows and air-conditioning puts residents in airtight prisons throughout the life of construction. It is a clear admission by the developer that outside space will become unusable for the decade-plus life of the construction. Further mitigation, in the form of utility bill assistance and enclosure of outdoor spaces must be made for residents in the immediate construction area. (371, 461)

It is unacceptable to suggest that admittedly off-the-chart levels of noise and air pollution that will be generated by this project be mitigated by suggesting that I and my neighbors stay inside our homes behind double-insulated glass with our air conditioners on for the next 10 years. This is a ludicrous solution. (151)

The suggested mitigation that the developer provides area residents with double-pane window and air-conditioning to counter the negative impacts of construction is insultingly insensitive to the seriousness of the issues involved. (48)

The sponsor has noted in the DEIS that most sensitive locations are already fitted with double-glazed windows, and neglects to recognize that while air conditioners are a form of alternative ventilation, they are also costly and a source of additional noise themselves. If the sponsor combined the air conditioning unit with a program to underwrite its use, it could be more effectively considered as a mitigation technique. (255)

If owners don't opt for the double-glazed and air conditioner offered by the project sponsors, the DEIS states that the proposed project would have "unmitigated significant adverse impacts." In order to work, these proposed mitigations would require everyone who lives and works in the area to remain indoors. Confinement to interior spaces is not an appropriate mitigation. To the extent that residents were to stay indoors the proposed mitigations would undermine Brooklyn's well known "stoop culture," condemning everyone to adverse health risks. It would also undermine any benefits there might be to the network of "publicly accessible open space" planned for the project. (55, 88)

Given that accepting the proffered mitigation will obligate residents to an ongoing and perhaps unexpected expense, it is very possible some will not accept the material required by the mitigation. In this event, the DEIS states that the proposed project would have "unmitigated significant adverse impacts." This conclusion does not go far enough. It is improper to characterize an obligatory expense being transferred to local residents as mitigation. Therefore, the DEIS has not proposed any significant mitigation and the condition of construction-related and ongoing project-related noise remains an unmitigated negative impact for an unknown percentage of the population. (55, 102, 103)

The proposed project will result in significant adverse noise at 4 locations according to the EIS, all of which include Dean Street. I don't want new double glazed windows, I want to be able to open my window and get some fresh air, not quote marginally unacceptable noise ranges. Double glazed windows, even if the air gap is 100mm and 10mm glass is used, offer at best a reduction of traffic noise by around 15 dba's and only work when shut. (57)

The DEIS states that "noise levels from project-generated traffic would exceed the *CEQR Technical Manual* impact criteria and result in significant adverse noise impacts" in areas surrounding the project. In mitigation it offers air conditioning and double-glazed windows, which most units already have, so they are basically offering nothing. (371)

The developer's offer of double-paned windows and air-conditioners to residents, many of whom are already equipped with these modern conveniences, only addresses the noise impact on the indoor acoustic environment. (102, 103)

Many residents in noisy urban centers use the drone of air conditioners to increase the average decibel level so that the contrast with peak-level occurrences will not be as significant. This results in an overall increase in the average decibel level, which may mitigate the annoyance, but increases the loudness of everyday life, and in itself has negative health and quality of life impacts. (102, 103)

Noise mitigation measures are minimal and ineffective. (475)

Response 15-25: The mitigation program that the project sponsors have proposed is the most extensive noise mitigation program ever undertaken for any project in New York City. The measures proposed would reduce and/or eliminate project impacts on interior noise at residences. Additionally, the storm windows would reduce noise levels during off-hours when project-generated noise increases are not significant, and the air conditioning units would provide comfortable environmental conditions during warm weather conditions. The project sponsor is not proposing to provide utility bill assistance.

Comment 15-26: There is concern that the three community parks, as well as the Pacific branch of the Brooklyn Public Library, will be overwhelmed by the level of noise generated during construction and arena events, that the adverse impact will not be mitigable. (461)

Response 15-26: As described in Chapters 15, “Noise,” and 17, “Construction Impacts,” the proposed project would result in significant increases in noise levels at these facilities. In the case of the parks, there is no feasible mitigation that would eliminate these project impacts. In the case of the Pacific Library measurements of internal/external noise levels at the library showed that the library’s windows/walls provide approximately 20 dBA of attenuation. In addition, the library is already air conditioned. Therefore, during the 1st three years of construction—2007, 2008, and 2009—interior noise levels within the library building during periods of peak construction would be in the range of approximately 50 to mid-50 dBA, which would be above the 45-50 dBA L₁₀ noise level that would be desirable for this type of land use. To address this significant adverse noise impact on the library, the project sponsors would make available to the library, and install, interior-fitted storm windows on the facades facing Pacific Street. In the event the library elects to not accept the offer, there would be an unmitigated significant noise impact for this three year period.

Comment 15-27: To mitigate noise, there should be developer-funded noise enforcement jobs. The developer’s claim of job creation could be effectuated, and neighborhood harmony facilitated, by the permanent funding of several noise enforcement positions, similar to the parking enforcement personnel currently hired by New York City. (451)

Response 15-27: ESDC would require the project sponsors to enter into contractual obligations to implement the environmental impact avoidance and mitigation measures to be executed by the project sponsors. During construction of the proposed project, ESDC expects to retain the

services of appropriate professionals to monitor and ensure compliance with the same.

Comment 15-28: The DEIS incorrectly frames the noise mitigation discussion by comparing the open space area of the proposed development to such areas as Fort Greene Park. But, Fort Greene Park is more than three times the size of the proposed open space, and is designed so that park users can reasonably expect to escape the noise of the city. Stating that the noise level the project's open space would experience is analogous to the "noise levels in a number of open space areas and parks in New York City" is not a mitigation response, nor is it an accurate assessment. Acknowledging that an adverse environmental effect exists elsewhere in New York City does not adequately fulfill the mitigation requirements of SEQRA and CEQRA. (88)

Response 15-28: While noise levels in the proposed new open space areas created on-site as part of the proposed project would exceed the 55 dBA $L_{10(1)}$ level recommended for outdoor areas in the *CEQR Technical Manual*, there is no feasible and practicable measures that could be implemented to reduce noise levels to acceptable levels. However, even with noise levels above desirable levels within these areas, the proposed project's new open space areas would be a valuable addition to the neighborhood.

Comment 15-29: The DEIS mitigation measures do not address street noise, only interior noise. Given the claim that the proposed project will create a vibrant street life around the site, this is unacceptable. (102, 103)

Response 15-29: While it would be expected that the proposed project would result in an increase in the number of people on the streets in the project area, this increase would not be expected to significantly increase noise levels in the project area. Project-generated traffic, not the increase in people on the street, would result in significant impacts at specified locations. There are no feasible mitigation measures to significantly reduce and/or eliminate these impacts.

CHAPTER 16: NEIGHBORHOOD CHARACTER

Comment 16-1: If the only possible way the Atlantic Yards development can be practical is by developing it in such a method that it would drastically change the character of the surrounding neighborhoods, then it should not be built at all. (300, 316)

The Atlantic Yards project is not in keeping with the character of the Brooklyn neighborhoods that it would transform. (31, 179, 197, 217, 242, 318, 333, 340, 404, 409, 420, 421, 525, 553)

The implementation of this project will totally change the character of the surrounding neighborhoods and will have ramifications for miles beyond. (425, 521)

Our beautiful polyglot neighborhood where people live, work, educate, and shop locally, will all change. (327)

A huge construction like the Atlantic Yards will kill all that we love about this neighborhood. The impact of so many big buildings will take away all the slow, quiet community feelings that are why we live here. (199, 429, 473)

New York City needs Brooklyn's space, character, light and air just as it needs the Village, Soho, and Tribeca, as well as the high rises of Times Square and midtown. (174)

This project will totally destroy what makes Brooklyn Brooklyn. The neighborhood feel, the openness, and the quality of life. (48, 214, 324, 343, 344, 429, 431, 495, 503, 517, 528, 538)

Brooklyn is all about neighborhoods and communities, and the proposed project does not create a sense of community. (227)

Instead of supporting the positive changes in Brooklyn, the proposed project would kill them. The effect would be like putting skyscrapers in Greenwich Village. The proposed buildings would distort the character of the communities around them, cutting them off from the rest of the borough. (253)

Nothing substantiates the demand for luxury housing next to a 20,000-seat basketball arena in a development that would be part of the densest census tract in North America. Brownstone Brooklyn is a desirable area specifically because of its low density and human scale. (108, 241) Warren,, Witter

Neighborhoods around the project site are growing thanks to longtime residents committed to the historic housing stock, locally owned businesses. We need development here that reflects that kind of growth—not residential towers with no plan for dealing with traffic and congestion. (478, 523)

The project as currently conceived is far too dense for the existing context and would overwhelm the surrounding neighborhoods. (489)

Response 16-1:

As discussed in Chapter 16, "Neighborhood Character," the proposed project would not result in a significant adverse impact on neighborhood character. Chapter 1, "Project Description," of the DEIS, the overarching goal of the proposed project is to transform a blighted area into a vibrant mixed-use community. The proposed project aims to

provide a state-of-the-art arena, necessary affordable and market-rate housing, first-class office space, publicly accessible open space, local retail and community services, a hotel (under one variation of the project program), a new subway entrance, and an improved rail yard. The proposed project's buildings would contribute to the Brooklyn skyline and the open space would connect the surrounding neighborhoods, which are currently separated by the open rail yard and a major avenue (Atlantic Avenue). While the proposed project would result in a taller and denser development when compared to the adjacent residential neighborhoods, the proposed project would be implemented pursuant to a GPP which includes Design Guidelines that were developed in consultation with DCP. As discussed in Chapter 3, "Land Use, Zoning, and Public Policy," the proposed project would further City policies for housing and commercial development in Brooklyn and promote the City policy of transit-oriented development resulting in a higher-density development more reflective of, and consistent with, zoning policy envisioned for Downtown Brooklyn and of a density appropriate adjacent to the borough's largest transit hub, in close proximity to other high-density commercial uses, and at the intersection of three of the borough's major commercial thoroughfares.

As described in Chapter 16, "Neighborhood Character," the project site contains virtually none of the neighborhood characteristics or vitality of the surrounding neighborhoods due to the open below-grade rail yard and the blighted conditions on the project site, which have existed for decades.

Comment 16-2: The huge influx of white upscale residents will destroy the great ethnically and economically mixed neighborhoods of Fort Greene and Prospect Heights. (179, 428, 501)

The proposed development will ruin a neighborhood that strikes an amazing balance of classes, cultures, and ethnicities. (475)

Response 16-2: Race would not be a factor in determining who lives in the proposed residential units; thus, the race of future residents of the proposed project is unknown. In addition, 2,250 of the proposed project's 4,500 rental units would be administered under an affordable housing program which would provide housing for a sizable portion of the new residents at below-market rates.

Comment 16-3: Brownstone neighborhoods work because people see each other, know each other and protect each other. When you cram too many people together "community" is lost. (216, 390)

- Response 16-3:** New York City comprises many neighborhoods with varying sizes and densities. The proposed project's buildings would be taller and denser than the surrounding residential neighborhoods. However, as stated in the DEIS, the change in character on the project site would not alter the basic character of the surrounding neighborhoods, whose defining elements are located at some distance from the project site.
- Comment 16-4:** There is concern that construction, drunken stadium patrons, traffic congestion, and other less tangible results like shadows and wind tunnels caused by high-rises will erode the value of our buildings. (27) Finton
- Response 16-4:** As discussed in Chapter 4, "Socioeconomic Conditions," the proposed project would not impose any type of change that would diminish investment in the study area; to the contrary, the proposed project would reinforce the trend toward increasing residential and office investment, drawing in direct investment to the area. While it is true that arena events would draw a large number of patrons, because of the project's location above a transit hub—transit connection through the Urban Room, it is anticipated that a substantial number of patrons will use mass transit to the arena. As discussed in Chapter 3, "Land Use, Zoning, and Public Policy," experience has also shown that arenas and other sports facilities thrive in combination with a strong mix of commercial and residential land uses, both as proposed elements of a larger master plan or as a catalyst for urban development. As discussed in Chapter 9, "Shadows," shadows move throughout the day and are not permanent or perpetual; furthermore, the shadows in the project area would be typical for dense urban areas, like many neighborhoods in New York City. Significant shadow impacts would be limited to the Atlantic Terminal Houses' open space and the Church of the Redeemer (see Chapter 9, "Shadows," and Chapter 19, "Mitigation"). The project site would be policed by both NYPD and private security services. Chapter 16, "Neighborhood Character," analyzed the effects of traffic on the character of the neighborhoods surrounding the project site. In response to comments, an evaluation of wind conditions was conducted and indicated that the proposed project would not result in adverse wind conditions in or around the project site.
- Comment 16-5:** To the point of the CEQR guidelines, the number of defining features of the neighborhood character which the DEIS should have found to be significantly or adversely impacted, when taken together, definitively warrant a finding of neighborhood character being significantly or adversely impacted in a negative manner. (102, 103, 108)

Response 16-5: The analysis of neighborhood character was conducted per methodologies outlined in the *CEQR Technical Manual*. As discussed in the DEIS, a community is defined by a number of elements, but not all of these elements affect neighborhood character in all cases; a neighborhood usually draws its distinctive character from a few determining elements. The impact analysis focused primarily on changes to neighborhood character resulting from changes in land use, urban design and visual resources, cultural resources, traffic and pedestrians, and noise; the impact of socioeconomic conditions on neighborhood character is not analyzed because the proposed project would not result in significant adverse impacts in any of the areas analyzed in that chapter (see Chapter 4, “Socioeconomic Conditions”). The project site contains virtually none of the neighborhood characteristics or vitality of the surrounding neighborhoods of Boerum Hill, Downtown Brooklyn, Fort Greene, Clinton Hill, Prospect Heights, and Park Slope. As stated in the DEIS, the collective impacts of the proposed project would result in localized adverse neighborhood character impacts in the areas closest to the project site, which include changes in character for residential rowhouses facing Site 5, within sight of the arena’s brightly lit signs, and across from the arena loading docks on Dean Street, as well as a deterioration in the character of traffic flow on Bergen Street in Prospect Heights. These areas closer to the project site lack the cohesive character of the cores of their neighborhoods, indicative of the transitional character of these areas. The proposed project would have no significant adverse impact on the overall character of the surrounding residential neighborhoods.

Comment 16-6: The DEIS does not acknowledge the change in character along edges of the project including Atlantic Avenue between South Oxford Street and Carlton Avenue; Pacific Street between Flatbush Avenue and Carlton Avenue; and, opposite Site 5 along Fourth Avenue and along Pacific Street. The DEIS fails to acknowledge that project generated traffic will also result in adverse neighborhood character impacts for the existing residential buildings along Pacific Street opposite Site 5. (12)

Response 16-6: As discussed in Chapter 16, “Neighborhood Character,” of the DEIS, the proposed project would create a new neighborhood context along the Atlantic Avenue and Flatbush Avenue corridors in keeping with the stature of these corridors as two of the principal (and widest) routes through the borough. The western end of the project site, west of 6th Avenue, would contain the most intense uses. To the east, the proposed project would establish a strong residential/commercial presence along Atlantic Avenue; and while Phase II development would be built to a substantially greater scale than many of the adjacent uses, taller

buildings would be placed on Atlantic Avenue, where they would be of comparable height and scale to the taller buildings north of Atlantic Avenue; shorter street walls would face towards the lower-density neighborhoods to the south and east of the site and would be similar in height to the Newswalk Building on Pacific Street immediately south of the project site.

As stated on page 16-18 of the DEIS, there would be a localized neighborhood character impact for the residential buildings along Pacific Street opposite Site 5. Although the Site 5 building would relate well to Downtown Brooklyn to its north, it would be of a scale and density new to Pacific Street on its southern face. This building, its scale and the intensity of activity it would engender, would create a localized adverse impact in neighborhood character for the rowhouses and apartment buildings along Pacific Street between Flatbush and 4th Avenues. Fourth Avenue is a wide arterial street and its character would not be adversely impacted by the proposed project.

Upon completion of construction, the proposed project would not result in a significant adverse impact to the character of Pacific Street between 6th Avenue and Carlton Avenue. (The segment of Pacific Street between Flatbush and 5th Avenues would be occupied by the arena block.)

The DEIS concludes that the locations where localized character impacts would occur would be adjacent to the project site, in areas which are located along the perimeters of and not in the cores of their respective neighborhoods. Even when considered together, the changes to neighborhood character in these transition areas would not be significantly adverse.

Comment 16-7:

The DEIS excessively dissects the notion of “neighborhood character” into narrow slices and thus fails to address the actual value of what Atlantic Yards will destroy; Prospect Heights and Fort Greene are emblematic of Brooklyn’s most unique resource: low- to medium-rise residential neighborhoods with a wealth of local small businesses and a strong sense of community and street life. Such highly livable urban neighborhoods, while common in many European cities, are an endangered species in the United States. (461)

Response 16-7:

As discussed in the DEIS, the proposed project would not result in significant adverse impacts to the surrounding neighborhoods, including Prospect Heights and Fort Greene. The project site is currently an isolated area with a mixture of vacant properties, underutilized manufacturing and small commercial buildings, residential units in various states of repair, and an open rail yard. The project site, as it now

stands, does not contain any of the community character—including the strong sense of community and street life—that defines the surrounding neighborhoods. The proposed development on the project site would not adversely affect the livability of the surrounding urban neighborhoods.

Comment 16-8:

The assumptions of Section E, “Probable Impacts of the Proposed Project—2010,” are questionable. The language of the DEIS seems predisposed to assuming that the proposed project and the arena will be a positive addition to the neighborhoods. This bias attempts to color or masque the lack of analysis supporting statements made in the report. (102, 103)

The first paragraph of the Overview for Adjacent Neighborhoods is a complete non sequitur and makes no sense. The DEIS fails to explain how the introduction of “uncharacteristically dense development” is inherently beneficial to neighborhood character. (102, 103)

Response 16-8:

Chapter 16, “Neighborhood Character,” of the DEIS lists a number of positive aspects of the proposed project, which would include the following: the reconfiguration, renovation, and platforming over the existing rail yard, which has long been a blighting influence in the immediate area, thereby eliminating the physical and visual barrier that separates the neighborhoods of Boerum Hill, Fort Greene, Prospect Heights, and Park Slope; creating an active streetscape where none currently exists; and providing eight acres of publicly accessible open space to serve and connect the surrounding neighborhoods. The proposed arena would offer the opportunity to bring a much-desired major-league sports team back to Brooklyn.

As discussed in Chapter 1, “Project Description,” the proposed project would follow urban design goals and principals set forth in a set of Design Guidelines, developed in close consultation with ESDC and DCP staff, supported by the New York City Planning Commission (CPC) in its recommendations on the proposed project; the proposed project has been modified since issuance of the DEIS to reflect CPC’s recommendations. Although the proposed project would be built to a higher density than the lower-scale uses to the south, the proposed development would be more reflective of, and consistent with, zoning policy envisioned for Downtown Brooklyn. The extension of the policies supporting the siting of higher-density uses comparable to those found in Downtown Brooklyn to the project site would be appropriate because the project site is located adjacent to the borough’s largest transit hub, in close proximity to other high-density commercial uses, and at the intersection of three of the borough’s major commercial thoroughfares. The Design Guidelines would require the building

envelopes to step down in height from the Atlantic Avenue frontage and change character considerably along the southern edge of the project site to more reflect the scale of buildings to the east and south of the project site.

Comment 16-9: The DEIS fails completely to substantiate the claim that the project will connect the neighborhoods to the north and south. There is no study or investigation provided to support the statement. Saying it repeatedly in the DEIS does not make it a true statement. (102, 103)

Response 16-9: As discussed in Chapter 1, "Project Description," in the DEIS, in addition to the existing pedestrian connections via the 6th Avenue and Carlton Avenue Bridges (which would remain), the proposed project's open space component would include four additional north-south pedestrian passageways aligned with the Fort Greene street grid to the north of Atlantic Avenue, effectively extending the pedestrian aspects of these streets southward through the project site. A dedicated southbound bicycle path would enter the project site along Atlantic Avenue at Cumberland Street and would continue southbound between Buildings 6 and 7. The route would turn east running along Pacific Street where it would reenter the project site at a pedestrian pathway at Carlton Avenue. As presently conceived, it would continue southeast around Building 14 to Dean Street. The bike path would continue eastward along Dean Street toward Vanderbilt Avenue where it would connect with the larger city bicycle network.

Comment 16-10: The DEIS states "The energy created by the arena and the associated high density of residential and commercial uses would emanate out from the project site along the major traffic and pedestrian corridors." And in the same paragraph it states "the proposed project would have minimal impact on the overall character of the surrounding residential neighborhoods, as the cores of these neighborhoods are beyond the proposed project's influence, but it would affect the portions of the neighborhoods adjacent to the project site."

The DEIS seems to imply some magical power which limits the impact of the proposed project only to the areas which it conveniently defines as dilapidated or transitional while any effects on the historic neighborhoods is mysteriously avoided by the shield of Landmark status or vitality. These proposed buildings will loom large over the neighborhoods to the north or south and will be clearly visible from all major view corridors to the west. These "protected" historic neighborhoods have for the most part enjoyed the benefit of having their

skyline views unencumbered since their creation. To state that there will be no effect is willfully naïve. (102, 103)

Response 16-10:

Chapter 16, “Neighborhood Character,” of the DEIS, states that the proposed project would not have a significant adverse neighborhood character impact but would significantly change the character of the project site. The overarching goal of the proposed project is to transform a blighted area into a vibrant mixed-use community. The DEIS indicates that the proposed project site is characterized by blighted conditions, including dilapidated and structurally unsound buildings, debris-filled vacant lots, and underutilized properties, a neglected area suitable for redevelopment. In contrast, the neighborhoods and blocks surrounding the project site are not blighted. The land use patterns in nearby neighborhoods are expected to remain stable as these areas are primarily protected by existing zoning and are already built out in a manner consistent with existing zoning. Local historic district designations provide another level of stability since alterations or new development within historic districts must be reviewed and approved by the New York City Landmarks Preservation Commission (LPC) or its staff. As described in Chapter 7, “Cultural Resources,” the historic districts located within the project study area were designated as eligible for listing on the State and National Registers of Historic Places (S/NR) or New York City historic districts because they contain architecturally distinguished buildings or are illustrative of residential design during certain periods of Brooklyn’s history. A number of view corridors were analyzed in Chapter 8, “Urban Design and Visual Resources.” Of these, the proposed project would obstruct views south and southeast of the Williamsburgh Savings Bank Building (resulting in a significant adverse impact); no other significant adverse impacts to visual resources would occur. The skyline changes would be perceptible in the hearts of a number of adjacent residential neighborhoods, but they would read as middle-distance to background conditions, and would not change the quiet atmosphere of these neighborhoods’ tree-lined streets. Most views along the east-west tree-lined residential streets identified as view corridors in Chapter 8, “Urban Design and Visual Resources,” would not include views of the project site. The density of the rowhouses along these streets, which create solid streetwalls on narrow streets, would typically obscure street-level views to the project site.

Comment 16-11:

The project site description mentions “the first stages of an overall master plan.” The developer’s plan for the project site should not be misconstrued as a master plan. The use of this term is misleading; it implies that there has been some governmental involvement or some

overall study and planning for the different aspects of the site. The development plan will not create a neighborhood, but rather a high-density enclave between several neighborhoods, which will in fact be a new urban form, however, more likely analogous to a spaceship landing in a field than a unifying element in the community. It may work in concert with itself but not with the surrounding neighborhoods. (102, 103)

Response 16-11:

The project sponsor, in consultation with ESDC and City Planning (DCP) developed Design Guidelines that govern the development of the proposed project. CPC stated that it (CPC) supports the project and the exercise of ESDC's statutory authority.

The proposed project would increase connectivity between the neighborhoods to the north and south by the proposed project's 8 acres of publicly accessible open space. Portions of the planned open space would extend the pedestrian experience of the Fort Greene street network southward, fostering additional connections between Prospect Heights and the neighborhoods to the north: Fort Greene and Clinton Hill, an improvement over the current condition where the only way to currently cross the rail yard is on the 6th Avenue and Carlton Avenue bridges, flanked on either side by the below-grade rail yard. The numerous entrances to the proposed open space, which would be aligned with and act as extensions of the streets to the north, namely South Oxford Street, Cumberland Street, and Clermont Avenue, extending the activity associated with these neighborhood streets southward, would be a minimum of 60 feet wide, the width of the average local street, with an axis leading to a visible interior focal destination and/or through the block to the opposite street. Although Pacific Street between Carlton and Vanderbilt Avenues would be closed to vehicular traffic, it (Pacific Street) would be incorporated into the proposed open space and would be available for non-vehicular forms of transportation. A dedicated bicycle path—part of the City's Bicycle Network Development Program and part of the larger citywide network of bicycle lanes and paths—would also be included as another open space amenity that would further link the project site to the surrounding area.

As noted in Chapter 8, "Urban Design and Visual Resources," the buildings on the project site would be dramatically different from anything in the neighborhood today. The distinct visual appearance and architecture of the buildings would offer a contrast to and interplay with the more traditional architecture found in many of the surrounding residential districts. The presence of buildings with distinct architectural styles located in proximity to these surrounding neighborhoods would

not alter the defining character of these surrounding neighborhoods and would not result in a significant adverse impact. While the building heights would vary from building to building, with lower buildings interspersed between higher ones, there would be a general trend of higher and larger scale buildings to the west, closest to the Atlantic and Flatbush Avenue transit hub and Downtown Brooklyn, and lower buildings to the east and south, closest to the lower-scale residential neighborhoods. The building envelopes would step down in height from the Atlantic Avenue frontage and change character considerably along the southern edge of the project site to approach the scale of buildings to the east and south of the project site.

Comment 16-12: Quality of life will suffer adverse impacts due to increased security situations, increased surveillance, restrictions on entering and/or traversing the complex, the probability of personal bag searches, etc. Such things are not a part of the character of the study area and can in no way be considered either insignificant or a change for the better. (107)

Response 16-12: The proposed project would not result in the types of quality of life concerns identified by the commentor. With the exception of the arena during event times, security on the project site would be no more intrusive than that of similar areas in the city. Arena security would not search the bags of pedestrians not seeking to enter the arena, and security screening is expected to occur within the vestibules of the arena.

Comment 16-13: The four residential buildings proposed to front Dean Street between Carlton and Vanderbilt are inconsistent with the character of the community and must be eliminated and/or reduced to reflect the heights of the townhouses. (411)

Response 16-13: One of the planning principals listed in the GPP's Design Guidelines would be that the buildings on the project site would step down in height and scale along Dean Street to reflect the lower-density character of the uses adjacent and south of the proposed project's easternmost block. As discussed in Chapter 8, "Urban Design and Visual Resources," in the FEIS, while the proposed buildings along Dean Street would range in height from approximately 184 feet (Building 14) to approximately 287 feet (Building 12) at their highest roof, these buildings would have streetwalls of between 60 and 105 feet; above these heights the buildings would set back a minimum of 55 feet before reaching their maximum building heights. This would create a scale on Dean Street that would be larger than many of the buildings in the

nearby study area, but would be consistent with others, such as the Newswalk Building on the lot that spans Pacific and Dean Streets. It is further envisioned that the bases of the proposed buildings on the north side of Dean Street on Block 1129 would be clad in masonry and would have a massing compatible with the existing rowhouses along Dean Street (see Figure 8-51 of the FEIS).

CHAPTER 17: CONSTRUCTION IMPACTS

GENERAL

Comment 17-1: The Atlantic Yards project is not forthcoming with a comprehensive roll out plan. We need to see a work schedule and financial plan for each phase of construction. What will be built? How many trades people and laborers are needed and where is the money coming from? What agreements with utility companies and Department of Transportation are in place? (133)

Response 17-1: The DEIS provided detailed estimates of the expected number of workers required to complete construction of the proposed project by calendar quarter for the entire project. The costs for the construction of the proposed project by phase were included in the DEIS in Chapter 4, "Socioeconomic Conditions." Descriptions of all the major work elements that would be constructed were provided and analyzed in the DEIS. As noted in the DEIS, within the project site and adjoining streets, new gas mains, service lines, and metering would be necessary. As specific site designs move forward, the utility companies would identify those specific upgrade needs. Meetings with utilities, the DEP and the NYCDOT have been underway during the preparation of the DEIS and are continuing, to make sure that the DEIS and FEIS reflect the latest understandings of the likely construction methods, durations, timeframes and mitigation measures. As shown in the General Project Plan, the project would be funded by a mix of private financing and public subsidies.

Comment 17-2: ESDC or FCR need to run a simulation of life at the completion of each construction phase. It should show the number of businesses, homes, people, and vehicles. (133)

Response 17-2: The DEIS provided analyses of various environmental subject areas for the construction of Phase I and Phase II of the proposed project. The reasonable worst-case time periods during construction were identified, and relevant environmental analyses were conducted to address potential impacts during these time periods. It is not necessary to analyze the impacts of each construction phase separately, because the

analysis in the DEIS and FEIS identifies and describes impacts from the reasonable worst case time periods. Impacts during other time periods would be less intense.

Comment 17-3: The DEIS does not demonstrate the project sponsor has evaluated all of the options at its disposal to design a construction plan that alleviates construction impacts most comprehensively. (108)

Response 17-3: Chapter 17, "Construction," of the DEIS describes in great detail the extensive measures that would be undertaken by the project sponsors to avoid or minimize impacts during project construction.

Comment 17-4: The DEIS fails to note that the interim surface parking lots may be permanent, blighting the area. The amount of staging area being sought by the project sponsors seems unusually large. Should the project not proceed as planned or as scheduled, the cleared, secured site would have a far worse effect than the rail yards in separating the surrounding communities of Fort Greene and Prospect Heights. One way of addressing the impact of the interim staging area is to require confirmation that Phase II will proceed before permitting the demolition of buildings. (108)

Response 17-4: The GPP governs development on the entire project site, which does not allow for a large permanent surface parking lot on the project site. Should the project program change in a magnitude necessary to warrant a modification of the GPP, the proposed project would require additional environmental review to reassess the impacts on environmental conditions. During construction, the surface parking on the eastern end of the project site would be for construction workers, in order to minimize the potential for construction worker parking impacts on the surrounding area. Following the opening of the arena, the interim parking facility would be accessory to the project uses until the parking is relocated to the permanent below-grade facilities.

The construction of a new state-of-the-art railroad facility for the LIRR, retaining walls, foundations for a platform and the future residential buildings, the platform itself and related supports over the Vanderbilt Yard, in particular, along with the installation of utilities and the construction of the arena structure would require the use of Blocks 1128 and 1129 for staging and construction worker parking.

Since the existing buildings on Blocks 1128 and 1129 would ultimately be replaced by the proposed residential buildings and open space, demolishing them early in the project schedule to facilitate better operation of construction activities and the benefit to the surrounding

environment is appropriate. Throughout the construction period, measures would be implemented to reduce impacts from the construction, including the erection of construction fencing which would reduce the views of the parking and staging area.

Comment 17-5: While pollution reduction measures during construction are included in the DEIS, construction dust and other hazardous materials that can become airborne will have significant impacts on surrounding residents. Local children may not be able to safely use the Dean Playground during project construction. (136, 324)

Response 17-5: A detailed assessment of potential air, noise and hazardous materials impacts during construction was performed for the DEIS. As a result, an extensive air emissions reduction program was included in the proposed project in order to attain the lowest practicable emissions from construction activity. A similar assessment was done for the construction noise assessment. As part of the development of the DEIS, an air quality emissions reduction program was developed for incorporation into the proposed project. The emissions reduction program defines engine specifications and operational measures that would result in the lowest practicable level of emissions. The DEIS analyzed the potential transport of particulate matter that is expected to become airborne during construction of the proposed project. In addition, an evaluation of the hazardous materials on-site and the measures that would be put in place to minimize the emissions of such sources was also included in the DEIS. This includes the required construction health and safety plan (CHASP) and Community Air Monitoring Plans (CAMP). The analysis demonstrated that there would be no predicted significant adverse impacts from airborne materials as a result of construction, including at the Dean Playground. Children would still be able to use the Dean Playground safely during all phases of construction.

Comment 17-6: There should be an estimate of the potential for environmental impacts involved with actual clearance of debris as the site is prepared for construction, with attention paid to the noise, dust, smell, and perhaps the chemicals that may be buried or loose in the area. (26)

Response 17-6: The DEIS examined all the components and phases of construction, including demolition and site preparation. In most cases, these phases do not result in the greatest potential for impacts on noise or air quality during construction. The potential for on-site contamination that may be disturbed during construction was also evaluated in the DEIS. While there were potential significant adverse impacts identified in certain

areas for noise due to the duration and intensity of off-site noise impacts, with the proposed emission reduction measures in place during construction and the requirement to prepare and implement a CHASP and CAMP, there were no predicted significant adverse impacts on air quality or from hazardous materials predicted from construction of the proposed project. Mitigation for the significant adverse noise impacts is presented in Chapter 19, "Mitigation," of the DEIS.

Comment 17-7:

The FEIS should consider the impacts on air quality and noise during the construction period. Every precaution should be taken to alleviate air and noise pollution. (12)

The residents of State Street will be doubly punished by having to deal with air and noise impacts of this project and the water tunnel project. (363)

The dust and noise level (during and after construction) will destroy the quiet charm of our neighborhoods. (179)

The environmental degradation (lack of open sky, traffic, sewage problems, poor air quality, radiation, and street destruction) that would result from construction is devastating. (273, 274, 392)

Response 17-7:

The potential air and noise impacts during construction from the proposed project and other regional activity were analyzed in the DEIS. The potential significant noise impacts and mitigation to reduce such impacts were provided in the DEIS. The potential impact on neighborhood character during construction was also assessed. The potential impacts from cumulative activities from the construction and operation of the proposed project were examined in great detail for all subject areas, following the guidelines under SEQRA and the City's *CEQR Technical Manual*. Construction activity associated with the proposed project would have significant adverse localized neighborhood character impacts in the immediate vicinity of the project site during construction. The impacts would be localized and would not alter the character of the larger neighborhoods surrounding the project site.

No significant air quality impacts would be expected during construction; the effect of construction on air quality at State Street specifically would be negligible, as demonstrated in figures 17b-4 through 17b-13, due to the distance from the site. The areas near the project site that would experience the highest incremental concentrations of particulate matter and other pollutants from the project construction work are distant from the water tunnel construction sites. No significant new air quality or noise adverse impacts are

expected from the cumulative construction of the proposed project and the water tunnel.

Comment 17-8: Will all construction-related activities be set up on the construction site itself or will these activities also cause mayhem on the local streets? (57)

If the project goes forward we will be cut off from facilities such as Prospect Park, the Brooklyn Central Library, and the Brooklyn Botanic Garden due to construction and traffic congestion. (504)

Response 17-8: As described in the DEIS and FEIS, during the course of construction, certain traffic lanes and sidewalks would be closed or protected for varying lengths of time. Maintenance and Protection of Traffic (MPT) Plans, coordinated with the New York City Department of Transportation, would ensure that lane closures and sidewalk closures are kept to a minimum. The traffic analyses performed for the DEIS considered these preliminary MPT Plans. Construction-related activities would be confined to the construction site to the extent practicable, but as noted in the DEIS, would also involve some construction activity of adjoining streets and sidewalks. A staging area at Block 1129 would be used during the entire Phase I and part of Phase II construction to accommodate equipment and truck staging. Where curbside deliveries are required, they would be managed within fenced-off areas to minimize local street disruptions. The potential environmental effect of construction activities on surrounding streets was analyzed in the EIS. The proposed project will not cut off access to Brooklyn's cultural or park amenities.

Comment 17-9: The EIS acknowledges that there will be periods when construction will need to be done at night. How often and for what duration? (57)

Response 17-9: As stated in the DEIS, nighttime work, which would end no later than 11 PM, may occur once or twice a week during critical construction phases to perform specific construction activities at the project site. This work would take place primarily during the construction of the Arena block during the first few years of construction and would typically be limited to a substantially smaller work force (approximately 10 percent of daytime workforce). Certain of the transit improvements may involve street openings at the intersection of Flatbush and Atlantic Avenues, and this would likely be allowed only during the late evening and night when traffic is at its lightest. In addition, some of the larger construction tasks within the Vanderbilt Yard and the arena may require continuous periods of time to complete. So as not to interfere with the LIRR train schedule, LIRR work 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. When work is required outside of normal construction hours, the proper approvals would be obtained from the appropriate agencies. A noise control plan would be developed and implemented to minimize intrusive noise emanating into nearby areas and affecting sensitive receptors.

Comment 17-10:

Residents of the Newswalk building are concerned about the construction period effects of noise and impact on the structural integrity of their building. (142, 383)

Newswalk residents are concerned about safety concerns during construction due to unforeseeable accidents such as an explosion. (142)

Newswalk residents will incur extra financial costs due to construction. Extra costs may include replacement of windows damaged by noise or accidents, increases in electrical costs from air conditioning because residents cannot open their windows, increased building maintenance and landscaping due to dust pollution. (142)

Surrounding buildings may not stand up to pile driving and deep construction of the underground parking garage and 30-story building on Site 5. (510)

Response 17-10:

As noted in the DEIS, with the exception of the case of fragile, typically historically significant structures or buildings, generally construction activities do not reach the levels that can cause architectural or structural damage, but they can achieve levels that may be perceptible and annoying in buildings very close to a construction site. There would be no pile driving associated with the proposed project; rather, the piles would be bored, a process that results in less noise and vibration. The DEIS included an assessment of the potential vibration impacts of construction activities on structures and residences near the project site. For the Newswalk building, the distance between construction equipment and receiving building is sufficiently large to avoid vibratory levels which would result in architectural or structural damage.

Based on the knowledge of the existing conditions of the site and the planned construction program, there are no special circumstances for the project that would result in expectations of explosions during construction. No blasting would occur during construction, and no damage to windows is expected to occur from construction. As stated in other responses to comments, a CHASP and CAMP would also be required.

As part of the earlier discretionary approvals for the Newswalk development, the units were required to provide noise attenuation

measures to reduce noise impacts for on-site residents. Thus, no additional costs for air conditioning would be expected for these residents. In addition, during all subsurface disturbance work, dust control measures (e.g., applying water on haul roads, wetting equipment and excavation faces, spraying on equipment buckets during excavation and dumping, hauling materials in properly tarped or watertight containers, restricting vehicle speeds to five miles per hour on the project site and covering stockpiled excavated material) would be implemented. No significant adverse impacts on air quality at the Newswalk building are expected, and no significant increase in building maintenance or landscaping costs is expected to occur at Newswalk due to construction of the proposed project.

Comment 17-11:

There are issues about the phasing of the plan, which calls for the block bounded by Dean Street and Atlantic, Vanderbilt and Carlton Avenues to be surface parking and a staging area for construction for several years while the project is built. (37, 87)

How do we know your construction workers (15,000 jobs as you claim) will not compete with us for parking? (492)

The proposed construction phasing, as well as the location and scale of the construction staging and interim surface parking areas may blight our neighborhood for at least a decade. (48, 57, 460, 560, 585)

The most troubling aspect of the project is the phasing of construction. It places a burden on parts of the project that will see the benefits of the project last. This assumes the project is finished on schedule and all phases are built. (460, 461, 463)

Regarding the interim surface parking lot proposed for Block 1129, the community would best be served if the developer used the Phase I period to test remote parking and alternate transportation methods, rather than encouraging construction personnel to drive to the site. (102)

Response 17-11:

As part of the preparation of the DEIS, the construction phasing, staging and sequencing was assessed. This included examining what construction sequencing solutions could be implemented to limit the effects of staging, construction worker parking and construction activities to the surrounding community. This consideration resulted in the selection of Block 1129, which is bordered by Dean Street, Pacific Street, Vanderbilt Avenue, and Carlton Avenue, to be used as an on-site staging/parking area for a large portion of the construction period to keep construction-related vehicles off neighborhood streets to the extent practicable. Without this designated staging/parking area, the neighborhood and surrounding streets would be more affected by the

project's construction activities (e.g., more or longer lane closures). The strategy of dedicating space on Block 1129 for staging and parking is also logical because the construction of project components on Block 1129 would require a smaller workforce and less construction equipment, compared to what would be required during the earlier phases of construction. Hence, during the latter stages of the project construction on Block 1129, when designated on-site staging/parking areas would be the least available, the requirement for truck staging and construction worker parking would also be at the lowest.

The project sponsors do not intend to promote parking for construction workers. Extensive research was undertaken for the DEIS to estimate the likely travel patterns and characteristics of construction workers throughout the construction period. This research concluded that a substantial number of construction workers would likely travel via auto, irrespective of the abundance of transit options in the area and the costs associated with driving.

The DEIS acknowledges that some construction workers would utilize on-street parking spaces. To avoid overtaxing nearby on- and off-street facilities, the project sponsors would provide on-site (southern half of Block 1129) parking for construction workers at a fee that is comparable to other parking lots/garages in the area. 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.

Unlike the project operational analysis, no additional environmental benefits would be expected from requiring construction workers to utilize remote parking. Many construction workers bring tools to the project site, which require them to be close to the work areas. In addition, the actual work time per day may be less, because workers may be allowed to clock in at the remote facility and have to be shuttled to the site, thus extending the amount of time to complete the construction of the project. Finally, there is no clear advantage for construction workers to use this remote parking, in light of the baseline traffic and parking conditions during their travel. Hence, this measure would not be expected to reduce the number of workers driving to the site.

Comment 17-12:

There is no need to demolish Block 1129 for staging. Not only is an entire city block unnecessary for staging, it is physically far from the arena site and causes an empty space for 10+ years for numerous

Prospect Heights citizens. Seven World Trade Center was completed with a staging area no more than 10 percent of this staging plan. (57, 178, 196, 211, 223, 278, 288, 291, 304, 320, 396, 423)

Demolishing irreplaceable buildings, such as the Ward Bread Bakery (which the DEIS finds eligible for the National Historic Register), to make room for vacant lots and surface parking, changes a neighborhood for the worse. All three proposed sites for interim surface parking and construction staging are exposed to residents adjacent to the footprint. The New York Times headquarters and Seven World Trade Center both used much smaller staging areas. (48, 57, 460, 461)

The staging areas currently planned for the project appear to be designed more to create strategic vacancy, with the project positioned as a solution to that problem, than for any real construction need. The project's popularity can only benefit from the preservation of some of the buildings to be demolished, several of which can easily be used for staging, storage, and construction offices, and then converted to housing if left standing just as they are. (108, 366, 560, 585)

Response 17-12:

The staging needs for the Atlantic Yards project are substantially greater and different in nature than those for the Seven World Trade Center and the New York Times Headquarters buildings. The construction of a new state-of-the-art railroad facility for the LIRR, retaining walls, foundations for a platform and the future residential buildings, the platform itself and related supports over the Vanderbilt Yard, in particular, along with the installation of utilities and the construction of the Arena structure, require more equipment compared to projects like Seven World Trade Center or the New York Times Headquarters buildings. As stated in the response to the other similar comments, the use of Blocks 1128 and 1129 for staging and construction worker parking would keep construction-related vehicles off neighborhood streets to the extent practicable, and allow for staging and material delivery in a controlled and efficient manner. Furthermore, since the existing buildings on Blocks 1128 and 1129 would ultimately be replaced by the proposed residential buildings and open space, demolishing them early in the project schedule to facilitate better operation of construction activities and the benefit to the surrounding environment is appropriate. The potential reuse of these properties as part of the proposed project has been studied, and it has been determined that there is no practicable alternative to their demolition. Chapter 7, "Cultural Resources" of the DEIS provides additional information on this determination.

Comment 17-13: Existing buildings should not be vacated and/or demolished until replacement design and financing are in place. (37)

Only blocks immediately slated for construction should be demolished. (461)

All the demolition is scheduled to happen at the beginning of the project. Much of the project area is the way it is because perfectly good brownstones were demolished for a Baruch College expansion that was never built. Demolition on this project shouldn't happen until rebuilding is scheduled to start. (235)

The 10 year construction time frame is inadequate—construction mitigation needs to be determined for 15-20 years due to the likelihood of project delay for economic reasons. For this reason only blocks immediately slated for construction should be demolished. (461)

Response 17-13: As described in other responses, utilization of the full project site to support construction phasing would allow for more on-site staging capabilities, better control of delivery and handling of materials and equipment and would reduce the effect on on-street parking in the community from construction workers. The impacts represented in the DEIS identify and describe the potential significant adverse impacts that would result from the construction of the proposed project on the anticipated schedule. If there are unanticipated delays in the completion of any element of the project, the duration of individual construction elements would not be expected to change appreciably, and no new significant adverse impacts would be expected.

Comment 17-14: The DEIS fails to address the negative socioeconomic impact of long-term construction on the existing business community. (31, 57)

Although the DEIS states that there would be no significant adverse impacts to the local businesses surrounding the project area, further analysis is necessary as sidewalk closures, changed bus routes and lessened pedestrian traffic during the 10-year duration of the construction period will have detrimental effects to the local businesses in the project area. (12)

The DEIS does not take into account the economic impacts on businesses and residents during the construction period. The DEIS should consider the impact on local businesses dependent on foot traffic on Vanderbilt and Flatbush Avenues, which are likely to be deterred by dust, noise, and street construction. Extensive infrastructure work on Dean Street is likely to adversely impact the operations of local manufacturers who will have difficulty with loading operations. Interruptions to utilities (telephone, water, and electricity) are to be

expected during construction. Even brief interruptions can have a catastrophic impact on small businesses. Other neighborhood businesses whose operations are environmentally sensitive will be adversely impacted by dust. (108)

Response 17-14:

The effect of construction activity on the existing business community is addressed in Chapter 17, "Construction Impacts." As indicated in that chapter, construction activities associated with the proposed project would, in some instances, affect socioeconomic conditions in the vicinity of the project site. Access to the businesses in the vicinity of the project site would not be impeded, nor would signage be restricted. While construction may require the temporary closure of travel lanes on the north side of Atlantic Avenue and adjacent to the project site on Flatbush Avenue, curbside deliveries to surrounding businesses are not expected to be significantly affected. Most businesses are not expected to be significantly affected by a temporary reduction in the amount of pedestrian foot traffic that could occur as a result of construction activities. For example, Atlantic Avenue commercial uses in the vicinity of the project site are concentrated in the Atlantic Center and Atlantic Terminal shopping centers, located immediately north of the arena block. Construction of the proposed project would not adversely affect these businesses, most of which are destination retail stores that do not rely on pedestrian traffic and attract customers from across Brooklyn. In addition, as described in Chapter 17, "Construction Impacts", the businesses, such as those along Flatbush and Atlantic Avenues, are not expected to be adversely affected by the temporary relocation of bus stops near the project site. Overall, construction of the proposed project is not expected to result in any significant adverse impacts to surrounding businesses.

Comment 17-15:

A local citizen review panel to monitor construction must be established, with immediate access to official channels in order to stop or modify unacceptable construction activity. (461)

An independent body with testing and enforcement capabilities should oversee the construction of the proposed project. (108)

The FEIS should order appointment of a Construction and Project Design Oversight Watch Group to monitor construction and the proposed design as it progresses, and listen to and address community complaints during the 10-year proposed construction period. In order to be effective in any way, this must be an independent group that is designed to absorb public input, and it must have enforcement powers. (48, 255)

A local monitoring committee should be established during demolition and during construction. (37)

The DEIS does not mention a process in which citizens can submit complaints and concerns during the construction phases. (560, 585)

Response 17-15: In addition to the construction management team that would monitor day-to-day construction activities, an on-site construction coordinator, functioning as a liaison between the project sponsors and the community, would be available to address specific concerns. ESDC would require the project sponsors to enter into contractual obligations to implement the environmental impact avoidance and mitigation measures to be executed by the project sponsors. During construction of the proposed project, ESDC expects to retain the services of appropriate professionals to monitor and ensure compliance with the same.

Comment 17-16: If the project proceeds as planned, Dean Street will become a dust-covered, congested construction zone until the children living here have gone to college. (57)

During the 10-year construction period, interim surface parking lots and construction staging areas incompatible with existing zoning will be placed in direct proximity to Dean Street homes and businesses. (48, 57, 108, 460)

Response 17-16: The potential for dust, particulate matter and congestion resulting from construction of the proposed project was examined in great detail in the DEIS. No significant adverse impacts on air quality from the construction of the proposed project are expected on Dean Street or other locations in the project study area. As stated in responses to other comments, the use of Blocks 1128 and 1129 for construction management and staging/parking is integral to the project's construction and essential to minimizing disruptions on the surrounding neighborhood and roadway network. Potential impacts on Dean Street from the construction of the project were disclosed in the DEIS. In addition, Block 1129 is predominantly a manufacturing zone as is the block immediately to the south.

Comment 17-17: There should be engineering evaluation and monitoring to ensure that our facades and foundations survive the construction period. (461)

There is concern about the direct impacts on the physical integrity of the nearby buildings from the project's construction. What is the plan to protect building residents on Dean Street? (560, 585)

Response 17-17: The DEIS included an assessment of the potential vibration impacts of construction activities on structures and residences near the project site.

Vibratory levels would not result in architectural or structural damage to nearby structures. Moreover, consistent with standard practice, the project sponsors would conduct a pre-construction survey of adjacent and identified historic buildings to determine their condition. This not only assists in the engineering determinations of construction methods to ensure such structures are not damaged, but also to properly document conditions before construction starts. As disclosed in the DEIS, a Construction Protection Plan would be developed to comply with the procedures set forth in TPPN #10/88 and other New York City Building Code regulations in order to ensure that off-site historic resources are not damaged during construction. Also as noted in the DEIS, the historic resources of most concern with regard to the potential for structural or architectural damage due to vibration are the Swedish Baptist Church (the Temple of Restoration) and nearby row houses along Dean Street, which are immediately adjacent to the site of Building 15. The project sponsors would implement a monitoring program to ensure that no architectural or structural damage would occur.

Comment 17-18: The project should be reviewed in phases to account for real-time information and actual impacts associated with construction, and after the completion of Phase I, to take into account the actual effects of the project and allow for greater flexibility in achieving further mitigation. (25)

Response 17-18: The assessment performed for the DEIS was based on the likely construction methods, practices and timeline for construction. Input on state-of-the-art real world measures and environmental controls on equipment that can be procured at the present time were utilized in the impact assessments for the DEIS and FEIS to evaluate the potential environmental impacts of construction. As such, they provide realistic mitigation that can be incorporated into the project at this time. The EIS analyzed the potential for construction-related impacts at peak construction periods throughout the anticipated duration of construction. Continuing coordination between the project sponsors, their construction managers, and City agencies would be undertaken throughout construction to address specific needs that may arise.

Comment 17-19: Site 5 should be designated as a separate Phase III so that construction is not occurring simultaneously on both sides of Flatbush Avenue at this busy location. (25)

Response 17-19: Site 5 is included in Phase I because it is a site unencumbered by the need to move a rail yard or build an arena. As such, its construction

could proceed independently and rapidly should, for example, an office tenant be identified. Thus, it is consistent with a reasonable worst-case construction impact analysis to include it in the Phase I build year of 2010. The potential significant adverse impacts of construction of Site 5 during the anticipated timeframe were disclosed in the DEIS. Based on the results of these analyses, changing the timeline of construction of Site 5 would not result in any appreciable change in predicted significant adverse impacts than those reported in the DEIS, and would not reduce or avoid significant adverse impacts disclosed in the DEIS.

Comment 17-20: It is not consoling to read that the DEIS vaguely suggests analyzing safety hazards sometime in the future. People living near the site need to know now what health, noise and quality of life issues they will be facing over the next decade, not at some undetermined point in the future. (48)

Response 17-20: While the comment is not specific on safety issues discussed during construction, the DEIS fully analyzed the potential for impacts on the community throughout construction phases. As part of this analysis, the DEIS noted safety measures including the preparation of a construction health and safety plan (CHASP). The CHASP would be finalized in concert with the construction management/coordination plan. Additional information on what would likely be included in the CHASP is included in the FEIS. The CHASP would be prepared in accordance with Occupational Safety and Health Administration (OSHA) regulations and guidelines, to address both the known contamination issues and contingency items. The CHASP would include provisions for the identification, handling and disposal of known and/or unexpected buried tanks, petroleum-contaminated soil, historic fill, or other contaminated materials that might be encountered. The CHASP would also address procedures for stockpiling, testing, loading, transporting (including truck routes), and properly disposing of all excavated material. A Community Air Monitoring Plan would also be included to be implemented during excavation work that disturbs potentially hazardous materials on the project site. Chapter 10, "Hazardous Materials" of the FEIS provides further details on the likely air quality monitoring requirements during various components of construction.

Comment 17-21: What will be the impact of ten years of construction on Atlantic Avenue's status as a Shore Evacuation Route? (69, 107)

Response 17-21: The proposed project and associated construction should not affect the ability to use Atlantic Avenue as a Shore Evacuation Route. As disclosed in the DEIS, measures outlined in the Construction Protection

Plan (CPP) and Maintenance and Protection of Traffic (MPT) Plan would ensure that lane closures are kept to a minimum. Construction of the proposed project would not block or restrict access to any facilities in the area, and would not affect emergency response times significantly. As part of the approvals for the MPT, it is expected that the New York City Department of Transportation Office of Construction Mitigation and Coordination (OCMC) would require intermittent lane closures during off-peak hours or for shorter roadway segments. The construction-related effects on Atlantic Avenue would be the most pronounced during the early stages of construction when activities associated with the Carlton and 6th Avenue bridge replacement, the construction of the LIRR West Portal, and the utility installation would be undertaken. After Phase I of the project is completed, anticipated in 2010, the related roadway improvements would substantially improve operations along Atlantic Avenue, particularly between Flatbush and Vanderbilt Avenues. After this time, construction activities would occur primarily on-site and would have little effect on traffic flow on Atlantic Avenue or its status as a Shore Evacuation Route. In the event of a shore evacuation, it can be assumed that construction-related traffic or construction activities at the site would be discontinued or significantly reduced.

Comment 17-22: A three-year development period for the first phase is extremely tight and it is reasonable to question whether it can be completed in such a short period of time. Property must be condemned, and any legal challenges cleared. The Vanderbilt Rail Yards renovation must be completed and a platform section built. All discretionary approvals must be completed, streets closed, and utilities relocated. Coordination with local agencies and services to minimize construction impacts will take time. Major street reconstruction/utility replacement projects in central area of Brooklyn often take 2-3 years, and that does not include new construction. (55)

Response 17-22: The four-year timeline for construction of the first phase of the project is based on the engineer's estimates of completion based on a detailed scheduling program for construction, and years of experience in the construction of sports complexes and residential/office buildings. As part of this scheduling, an extensive amount of coordination with the utility and transportation agencies has been undertaken before the preparation of the DEIS to ensure that the analyses reflect the likely timelines for reconstruction/utility replacement. The schedule and analyses concentrate construction activities at the site and assures that the reasonable worst-case construction condition is analyzed.

Comment 17-23: Should the first phase take longer than three years, construction impacts in the second phase could intensify, and this would require additional environmental impact analysis. Should the entire project take longer than 10 years, this will extend the period of significant and adverse impacts, and the subsequent public health implications. (55)

Local real estate market conditions are difficult to predict 10 years in advance. The long-term strength of both residential and commercial markets may be difficult to assess and investors may choose to delay the project, or add new phases, so that what is now planned for the second phase by 2016 may actually be built over a much longer period of time. (55)

The phasing of the project is a complicating factor in the analysis of the construction plan. As the project is currently proposed, the second phase of the development has no concrete, enforceable timeline. That means there is real potential any "temporary" alterations to the 2nd phase footprint for the purposes of construction will remain unchanged for a long time after the projected ten year final build-out, if not permanently. (108)

Response 17-23: The timeline for construction takes into account the practicality of completing various project elements before additional elements of the project can be started. If there were delays in completion of Phase I, this would likely result in some start-up delays for Phase II, but would not likely result in more intense construction for Phase II. The impacts represented in the DEIS identify and describe the potential significant adverse impacts that would result from the construction of the proposed project on the anticipated schedule. If there are unanticipated delays in the completion of any elements of the project, the duration of other elements would not be expected to change appreciably, and no new significant adverse impacts would be expected.

Comment 17-24: We recognize the concern of some citizens about how the construction of new foundations will impact the integrity of nearby existing buildings. This concern can be further addressed when the architects, engineers, and construction managers review the overall project design. In this industry, and with a project of this magnitude, such concern and thorough evaluation is an activity of the preliminary design process. (73)

Response 17-24: Comment noted.

- Comment 17-25:** The increase in dust and noise during construction will make the Fulton Street commercial strip an unpleasant venue for shopping and pedestrian foot traffic which are essential to storeowners. (105)
- Response 17-25:** As discussed in other response to comments and the DEIS, extensive dust control measures will be incorporated into the construction plans. The extent of predicted potential significant adverse noise impacts from construction would not extend to Fulton Street. The construction of the proposed project would not significantly affect the shopping environment of the Fulton Street.
- Comment 17-26:** In 1997, St. Felix Street, which is adjacent to Atlantic Center Mall, collapsed taking the buildings' historic facades with it. Vibrations from the subways and a broken water main caused the collapse. This is one of the oldest sections of Brooklyn, where there are two houses still standing from the Dutch era just two blocks away on Fort Greene Place. How will this area of historic homes, particularly the blocks adjacent to the site, survive the vibration of excavation, pile driving, and heavy truck traffic caused by 35- to 60-story buildings being erected? These issues must be mitigated. (105)
- Response 17-26:** The DEIS concluded that there would be no significant vibration impacts on structures on Fort Greene Place. As noted in the DEIS and other responses to comments, a Construction Protection Plan (CPP) would be developed to comply with the procedures set forth in TPPN #10/88 and other New York City Building Code regulations in order to ensure that off-site historic resources are not damaged during construction. There would be no pile driving associated with the proposed project; rather, the piles would be bored.
- Comment 17-27:** In addition to temporary landscaping around construction sites, significant, mature trees be planted on adjacent streets, including the entirety of Dean Street from 6th Avenue to Vanderbilt Avenue; Atlantic Avenue from Flatbush to Vanderbilt Avenues; Vanderbilt Avenue from Dean Street to Atlantic Avenue; Pacific Street between 6th and Carlton Avenues; and other residential areas most affected. (371)
- Response 17-27:** The proposed project would replace the street trees that would be removed as a result of the project's construction activities. Additionally, the proposed project would create eight acres of landscaped publicly accessible open space that entail the plantings of a substantial number of trees. It would also include street tree plantings on the sidewalks abutting the project site, where practicable. (Because of subway vents and other infrastructure constraints, certain sections of the public sidewalk may not accommodate street plantings.) These locations would

include Atlantic Avenue from Flatbush to Vanderbilt Avenues, Vanderbilt Avenue from Dean Street to Atlantic, Pacific Street between 6th Avenue and Carlton Avenue and portions of Dean Street adjacent to the project parcels.

Comment 17-28: The FEIS should examine an alternative construction schedule that provides additional publicly accessible open space beyond that of the Urban Room in Phase I. (94)

The FEIS should examine an alternative that eliminates or moves the construction materials storage, staging, and parking lot proposed for the eastern blocks of the project site. Instead, this alternative should consider the provision of open space on these sites sooner than currently proposed. (94, 119)

Response 17-28: The proposed project would provide a total of 8 acres of new open space within the development parcels. In addition to the Urban Room, there would be approximately 1 acre of private open space on the roof of the arena at the completion of Phase I. Open space would be added incrementally between 2010 and 2016 as development on the project site progresses eastward and each successive building is constructed. Because construction staging would be more critical during the earlier stages of construction to complete the arena block, Carlton and Sixth Avenue Bridge replacements, LIRR West Portal improvements, and the decking over the Vanderbilt Yard, having a dedicated staging area at Block 1129 would reduce the need for on-street construction staging, which typically results in the taking up of available curb space and at times disruptions to general traffic flow. By also using it for temporary construction worker parking, the need to circulate neighborhood streets by construction workers seeking available parking would be reduced as well. Furthermore, the full use of open space on the project site would not be feasible because of access and safety considerations as construction of project elements is undertaken. Therefore, the early development of open space on the eastern portion of the project site is not considered a feasible alternative to the proposed project.

Comment 17-29: The project sponsors should stop construction on all recognized religious holidays in respect of the multicultural communities in Brooklyn. (12)

Response 17-29: Interrupting construction for all religious holidays would prolong the construction period and any associated impacts on the surrounding community and would be inconsistent with standard construction practices.

Comment 17-30: The depth of the construction impacts are understated and under analyzed. As an example, in a serious oversight Pacific Street and Carlton Avenue are not included in the construction impact analysis. Construction impact analysis of Pacific Street between 6th and Carlton Avenues will show the consequences of the construction traffic plan on the residential Newswalk building located there. It is generally most efficient to place staging as close to, if not in the site under construction. (108)

Response 17-30: The analysis of construction impacts presented in Chapter 17, “Construction,” included Pacific Street and Carlton Avenue. With respect to traffic-related construction, under the reconfigured street network, Pacific Street between 6th and Carlton Avenues serves only local traffic. As such, its traffic level would be substantially lower than other area streets. Hence, its intersections with 6th and Carlton Avenues were appropriately not included as critical intersections for the construction traffic impact analysis. While some truck traffic would result from staging activities at Block 1129, most truck deliveries would be timed and accommodated at the many site driveways and curb locations along the perimeters of the project site. Truck deliveries would also follow NYCDOT designated truck routes and traverse local streets only upon site access. Contrary to the conclusions made in the comment, using Block 1129 for construction staging would instead minimize travel and curbside activities on neighborhood streets. The analysis assumptions and results were presented in a comprehensive manner in the DEIS and its supporting appendices.

CONSTRUCTION—NOISE

Comment 17-31: Why did analysis exclude the din that will be caused by years of construction and skip to the 2010 year of completion? (358)

Many areas will encounter the cumulative effect of both operational and construction noise. The analysis of operational and construction noise should be combined across each phase in the project. (108)

Response 17-31: The construction noise analysis presented in the DEIS examined potential impacts of the project during the worst projected quarterly periods for each year of construction—2007 through 2016. The noise construction impacts for Phase II accounted for the noise generated by operations of the Phase I buildings.

Comment 17-32: Loud activities must be banned completely at night. (461)

Response 17-32: The DEIS described the likely reasons why work would be required at night. The construction noise analysis examined potential noise impacts

that would occur due to weekday nighttime 2nd shift construction activities. Those analyses showed that even though ambient noise levels are lower during weekday nighttime (2nd shift), in general, the largest noise increases are predicted to occur during the weekday daytime (normal) construction time period. This is because only limited construction activities, which need to take place to avoid impeding construction would be scheduled to take place during the weekday nighttime (2nd shift). The primary exceptions would be work scheduled during nighttime hours in order to avoid impeding on transit operations or traffic flow. Evening work would be subject to the approval of the City or, with respect to work on MTA property, the MTA.

Comment 17-33: The tables in the “Noise” section cite “noise levels,” which are actually sound level readings. The DEIS appears not to know the difference between sound and noise. By treating sound and noise interchangeably, the DEIS relies heavily on sound level readings and tends to underplay the actual impacts of these different sound levels on people. Nowhere are the effects of noise on people described. (55)

Response 17-33: In general, noise, in its simplest definition, is unwanted sound. Sound can be unwanted for a large variety of reasons—because of its intensity (loudness), tonal character, when it occurs, etc. What is unwanted sound is very subjective. Various people react differently to different types of sound. The commenter is correct that frequently sound and noise are used interchangeably. However, for purposes of assessing noise impacts and following accepted practice and recommendations in the City’s *CEQR Technical Manual*, impacts are determined based upon the change in the intensity (loudness) of the sound (noise) level. A brief discussion of the effects of noise on people was provided in Chapter 15, “Noise” of the DEIS.

Comment 17-34: Sometimes it is acknowledged that noise produced by on-site construction activities will be “clearly unacceptable.” But this language ignores the actual impacts on people’s physical and mental health. Adding insult to injury, the DEIS then concludes that there are many areas in New York City where noise levels fall into the “marginally unacceptable” category and further concludes that “the noise levels produced by construction activities with the incorporated noise reduction measures would be relatively low for a construction of a project of this magnitude.” Such statements dismiss any significant impacts on people. (55, 57)

Response 17-34: The classifications mentioned are based upon the categories listed in Table 15-4, Noise Exposure Guidelines for Use in City Environmental

Impact Review, of the DEIS, which is from the City's *CEQR Technical Manual*. The statements that "there are many areas in New York City where noise levels fall into the 'marginally unacceptable'" category and that "the noise levels produced by construction activities with the incorporated noise reduction measures would be relatively low for a construction of a project of this magnitude" are correct.

Comment 17-35: The DEIS ignores the impact of noise on children's learning. (55)

Response 17-35: Chapter 15, "Noise," in the description of Noise Fundamentals, states that "If sufficiently loud, ... noise may interfere with human activities, such as sleep, speech communication, and tasks requiring concentration or coordination." This would include children's learning. As noted in Chapter 17, "Construction Impacts", most work would occur during normal working hours, and no nearby schools would have predicted significant adverse noise impacts as a result of construction of the proposed project. In addition, the proposed mitigation measures for residences (i.e., window treatment and alternative ventilation for residences that don't already have double glazed windows and alternate ventilation) where significant adverse noise impacts from construction were predicted would generally result in interior L₁₀ noise levels below the CEQR 45 dBA L₁₀ recommended level for these land use types. Therefore, no significant adverse impacts on children's learning are anticipated with the proposed project.

Comment 17-36: By the DEIS's own predictions, it seems that the street noise from the traffic will be so massive that it will "mask" the construction noise and is therefore not identified as a major problem in the DEIS. More analysis needs to be done. (37)

Response 17-36: As discussed in the DEIS and in other response to comments, an extensive assessment of construction noise was performed for the proposed project. The analyses for the DEIS followed the guidance in the City's *CEQR Technical Manual*.

Comment 17-37: Figure 17c-1 shows four buildings in Block 1137 as residential, even though they are designated otherwise. On the same block the well-established creative sector was excluded. It is critical in construction noise analysis to identify creative sector as it's highly sensitive to noise. (296)

Response 17-37: The land uses depicted in Figure 17c-1 for this block are correct. All of the nearby sensitive uses were identified in the DEIS noise analyses, and the potential significant adverse impacts from noise (over time at discrete locations) was presented in the DEIS.

CONSTRUCTION—AIR QUALITY

Comment 17-38: The DEIS fails to discuss the potential pollution that will result from the handling of building materials during the actual construction phases. Particulate matter released into the air by sawing, drilling, cutting, planing, welding, brazing, sanding will adversely impact air quality. Much of the pollution will not be containable. (24, 488, 563)

Response 17-38: Analysis of dust emissions during construction was included in the detailed modeling analysis presented in the DEIS. This included the major potential sources of dust, such as resuspension of dust from unpaved surfaces, excavation, loading and unloading of material and debris, demolition, etc. The dust emissions were included in the analyses, and no significant adverse impacts from airborne particulate matter were predicted. Sawing, cutting, planing, sanding operations on-site would be minimal, and would be an insignificant source of dust.

Comment 17-39: The DEIS predicts that PM_{2.5} impacts both during the ten-year construction period and after Project completion will be high enough to exacerbate the already existing violation of national ambient air quality standards (NAAQS). That alone is considered a significant impact according to the city's *CEQR Technical Manual*. The construction period impacts in particular do not simply represent marginal exacerbation of the PM_{2.5} violation, but will be far in excess of the concentration thresholds adopted by both DEC and DEP as a measure of "significant impacts" even in the absence of an NAAQS violation. Under SEQRA, significant impacts require mitigation. (55, 488)

Response 17-39: No significant adverse impacts on air quality would be expected at any time throughout the duration of construction and operation, due in part to the extensive emissions reduction program that was adopted as part of the proposed project. Maximum predicted impacts greater than guidance threshold values were predicted for limited duration in covered walkways adjacent to construction (up to two years at some locations), and in some limited cases for limited peak periods at residential locations as well—up to a single year of exceedance of the annual threshold or a single day of exceedance of the 24-hour threshold at a few specific ground-floor residences. The *CEQR Technical Manual* does not specifically address the determination of significance of PM_{2.5} impacts since it was last updated prior to the EPA PM_{2.5} determination of non-attainment and the publication of any PM_{2.5} analysis procedures by EPA and DEC; it does not state that any increment in PM_{2.5}, or of any other pollutant, would be significant. DEP has provided guidance similar to DEC, adopting incremental threshold values for evaluating

PM_{2.5} impacts from projects. Under the guidance, if exceedance of these thresholds is expected with a proposed action, an EIS should be prepared, such as was done for the proposed project, and identification of mitigation measures, such as the Best Available Technologies strategy already included in this project, should be identified. SEQRA regulations (and the City's *CEQR Technical Manual*) recommend that the significance of an action's potential adverse impact should be based on evaluating the setting, the probability of occurrence, the projected duration, its irreversibility, the geographic scope and magnitude, and the potential number of people affected. These evaluation criteria, along with PM_{2.5} guidance from DEP and DEC, were followed to determine the significance of potential air quality impacts during the construction period. As a result of the inclusion of an extensive emissions reduction program, incorporated in the proposed project, no significant adverse air quality impacts, as defined by SEQRA and CEQR, were predicted during construction.

The predicted increment in PM_{2.5} concentrations from the projected construction, at the locations of maximum impact, would be less than increases from other construction projects subject to study in an EIS. For example, in the EIS for the Croton Water Treatment Plant, DEP concluded that the temporary maximum PM_{2.5} increments from construction would be 17.9 µg/m³ averaged over 24-hours and 1.31 µg/m³ averaged over a year at discrete locations, higher than the maximum impacts predicted in this EIS, and would be 0.35 µg/m³ averaged over a year at a nearby residential location, which also exceeds the threshold guidance value, but concluded that there would be no significant adverse impact on air quality. In that case, DEP stated that *"...this concentration only occurs during the peak year (2010), and the annual concentration for the rest of the construction period will be lower than 0.3 µg/m³.... Based on the above, the impact from the construction of the project on PM_{2.5} was not considered significant."*

Comment 17-40: Despite the mitigation measures, PM_{2.5} impacts will still be relatively high. However, rather than consider additional mitigation measures, the DEIS claims that the remaining impacts are not "significant." (55)

Response 17-40: The emissions reduction program was included in the proposed project in order to attain the lowest practicable emissions from construction activity. In realistic terms, due to these emission reduction measures, PM_{2.5} impacts from construction of the proposed project would be reduced by approximately 90 percent. As a result, off-site PM_{2.5} concentration increments from construction of the proposed project at any given location would be reduced to the maximum degree practicable. In addition, the magnitude of the PM_{2.5} impacts with these

emission reduction measures would be less than impacts from smaller, standard private construction projects. The impacts would not be significant, as described above.

Comment 17-41: EPA took into account the other factors the DEIS says it will consider (urban/rural setting, probability of occurrence, duration, irreversibility, geographic scope, number of people affected) in setting federal standards at a level “requisite to protect the public health.” EPA’s determination should be sufficient, and the sponsors lack the expertise to challenge standards set by the EPA. (55)

Response 17-41: The DEIS does not “challenge standards set by the EPA.” Quite to the contrary, the analysis utilizes EPA standards, where those standards are not exceeded in the background condition, and as a basis for comparison when they are, such as is the case of PM_{2.5}. No new exceedances of the NAAQS were predicted. However, the above mentioned factors are utilized not in determining the attainment of EPA NAAQS standards, but rather for assessing the significance of any impacts under SEQRA. EPA does take such factors into account in setting standards, which is why PM_{2.5} NAAQS were based on 3-year averages. Even if NAAQS attainment were the issue, none of the temporary impacts during construction of the Proposed Project would occur in one place for three years. Nonetheless, the analysis for EIS purposes, according to CEQR and SEQRA, goes further to analyze peak potential pollutant concentrations (i.e., the highest year or the highest day) without using a 3-year averaging period (as is done for NAAQS determinations), and including sidewalk, window and air intake locations, because it is determining significance, not NAAQS attainment.

Comment 17-42: As a state agency, ESDC is obligated to mitigate violations of NAAQS identified by the SEQRA process, since this is one of the strategies of the State Implementation Plan (SIP) that New York implemented to comply with the Clean Air Act. The sponsors do not have the authority to supersede the SIP. (55)

Response 17-42: It is not clear what SIP the comment refers to. There is currently no SIP for PM_{2.5}. The only SIP currently in affect in New York is the ozone SIP, which is clearly not relevant to PM_{2.5}. There is mention of the SEQRA process in the Carbon Monoxide (CO) Maintenance Plan (the successor to the previous CO SIP), which states that transportation projects “1. *Either not cause or contribute to any localize CO violations or increase the frequency or severity of any CO violation, and 2. Either eliminate or reduce the severity and number of localized CO violations*

affected by the project”. As demonstrated in the DEIS, the proposed project would not cause any exceedance or exacerbation of the CO NAAQS.

Exceedances of the NAAQS from existing regional sources of PM_{2.5} were reported in the DEIS. As indicated in the DEIS, no new exceedances of the NAAQS have been predicted because of the proposed project, and the lead agency is not superseding the SIP. The State does not yet have a PM_{2.5} SIP, but would be required to develop one by 2010. The future SIP will need to present a plan to reduce regional emissions of PM_{2.5} and its precursors. Contrary to the opinion raised in the comment, by adhering to extensive PM_{2.5} emissions controls during construction, which would be mandated by ESDC, the proposed project would reduce regional emissions of PM_{2.5} in the New York City metropolitan region, and support the SIP objective of emissions reductions, since the regional benefits could extend beyond the limits of the project. It is likely that the benefit of the clean construction equipment mandated for the proposed project would extend beyond the limits of the proposed project because equipment that is no longer needed on the project site would likely continue to be used for construction of other projects in the region.

Comment 17-43: The DEIS claims that the Project causes no significant air quality impact because “maximum predicted PM_{2.5} concentration levels are comparable to ambient levels of PM_{2.5} measured at various locations in New York City over the past several years” and the “impact is comparable to increments predicted for many small-scale construction operations.” (55)

Response 17-43: The significance determination in the DEIS is not based on impact levels of other projects. The significance of potential PM_{2.5} impacts was determined according to SEQRA regulations, guidance in the *CEQR Technical Manual*, and the NYSDEC and DEP guidance threshold criteria. Comparisons to other projects or environments are presented in order to put the maximum predicted impacts from the proposed project in perspective, explaining that not only would the project not have significant adverse impacts as defined above, but that even the temporary exceedances of the thresholds identified are well within the range of the norm for much smaller projects without comparable emission controls. The overall PM_{2.5} concentrations would likely be similar to concentrations at other locations in New York City.

Comment 17-44: The DEIS claims that short-term PM_{2.5} impacts are not significant if they occur “only on days when wind speeds would be low and blowing

from the site” toward a particular sidewalk, and annual PM_{2.5} impacts are not significant if they occur at only one residential location or only for one year. NYSDEC and DEP have already considered the geographic and temporal extent of impacts in their interim PM_{2.5} guidance. Both concluded that predicted PM_{2.5} impacts, at any location that exceed certain thresholds for the requisite time periods (one day or one year) require mitigation “to the maximum extent practicable,” and the sponsors have agreed to abide by those policies. (55)

Response 17-44: As discussed in other responses to comments, the DEIS correctly followed the SEQRA regulations and *CEQR Technical Manual* for the evaluation of the significance of PM_{2.5} impacts during construction by taking into account the setting, the probability of occurrence, the projected duration, the irreversibility, the geographic scope and magnitude, and the potential number of people affected by predicted potential impacts. As noted in the DEIS, the sponsors have committed to a PM_{2.5} emissions reduction program during construction, to be mandated by ESDC, that would result in the lowest PM_{2.5} emissions and impacts practicable during construction of the proposed project.

Comment 17-45: The sponsors apparently misunderstand DEP’s PM_{2.5} guidance. Sponsors seem to believe that DEP’s annual stationary source criterion consists solely of an average impact of 0.1 µg/m³ within a 1 km square. This is not correct. The DEP criterion is an alternative formulation DEP developed, but DEP also applies the same annual criterion as NYSDEC of a maximum of 0.3 µg/m³ at any location. According to DEP, a violation of either annual criterion is considered a significant impact. Also DEP does not apply any emissions threshold. (55)

Response 17-45: The DEIS clearly states that both annual thresholds are relevant, and both were used in the assessment. All of the DEP and NYSDEC criteria were considered and employed in the DEIS. However, the comment is incorrect in stating that a predicted exceedance of DEP’s 0.3 µg/m³ criterion alone mandates a determination of significant adverse impacts; determination of significance under CEQR and SEQRA also takes into account the setting, the probability of occurrence, the projected duration, its irreversibility, the geographic scope and magnitude, and the potential number of people affected.

As part of the preparation of the DEIS, in addition to following the recommendations of the SEQRA regulations and *CEQR Technical Manual* for determining significance of PM_{2.5} impacts during construction, the ESDC reviewed the results and conclusions from numerous other EISs that evaluated and quantified air quality impacts from construction. These included the DEP FEISs for the Croton Water

Treatment Plant Project, the Catskill Delaware Ultraviolet Light Disinfection Facility and Shaft 33B to City Water Tunnel No. 3 - Stage 2—Manhattan Leg. All of these DEP EISs had quantified construction impact analyses with maximum 24-hour and annual average PM_{2.5} concentrations at discrete receptors greater than the applicable NYSDEC and DEP guidance criteria, yet DEP made SEQRA determinations that the construction air quality impacts were not significant. As noted, several of these included DEP large scale construction projects, and the same SEQRA/CEQR approach for making determinations of significance for PM_{2.5} impacts was followed.

Comment 17-46:

Combustion of natural gas in diesel engines is inherently less polluting than combustion of diesel fuel. With regard to PM_{2.5} emissions, natural gas combustion has emissions as low as the combination of ultra-low sulfur diesel fuel and particulate filters that the sponsors have committed to use on construction equipment. But diesel particulate filters may not fit all existing equipment. In those cases the sponsors plan to use less effective oxidation catalysts. Sponsors should examine the use of natural gas where particulate filters cannot be used. Furthermore, even with the use of particulate filters and the other measures the sponsors propose, PM_{2.5} impacts during the ten-year construction period will still be relatively high. Sponsors should explore the use of natural gas with diesel particulate filters or oxidation catalysts to further reduce PM_{2.5} emissions. (55)

Response 17-46:

Natural gas engines are not available for most categories of construction engines, and data on emissions is even sparser. Based on the available data from EPA's latest NONROAD model, although natural gas engines generally have a very low emission rate of particulate matter and of sulfur dioxide, the particulate matter levels from natural gas engines would be similar to or somewhat higher (possibly as much as three times higher) than those from engines fitted with diesel particle filters (DPF) using ultra low sulfur diesel, which would be used for the construction of the proposed project. The sulfur emissions from natural gas engines, although very low, would be somewhat higher than those from engines using ultra low sulfur diesel, depending on the quality of the gas. Natural gas engines would in most cases emit higher levels of nitrogen oxides (NO_x), and substantially higher levels of carbon monoxide (CO) and volatile organic compounds (VOCs). As stated above, natural gas fueled construction engines are fairly rare, and may not be available at all for many categories of equipment, whereas diesel engines for all construction equipment types are readily available and can easily be retrofit with tailpipe controls such as particle filters.

While natural gas powered generators are available, they are not designed in consideration of the portability a large construction job site necessitates. As a result of this, the utility of natural gas generators on a construction site is problematic. These generators would need a natural gas standpipe as a fuel source, which is required to be encased in a rated enclosure. Natural gas systems on an active construction site during the erection of a structure would create significant safety concerns. Jobsite generators generally need to be available for use in proximity to the progression of the leading edge of the work, so the natural gas systems and distribution lines would need to be continually extended, and then inspected and approved for use with each move which could cause interruptions and delays to the project schedule.

Since there would likely be no air quality benefit to the use of natural gas, and many difficulties, natural gas is not considered a viable option. The application of DPFs or diesel oxidation catalysts (DOC) with natural gas engines has not been widely tested or used for construction engines. For the purposes of the analysis, all engines that were known to be needed for construction and were therefore included in the analysis were identified as good candidates for DPFs. This conclusion is supported by recent experience in other large New York City infrastructure construction projects, and research undertaken with regional construction equipment suppliers, engine manufacturers and contractors before the DEIS was issued. The option of using DOC was introduced as an alternative only for cases where DPF or electric engines were not possible for safety or operational reasons.

Comment 17-47:

The sponsors should monitor $PM_{2.5}$ concentrations both during demolition and during the ten-year construction period. (55, 255)

$PM_{2.5}$ monitoring is a relatively easy and inexpensive process that was used effectively in lower Manhattan after the World Trade Center disaster. (55)

Proposed mitigation is insufficient. Air monitoring is limited to demolition activities and does not include monitoring for $PM_{2.5}$ (particulate matter which may bypass filtration in the nose and be deposited in the lungs). We want more extensive air monitoring, more limitations on heavy construction and an active community advisory committee throughout the 10-year construction period. (26)

Dust is currently planned only to be measured during demolition. It must be measured throughout construction, with immediate local residents serving on a monitoring. (461)

Response 17-47: PM_{2.5} air monitoring during construction would not enable the identification of small incremental levels, which could be expected with the enforcement of the emissions reduction program. In addition to the construction management team that would monitor day-to-day construction activities, an on-site construction coordinator, functioning as a liaison between the project sponsors and the community, would be available to address specific concerns.

As part of the preparation of the DEIS, in addition to examining the potential sources of PM_{2.5} and maximum practicable emission reductions for such equipment, ESDC also examined variations in measured PM_{2.5} from NYSDEC monitoring levels and specifications utilized by other government agencies to monitor emission reduction programs for construction activities. As discussed in Chapter 14, "Air Quality," NYSDEC PM_{2.5} monitoring data were reviewed to understand the historic and seasonal patterns in PM_{2.5} background concentrations. Figure 14-4 summarized one of these examinations. As shown in that figure, the variations in measured 24-hour PM_{2.5} background concentrations are extensive. Additionally, the study of co-located PM_{2.5} monitors at NYSDEC monitoring stations in New York City has exhibited variations between monitored PM_{2.5} values at the same location which were larger than the increments predicted during the construction of the proposed project. The relative maximum PM_{2.5} increments expected from the proposed project with the incorporated emission reduction program at upwind and downwind locations would likely not be discernable, and the incremental PM_{2.5} concentrations would likely not be discernable from any local PM_{2.5} monitoring during project construction.

The small predicted increments from construction activity are not similar in any way to emissions from the uncontrolled fires that were ongoing in the aftermath of the World Trade Center terrorist attacks.

The cost of a monitoring program such as the one suggested, including the purchase of equipment for multiple stations, securing locations for stations, and constructing stations, and then maintaining the equipment and processing and analyzing the data over a period of 10 years, is not inexpensive. This effort and expense, as described above, would then not enable the identification of small incremental levels, which could be expected with the enforcement of the emissions reduction program, even in the event that these increments would exceed the guidance thresholds. No significant adverse impacts were predicted.

Instead, the most practicable approach to ensuring that PM_{2.5} emissions are reduced during construction would be through contract specifications and enforcement mechanisms that ensure the use of

electric engines, ultra low sulfur diesel and the emissions controls on construction equipment which were assumed in the analyses. The emissions reduction program defines engine specifications and operational measures that would result in the lowest practicable level of emissions. This would be enforced by on-site inspections and the associated record keeping procedures to ensure that the program is implemented fully, and would be defined in enforceable commitment documents.

Comment 17-48: The EIS states that “Although concentrations of PM_{2.5} may increase by more than the applicable 24-hour and annual average guidance thresholds in areas immediately adjacent to the construction activity, the PM_{2.5} threshold exceedances were predicted to be limited in extent, duration, and severity,” but does not give any details. (108, 255, 560, 585)

Response 17-48: The statement, taken from the Executive Summary, is only a summary of much greater detail given in the Construction chapter in great length, describing the limited location, extent, and duration of the predicted exceedances of threshold values.

Comment 17-49: The DEIS states that 24-hour average PM_{2.5} concentrations may exceed the guidance threshold at some ground-floor residential location immediately adjacent to the construction activity only on one single day of the entire construction period while also stating that annual average of PM_{2.5} concentrations may exceed the thresholds at some ground-floor locations for one year. (108, 255, 560, 585)

Response 17-49: The DEIS statements are correct. The annual and 24-hour thresholds are different, and measure different averaging periods. It is possible to have an annual exceedance without ever exceeding the 24-hour average threshold.

Comment 17-50: The DEIS draws the conclusion that threshold exceedances pose no significant adverse impact on the air quality when it clearly violates a standard identified by EPA. (108, 255, 560, 585)

Response 17-50: The threshold values are set by DEP and NYSDEC. The determination of significance is not based on any potential single violation of a threshold, but rather on CEQR and SEQRA criteria, as described in detail in response to other comments. The proposed project would not cause any new violations of EPA standards.

- Comment 17-51:** A declaration that water would be the wetting agent instead of an oil or chemical product should be made. (108, 255, 560, 585)
- Response 17-51:** Water would be used, as mandated by regulations. Details of dust suppression methods would appear in the CHASP.
- Comment 17-52:** The issue of traffic and parking are of substantial concern, and in particular in regard to air quality. (255)
- Response 17-52:** The DEIS undertook an extensive, conservative analysis of the potential traffic and parking impacts from the construction of the proposed project. As presented in the detailed microscale mobile-source air quality analyses in the DEIS, air pollution increments from mobile sources are expected to be quite low as compared with standards and benchmarks. No significant adverse air quality impacts from construction mobile sources are expected from the proposed project.

CONSTRUCTION—TRAFFIC

- Comment 17-53:** Dean Street between 6th Avenue and Vanderbilt Avenue should not be used for construction traffic due to negative impacts on Dean Street Residents, including those in the Merchant House. (57, 461)
- Response 17-53:** As shown in the figures in Appendix F in the DEIS, most construction-related traffic projected to use Dean Street between Flatbush and Vanderbilt Avenues would be construction worker vehicles that primarily arrive early in the morning (6-7 AM) and depart mid-afternoon (3-4 PM). Construction trucks, on the other hand, would travel along NYCDOT-designated truck routes and access the project site at designated locations, including driveways along the perimeters of the project site. For the segment of Dean Street between 6th and Vanderbilt Avenues, minimal exposure to construction truck traffic is anticipated, as demonstrated in Exhibits F17a-19 through F17a-21, because only a portion of Dean Street between 6th and Carlton Avenues borders the project site and the block between Carlton and Vanderbilt Avenues would be used for construction staging and construction worker parking for most of the construction period.
- Comment 17-54:** Access must be maintained at all times to the only parking garage on the block, whose entrance is 700 Pacific Street. (461)
- Response 17-54:** As shown in Figures 17a-1 through 17a-8 in the DEIS, construction activities are not expected to affect the access to this parking garage.

Comment 17-55: The DEIS is devoid of any acknowledgement of the adverse impact of construction on bicyclists. As the rash of recent bicyclist deaths and injuries on Houston Street (currently under reconstruction) has proven, errantly placed and non skid surface street plates, street debris, increased rates of double parking and other construction related impacts directly cause bicycle crashes. (55)

The construction phase of the project alone will bring a significant amount of large vehicles to the proposed project area. These will pose an especially high risk to bicyclists. The routes that these large vehicles will take must be analyzed to determine the impact their presence will have on the safety of bicyclists and bicycle infrastructure. (125)

Projected short or long term temporary street closures or incursions during construction must be analyzed for any impacts on the bicycle infrastructure. Appropriate relief measures should be put in place. This will require a joint effort between the project sponsors and NYCDOT. Public notice should be given to bicyclists about construction activities. (125)

Response 17-55: As stated in other responses, construction trucks would travel along NYCDOT-designated truck routes and access the project site at designated locations. The project construction would be conducted in coordination with NYCDOT, to ensure that proper measures would be employed to maintain and protect vehicular, bicycle, and pedestrian traffic.

Comment 17-56: The traffic on site will be limited to a speed of 5 miles per hour to avoid the redistribution of dust, and vehicles would be required to turn off their engines after three minutes of idling. Again, these are good measures, but their enforcement needs detailing. (108, 255, 560, 585)

Response 17-56: The construction management team would monitor and regulate day-to-day construction activities, including on-site traffic speeds. ESDC would require the project sponsors to enter into contractual obligations to implement the environmental impact avoidance and mitigation measures to be executed by the project sponsors. During construction of the proposed project, ESDC expects to retain the services of appropriate professionals to monitor and ensure compliance with the same.

Comment 17-57: As described in the DEIS and based on the Jay Street Marriott hotel project, there is an average vehicle occupancy of 1.89 construction workers per vehicle. Table 17-1 gives the numbers of estimated workers and deliveries to the site during Phase I as exceeding 2,000 for a period of 1.5 years, and the number of deliveries exceeds 300 for a period of

over two years, with the exception of one month. Using these numbers the site can expect over 1,000 worker vehicles and 300 deliveries daily to enter and leave the site. This is far greater than the estimated 800 parking spaces that will be made available on site at the peak period and suggests that 200 cars and 300 delivery trucks will be forced into parking on local streets. (108, 255, 560, 585)

Response 17-57: With an anticipated auto share of 55 percent for construction workers, peak construction could generate over 1,000 worker vehicles during limited periods in the construction schedule, as analyzed in the DEIS. The study also recognized that construction workers would seek on-street parking, and that some of the construction worker parking demand would be accommodated on-street. However, it is expected that area residents would adjust their parking habits and not wait until the morning to move their vehicles for street cleaning purposes. It is expected that any on-street parking by construction workers would have more of an effect on commuters and transient parkers than on local residents. As for construction-related truck deliveries, the DEIS has stated that they would be mostly timed deliveries, avoiding excessive queuing or on-street staging. Many of these deliveries would occur directly on the construction site and some would be accommodated along roadway curbs within construction fences, such that street operations would not be further affected. In cases where truck staging is required, which would primarily occur during Phase I of construction (pre-2010), a staging area on Block 1129 adjacent to the future temporary on-site parking facility would be designated for this purpose.

Comment 17-58: The DEIS mentions that the Marriott project sponsors subsidized parking while the Atlantic Yards project sponsors will not. In the DEIS the sponsors conclude that an unsubsidized lot would discourage workers from driving to work, but it is of great concern to the neighborhood that the unsubsidized lot will have the impact of encouraging workers to park on neighborhood streets, further congesting the streets and contributing to traffic noise and vehicular emissions at the local level. A more effective technique might be to provide workers with subsidized metro cards or transit checks. Additional efforts to relocate the workers' vehicles away from local streets would include the subsidizing of an off-site parking lot. (108, 255, 560, 585)

Response 17-58: During the preparation of the DEIS, there was careful consideration in balancing construction worker parking supply and demand. The two surveys conducted, one in midtown Manhattan and the other in downtown Brooklyn, demonstrated that a disproportionately higher percentage of commuting trips by construction workers would be made

by auto, even in areas where parking is more expensive or may not be as readily available. While a transit subsidy would benefit those who choose to commute via transit, it was concluded that it is not likely to be enough of an incentive to significantly change the mode choice of construction workers, many of whom travel with their tools, during off-commuter peak hours.

The analysis also accounted for a portion of the construction workers choosing to park on street. As stated in the DEIS, there is currently an inventory of available spaces near the project site, which would be the most accessible to those construction workers arriving at the area early in the morning (i.e., 6-7 AM). The study recognized this reality and attempted to achieve a programming scheme that would supply enough parking to minimize the impact on the surrounding streets and other nearby off-street facilities while not encouraging more construction workers to drive. It is believed that subsidizing construction worker parking on-site would likely escalate the number of construction workers traveling by auto. In addition, off-site subsidized parking is not expected to reduce parking demand to the area, because construction-workers would likely still travel to the project site seeking either free on-street parking or closer off-street parking.

Comment 17-59: Taking into consideration the expectation that the highest level of construction activities would take place between the third quarter of 2008 and the second quarter of 2009 during which time one could estimate 733 construction worker vehicles would arrive the hour before (6 to 7 AM) and depart the hour after (3:30 to 4:30 PM) the regular day shift, this represents a significant adverse traffic impact on local air quality and vehicle-related noise. (108, 255)

Response 17-59: The comment correctly summarizes the anticipated peak construction worker periods and the times they would likely arrive and depart. The potential impacts of these projected vehicle trips on traffic, air quality, and noise were fully addressed in the DEIS.

Comment 17-60: The DEIS states that “Overall, significant adverse traffic impacts during construction were identified for 12 intersections in proximity to the project site and seven outlying intersections....all significant adverse traffic impacts identified at the outlying intersections would be mitigated by the early implementation of proposed mitigation measures. However, certain significant adverse traffic impacts identified at 10 intersections adjacent to the project site would remain unmitigated.” This information is unambiguous in its description of the traffic congestion that will plague the neighborhood and produce large

quantities of emissions as cars idle and slowly make their way through the area on a daily basis for the duration of the project. (108, 255, 380, 345)

Response 17-60: The analysis was conducted for the time periods during which construction activities are expected to be the highest to identify the reasonable worst-case conditions during construction and the potential measures that could mitigate these impacts to the extent practicable. As shown in the DEIS projections, the intensity of construction activities, and the traffic associated with those activities, would vary greatly over the 10-year construction period. Furthermore, after the Arena block, infrastructure work, and roadway improvements are completed in 2010, the projected construction traffic impacts would likely be limited only to the peak worker arrival and departure hours, which differ from the commuter peak hours. The potential air quality impacts from car idling and projected future traffic conditions from the construction and operation of the proposed project were included in the DEIS.

Comment 17-61: The DEIS fails to take into account the potential that transportation problems will hinder completion of the project on schedule. The DEIS also fails to examine whether traffic congestion during construction and the closing of streets will affect emergency response times. (55, 108, 380)

Response 17-61: Traffic-related impacts during construction were identified and potential mitigation measures were evaluated in the DEIS. There is no material correlation between traffic-related impacts and the construction schedule. With regard to emergency response times, as stated in the “Community Facilities” section of the DEIS Chapter 17 construction assessment, lane closures would be coordinated with DOT and the bridge reconstruction would be phased such that at least one bridge would be open at all times during the construction period. The construction of the proposed project is not expected to significantly affect emergency response times nor would it affect the delivery of police or fire protection services. The project site and the surrounding area are well-served by NYPD and FDNY protection services as well as hospitals, from all directions (See Chapter 5, “Community Facilities”). Emergency response times would not be significantly affected because of the geographic distribution of their facilities and their respective coverage areas and the existence of multiple routes to their destinations. As discussed in Chapter 5, “Community Facilities,” the City is implementing an automatic vehicle location (AVL) system in all ambulances and FDNY apparatus to allow for accurate real-time information as to the location of the vehicles. The use of this technology is expected to further reduce emergency response times.

Comment 17-62: The percentage of fee avoiding construction workers needs to be factored into the FEIS' determination of the impact on local parking along with the aggravating effect on traffic and air quality caused by cars circulating local streets in search of free parking at all hours, seven days a week, for up to two shifts a day over the course of 10 years of construction. (107)

Response 17-62: The DEIS assumed that some construction workers would seek free on-street parking rather than on-site parking and accounted for these trips in the analysis. Since extended, nighttime, and weekend construction would require substantially fewer construction workers, the effect on the surrounding areas during these times would not be nearly as perceptible to the community. The potential air quality impacts from the expected traffic conditions, while the proposed project is under construction was fully analyzed in the DEIS.

Comment 17-63: The construction disruptions will be equally as burdensome for pedestrians with the added potential for generating accidents. (107)

Response 17-63: The project construction would be conducted in coordination with the relevant approval agencies, including NYCDOT, to ensure that proper measures would be employed to maintain and protect vehicular, bicycle, and pedestrian traffic.

Comment 17-64: There are concerns regarding the diversion and increase of traffic, especially trucks onto Fulton Street and across the truck routes of Vanderbilt and Washington Avenues as construction trucks make their way across Fort Greene and Clinton Hill to the BQE. Fulton Street is already heavily blocked by traffic in the mornings up past Classon Avenue making it difficult to park and shop. (105)

There is a concern that trucks would begin to use Vanderbilt Avenue to avoid other congested roadways. (504)

Response 17-64: Construction trucks would travel along NYCDOT-designated truck routes and access the project site at designated locations. Fulton Street, Vanderbilt Avenue, and Washington Avenue are not truck routes. Trucks are permitted on these roadways only for the purpose of accessing local destinations. Hence, as demonstrated in Exhibits F17a-19 through F17a-21 in Appendix F of the DEIS, truck traffic related to the project construction is not expected to traverse the three roadways referenced in the comment.

Comment 17-65: The FEIS needs to include construction impacts in its traffic analysis as well as to consider its changing impact on emergency response services. (107, 345)

Response 17-65: As stated in the “Community Facilities” section of the DEIS Chapter 17 construction assessment, lane closures would be coordinated with NYCDOT and the bridge reconstruction would be phased such that at least one bridge would be open at all times during the construction period. The construction of the proposed project is not expected to significantly affect emergency response times nor would it affect the delivery of police or fire protection services. The project site and the surrounding area are well-served by NYPD and FDNY protection services as well as hospitals, from all directions (See Chapter 5, “Community Facilities”). Emergency response times would not be adversely affected because of the geographic distribution of their facilities and their respective coverage areas and the existence of multiple routes to their destinations. The City is implementing an automatic vehicle location (AVL) system in all ambulances and FDNY apparatus to allow for accurate real-time information as to the location of the vehicles. The use of this technology is expected to further reduce emergency response times.

Comment 17-66: When the Atlantic Avenue subway station was being built there were major traffic problems. This will be worse. (465)

Construction will affect traffic and transit services for years. (370)

Response 17-66: The DEIS provided a comprehensive analysis of the reasonable worst-case construction conditions and identified traffic-related issues and mitigation measures. Similar to all construction-related activities, the maintenance and protection of traffic would be coordinated with NYCDOT to ensure reasonable traffic operations during construction. Transit service is not expected to be significantly affected by the proposed project’s construction.

Comment 17-67: Temporary surface parking lots have not proven necessary at other large-scale construction projects in New York, such as the World Trade Center site and the Fulton Street Transit Center project. (37, 87)

Response 17-67: The construction projects stated in the comment are located in Manhattan where construction worker travel via auto is comparatively lower than that would be at Atlantic Yards. Furthermore, because on-street parking availability near the two Manhattan projects is scarce due to stringent curbside restrictions, construction workers who choose to drive would need to seek paid off-street parking. In the Atlantic Yards

area, however, some legal on-street parking would be available. Therefore, the project sponsors have committed to allocate space within the construction site to accommodate this parking demand to minimize the impact construction worker parking could potentially have on the area's parking supply. Provisions for supplying construction worker parking to mitigate impacts on local communities have been incorporated into recent major government construction contracts, including the DEP Newtown Creek Water Pollution Control Plant Upgrade and the Croton Water Treatment Plant.

Comment 17-68: The DEIS states that temporary parking facilities would be constructed to accommodate residents and visitors to the project site on Block 1129. Does that include Newwalk residents and neighbors who will no longer be able to park on the streets because of the construction? (142)

Response 17-68: The comment is incorrect. The temporary parking facilities would be constructed to accommodate construction workers, rather than residents and visitors. Temporary curb lane closures would be required and coordinated with NYCDOT, as would be by any other construction project. These closures are expected to move from place to place, as necessitated by construction activities at particular sites. No special provisions would be made to replenish the temporary loss of curbside spaces in the area.

Comment 17-69: There is concern that many drivers will not use Atlantic Avenue but will head straight for the local streets to avoid the traffic problems brought on by construction. (183)

Response 17-69: As analyzed in the DEIS, construction-related impacts would not be limited to intersections on Atlantic Avenue. The analysis distributed traffic to both Atlantic Avenue and area local streets and identified significant adverse traffic impacts at numerous intersections.

Comment 17-70: Since the DEIS has acknowledged that significant adverse impacts on traffic will be exacerbated by construction vehicles and lane closures during the construction period, the FEIS should consider the feasibility of delivering construction materials and removing construction debris by use of the Long Island Railroad (LIRR) as a possible mitigation method. (12)

Response 17-70: The MTA and the project rail engineers have considered the potential for using the rail system for deliveries and debris removal. However, the design constraints of the Vanderbilt Yard and its tunnels, as well as the need for LIRR to maintain ongoing operations and servicing of its commuter trains, preclude utilizing the rail system for such purposes.

CONSTRUCTION—HAZMAT

Comment 17-71: There is concern about potential air contamination by asbestos, lead-based paint and volatile organic compounds already on site during the demolition phase of the project. (26, 37, 506)

Construction dust will limit even further use of existing open space amenities. (108)

Response 17-71: As indicated in Chapter 10, “Hazardous Materials” of the DEIS, asbestos would be removed, as required by regulation, prior to building demolition (unlike lead abatement work). Air monitoring for asbestos is performed before, during, and after abatement of friable asbestos-containing materials to detect any emissions of airborne asbestos. Asbestos abatement work would be conducted in contained enclosures in compliance with all applicable regulations. In general, when undertaking demolition (unlike lead abatement work), lead-based paint is not stripped from surfaces. Structures are disassembled or broken apart with most paint still intact. Normal dust control measures (spraying the building with water) would be used for demolition. The lead content of any resulting dust is therefore expected to be low, and normal dust control measures are sufficient to prevent off-site impacts. Work zone air monitoring for lead may be performed during certain demolition activities with a high potential for releasing airborne lead-containing particulates in the immediate work zone, such as manual demolition of walls with lead paint, or cutting of steel with lead-containing coatings. This monitoring would be intended to ensure that workers performing these activities are properly protected against occupational lead exposure. During all subsurface disturbance work, dust control measures (e.g., applying water on haul roads, wetting equipment and excavation faces, spraying on equipment buckets during excavation and dumping, hauling materials in properly tarped or watertight containers, restricting vehicle speeds to five miles per hour on the project site and covering stockpiled excavated material) would be implemented. Volatile organic compounds, though known to be present in the subsurface, are not anticipated to be present in buildings and significant sources of VOCs inside buildings would be limited to aboveground storage tanks, which would be removed prior to demolition. Based on the assessments performed for the DEIS and the inclusion of remediation and health and safety measures as outlined in the DEIS, no significant adverse impacts from contaminants currently on-site are expected. With the implementation of measures identified in the DEIS, dust generated by construction activities would not result in significant adverse impacts on air quality at open spaces in the study area.

Comment 17-72: Despite safety measures outlined in the DEIS, CB2 believes that the community surrounding the project site will be exposed to airborne toxic fumes and particulates. According to residents of the community surrounding the Atlantic Shopping Mall, FCR failed to adequately contain hazardous material contamination during the demolition phase of that project and the community does not trust that adequate containment will take place with the proposed project, which is much larger. More stringent measures should be implemented. (24)

Residents around Atlantic Mall say that FCRC failed to adequately contain hazardous material contamination during demolition. They don't trust that it will succeed on this project which is a lot bigger. (24)

Response 17-72: Procedures to avoid the potential for demolition-related contamination resulting from asbestos, lead-based paint and volatile organic compounds were described in the DEIS and other response to comments. Controls to reduce dust and particulates during construction would be a fundamental requirement. In addition, as noted in the DEIS in Chapter 17, "Construction Impacts", dust suppression measures, such as wetting of materials, would be used, and an exposure assessment would be performed to determine appropriate dust control measures to manage any lead-based paint. Finally, as noted in other responses and in the DEIS, a CHASP with dust control measures would be required. During all subsurface disturbance work, dust control measures (e.g., applying water on haul roads, wetting equipment and excavation faces, spraying on equipment buckets during excavation and dumping, hauling materials in properly tarped or watertight containers, restricting vehicle speeds to five miles per hour on the project site and covering stockpiled excavated material) would be implemented. As part of the best management practices under the Construction Stormwater Pollution Prevention Plan (SWPPP), best management practices would include routine inspection, dust control, cleaning, and maintenance programs; instruction on the proper management, storage, and handling of potentially hazardous materials. ESDC would require the project sponsors to enter into contractual obligations to implement the environmental impact avoidance and mitigation measures to be executed by the project sponsors. During construction of the proposed project, ESDC expects to retain the services of appropriate professionals to monitor and ensure compliance with the same.

Comment 17-73: The potential release of hazardous materials during the demolition and construction process is specifically mentioned in the DEIS as related to the potentially contaminated sub surfaces of the site. The DEIS states that by following "a variety of measures set out above under 'Site Remediation,' no significant adverse impacts related to hazardous

materials would be expected to occur.... These measures include development and implementation of a construction health and safety plan and community air monitoring plan during excavation.” This issue is not fully explained in the DEIS and requires a more detailed explanation. How are local residents to be made aware of the release of potentially hazardous materials? The construction health and safety plan should be included in the DEIS and should be made public for evaluation. (108, 255, 560, 585)

Response 17-73: Chapter 10, “Hazardous Materials” of the FEIS provides further details on the likely elements that would be included in the CHASP and Community Air Monitoring Plan (CAMP). The CHASP would be finalized in concert with the construction management/coordination plan. As stated in the DEIS, as part of general construction practices, the project sponsors would have a field representative on-site through the whole construction period. The representative would serve as the contact point for the community and local leaders to voice any concerns about construction activities. A security staff would be on-site 24 hours per day, 365 days per year. In the event of an emergency, the project sponsors would contact the local authorities.

Comment 17-74: Asbestos abatement is clearly described in the DEIS and would be the first part of demolition. As New York City regulates the specialty tasks related to asbestos abatement, we need the sponsors to ensure that the process is monitored and the regulations enforced. Missing from the DEIS is the explicit description of how the asbestos abatement process will be monitored and enforced. (108, 255, 560, 585)

Response 17-74: Asbestos abatement, which as noted is required by the city/state/federal regulations to be completed prior to building demolition, is also discussed in Section F of Chapter 10, “Hazardous Materials.” Among other things, these regulations require "third-party" monitoring of the abatement. In addition, DEP and the New York State Department of Labor perform unannounced inspections of selected asbestos abatement projects.

Comment 17-75: The demolition may include buildings that contain lead-based paint. The DEIS states that an exposure assessment would be performed to determine appropriate dust control measures to manage lead-based paint but does not specify when this exposure assessment would take place and what it would consist of. It is of concern that assessments take place before and during demolition and that every possible measure is detailed, programmed, and taken in the demolition of buildings containing lead-based paint. (108, 255, 560, 585)

Response 17-75: As stated in the DEIS, any lead-based paint present in buildings to be demolished must be addressed per OSHA regulation (29 CFR 1926.62) with an exposure assessment for lead-based paint performed prior to demolition (once detailed procedures for demolition are known) per 29 CFR 1926.62(d). The exposure assessment would be prepared prior to or at the beginning of the building demolition. Under 29 CFR 1926.62 the contractor is required to institute engineering and work practice controls to reduce and maintain exposure to lead to or below the permissible exposure limit. In general, when undertaking demolition, lead-based paint is not stripped from surfaces. Structures are disassembled or broken apart with most paint still intact. With normal dust control measures, the lead content of any resulting dust is therefore expected to be low, and the required dust control measures, such as wetting down debris and removing debris through enclosed chutes, are sufficient to prevent off-site impacts. As a result of such, no significant adverse impacts from hazardous materials are expected from the demolition of buildings.

CONSTRUCTION MITIGATION—GENERAL

Comment 17-76: The impacts the project causes must be meaningfully mitigated or averted. The noise and dust caused by project and infrastructure over the short and medium term, as well as by project-generated traffic, will affect residents, artists, church services, businesses, and a playground. Construction should follow a normal weekday work schedule and construction impacts should be drawn away from the project's neighbors. (48, 460)

Response 17-76: The DEIS provided conservative estimates of construction activities for a potential reasonable worst-case impact analysis. While the project sponsors would keep nighttime and weekend work to a minimum, some work, such as transit improvements and LIRR Vanderbilt Yard construction, would be necessary to meet safety and operational needs. This work, however, is likely to occur at a lower frequency than what was described in the DEIS. While not likely to result in any new predicted significant adverse impacts, a delay in the construction schedule would further extend the duration of impacts identified on the surrounding neighborhood. As described in Chapter 17, "Construction Impacts," of the DEIS and in response to comments, many elements were incorporated into the construction of the program (e.g., utilization of Block 1129) to reduce the effect of construction on the community.

Comment 17-77: The mitigations proposed by the project sponsors are significant and will no doubt dramatically reduce the impacts of construction, but the

total absence of a program of enforcement gives one pause and ultimately undermines the mitigations. (255)

Response 17-77: The construction management team would monitor and regulate day-to-day construction activities, and an on-site construction coordinator, functioning as a liaison between the project sponsors and the community, would be available to address specific concerns. ESDC would require the project sponsors to enter into contractual obligations to implement the environmental impact avoidance and mitigation measures to be executed by the project sponsors. During construction of the proposed project, ESDC expects to retain the services of appropriate professionals to monitor and ensure compliance with the same.

Comment 17-78: Rodents will become a major issue for local residents in such an enormous project. Beyond on-site poison control, further mitigations on the premises of residents, such as metal trash bins and on-going extermination, must be provided. (105, 461, 492)

Currently CB2 communities have documented instances of infestations and invasions of large populations of huge disease-bearing rats. The excavation, demolition, and construction involved in the proposed project would disturb the rodent population. Rodent containment plans should be specifically defined and coordinated with appropriate governmental agencies prior to the demolition, excavation, and construction of the project. (24, 42)

Response 17-78: As described in the DEIS, prior to the start of construction, the construction would include a contract for providing for a rodent (mouse and rat) control program. The contractor would survey and bait the appropriate areas and provide for proper site sanitation. As necessary, the contractor would carry out a maintenance baiting program. Trash would be removed daily from the construction sites. Coordination would be maintained with appropriate public agencies.

CONSTRUCTION MITIGATION—NOISE

Comment 17-79: The parks our children use (Dean Street playground and South Oxford Park) are deemed to have unmitigated noise impacts for an unstated period throughout construction—and thus the entire childhood of many children. Some compensation must be devised to provide our children outdoor recreation spaces. (119, 461)

There is concern that the three community parks and the Pacific branch of the Brooklyn Public Library Branch will be so overwhelmed by the level of noise generated during construction and arena events that the adverse noise impact will not be mitigatable. (24, 461)

It is unacceptable that South Oxford Park will experience significant adverse noise impacts during construction that cannot be practically mitigated. (71, 272)

The FEIS should consider mitigation for the impacts of sound on these area open spaces (Bear's Community Garden, Dean Playground, and South Oxford Park) during construction by constructing replacement parkland in the form of an interim park on sites not slated for development until Phase II and/or additional maintenance to other parks within the ½ mile study area. (94)

The proposed schedule of construction indicates that during the peak times the main access to the site is going to be on Dean Street. Dean Street is a one way going north. There are anticipated to be 340 workers and 42 trucks on the site until 11 p.m. up twice a week, as well 680 workers and 82 trucks performing construction during fifty percent of weekends, possibly both on Saturday and Sundays. This projection is unacceptable. Dean Street Playground and the South Oxford Park will suffer unmitigable adverse noise impacts. (57)

Construction noise will limit even further existing open space amenities. (108)

Response 17-79:

As described in the Chapters 15 and 17, the proposed project would result in significant increases in noise levels at these parks during construction. In the case of the parks, there is no feasible mitigation that would fully eliminate these project impacts. In the case of the Pacific branch of the Brooklyn Public Library, the potential significant adverse impacts from noise during construction would be temporary. During arena events, the noise levels within the library are expected to be within levels desirable for this type of use. The DEIS noted that at the Brooklyn Bear's Community Garden, the Dean Playground, and South Oxford Park, because of safety and aesthetic concerns, there is no feasible and practicable noise mitigation. Since the issuance of the DEIS, the project sponsors have met with representatives of DPR regarding the feasibility of implementing measures for the Dean Playground. Even with the measures incorporated into the proposed project to reduce noises, it is not likely that the predicted significant adverse noise impacts from construction at any of these parks can be fully mitigated; however, with respect to the Dean Playground, the noise impact would be partially mitigated by the provision of an amenity to the park users. With regard to the Brooklyn Public Library Branch at 4th Avenue, measurements of internal/external noise levels at the library undertaken in October 2006 showed that the library's windows/walls provide approximately 20 dBA of attenuation. In addition, the library is already air conditioned. Therefore, during the

first three years of construction—2007, 2008, and 2009—interior noise levels within the library building during periods of peak construction would be in the range of approximately 50 to mid-50 dBA. This is above the 45-50 dBA L_{10} noise level that would be desirable for this type of land use. Consequently, construction of the proposed project would result in a significant adverse impact, of limited duration and magnitude, at this library. Since the issuance of the DEIS, noise mitigation measures were identified that would include additional acoustical treatment for the library windows on the Pacific Street side. With these measures, the significant adverse noise impact on the Pacific Branch of the Brooklyn Public Library would be mitigated.

As discussed in other response to comments, the Phase II areas of the project site are needed as staging/parking areas from the start of the project to reduce impacts on the community.

Comment 17-80:

The proposed mitigation of double-glazed windows and air-conditioning puts residents in airtight prisons throughout the life of construction. It is a clear admission by the developer that outside space will become unusable for the decade-plus life of the construction. Further mitigation, in the form of utility bill assistance and enclosure of outdoor spaces must be made for residents in the immediate construction area. (461)

The measure intended to mitigate noise and air quality problems during construction—providing double-paned windows and air conditioners for residents and community facilities—is not a solution for these problems, only a way to mask them while residents are inside their homes. The FEIS should recommend further mitigation methods so that these impacts are lessened in outdoor spaces. (12)

It is unacceptable to suggest that admittedly off-the-chart levels of noise and air pollution that will be generated by this project be mitigated by suggesting that I and my neighbors stay inside our homes behind double-insulated glass with our air conditioners on for the next 10 years. This is a ludicrous solution. (151)

The suggested mitigation that the developer provides area residents with double-pane window and air-conditioning to counter the negative impacts of construction is insultingly insensitive to the seriousness of the issues involved. (48)

The sponsors have noted in the DEIS that most sensitive locations are already fitted with double-glazed windows, and neglects to recognize that while air conditioners are a form of alternative ventilation, they are also costly and a source of additional noise themselves. If the sponsors

combined the air conditioning unit with a program to underwrite its use, it could be more effectively considered as a mitigation technique. (108, 255, 560, 585)

If owners don't opt for the double-glazed and air conditioner offered by the project sponsors, the DEIS states that the proposed project would have "unmitigated significant adverse impacts." In order to work, these proposed mitigations would require everyone who lives and works in the area to remain indoors. Confinement to interior spaces is not an appropriate mitigation. To the extent that residents were to stay indoors the proposed mitigations would undermine Brooklyn's well known "stoop culture," condemning everyone to adverse health risks. It would also undermine any benefits there might be to the network of "publicly accessible open space" planned for the project. (37, 55, 88)

Given that accepting the proffered mitigation will obligate residents to an ongoing and perhaps unexpected expense, it is very possible some will not accept the material required by the mitigation. In this event, the DEIS states that the proposed project would have "unmitigated significant adverse impacts." This conclusion does not go far enough. It is improper to characterize an obligatory expense being transferred to local residents as mitigation. Therefore, the DEIS has not proposed any significant mitigation and the condition of construction-related and ongoing project-related noise remains an unmitigated negative impact for an unknown percentage of the population. (55)

Response 17-80:

Confinement to interior spaces is not a requirement nor considered a mitigation element associated with the construction of the project. In addition, contrary to the comment, the noise levels (and air pollution) from construction would not be "off the chart", but would be less than those typically associated with construction as a result of the addition of noise attenuation measures.

Before addressing the need for off-site mitigation measures, the analyses for the DEIS analyzed the elements associated with construction of the project, and developed a wide variety of measures to minimize and/or eliminate potential impacts. These measures, which are quite extensive, are detailed in Chapters 17, "Construction" and 21 "Mitigation". They go far beyond typical construction techniques and noise control measures. However, because of the construction noise mitigation measures that have been incorporated into the project and committed to by the project sponsors, the magnitude of the noise levels produced by construction activities for this project are below those typically produced by major construction projects in New York City.

As noted in the DEIS, typical construction activities for major construction projects produce noise levels ranging from the high 70s to

about 90 dBA with an uncontrolled average of about 85 dBA. With the insight from the detailed analyses performed and the subsequent incorporation of noise reduction methods in the proposed project, normal weekday construction activities for the proposed project are expected to produce noise levels at nearby receptor locations generally ranging from about 57 to 78 dBA, with an average in the low 70s dBA range. The 2nd shift weekday nighttime construction activities, on those occasions when they occur, are expected to produce noise levels at nearby receptor locations generally ranging from about 56 to 75 dBA, with an average in the mid 60s dBA range; weekend daytime construction activities, on those occasions when they occur, are expected to produce noise levels at nearby receptor locations generally ranging from 57 to 75 dBA, with an average about 70 dBA.

However, even with equipment or source control measures, and with path control measures (i.e., barriers), receptor control measures would still be recommended to reduce predicted incremental off-site internal noise levels at sensitive locations. Per the guidance in the City's *CEQR Technical Manual*, these measures are window treatment and alternative ventilation (e.g., air conditioners). This is not an unusual mitigation effort. For example, as part of the earlier discretionary approvals for the Newwalk development, the units were required to provide noise attenuation measures to reduce noise impacts for on-site residents.

With respect to the issue of additional costs for air conditioners for units that do not currently have one, the costs for running such units would not be unexpected, and the project sponsors would not be required to underwrite the cost of using the air conditioners. Therefore, the DEIS acknowledged that residents may choose not to accept this mitigation measure, and if so, the predicted significant noise impacts at those locations would remain unmitigated. The double-paned windows and air conditioners are noise, not air quality, mitigation measures.

Comment 17-81:

The DEIS does not provide a program of enforcement for noise mitigation techniques and, therefore, lacks sufficient assurance that such techniques will be adhered to. The control measures proposed to reduce noise are identified as source controls, path controls, and receptor controls. In addition to these, the sponsors have presented a likely working schedule along which noise can be assumed to follow. While this methodology intends to be an effective solution to the problems of construction-related noise, it also contains significant loopholes, allows for generous exceptions, and most disturbingly provides no explanation of how enforcement will be integrated into the construction program. Source controls reduce noise at their source or during sensitive time periods, including requiring contractors to properly maintain their

equipment and have quality mufflers installed. They also require that all trucks at the staging areas, except for cement mixers, turn off their engines while they are waiting. Vehicular speed on site is also a factor and is proposed to be limited to 5 miles per hour. How will such measures be enforced and by whom? (108, 255, 560, 585)

Response 17-81: Noise control measures would be included in all contractor agreements. ESDC would require the project sponsors to enter into contractual obligations to implement the environmental impact avoidance and mitigation measures to be executed by the project sponsors. During construction of the proposed project, ESDC expects to retain the services of appropriate professionals to monitor and ensure compliance with the same.

Comment 17-82: Regarding path controls, locating generators and other noise equipment within the 20' sunken holes of the foundations sites before they are completed can only be interpreted as an extremely temporary form of mitigation. It is also clear that much of the construction equipment will be necessarily used at its point of application, regardless of whether or not that area is near a sensitive location or not. Further mitigation through the use of mufflers on or as close to the equipment as possible should be incorporated along with barrier walls, or perhaps multiple barrier walls. Further explanation of the use of noise curtains and equipment enclosures should be detailed and, again, some enforcement program should be outlined for the guarantee of maximum noise abatement through path controls. (108, 255, 560, 585)

Response 17-82: As a result of the detailed analyses performed for the DEIS, an examination of the most significant noise sources was performed, and the real-world actions that could be undertaken to reduce noise from such sources, such as location of generators and other equipment were identified. The measures discussed in this comment have been considered and where feasible have been proposed as part of the construction noise mitigation plan. With regard to noise curtains, as stated in the DEIS, noise curtains would be utilized where feasible and practicable. However, to be conservative, no credit has been taken in the noise analysis for the effects of noise curtains in reducing noise.

Comment 17-83: The issue of construction noise mitigation must be looked at in relation to weekend working hours. The current schedule of construction is unacceptable as planned. The respite from construction activity in the evenings and on weekends will provide essential relief to the corrupted quality of life that the surrounding residents will be forced to endure over the 10-year period of the project. (108, 255, 560, 585)

Projected weekend work for 50 percent of Saturdays for the life of the construction will seriously degrade residential life in the neighborhood. Residents should serve on the approval board for work outside of normal construction hours (weekdays 6 to 7 AM to 3:30 PM). (461)

Construction should follow a normal weekday work schedule and construction impacts should be drawn away from the project's neighbors. (57)

Curtailing weekend work would mitigate some of the significant adverse impacts on the Pacific Branch of the Brooklyn Library. Likewise with the Brooklyn Bear's Community Garden, the Dean Playground, and South Oxford Park. (94, 108, 255, 560, 585)

Construction should not start before 7:00 AM or continue after 7:00 PM during the week and should be discontinued on weekends and holidays. (108, 371)

Response 17-83: As discussed in the DEIS some weekend and evening work will be necessary. This is similar to other construction projects in New York City. In general, the intensity of this weekend and evening work will be less than typical weekday daytime construction activities and impacts during these time periods would also be less than during typical daytime construction time periods. Also as noted in the DEIS, the New York City Noise Control Code, as amended December 2005 and effective July 1, 2007, requires the adoption and implementation of a noise mitigation plan for each construction site, and this would be done for the proposed project.

Comment 17-84: Special attention should be paid to the abatement of construction-related noise that will affect JHS 113, the Ronald Edmonds Learning Center. All noise of a detectable decibel within any part of the school should be scheduled around school hours. (108, 255, 560, 585)

Response 17-84: No significant adverse noise impacts at JHS 113 would be expected due to construction activities.

Comment 17-85: The DEIS does not include the jack hammering of streets to lay new sewer facilities. Pipe installation, as described in the DEIS, involves jackhammers, pavement cutters, pouring gravel, and deliveries by flatbed trucks. Yet, there are no noise mitigation techniques mentioned as specifically related to the ripping up of streets outside the construction site and the laying of the new sewer system. (108, 255, 560, 585)

Response 17-85: The DEIS noted in Chapter 17, "Construction Impacts," that "sewer construction work primarily uses a 'cut and cover' technique. A trench

would be excavated in the street, a bedding layer of gravel laid in the bottom of the trench, the sewer pipe placed in the trench, the trench backfilled, and the pavement patched. This work typically involves the use of jackhammers and pavement cutters to open the street, backhoes to excavate the trench and place the backfill, and cranes to lift the sewer pipes into place.” Jack hammering of off-site streets to lay new sewer facilities was not included in the quantified noise impact calculations for construction, because these activities would be temporary in nature at any one location. Jack hammering is one of the first phases involved in breaking/removing pavement. As noted in Table 17c-3 of the DEIS, under the City’s new Noise Control Code, permitted noise emission levels for jack hammering will be much lower than typical historical noise levels from such equipment. As described in Chapter 17, “Construction” of the DEIS, for the noise impact assessment for construction, separate analyses were performed to examine potential noise impacts during each year of the anticipated 10-year construction period. To be conservative, for each analysis year the 3 month time period with the most intensive construction operations taking place was analyzed. Where such activities were in the on-site construction activities, they were included in the modeling for the peak quarter. Activities that would occur for lesser frequencies of time (such as jack hammering) or would not be in the worst quarterly period were not modeled. As noted in the DEIS, typically, about 100 feet of water line can be installed per day. Under the proposed project, sewer replacement would serve the dual purposes of handling the added flow from the proposed project and replacing old pipes—some of which date from the late 19th and early 20th century—with new 15- to 60-inch sewers. Such work would be required to conform with the City’s new Noise Control Code and the noise mitigation plans associated with such type of work.

Comment 17-86: The DEIS states that the construction noise mitigation measures that have been incorporated in the project are in line with the mitigation strategies for devices and activities imposed by the recently passed New York City Noise Control Code. This is said to assuage the concerns about construction noise expressed by community residents. But it should be noted that the DEP has not yet spelled out construction noise mitigation rules. Therefore, it is strongly recommended that an independent acoustical engineer review noise monitoring techniques, noise analysis methodology, and noise reduction measures. (55)

Response 17-86: While the New York City Noise Control Code (as amended December 2005 and effective July 1, 2007,) has not been implemented, it does provide new specifications on noise performance limits for many types of construction equipment. With respect to noise performance limits

listed in the new New York City Noise Control Code, as noted in the DEIS, where feasible, the project sponsors would use quiet construction procedures, and equipment (such as generators, hydraulic lift vehicles, trucks, and tractor trailers) quieter than that required by the New York City Noise Control Code. Table 17C-3 of the DEIS showed the noise levels for typical construction equipment and the mandated noise levels for the equipment that would be used for construction of the Atlantic Yards.

In addition, the New York City Noise Control Code requires the adoption and implementation of a noise mitigation plan for each construction site. The comment is correct in noting that these plans have not been finalized by DEP. However, before the DEIS was issued, ESDC and the project sponsors met with the DEP to present the construction analysis for the proposed project, to discuss the extensive mitigation measures under consideration for the project and to request input from DEP on additional measures that may be included in their forthcoming noise mitigation plans pursuant to the Noise Control Code.

CHAPTER 18: PUBLIC HEALTH

Comment 18-1: The project will elevate ozone levels, carbon monoxide and other hazardous particulates that trigger asthma attacks. (10, 234)

Asthma sufferers will have to deal with poisonous substances released into the atmosphere as a result of demolition, hundreds of trucks, asbestos, airborne toxic debris, diesel fuel emissions, rodent poison, plaster dust, adhesives, and metal. (116, 119, 141, 145, 164, 174, 206, 227, 358, 391, 479, 506, 580)

Air pollution is a serious concern in CB2, where there is an inordinate incidence of asthma among the area's children and families. Any additional release of air pollutants will exacerbate an already critical state of air quality in the area. Airborne exhaust fumes generated by vehicles belonging to the project site workers, residents, and visitors will increase asthma in the surrounding community. This could be partially mitigated through extensive planting of trees and vegetation to absorb the excessive exhaust fumes. (24, 195)

We are raising our children in what is sure to become known as asthma alley, as vehicular traffic sits gridlocked in 68 of the surrounding 93 intersections. (10, 195, 262, 327)

Existing traffic levels in the Gowanus Corridor have created a pollution "hot spot" and have led to increased levels of pulmonary and respiratory

disease in the area, especially among lower-income communities. (470, 474)

An item in the March 1996 issue of *Brooklyn Bridge* magazine identified these disease levels, by zip code, throughout Brooklyn. The levels in the Gowanus Corridor and Downtown Brooklyn were much higher than the average. This is directly attributable to the volume of vehicular traffic in the area. Pollution remediation measures for individual vehicles, whether the replacement of older passenger cars or the introduction of buses powered by compressed natural gas, have been offset by traffic increases. The proposed Atlantic Yards redevelopment cannot be allowed to contribute to an existing pollution problem by drawing additional vehicles into its vicinity. New York City is not now in compliance with federal air quality requirements, and unless transportation issues are addressed as part of the redevelopment, conditions will be made worse. The solutions identified are essential to mitigate these public health concerns, but all feasible steps must be taken to make use of public transportation for visits to the area both practical and attractive. (470)

The Atlantic Avenue and Flatbush Avenue intersection has long been considered a major traffic bottleneck. For this reason, in part, it, and the surrounding neighborhoods have long been studied and documented as areas of increased asthma among local children. The DEIS does not address this. Why? And how can this major national health issue be ignored? (160)

The planning process should take into account the effect of traffic and emissions on asthma rates and other respiratory ailments. (37, 510, 519)

Asthma deaths, though rare, are dramatically higher in Brooklyn than they are in the rest of New York State and the country. The borough has the highest number of hospitalization for asthma in all of New York City—an indication that many Brooklyn residents are not receiving adequate treatment. (123, 195)

Traffic congestion and construction due to the project will increase the risk of asthma for vulnerable populations, particularly children. (527)

Response 18-1:

Asthma issues in the community and potential impacts from the proposed project were thoroughly addressed and assessed in the DEIS. Given the public's concern over asthma rates in New York City during the scoping process, and concern that exposure to PM emissions could aggravate or induce asthma episodes in an individual, an in-depth review of relevant asthma-related studies, an overview of the prevalence of asthma in New York City, current asthma hospitalization data for neighborhoods representing the potentially affected population

surrounding the proposed project, and consideration of the relationship between ambient particulate matter levels and the incidence of asthma were provided in the DEIS. In consideration of this and other environmental concerns, the DEIS undertook an extensive study to quantify the effects on the nearby community, including increased air pollution for the construction and operational phases. While trees and vegetation would absorb some carbon dioxide, they would not absorb/control particulate matter from on- and off-site project related emissions. Instead, a series of measures were identified and incorporated into the proposed project to reduce air quality impacts on the surrounding community. For example, as described on page 17-62 of the DEIS, to ensure that the construction of the proposed project results in the lowest feasible diesel particulate matter (DPM) emissions, the project sponsors committed to implementing a state-of-the-art emissions reduction program. On-site emissions would be minimized by utilizing electricity on-site early on to reduce fuel combustion and state-of-the-art emissions controls for off-road construction equipment. Emissions in the nearby community would also be minimized through the use of the best available tailpipe technology for reducing DPM emissions for controlled truck fleets (i.e., truck fleets under long-term contract with the proposed project, such as concrete trucks). This far-reaching set of commitments, the combination of which has never been surpassed by any other major construction project in the New York City Metropolitan area, were indicative of the hard look undertaken to reduce particulate matter emissions in the community to the maximum extent practicable. The analysis concluded that there would be no significant adverse impacts on asthma rates.

Additionally, the proposed project incorporates a number of other measures that would help reduce auto demand from the project's residential and commercial components as well as the arena. These include a major new on-site entrance and internal circulation improvements at the Atlantic Avenue/Pacific Street station complex, secure, indoor parking for up to 400 bicycles near the proposed entrance, and as a result of the mitigation measures described in the FEIS, a comprehensive set of traffic demand management strategies to reduce arena-related traffic for game events.

Comment 18-2:

The DEIS offers a lengthy theoretical treatise on the complexity of asthma but does not calculate the increased risk of asthma to children in the vicinity of the project. While asthma undoubtedly has multiple causes, it is highly probable that additional asthma attacks and life-threatening health crises will be caused by the burdens resulting from

the unmitigated traffic and air pollution and other environmental aspects of the project. (55)

Response 18-2:

The public health impact assessment completed for the DEIS followed the guidance in the 2001 *City Environmental Quality Review (CEQR) Technical Manual* on public health concerns for which a public health assessment may be warranted and concluded that there would be no significant adverse impact on asthma rates. As part of this guidance, the *CEQR Technical Manual* suggests that “In most cases, actions that comply with applicable standards and guidelines protecting public health would not typically result in significant adverse impacts on public health” and “Some points to consider when determining significance include the likelihood of occurrence, characteristics of the population potentially affected (e.g. age; disease burden; number of people at-risk or sensitive; pregnancy status, etc.); the time frame of potential exposures (e.g., time of day, seasonal vs. year-round); latency (time between exposure and potential health effects); seriousness of the potential health effect; duration (e.g., acute vs. chronic health effects); number of people potentially affected; and the reversibility of potential impacts.” These steps were undertaken for the DEIS. The most critical component of the potential effect on asthma was the air quality impact assessment, especially for construction, which would be the component of the project resulting in the greatest emissions of air pollutants of the type that have the potential to trigger asthma attacks in people susceptible to asthma in the nearby community. An extensive analysis was undertaken to determine how air pollution could be reduced (thus leading to the emissions reduction program commitments) and to determine the consequential air quality impacts on the community. After completion of these detailed studies, Figures 17b-4 through 17b-10 provided depictions of the limited incremental air quality concentrations in the community. As a result, no significant adverse air quality impacts were identified in the DEIS from the proposed action. The DEIS noted that the potential public health impacts of particulate matter (PM) emissions and noise levels due to the proposed project are based on the results of the air quality and noise impact assessments presented in Chapters 14, “Air Quality,” 15, “Noise,” and 17, “Construction Impacts.” After subsequent review of all the pertinent analysis areas, it was determined that no significant adverse impact would occur on public health.

Comment 18-3:

The area’s high asthma hospitalization rates are understated in the DEIS. Table 18-1 shows a decline in asthma hospitalization rates between 1997 and 2004 in New York City, in Brooklyn, and in two areas around the project area, each comprised of five zip codes.

Although one of the two areas still shows an overall rate higher than the Brooklyn rate, the impression is given that asthma hospitalization is relatively low and declining. This is false, since asthma rates remain relatively high. The rates are declining only marginally and in limited areas, and any decline may well be transitory. Table 18-1 uses data from 2004, the latest available, but that data only provides information for groups of zip codes and fails to identify differences within the zip code groups. (55)

Data from 2000 organized by zip code reveals the differences among the zip codes and shows why the grouped data fails to identify wide disparities. The associated CBN table shows that the small decline in hospitalization rates, reported in the first zip code group (from 4.87 to 4.45) obscures the continuing wide disparity in Fort Greene's asthma hospitalization rates when measured against the Brooklyn rate. In the second grouping, while there was an incremental increase in asthma hospitalization rates for all the zip codes in the group (0.11), most of the individual zip codes in this group still have asthma hospitalization rates far greater than the Brooklyn average. (55)

Response 18-3:

The most current 2004 asthma hospitalization rates from The New York City Department of Health and Mental Hygiene (NYCDOHMH) are provided on a neighborhood level. While it is acknowledged that individual zip code data may provide additional detail, the DEIS does not understate the project area's high asthma hospitalization rates. The baseline data presented in the DEIS are intended to provide an overview of asthma hospitalizations in the communities, and to put into context the various asthma hospitalization rates in the project area with those of the Borough of Brooklyn, and the City of New York as a whole. In addition to the summarized hospitalization data, the subject of asthma as a serious health concern is discussed extensively in the DEIS. The discussion includes an extensive amount of additional information on baseline asthma concerns including *"Asthma is the leading cause of hospitalization in New York City for children aged 0 to 14 and ranks among the leading causes of hospitalization for all age groups. In 2000, the hospitalization rate for asthma among children aged 0 to 4 was 10.2 per 1,000 children in New York City, compared to 6.4 per 1,000 in the United States. Asthma exacerbations resulting in hospitalizations appear to be particularly frequent and severe among minority, inner-city children. A recent study by investigators at the Mount Sinai School of Medicine found an enormous difference in the rate at which children living in poor New York City neighborhoods were hospitalized for asthma, compared to children in wealthy neighborhoods. Another recent study conducted in New York City found that children living in neighborhoods of low socioeconomic status had more than 70 percent*

increased risk of current asthma (diagnosis and symptoms during the previous 12 months), when compared to children of their same ethnicity and income level living in communities of greater economic affluence. These findings suggest that characteristics of the urban environment, apart from the ethnicity and income level of the residents, contribute to high asthma prevalence. The study noted that areas with high asthma hospitalization rates are geographically clustered in low socioeconomic status areas. These areas tend to contain a number of potential pollution sources that could affect respiratory health, including designated truck routes and high traffic roads, waste transfer stations, and nearby power plants.” While the comment discusses how the baseline data are presented in a table, the DEIS clearly discussed the public health concerns related to asthma in New York, Brooklyn or the study area.

Comment 18-4: Regardless of the decline in hospitalization rates, asthma prevalence rates in the project area are still very high. In Brooklyn in 2000, a total of 68,262 or 3.7% of the adult population reported having asthma. In neighborhoods surrounding the Atlantic Yards the percentage of adults with asthma was over twice that much. In the United Hospital Fund neighborhood cluster, which includes Brooklyn Heights, Park Slope, and Fort Greene, 8 percent of the adult population reported having asthma. The prevalence rate in children is over 9 percent. (55)

Response 18-4: Comment noted. See other responses on baseline asthma conditions.

Comment 18-5: The DEIS obscures the continuing disparity in childhood asthma hospitalization rates affecting the populations most likely to be impacted by the project; the low-income children in Fort Greene, Prospect Heights, Crown Heights, and Bedford-Stuyvesant. Hospitalization rates in 2000 in these neighborhoods are all higher than the US rate of 3.03, the New York City rate of 6.06, and the Brooklyn rate of 5.45. The Fort Greene rate is 18 percent higher than the Brooklyn rate, Prospect Heights is 53 percent higher, Crown Heights is 78 percent higher and Bedford-Stuyvesant is 135 percent higher. The DEIS analysis fails to show how the decline in rates was greatest in areas where income levels went up; among at-risk low-income populations there was little if any decline relative to Brooklyn and New York City. (55)

Response 18-5: The comment correctly observes that different areas of Brooklyn have different asthma hospitalization rates. The baseline data presented in the DEIS are intended to provide an overview of asthma hospitalizations in the communities, and to put into context the various asthma

hospitalization rates in the project area with those of the borough as a whole, and the City of New York. The seriousness of asthma and the subject of asthma hospitalizations are discussed extensively in the DEIS. The DEIS does not obscure disparity of childhood asthma hospitalization rates. See other response on baseline asthma conditions.

Comment 18-6: If the DEIS prediction that low-income populations will continue to decline in the area is correct, that does not remove responsibility for disclosing the impacts of the project on the low-income population that will remain. It only means that the baseline for asthma hospitalization analysis is lower. If the project actually accelerates the displacement of low-income populations, as the analysis of the Socioeconomics chapter suggests, that does not mean that impacts on the remaining at-risk populations do not have to be analyzed. (55)

Response 18-6: Asthma hospitalization rates are the number of people per unit time. Rates are not a function of the total population size, and changes in the size of a low-income population size in a community would by itself not likely change a hospitalization rate. Chapter 4, “Socioeconomic Conditions,” concludes that the project would not result in any significant changes in the socioeconomic profile of the neighborhoods surrounding the project site. The commentator’s contention that the DEIS relied upon such changes in its public health analysis is incorrect.

Comment 18-7: Research on the effects of displacement on people displaced suggests that stress and feelings of loss can lead to illnesses such as depression among large numbers of people. The loss of friends and relationships due to upheaval and displacement are particularly profound in minority populations whose histories are filled with painful displacements, including slavery and poverty-driven immigration. (55)

Response 18-7: All of the recommended analysis input for assessing public health impacts in the *CEQR Technical Manual* were followed in the preparation of the DEIS. The DEIS disclosed that the project sponsors have been purchasing property in an effort to assemble the project site for development and have extended relocation offers to the on-site rental tenants either through compensation or offers for comparable off-site housing with the opportunity to move back into the proposed development at rent levels comparable to their current rents. Should the proposed project be approved, residents considered by ESDC to be directly displaced (existing residential occupants within the project site who are legally occupying a residential dwelling unit) would be provided with relocation assistance (See Chapter 4, “Socioeconomic

Conditions”). The health issues raised in this comment are not subject to further analysis.

Comment 18-8: On page 18-21, the qualifier offered for looking at the effects of PM on humans is “...to the extent that it can be determined...” The DEIS had already suggested that nothing can be determined from changes in air quality because of the “uncertainty regarding the shapes of the particulate matter exposure-response relationship,” and a host of other uncertainties, so it seems to imply there is no merit in further consideration (pages 18-10 and 18-11). This negative approach will most likely not resonate with the children in Prospect Heights or their parents who may be facing more asthma attacks. Despite uncertainties, EPA regularly commissions quantitative analyses of the public health impacts of particulate matter emissions. The Sponsoring Agency should do the same. (55)

Response 18-8: As discussed in responses to other comments, due to environmental and public health concerns, the proposed project would implement an emissions reduction program that would substantially reduce emissions from on-site construction equipment and off-site construction fleets. While qualifying language on the certainties of exposure relationships were accurately included in the summary discussions of the DEIS, a quantified analysis of the potential air quality impacts from the proposed project were compared to the suggested air quality impact significance thresholds from the New York City Department of Environmental Protection and the New York State Department of Environmental Conservation along with the significance criteria of SEQRA and the City’s *CEQR Technical Manual* to make the determination of public health impacts from particulate emissions. Based on the results of these detailed analyses, no additional quantified analyses were warranted, and no predicted significant adverse impacts on public health were predicted.

Comment 18-9: The DEIS, on page 18-21, also depends on the highly unlikely scenario that children will avoid exposure by staying indoors with the windows shut. The health consequences of such a scenario are substantial. With growing childhood obesity and diabetes, further limitations on opportunities for exercise and play among children can only increase the risk of these epidemics. But even if this were to be a desirable scenario, there is no reason to assume that it is a likely.

The DEIS notes the severely limited opportunities for active recreation in the area. This does not mean that children will necessarily be confined to their apartments or stay off the streets and sidewalks. The

most likely scenario is that children will be forced to play in unhealthy environments, in their schoolyards, local playgrounds, and streets and sidewalks, and unmitigated air quality, noise, shadow, and other impacts will expose them to greater health risks. (55)

Response 18-9:

The comment is incorrect in referencing that on page 18-21, the DEIS depends on any assumption that children will avoid exposure by staying indoors with the windows shut. Rather, the DEIS explains that although modeled increments of PM_{2.5} were predicted to exceed the annual impact thresholds at some locations on the exterior of on-site buildings, potential exposure at these locations would be limited since *“occupants would not be expected to have their windows open continuously and be exposed to outdoor concentrations throughout the year.”* The fact that windows would be unlikely to be open year-round is one of the considerations that were assessed in concluding that the annual average impacts would not be considered significant. The determination of significance does not depend on children staying indoors with the window shut throughout the year. In addition, the DEIS raises concerns associated with children spending more time indoors. As noted in other pages of Chapter 18, “Public Health,” *“indoor sources of PM_{2.5} contribute to, and in some cases, dominate personal exposures”, and “decreased physical activity, increasing prevalence of obesity, and increased time spent indoors are hypothesized to be contributing factors to the increase in the prevalence of asthma,” and “the effect of indoor pollutants may be increased by the growing amount of time that children spend indoors.”* No significant adverse air quality impacts were predicted, including at locations where children may be playing outdoors.

Comment 18-10:

The DEIS sums up the public health effects of noise as follows: “Therefore, no significant adverse health impacts are expected due to operation of the proposed project...the overall changes in noise level due to the project are not of a magnitude that would significantly affect public health.” This conclusion contradicts the statement in Chapter 15, “Noise,” of the DEIS: “The analysis concludes that the proposed project would result in significant adverse noise impacts at a number of locations.”

Therefore, there is a serious inconsistency between Chapter 15, “Noise” and the Public Health chapter. How can there be significant adverse noise impacts that have no effect on people? Who are the adverse to? How could they be adverse and not negatively affect other people’s health and well-being? CEQR guidelines clearly define the meaning of “adverse” and the DEIS has clearly failed to follow the guidelines. (55)

Response 18-10:

There is no inconsistency between the determination of a significant adverse noise impacts and no significant adverse public health impact in the DEIS. Numerous EISs subjected to SEQRA/CEQR have come to similar determinations for noise and public health impacts. Significant noise impacts are determined by predicted changes in ambient noise levels as a result of a proposed action. Potential health-related noise conditions relate to ambient noise levels after the action occurs. Ambient noise levels may be moderate even if the increase in noise levels exceeds significance thresholds due to low baseline noise conditions. The City's *CEQR Technical Manual* has defined suggested noise impact criteria with very low thresholds for determining significant adverse impacts and noise guidelines for open space areas. The noise impacts with the operation of the proposed project would occur largely at low locations with relatively low background levels of traffic (and thus, baseline noise levels that are relatively low for New York City). The DEIS noted that the locations of noise impacts from operation of the proposed project "*would be the principal feeder streets to and from the parking facilities for project elements. Noise levels in these newly created open space areas would also be above the CEQR guideline noise level, but would be comparable to noise levels in a number of open space areas that are also located in urban areas, including Hudson River Park, Riverside Park, Bryant Park, Fort Greene Park, and other urban open space areas.*" In analyzing potential noise impacts from construction of the proposed project, the EIS noted that with the proposed noise mitigation, "*interior L_{10} noise levels at most, if not all, residences during most periods of time where significant noise impacts are predicted to occur would generally be below the CEQR 45 dBA L_{10} recommended level. With the implementation of the noise mitigation measures, the predicted absolute off-site noise levels during construction would be below those typically experienced by residents living adjacent to large construction projects.*" Following the suggested criteria in SEQRA and the City's *CEQR Technical Manual*, and extent, duration and magnitude of the predicted noise impacts, no significant adverse impacts on public health were predicted.

Comment 18-11:

Noise pollution is a serious environmental problem and the adverse effects must be acknowledge and disclosed in the DEIS. Rather than identifying the dangers of noise to human mental and physical health resulting from this project and then seriously considering ways to lessen noise impacts, the DEIS treats noise impacts as a "possibility" with great variability amongst individuals. Thus, the frivolous mitigation of closing windows and turning on air conditioning corresponds with an analysis that trivializes noise effects. The DEIS should discuss the

impact of higher noise levels on people using local streets, sidewalks, playgrounds and public spaces. Mitigations should be proposed that reduce the impacts of noise, particularly among the most vulnerable populations. All this is absent in the DEIS. (55)

Response 18-11: The comment is incorrect in stating the DEIS trivialized noise effects. An intensive effort to address and develop solutions to reduce noise impacts on the community from construction of the proposed project was undertaken for the DEIS. For example, this extended effort involved a detailed assessment of construction procedures, identification of noisiest activities/sources, research into the state-of-the-art equipment/noise reduction methods, and assessments of the most practical means/methods to reduce noise impacts on the surrounding community. The DEIS did address the potential noise impacts on sensitive uses (per the guidance in the City's *CEQR Technical Manual*), and by incorporating control measures to be implemented as part of the proposed project, and off-site mitigation measures during operation, the predicted absolute off-site noise levels during construction would be below those typically experienced by residents living adjacent to large construction projects. Ambient noise levels resulting from the proposed project are characteristic of many residential areas in New York City. The DEIS concluded that the overall changes in noise levels due to the project are not of a magnitude that would significantly affect public health. A more detailed public health analysis is not required.

Comment 18-12: The DEIS sidesteps the need to determine how many residents and workers in the area will experience physiological and mental health problems due to added noise. It merely says that everyone reacts differently to noise. Furthermore, the DEIS does not examine or discuss mental health impacts resulting from displacement, noise, shadows, and other impacts. (55, 475, 505)

Response 18-12: As discussed in responses to other comments, the analyses in the DEIS followed the guidance in the City's *CEQR Technical Manual*. The project would not result in ambient noise levels in excess of those that already occur in the area and would not result in significant noise-related adverse public health impacts.

Comment 18-13: Scientists accept that associations between exposure and risk exist in each of the areas discussed in the DEIS, even if direct causal links cannot be definitively proven. The DEIS, however, has failed to disclose the extent to which increased exposures caused by the project will increase health risks, or to include quantitative information where research has provided guidance. Uncertainties should not be used to

ignore serious possible risks to human health. This environmental review should take a “hard look” at potential impacts and consider the “worst-case” scenario. (55)

Response 18-13: The DEIS took a hard look at potential impacts and reasonable worst case scenarios. While background discussions of uncertainties in science were provided in the DEIS, numerous quantified analyses were undertaken. Pursuant to the guidance in the City’s *CEQR Technical Manual*, the results of these numerous analyses were taken into consideration in evaluating the potential public health impacts. This included looking at benchmark criteria for significant impacts, conditions experienced throughout New York City, and the extent, duration and severity of potential significant adverse impacts. Following the guidance in the SEQRA regulations, the determination from these extensive quantified analyses was that no significant adverse impacts on public health would occur from the construction or operation of the proposed project.

Comment 18-14: The discussion of the health effects of fine particulate matter, PM_{2.5}, in the DEIS appears to have been written by, or copied from material written by, Dr. Laura Green of Cambridge Environmental, Inc., a consultant often hired by polluting industries to defend their practices. Dr. Green’s views regarding the health effects of PM_{2.5} and of EPA’s National Ambient Air Quality Standards (NAAQS) for PM_{2.5} are considered extreme, and they run counter to the State of New York’s position. In this DEIS, the Sponsoring Agency has relied on biased material derived from Dr. Green. The scientific consensus represented in the PM_{2.5} NAAQS, EPA’s 2004 criteria document, and EPA’s 2005 proposal to revise the PM_{2.5} NQAAQS is not considered. (55)

Response 18-14: Dr. Laura Green has not been retained as a consultant for this EIS. The extensive discussion of PM_{2.5} is consistent with the State of New York’s position. In fact, much of the discussion of health effects of PM_{2.5} is from EISs that have been reviewed by agencies such as the New York City Department of Health, the New York State Department of Health, the New York City Department of Environmental Protection, the New York State Department of Environmental Conservation, the United States Environmental Protection Agency (USEPA) and the United States Center for Disease Control. This text was updated with some information from the latest scientific studies on the known health problems, including studies that were referenced in EPA’s 2004 criteria document. In addition, USEPA’s proposal to revise the PM_{2.5} was explicitly included in the DEIS and updated for the FEIS with USEPA’s recent change to the particulate matter air quality standards. The change

in the status of the PM_{2.5} standard did not change any air quality or public health conclusions in the DEIS.

Comment 18-15: Most critically, the DEIS analysis deals with the subject of public health superficially, providing broad area statistics, instead of investigating the wide variations within the study areas themselves. As a result, it fails to address the disparate impact of health risks on children, the elderly, and low-income minority populations. (55)

Response 18-15: As mentioned in earlier responses, the baseline data presented in the DEIS are intended to provide an overview of asthma hospitalizations in the communities, and to put into context the various asthma hospitalization rates in the project area with those of the borough of Brooklyn and, and the City of New York as a whole. Following guidance in the *CEQR Technical Manual*, and using benchmarks for determining the potential for public health impacts, it was determined that populations surrounding the proposed project, including children, the elderly, and low-income minority populations, would not experience a significant adverse public health impact from the operation and construction of the proposed project. As part of this determination of significance, ESDC examined potential air quality impacts and public health impact conclusions from other quantified construction impacts in recent EISs. This included the the Croton Water Treatment Plant FEIS (June 2004), and the City Tunnel No. 3, Shaft 33B FEIS (January 2006), which had its analyses reviewed and commented on by NYCDOHMH. After consultation with NYCDOHMH, DEP as lead agency reached the conclusions that the predicted air quality increments would not result in significant adverse public health impacts. For both of these DEP EISs, predicted neighborhood scale PM_{2.5} increments were greater than those determined in the DEIS for the Atlantic Yards project.

Comment 18-16: The DEIS makes only passing mention of the disparate effects of significant adverse environmental impacts on low-income minority communities, and fails to address them in any comprehensive way. These impacts should be addressed. (55)

Response 18-16: The potential public health impacts on all communities were addressed in the DEIS.

Comment 18-17: The proposed project put the solid waste burden of new development on low-income communities with disproportionately large minority populations. Vermin and increased diesel truck traffic, with their

associated traffic dangers and higher concentrations of particulates, are among the burdens imposed. (55)

Response 18-17: The proposed rodent control programs during construction and the overall solid waste practices from the construction and operation of the proposed project were described in the DEIS. The potential public health impacts from traffic and resultant air quality pollution from the construction and operation of the proposed project were examined in great detail. The result of these analyses indicated that there would be no significant public health impacts from the construction and operation of the proposed project.

Comment 18-18: Since the negative effects of air quality impacts are minimized in the DEIS, the disparate impacts are also minimized. As environmental justice advocates in New York City point out, people living in low-income minority neighborhoods near highways and high-volume traffic arteries experience greater health risks. It is commonly known that asthma affects low-income minority populations disproportionately. The DEIS should examine the extent to which traffic generated by the project will have disproportionately high negative impacts on the health of nearby low-income minority populations. (55)

Response 18-18: The DEIS does not minimize the air quality effects of the proposed project. Following the guidance in the *CEQR Technical Manual*, the DEIS did assess the potential public health impacts from traffic, and resultant air quality pollution related to the construction and operation of the proposed project. Since the results of the air quality analysis showed predicted pollutant concentrations would be below air quality guideline thresholds, it was determined that there would be no significant public health impacts on populations near the project site, including low-income and minority populations.

Comment 18-19: Adults and children will be exposed to much higher levels of air and noise pollution both during and after construction. Air pollution effects on both children and parents may include: asthma, hay fever, irritation of the eye, nose and throat, and headaches. Some studies suggest possible liver damage or damage to other organs; pregnant women and adults with certain cardiovascular or respiratory conditions living in the area will be affected more severely. Noise pollution impacts included tiredness and headaches, stress and hypertension, and hearing impairment. (461)

Response 18-19: As disclosed in the DEIS, while construction activities would be noticeable and intrusive, the noise levels produced by construction activities with the incorporated noise reduction measures would be

relatively low for construction of a project of this magnitude. Additional mitigation measures that were identified to further reduce these incremental construction and operational noise levels at nearby residences are described below and summarized in Chapter 19, “Mitigation”. The potential air quality and public health impacts were also addressed in the DEIS. Based on the extensive analyses performed for the DEIS and the incorporation of numerous mitigation measures into the proposed project, no significant adverse impacts on public health were predicted.

- Comment 18-20:** The DEIS does not address the public health impacts of air quality, noise, shadows, or changes in neighborhood character. (50, 64)
- The EIS suggests that the permanent exacerbated health of the youth of Fort Greene is insignificant compared to 62-story, luxury housing. (272)
- Response 18-20:** The EIS addresses neighborhood character impacts in Chapter 16, “Neighborhood Character.” The public health impacts were addressed in Chapter 18, “Public Health.” The EIS does not suggest in any way the statement referring to the health of Fort Greene youth.
- Comment 18-21:** The poor air quality from 10 years of construction will worsen allergies and other health conditions. Who will pay for this? (187, 530)
- Response 18-21:** Based on the extensive mitigation measures incorporated into the construction of the proposed project, no significant adverse public health impacts are expected in the community.
- Comment 18-22:** When CEQR guidelines speak of adverse impacts, they refer to impacts on people. Yet the Atlantic Yards DEIS consistently dismisses the potential impacts on people who live and work in the area by focusing on the complexities of asthma and noise, and the scientific uncertainties in determining cause and effect. If the DEIS can quantify probable increases in particulate matter and decibel levels, it can estimate the effects on asthma hospitalization rates and increased risks of physiological and psychological damage in the population. (55)
- Response 18-22:** The DEIS does not dismiss the potential public health impacts on people from the construction and operation of the proposed project. As discussed in other responses to comments, a presentation of baseline public health issues was provided in the text. In addition, per the guidance in the City’s *CEQR Technical Manual*, the public health impact criteria were applied to determine the potential for public health impacts. The results of these analyses demonstrated that with the elements required for the construction and operation of the proposed

project, there would be no predicted significant adverse public health impacts from the proposed project.

Comment 18-23: While the DEIS does not address the benefits of using safer materials, such benefits could be substantial in a truly worse case scenario. The DEIS ignores the issues raised by the destruction of the Twin Towers and the toxicity of the air that resulted as a consequence.

Given that the health consequences of that toxicity are only now being felt, and that the associated health costs to our government will only continue to grow, this is not an insignificant matter. (107)

Response 18-23: As described in Chapter 1, "Project Description," of the DEIS, the proposed project will include sustainable design measures. An analysis of a condition equivalent to the destruction of the Twin Towers is beyond the scope and requirements of the EIS.

Comment 18-24: There is a bias in the standards used to judge air quality that applies particularly to public health. The issue is not specifically whether the city's overall air quality will fall within NAAQS standards, but rather that the local levels around AY itself, where asthma rates already are among the worst in the entire city, falls within safe limits. Using only area wide standards that dilute the figures for local air quality impacts is a kind of dishonesty that puts private development ahead of public health. (107)

Response 18-24: The methodology applied for air quality modeling to support the assessment of public health impacts is consistent with the guidance in the City's *CEQR Technical Manual* and the practices employed in numerous other recent SEQRA/CEQR EISs that have addressed public health impact determinations based on air quality impacts. The determination of significance of the public health impacts from the proposed project was not based on the city's overall air quality as the comment suggests. A neighborhood-scale air quality analysis surrounding the project site was conducted and the resulting pollutant emissions were determined to be within the appropriate guideline concentrations used to determine significance of public health impacts.

Comment 18-25: Cars and truck cause more than half the region's ozone problem. Auto pollution attacks the human respiratory system, causing serious health problems. From the Atlantic Yards project alone there will be an estimated 23,000 car and truck trips daily added to the immediate area. This is around 8 million new trips a year. It is common sense that there will be an increase in asthma and other respiratory illnesses in the

immediate area, as well as increased sickness caused by the stress added to the lives of the residents in the area. (116)

Response 18-25:

As noted in the DEIS in Chapter 14, “Air Quality”, ozone is a regional pollutant of concern. As such, New York’s State Implementation Plan (SIP) for ozone examines the effect of regional sources, and requires that funding of transportation projects should consider growth in the region to ensure that air quality objectives are attained. Locating high density, high quality development in proximity to transit nodes is being increasingly recognized as an important planning strategy for reducing the numbers of auto trips that would otherwise be generated by such development.

As part of the preparation of the DEIS, representatives of the New York City Department of Planning (NYCDCP) and the New York Metropolitan Transportation Council (NYMTC) were contacted for their consultation on the potential regional impacts of the proposed project. NYCDCP noted that NYMTC was informed of the Atlantic Yards and that individual projects, such as the Atlantic Yards redevelopment project, are considered to be included in the growth within the longer term regional growth projections utilized by NYMTC. NYMTC confirmed that the Atlantic Yards Arena and Redevelopment project is accommodated in the regional growth estimates that were the basis for the regional emissions analysis in the latest conforming transportation plan and TIP determinations. Therefore, the proposed project is included in the regional modeling to ensure that air quality objectives for ozone are achieved. In addition, based on the results of the detailed localized modeling, no significant air quality or public health impacts are expected from either the construction or operation of the proposed project.

Comment 18-26:

The EIS should include the health care consequences of increased respiratory ailments and mental health problems from the residents in the area where the 68 traffic intersections will be congested. (227)

Response 18-26:

The public health analyses of the potential impacts from the proposed project followed the guidelines in the City’s *CEQR Technical Manual* and included a specific analysis of the potential for air quality impacts at the traffic intersections with the greatest amount of project-generated traffic. Based on the results of these analyses, no significant adverse impacts from public health are expected from the proposed project.

Comment 18-27:

It is critical to provide estimates and information that quantify by how much the PM_{2.5} thresholds are expected to be exceeded. It is very important to talk about the expected values of PM_{2.5} concentrations and

not just whether they are expected to be above or below the thresholds. (108)

Response 18-27: The total predicted concentrations of PM_{2.5}, as well as the predicted increases in PM_{2.5} are provided in Chapters 14, “Air Quality” and 17, “Construction.” As discussed in Chapter 18, “Public Health,” the determination of the significance of public health impacts is based, in part, on the results of the air quality data presented in these chapters for both the operational and construction aspects of the proposed project. The results show that there would be no significant adverse public health impacts.

Comment 18-28: The EIS does not go into much detail at all about how the PM_{2.5} estimates were derived for this project, but we expect it is from some sort of modeling process. Therefore, it is important to expand on the methods used (and how their validity was determined or established). However, as importantly, the modeling assumptions also determine to a large degree the validity and accuracy of the output, and these assumptions should be stated explicitly. (108)

Response 18-28: A complete discussion of the modeling techniques and assumptions used in the PM_{2.5} modeling for the proposed project are presented in Chapters 14, “Air Quality,” and 17, “Construction.”

Comment 18-29: It is critical to have a sense of the composition of the particulate matter that will be aerosolized during this project. Given that this project is centered on a former rail yard and in an area with a long history of high volume vehicle traffic, more information is required on things like the lead and PCBs that might be aerosolized during the project. Even if the overall PM_{2.5} is below the thresholds, if there is a high lead component and the exposure period is prolonged, this can result in increased blood levels, which in turn have an increased risk of adverse outcomes, which have been well-documented. Studies have shown that lead levels in both the environment increase (on and around urban construction sites), and the blood levels of construction workers due to aerosolization of lead in soil and paint at the site as a result of the work/upheaval. The risk is clearly highest for the workers, who should use personal protective equipment and other measures, but given that PM_{2.5} levels will be elevated in some residential areas, this becomes a potential public health concern as well as an occupational health concern. Some kind of ongoing or routine monitoring of air quality for the duration of the project should be carried out, including concentrations and composition/constituents of the PM_{2.5} (e.g., lead and other things which may be of concern and also measurable). Children in the immediate area

should be screened for lead poisoning with increased vigilance. The EIS should specify a program to be implemented by the project sponsors that extends the screening programs currently provided by public agencies, and includes a communications program to inform the surrounding communities as to their availability. (108)

Response 18-29:

As discussed in Chapter 18, “Public Health,” no exceedances of the neighborhood-scale air quality thresholds for PM_{2.5} were predicted, and no predicted significant adverse public health impacts are expected from the construction and operational activities associated with the proposed project.

The primary source of PM_{2.5} during project operations would be from project-generated vehicles using nearby intersections in the study area, and the potential stationary source emissions associated fuel burned on site for heating, ventilation, and air conditioning (HVAC) systems.

Chapter 17, “Air Quality,” describes lead emissions from motor vehicles:

“...Effective January 1, 1996, the Clean Air Act (CAA) banned the sale of the small amount of leaded fuel that was still available in some parts of the country for use in on-road vehicles, concluding the 25-year effort to phase out lead in gasoline. Even at locations in the New York City area where traffic volumes are very high, atmospheric lead concentrations are far below the national standard of 1.5 micrograms per cubic meter (3-month average).”

EPA has stated that “the large reductions in lead emissions from motor vehicles have changed the nature of the air quality lead problem in the United States. Industrial processes, particularly primary and secondary lead smelters and battery manufacturers, are now responsible for most of lead emissions and all violations of the lead air quality standards.” (<http://www.epa.gov/air/urbanair/lead/effrt.html>). There are no lead smelters or battery manufacturers surrounding the project area. In addition, the industrial source analysis presented in Chapter 14, “Air Quality,” concluded that there would be no significant adverse impacts from industrial sources on the proposed project.

In terms of emissions from fuel burned for HVAC systems, the proposed project would burn natural gas exclusively, with the exception of one emergency generator, which would burn diesel fuel. Emissions from natural gas-fired boilers and furnaces include nitrogen oxides (NO_x), carbon monoxide (CO), and carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), volatile organic compounds (VOCs), trace amounts of sulfur dioxide (SO₂) and lead, and particulate matter (PM) (EPA, *Compilations of Air Pollutant Emission Factors AP-42, Fifth*

Edition, Volume I: Stationary Point and Area Sources, Ch. 1.4, NC, <http://www.epa.gov/ttn/chief/ap42>, July 1998.) The particulate matter from natural gas combustion is usually larger molecular weight hydrocarbons that are not fully combusted. The fraction of lead in PM_{2.5} from gas-fired boilers has been estimated at less than one tenth of one percent. (England, G.C., *Development of Fine Particulate Emission Factors and Speciation Profiles for Oil and Gas-fired Combustion Systems*, Final Report, 2004.)

The primary source of PM_{2.5} emissions from construction activities associated with the proposed project would be from on-site construction engines. In general, most construction engines are diesel powered. The constituents of PM from diesel engines are mainly aggregates of spherical carbon particles coated with organic and inorganic substances with the composition of the particles being predominantly, 80 to 90 percent, organic and inorganic carbon. The inorganic fraction consists of small solid carbon particles, ranging from 0.01 to 0.08 micrograms, and sulfur, oxygen, carbon, sulfate (SO), CO and NO_x. The organic fraction of the diesel particle contains compounds such as aldehydes, alkanes and alkenes, aliphatic hydrocarbons, and PAH and PAH-derivatives. (California Air Resources Board, *Report to the Air Resources Board on the Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant*, April 1998).

As described above, PM_{2.5} emissions from fuel combustion during project operations and construction of the proposed project would contain negligible amounts of lead. EPA has stated that old lead-based paint is the most significant source of lead exposure in the U.S. today. (<http://www.epa.gov/iaq/lead.html>).

Chapter 10, "Hazardous Materials" discusses the occupational health considerations during site remediation, demolition, excavation and construction activities of the proposed project. Although the site investigation data reported in Chapter 10, "Hazardous Materials," do not indicate severe lead or PCB contamination at the project site, prior to site excavation, a Construction Health and Safety Plan (CHASP) would be prepared to address both the known contamination issues and contingency items. The CHASP would describe in detail the health and safety procedures to minimize exposure of hazardous materials to workers and the public. The CHASP would be developed in accordance with OSHA regulations and guidelines. In addition to a Community Air Monitoring Plan (CAMP) following the procedures of the NYSDOH, the CHASP is expected to include specific protective measures against potential exposure to lead. As described in the chapter, when conducting demolition (unlike lead abatement work), lead-based paint is

generally not stripped from surfaces. Structures are disassembled or broken apart with most paint still intact. Normal dust control measures (spraying the building with water) will be used during demolition. The lead content of any resulting dust is therefore expected to be low, and normal dust control measures are sufficient to prevent off-site impacts. Work zone air monitoring for lead may be performed during certain demolition activities with a high potential for releasing airborne lead-containing particulates in the immediate work zone, such as manual demolition of walls with lead paint, or cutting of steel with lead-containing coatings. This monitoring would be intended to ensure that workers performing these activities are properly protected against lead exposure. In addition, an Asbestos-Containing Materials (ACM) Management Plan, a Lead-Based Paint (LBP) Management Plan and a plan dealing with PCB-containing equipment would be implemented during site remediation according to all applicable federal regulations.

CHAPTER 19: MITIGATION

All comments pertaining to mitigation have been included within their respective areas of analysis.

CHAPTER 20: ALTERNATIVES

GENERAL

Comment 20-1: There is no meaningful discussion of reduced alternatives. There are alternative plans and unfortunately the DEIS does not examine them truthfully. They do include 30 percent affordable housing, they include union jobs, they don't use eminent domain, and they have a smaller scale, which would be much friendlier to the existing community. (10, 37, 50, 68, 122, 143, 152, 165, 168, 176, 259, 262, 273, 357, 411, 414, 468, 475, 560, 585)

The DEIS failed to give due consideration to alternative proposals and the public is entitled to consideration of alternatives. The EIS should be redone to more comprehensively address the alternatives. (474)

Response 20-1: The DEIS presented a detailed examination of two reduced density alternatives. The Reduced Density—No Arena Alternative, which was modeled after the Extell Plan, provided for development of approximately 30 to 35 percent of the dwelling units proposed by the project and occupied a smaller footprint. The Reduced Density—Arena Alternative, which was modeled after the Pacific Plan, considered about 55 to 70 percent of the units proposed with the project on a footprint that was nearly equal to the proposed project site, with the exception of certain parcels on Block 1129. While both of these alternatives would

provide for housing, jobs, and other benefits to the community as compared to current conditions, there is no arena in one alternative and an inferior arena in the other alternative. Both of the reduced density alternatives would result in significant adverse impacts and neither would achieve the same level of benefits that would occur with the proposed project. The proposed project would provide for more affordable housing units, more permanent jobs, more public open space, improved subway access, improved LIRR infrastructure, and superior stormwater management strategies. Therefore, the DEIS determined that the reduced density alternatives would not achieve the project goals as effectively as the proposed project.

Comment 20-2:

The analysis of alternatives is circuitous, and the DEIS completely fails to indicate that the goals of the proposed project were set by the developer; therefore, judging any alternative proposals by whether or not they meet the goals of this proposal is circular logic, and does not provide for proper reason for their dismissal. Furthermore, if the impact of the alternatives on the surrounding neighborhoods is less significant than the impact of the proposed development, a conclusion should be made that the goals of the proposed development outstrip the resources and context which are or could be made available to support the project. A logical conclusion, in such a case, is that the goals for the project should be modified to preserve the resources on and around the site that are considered important, and to avoid affecting them as this report finds the proposed development most certainly would. (55, 58, 69, 103, 119, 349, 361)

The fact that specific features of the current plan are included as part of the Purpose and Need confuses the means with the ends, resulting in a document that cannot be disputed but is ultimately meaningless; since the project is the same as the objectives, nothing can be changed. Because if it was, it wouldn't meet the objectives. And we see the results of this in the subsequent dismissal of the alternatives. (489)

Response 20-2:

ESDC set forth the goals in the GPP pursuant to the UDC Act, and these goals reflect longstanding public policy efforts by the city to redevelop the site, including economic development, affordable and market-rate housing, and transit improvements. The project goals are consistent with the City's goals for the ATURA, which include: removing blight and eliminating negative environmental conditions; maximizing the development of appropriate land use; strengthening the tax base of the City by encouraging development and employment opportunities; providing new housing of high quality and/or rehabilitated housing of upgraded quality; and providing appropriate community facilities, parks and recreational uses, retail shopping, and parking (public and private).

The project goals further the City policies to supply housing (market and affordable) and commercial space to accommodate the growth trends currently underway and anticipated in the future for Brooklyn and citywide. The project goals also reflect the *New York City Zoning Resolution* policies of encouraging high density development in areas with significant mass transit access.

The project goals were presented in the draft scoping document for the DEIS, which was made public by ESDC in September 2005. The public was afforded an opportunity to comment on the goals as part of its review of the draft scope, and a final scope was prepared and issued in March 2006, which incorporated public comments. The analysis prepared for the DEIS was based on the materials presented in the final scope. Consistent with SEQRA, the DEIS considers alternatives to the proposed project that would reduce the potential environmental effects and would continue to meet the goals and objectives of the project. As described in the DEIS, while alternative plans may reduce the potential environmental effects of the proposed project, none of the proposals would meet the project goals as effectively as the proposed project.

Comment 20-3: The MTA did not consider the other alternatives when selling the yards. (222)

Response 20-3: The MTA carefully considered all alternatives in response to its May 24, 2005 request for proposals soliciting interest in the sale or lease of the air space above the Vanderbilt Yards. On July 6, 2005, MTA received proposals from Forest City Ratner Companies and the Extell Development Company. After considering both proposals, the MTA Board decided on September 14, 2005 to reject the Extell proposal and to authorize continuing negotiations with Forest City Ratner Companies regarding its proposal.

In addition, Chapter 20, “Alternatives,” of the DEIS contains a detailed analysis of alternatives to the proposed project.

Comment 20-4: At least three alternative plans call for less construction and no street closures and/or the addition of new streets. These must be given serious consideration for their smaller impacts on traffic and transit. (180)

Response 20-4: Chapter 20, “Alternatives,” of the FEIS includes a detailed analysis of the potential transportation impacts of the Reduced Density—No Arena Alternative and the Reduced Density—Arena Alternative.

Comment 20-5: The three alternative plans (Pacific, Extell, and Unity) are never analyzed or discussed in any detail in the DEIS. These alternative plans

are only described and the relative impacts never quantified. Each of these alternative plans needs to be fully analyzed and discussed. Since each also creates jobs and housing, for instance, but with fewer impacts. (68, 206, 324, 474, 483, 527, 544)

Response 20-5: The DEIS presented a quantified analysis of alternatives, where appropriate. The DEIS identifies that lesser density alternatives would have fewer impacts on community facilities, traffic, and noise, but impacts would not be fully avoided. The DEIS also states that these alternatives would result in fewer new market-rate and affordable housing units, fewer construction and permanent jobs, less open space and of inferior quality, and reduced or inferior stormwater management infrastructure.

Comment 20-6: The other plans on the table would work with, and enhance, our historic communities. They would embellish our new economy, and build organically on the successes that we have already achieved as thriving, vibrant, desirable communities. They would embrace rather than destroy our historic treasures. (96, 501)

Response 20-6: All of the alternatives contemplate the construction of new, modern, high-rise structures on the project site. Furthermore, like the proposed project, both the Unity Plan and the Reduced Density—Arena Alternative would demolish the former LIRR Stables but they would retain the former Ward Bread Bakery complex, and the Reduced Density—No Arena Alternative would retain both the former LIRR Stables and the Ward Bread Bakery complex. However, as described in Chapter 7, “Cultural Resources,” adaptive re-use of these structures is infeasible.

Comment 20-7: The analysis of alternatives is flawed because ESDC has never solicited proposals from other developers and the state has refused to seriously and objectively consider alternatives to the project. (58, 119, 326)

Response 20-7: Chapter 20, “Alternatives,” of the DEIS contains a detailed analysis of a Reduced Density—No Arena Alternative and a Reduced Density Arena Alternative which were derived from the Extell Development Company’s bid for the MTA property and the Pacific Plan, respectively.

Comment 20-8: The DEIS makes an absurd claim that without Atlantic Yards, without eminent domain, no development could benefit New York State and that phony blight conditions would remain. (58, 107)

Response 20-8: The blight study accurately identifies blight on the project site, and eminent domain is an appropriate tool to address this blight. The DEIS

includes the analysis of the Reduced Density—No Arena Alternative, which would not require eminent domain but would also not meet the project goals as effectively as the proposed project.

Comment 20-9: In comparing various alternatives, the community’s support for each alternative should be considered. The community’s “Principles for Responsible Development” should be a guide for this analysis (55, 330).

Response 20-9: There has been an extensive public review process for this project that has included multiple forums for public participation. Many different viewpoints have been expressed during these public forums, including those of proponents of the “Principles for Responsible Development.” ESDC has carefully considered comments expressed during the public review process. The “Principles for Responsible Development” were the basis for the Unity Plan and the Reduced Density—No Arena Alternative, which was considered in the DEIS.

Comment 20-10: The reduced density alternatives would be consistent with ATURA, local zoning laws, and land uses. (411)

Response 20-10: Like the proposed project, the reduced density alternatives would meet goals of the ATURA Plan by providing for new residential and commercial uses on the project parcels, but the proposed project provides for superior linkage to transit, a greater number of affordable housing units, and far more open space. Therefore, the reduced density alternatives do not meet the goals of the ATURA as effectively as the proposed project.

Both of the reduced density alternatives would be inconsistent with existing zoning, and both would result in a change in land use on the project site. Like the proposed project, these alternatives would be implemented as part of a GPP; therefore, they would override the existing zoning of portions of the project site. However, unlike the proposed project, the Reduced Density—No Arena Alternative would not fully or partially override the zoning of Blocks 1127 and 1129; therefore, the existing zoning of these blocks would allow for the future development of low-density industrial uses, which would be out of context with the surrounding residential uses. Because the Reduced Density—No Arena Alternative would not include an arena, its implementation would not require an override of the provision of the zoning resolution that restricts the siting of an arena within 200 feet of a mapped residential district.

Comment 20-11: The DEIS states that the Reduced Density—Arena Alternative would create an arena that is too small. The DEIS does not substantiate that

claim with any proof. Perhaps most facilities are built larger than 750,000 square feet simply because they are built in locations with more space to build (299).

Response 20-11: The proposed project's arena is designed to meet the various requirements of a modern professional sports venue, which includes adequate space for luxury suites, back-of-house operations, circulation and amenities, and other support space. Since 2000, there have been three new arenas that have been built, and none of these facilities have been smaller than 750,000 square feet and the capacity for these modern arenas are all in excess of 18,000 seats. The arena proposed under the Reduced Density—Arena Alternative would be among the smallest venues in the NBA.

Comment 20-12: The DEIS states that under the Reduced Density—Arena Alternative, the largest park would be in a location that is not ideal for a park and would be less appealing than the proposed project's open space. The park proposed under the Reduced Density—Arena Alternative would be qualitatively better than most of the proposed project's open space because it would clearly be public due to the fact that it would be surrounded by streets. In general, it would probably be assumed that people prefer parks that are clearly public, those surrounded by public rights-of-way (299).

Response 20-12: The Reduced Density—Arena Alternative provides for far less public open space (1.84 acres) than the proposed project (8 acres), and it would quantitatively reduce the availability of active and passive open space as compared to the no build condition. Thus, the amount of open space proposed under the Reduced Density—Arena Alternative would be inadequate to serve the residents and workers of the study area. In addition, the open space provided under this alternative would not provide for the variety of recreational opportunities planned with the proposed project. The proposed project's open space would have a physical and functional relationship with surrounding residents by providing for pedestrian pathways oriented to the Fort Green and Prospect Heights street grids. The pathways would lead to larger open spaces that would provide for a mix of active and passive recreational uses. The proposed project's open space would be physically connected to the surrounding residential buildings on the project site and would be functionally connected to the surrounding neighborhoods by the pedestrian pathways. The portion of the open space located between Carlton and 6th Avenues would be physically adjacent to the Pacific Street and directly accessible from the sidewalk. In addition, portions of the project's open space would directly front Atlantic, Carlton and Vanderbilt Avenues and Dean Street.

Comment 20-13: It should not be assumed that a one-block extension of the Fort Greene Street grid is not significant. The three new blocks that would be added under the Reduced Density—Arena Alternative would provide much light and air to the development to make the increased density feel more bearable. In addition, added streets would provide easier access to and from the site, especially for pedestrians would not have to cross a super block (299).

Response 20-13: The proposed project would provide for new north-south visual corridors and pedestrian pathways through the project site without providing for new streets. The Fort Greene street grid north of the project site would be extended physically and visually as pedestrian paths into and across the eight-acre open space component of project site. There would be several pedestrian access points to the open space from the sidewalks adjacent to the project site: four points along Atlantic Avenue, aligned to the Fort Greene street grid to the north; three points along Dean Street; and one point at each end of the through-block pedestrian pathway, that would align itself with the closed right-of-way of Pacific Street between Carlton and Vanderbilt Avenues. The access points would be a minimum of 60 feet wide, comparable to the width of a neighborhood street (the east-west connections would be wider), would provide the same light and air to the area as a typical city street. The pathways would be landscaped with easily identifiable streetscape elements. The open space would allow views into and through the open space, providing users of the open space with views to access and egress points from most locations within the open space, increasing the safe and inviting character of this space..

Like the proposed project, the creation of new streets under the Reduced Density—Arena Alternative would allow for north-south visual corridors and pedestrian pathways through the project site. However, these new streets may hinder traffic operations without substantial improvements in traffic circulation. The extension of these streets would create more four-legged intersections along Atlantic Avenue between 6th and Vanderbilt Avenues, which may impede the flow of through traffic.

Therefore, the function of the proposed project's open space as visual and pedestrian pathways through the project site is considered a better means to physically and functionally connect the neighborhoods of Fort Greene and Prospect Heights than is the creation of new, one-block streets.

Comment 20-14: To mitigate noise impacts, project density should be reduced. The allowed number of housing units should be reduced by 50 percent below the current proposal of 6,860 units, to 3,430. (451)

Response 20-14: Reducing the project density to 3430 units would not necessarily eliminate project impacts. The DEIS provided a detailed analysis of a Reduced Density—Arena Alternative that includes approximately one-half of the residential units of the proposed project (in the residential mixed-use variation). As described in Chapter 20, “Alternatives,” the Reduced Density—Arena Alternative results in nearly the same noise impacts as the proposed project.

NO ACTION ALTERNATIVE

Comment 20-15: The No Action Alternative is unrealistic. (55)

Response 20-15: As required by SEQRA, the DEIS considers a No Action Alternative. As outlined in the final scope and in Chapter 2, “Procedural and Analytical Framework,” although some of the more intact buildings vacated through buyouts by the project sponsors could be reoccupied by 2010, the DEIS conservatively assumed, where appropriate, that the conditions currently present on the project site would remain the same in the future without the proposed project. According to the *CEQR Technical Manual*, the No Build condition provides a baseline against which the incremental changes generated by a project can be evaluated; the No Build condition does not contain any part of a proposed project. The reasonable worst-case scenario impact assessment discloses the greater (and more conservative) level of project-related impacts by assuming only limited development on the project site as part of the future No Build baseline. This would result in a greater difference in development between the future with and without the proposed project. The alternative plans proposed for the project site were not considered as part of the No Build baseline since those development plans would require their own discretionary approvals and would potentially occur in place of the proposed project.

Comment 20-16: The No Action Alternative says that nothing would be built on the Rail Yards in the next decade. Yet, the Extell bid is evidence of developer interest. (50, 203)

Response 20-16: A Reduced Density—No Arena Alternative was assessed, which was developed based on the Extell Development Company's plan for the rail yards. The Extell Plan, like the project, would require several overrides of the New York City Zoning Resolution and other discretionary approvals and therefore, is not considered as a No Action Alternative.

NO UNMITIGATED IMPACTS ALTERNATIVE

Comment 20-17: Instead of presenting a scenario, in which all significant impacts would be mitigated in one way or another, the no unmitigated significant adverse impacts alternative is an argument not to mitigate the impacts that the developer chooses not to mitigate. (55)

Response 20-17: The proposed project would result in unmitigated impacts with respect to cultural resources, urban design and visual resources, shadows, traffic, and noise. Any single alternative that would fully mitigate all of these effects would be based on the minimum impact threshold of each. Based on an assessment of the minimum thresholds, it was determined that traffic would be the controlling element of any alternative that would fully mitigate the effects of the proposed project. However as noted in the DEIS, because of existing congestion at a number of intersections, even a minimal increase in traffic would result in unmitigated impacts at some locations. Based on a sensitivity analysis of intersections within the study area, it was determined that the addition of five cars during the AM peak period would trigger an impact that cannot be fully mitigated. Thus, almost any new development on the project site, including that which would be allowed as-of-right, would result in unmitigated traffic impacts.

No practical alternative could be developed that would fully mitigate all of the unmitigated effects of the proposed project. Therefore, the DEIS explored program modifications for each of the unmitigated impacts to determine whether there were feasible changes in the project to avoid these unmitigated effects.

UNITY PLAN

Comment 20-18: The DEIS fails to take seriously the Unity Plan, which took close to a year to develop and included significant community participation. (55, 415)

Response 20-18: The materials submitted for the Unity Plan, during the public scoping process for the DEIS, did not provide a sufficient level of detail to prepare a quantified analysis of its potential environmental effects. However, the major principles of the Unity Plan, including lower density development, limited property acquisition, and no arena were incorporated into the Reduced Density—No Arena Alternative, which was analyzed in detail. Nevertheless, the Unity Plan was described as background to the Reduced Density—No Arena Alternative.

Comment 20-19: The Unity Plan is better because it: 1) respects in scale and design the existing environment; 2) integrates the existing historic industrial buildings through adaptive reuse; 3) proposes to use all existing streets instead of demapping streets (a failed and obsolete concept); 4) advocates for collaboration between numerous developers; 5) creates more opportunities for permanent jobs (focusing on the tourist industry) besides generating construction jobs; and 6) allows for a larger amount of affordable housing without displacement. (47, 441)

Response 20-19: As compared to the proposed project, the Unity Plan would result in fewer, smaller residential buildings on a smaller project site. The materials submitted during the public scoping process indicated that the Unity Plan would provide for 600,000 square feet of commercial space, 2,300 units of housing, a school, a community recreation center; and a linear, midblock park system through the site.

As compared to the proposed project, the Unity Plan provides for far less housing. The Unity Plan would not develop Blocks 1118, 1127, and 1129, but it cannot guarantee that adaptive re-use would be undertaken on these blocks since they would remain under private jurisdiction. The Unity Plan would not close Pacific Street or Fifth Avenue, but retaining these streets would not have a substantial benefit to local traffic circulation. The Unity Plan called for a collaboration of developers, but it did not provide information on how this would be achieved. Since the Unity Plan would not include office, arena, or hotel uses, the claim that it would provide for more permanent jobs is doubtful. Finally, the Unity Plan could not provide for the same or greater number of affordable units as the proposed project since its overall programming of uses is substantially smaller.

REDUCED DENSITY—NO ARENA ALTERNATIVE

Comment 20-20: The DEIS states that the Reduced Density—No Arena Alternative would not provide the economic entertainment and cultural benefits of an arena; therefore the Reduced Density—No Arena Alternative would fail to meet many of the project's goals. This alternative, would not use any eminent domain; would build at least thirty percent affordable housing; would build high density, but not extreme density; would not demap streets; would house approximately 6,000 residents; would construct a school; would propose to go through the City's transparent Uniform Land Use Review Procedure. Yet this is not addressed in the DEIS. (58, 273)

Response 20-20: The DEIS addresses these points on Pages 20-21, 20-22, and 20-23 as follows:

Unlike the proposed project, all of the parcels proposed for development under the Reduced Density—No Arena Alternative are owned by the MTA; therefore, condemnation would not be required for the Reduced Density—No Arena Alternative. The development of the proposed project would require action by ESDC to condemn and acquire parcels comprising the project site;

The Reduced Density—No Arena Alternative would provide for 573 affordable housing units on the project site as compared with 2,250 units with the proposed project;

As described in Chapter 20, “Alternatives,” of the FEIS, the Reduced Density—No Arena Alternative and the proposed project would have comparable FAR for the blocks east of 6th Avenue that each would develop (7.43 for the Reduced Density—No Arena Alternative vs. 7.40 for the proposed project).

Unlike the proposed project, Blocks 927, 1118, 1127, 1128, and 1129 would not be redeveloped in the Reduced Density—No Arena Alternative, and Pacific Street and 5th Avenue would remain in their current configurations.;

Table 20-4, cites that the Reduced Density—No Arena Alternative would generate approximately 4,700 residents based on the average household size for this area of Brooklyn, which is consistent with the methodology used to project new residents associated with the proposed project; and

The Reduced Density—No Arena Alternative includes community facility space for a school. Although that program for this school has not been defined, it is anticipated that seats would be provided to accommodate the overflow generated by the Reduced Density—No Arena Alternative.

Any development of the project site requires state actions for the conveyance of air rights from the MTA to a private developer. ULURP is not applicable for the proposed project because it is subject to the UDC Act, which provided numerous venues and opportunities for public review and comment.

Comment 20-21: The Extell proposal would have specified union labor, and there could have been more job creation proposals if there had been open bidding on this project. (58, 69)

Response 20-21: Chapter 20, “Alternatives,” of the DEIS shows that the Reduced Density—No Arena Alternative would generate 673 jobs as compared to 3,600 jobs for the residential mixed-use variation of the proposed project and 8,560 jobs for the commercial mixed-use variation of the proposed project.

Comment 20-22: The DEIS incorrectly states that the Reduced Density—No Arena Alternative would require most of the same discretionary actions as the project plan. This clearly contradicts the later statement that this alternative would not require condemnation. (55)

Response 20-22: The DEIS states that the Reduced Density—No Arena Alternative would not require acquisition of property through condemnation. However, this alternative would require many of the same actions as the proposed project, including adoption of a GPP by ESDC, override by ESDC of certain aspects of the New York City Zoning Resolution, acquisition and disposition of property by ESDC, disposition by MTA of a property interest in the rail yard and other transit improvements, and any related real property acquisitions by LIRR or MTA, approval of Public Authorities Control Board, and provision of State and City funding for affordable housing and other elements of the proposed project and tax exempt financing.

Comment 20-23: The Extell Plan is much more amenable. Please advocate for this less aggressive alternative plan that was designed by the community along with experts in urban planning. The DEIS fails to consider the benefits of this plan. (273, 265, 330)

Response 20-23: The DEIS provides for a detailed analysis of the Reduced Density—No Arena Alternative, and it concluded that, generally, there would be fewer environmental impacts associated with the Reduced Density—No Arena Alternative than with the proposed project. However, the DEIS identified a number of deficiencies in this plan as compared to the proposed project. The Reduced Density—No Arena Alternative would introduce new apartment buildings amidst a manufacturing district and would allow industrial uses to abut these new buildings. The Reduced Density—No Arena Alternative would provide for most of its open space at an elevation that is one-story above street-level, which is inconsistent with planning initiatives of the New York City Department of City Planning. Also, given requirements for clearance of the rail yard, the Reduced Density—No Arena Alternative would be constructed on a platform that is raised above the street-level of Atlantic Avenue, which would create a blank wall along pedestrian routes of travel rather than active retail uses. The Reduced Density—No Arena Alternative would also introduce a series of closely spaced, uniform 28-story buildings oriented east-west along Atlantic Avenue that, together with the raised platform, would create a visual barrier between Fort Greene and Prospect Heights. The Reduced Density—No Arena Alternative would not redevelop Blocks 927, 1118, 1128, and 1129, and the blighted and underused parcels would remain on the project site. Therefore, the DEIS concluded that the Reduced Density—No Area

Alternative would have fewer benefits to the local community and the City as a whole.

Comment 20-24: The DEIS incorrectly states that the Extell Plan would have the same effect of residential and commercial displacement as the proposed project. This is erroneous because the Extell Plan is half the size and would have only one-third the number of residential units. Increases in land values and rents, and thus, displacement pressure, are greater with qualitatively larger projects. (55)

Response 20-24: As described in the DEIS, development under the Reduced Density—No Arena Alternative would be confined to the rail yard parcels, which do not contain any residential uses. Therefore, while the proposed project would directly displace 171 households (conservatively including all housing units on the project site, regardless of their current occupancy status or the terms upon which they were vacated), the Reduced Density—No Arena Alternative would not result in any direct residential displacement. Although the Reduced Density—No Arena Alternative would introduce substantially fewer residential units than the proposed project (1,946 versus 5,325-6,430 units) it could, to some extent, serve to alleviate the current trend that places upward pressure on rental rates in the study area by increasing housing supply. Overall, like the proposed project, the Reduced Density—No Arena Alternative has limited potential to affect real estate values in the 10 Census tracts identified as containing at-risk population. Like the proposed project, the alternative is not expected to lead to indirect residential displacement in these tracts, and would not have a significant adverse indirect residential displacement impact.

Development under the Reduced Density—No Arena Alternative would be confined to the rail yard, and the rail yard does not contain any commercial or institutional uses other than the MTA/LIRR operations. Therefore, while the proposed project would directly displace 27 businesses and two institutions, the Reduced Density—No Arena Alternative would not result in any direct business or institutional displacement. Under the Reduced Density—No Arena Alternative, indirect business and institutional displacement along 4th Avenue and Flatbush Avenue would be less, since the new uses introduced to the western portion of the project site would not include office and arena uses, which could alter economic patterns in the immediate vicinity of the site. Indirect business displacement along Vanderbilt Avenue would be the same for the proposed project and the Reduced Density—Arena Alternative since they would introduce a substantial new residential population that would increase demand for neighborhood goods and

services along Vanderbilt Avenue, thereby increasing land values and rent.

Comment 20-25: The assertion that the Extell Plan does not provide as many benefits as a transit-oriented development because it is not as large is irrelevant. (55)

Response 20-25: As stated in the DEIS, the Reduced Density—No Arena Alternative would accommodate anticipated growth efficiently, in a relatively small land area that is well-served by necessary infrastructure, particularly transportation. However, unlike the proposed project, the Reduced Density—No Arena Alternative does not maximize the benefits of transit-oriented development. The Reduced Density—No Arena Alternative does not improve LIRR operations or subway access; it does not provide direct linkages between transit and uses on the project site; and it does not locate major employment or entertainment uses on a site that is well-served by transit infrastructure.

REDUCED DENSITY—ARENA ALTERNATIVE

Comment 20-26: The Pacific Plan is a smaller program and a revised master plan based on sound urban design principles that have been tested in the U.S. marketplace many times over the past thirty years. It provides for 3,560 dwelling units, 1,188 of which would be condominiums and 2,372 would be apartments; a 180 room hotel, 638,170 square feet of office, 236,500 square feet of retail, 46,120 square feet of community uses, 46,500 square feet of light industrial, and 3,400 parking spaces. A total of 1,186 dwelling units would be affordable housing. (254)

Response 20-26: The DEIS assessed a Reduced Density—Arena Alternative, which was modeled after the Pacific Plan based on materials submitted to ESDC during the public review period for the draft scope. Materials for the Pacific Plan that have been submitted as part of the public review process for the DEIS vary somewhat from previous submissions and DEIS analysis assumptions. Specifically, the retail square footage and number of parking spaces have been reduced. However, the programming of other uses and the site plan has not been changed. Therefore, the Reduced Density—Arena Alternative, which is described in detail in the DEIS, is considered an appropriate representation of the basic principles of the Pacific Plan.

Comment 20-27: The Pacific Plan is a better investment for this site because 1) large-scale rental housing is not the highest and best use of this property; 2) a diversified program of commercial uses provides for better return; and

3) large tracts of open space are expensive to build and when it is poorly designed provides little value to the project (254).

Response 20-27:

The site plan for the proposed project includes multiple considerations for the location of project elements. Office and retail space is located in close proximity to major arterials and transit stations and also serves as a buffer between residential communities and the commercial corridors along Flatbush and Atlantic Avenues. The site plan also addresses the City's desire to increase housing, and in particular affordable housing, in locations that have ample transit access and other supporting infrastructure.

The commercial uses for the Pacific Plan are similar to those that are part of the proposed project including office space, retail space, and a hotel. The Pacific Plan does include approximately 46,000 square feet of light industrial use, which would not be developed as part of the proposed project. However, given the sparsity of existing, active industrial uses within the project site, it is uncertain whether new industrial space would be appropriate or desirable.

The development of ample, high quality open space has been a central goal of the project since its inception. The eight acres of publicly-accessible open space will serve as a permanent amenity for the community at large as well as future residents and workers within the proposed project. Furthermore, the provision of large tracts of open space will allow for development of both active and passive uses, water features, and pathways and view corridors through the project site. It will enhance the public value of the proposed project and will link existing communities and the new residents of the proposed project.

Comment 20-28:

The Pacific Plan is a superior proposal because it incorporates a design based on the following principles: 1) it avoids displacing existing residents; 2) it adapts to the local street grid; 3) it trades open space for reduced scale and density; 4) it preserves existing buildings and provides for lower density on small vacant lots; 5) it encourages the development of Pacific Street as a first-class residential street; 6) it enhances the character of Atlantic and Vanderbilt Avenues as local shopping and dining streets; 7) it wraps the arena in a lively skin of commercial uses; and 8) it encourages public transportation while providing more intelligent choices for private motorists (254).

Response 20-28:

The proposed project would directly displace 171 housing units on 24 parcels located on Blocks 1127, 1128, and 1129. The project sponsors have extended relocation offers to the on-site rental tenants either through compensation or offers for comparable off-site housing with the opportunity to move back into the proposed development at rent levels

comparable to their current rents. Under the offer, the sponsors would pay certain moving costs and brokerage fees involved in seeking an interim relocation unit that is comparable to the tenant's existing unit and near to the tenant's current location, and in relocating the tenant to a new comparable unit in the proposed development. The sponsors have also agreed to pay the difference, if any, in rent between the tenant's current rent and the rent for the comparable interim unit until such time as the tenant is relocated into a new unit in the proposed development. This agreement would terminate only if the project were abandoned or the tenant breached its obligations. The Reduced Density—Arena Alternative would affect 17 of these same parcels, directly displacing a total of 146 housing units, which is approximately 15 percent fewer than the number of directly displaced units under the proposed project.

The Reduced Density—Arena Alternative would result in changes in the current street network. It would close Pacific Street between Flatbush and 6th Avenues and would create new streets through the project site between Atlantic Avenue and Pacific Street. Because the Reduced Density—Arena Alternative would not close Pacific Street between Carlton and Vanderbilt Avenues and would create new streets through the project site, it would not accommodate the provision of eight acres of public open space.

The Reduced Density—Arena Alternative would provide for 1.84 acres of publicly accessible open space and would add a total of 12,450 workers and residents to the study area. Thus, the Reduced Density—Arena Alternative would result in a lower open space ratio than the proposed project. As noted in the DEIS, the study area is already underserved by open space resources, and the Reduced Density—Arena Alternative would diminish rather than enhance the adequacy of open space resources for local residents and employees.

As with the proposed project, the Reduced Density—Arena Alternative would result in the demolition of structures on Blocks 927, 1118, 1119, 1120, 1121, and 1127, but it would redevelop fewer parcels on Blocks 1128 and 1129. Therefore, although this alternative would maintain some buildings on Blocks 1128 and 1129 that would be demolished with implementation of the proposed project, this alternative does remove existing structures from the majority of the project site.

Both the proposed project and the Reduced Density—Arena Alternative include retail uses along Atlantic and Vanderbilt Avenues, which is consistent with existing patterns of development along these streets. Furthermore, both the proposed project and the Reduced Density—Arena Alternative call for commercial, retail, and residential uses surrounding the arena. The programming of Pacific Street does vary

since the Reduced Density—Arena Alternative would not incorporate this street between Carlton and Vanderbilt Avenues as a pedestrian walkway. However, both plans would have a residential character along Pacific Street east of the arena block.

Given constraints of the Reduced Density—Arena Alternative’s site plan, it would not include an Urban Room, any subway entrance would be smaller, and it would not provide for a drill track for LIRR; therefore, it would not substantially benefit subway service and LIRR operations. While it would provide for more streets, the Reduced Density—Arena Alternative would not substantially enhance traffic circulation in the vicinity of the project site. Therefore, the Reduced Density—Arena Alternative is not considered better than the proposed project with respect to transportation access.

Comment 20-29: The blocks south of Pacific Street should not be developed as part of a high density complex, arena or not, but should work more as a transitional or buffer zone between large buildings to the north and the smaller scale residential neighborhood that currently exists on Dean Street. While these blocks can still accommodate some more reasonably sized residential buildings, they should be built around and complement the existing buildings currently remaining. (572)

Response 20-29: In order to maintain smaller scale development on Block 1127, it would not be possible to locate an arena on the project site. Any arena of an appropriate size and configuration would not fit on a footprint bounded by Atlantic Avenue and Pacific Street.

The DEIS considered a Reduced Density—Arena Alternative, which included a mix of rehabilitated structures and new construction on Block 1129 of a scale similar to today. However, this alternative would preclude the ability to provide for eight acres of public open space and on-site retention of stormwater. The development of ample, high quality open space has been a central goal of the project since its inception. The eight acres of publicly-accessible open space will serve as a permanent amenity for the community at large as well as future residents and workers within the proposed project. On-site retention of stormwater benefits the City by reducing combined sewer overflows to local waterbodies.

OTHER

Comment 20-30: The DEIS fails to consider alternatives for the location of a stadium at other locations. Previous planning studies have identified Coney Island and the Brooklyn Navy Yards as viable locations for an arena. The

DEIS does not provide substantial evidence that Prospect Heights is the proper location for an arena (30, 58, 152, 330, 119, 571, 577)

Response 20-30:

Chapter 1, “Project Description,” of the DEIS presented the consideration of alternative sites for an arena in Brooklyn. The FEIS provides an expanded discussion in the same chapter. It was clear after consideration of alternative sites for an arena that the project site, which is located at the intersection of Flatbush and Atlantic Avenues and at the site of Brooklyn’s largest transit hub, is the most appropriate location for an arena in Brooklyn. The project site would also be large enough to accommodate a cohesive, comprehensive development containing not only the arena but also a mix of synergistic uses, while offering extraordinary transportation access, proximity to a Central Business District, and substantial publicly accessible open space designed to foster pedestrian activity and promote connections with the surrounding neighborhoods.

Comment 20-31:

An alternative site for the arena could be the area between the Bush Terminal complex on 2nd Avenue and the waterfront from 30th to 39th Streets. This is currently a large swath of mostly empty weed and trash covered lots, some utilized, at best, for vehicle storage. Considering that hardly any buildings would need to be demolished, no lengthy eviction and eminent domain proceedings would hold up progress. The waterfront site has much more space for parking facilities, and a direct on and off ramp from the Gowanus Expressway could be provided. Public transit could also be incorporated with a shuttle linked to the 36th Street subway station or maybe even a direct subway connection, which could use an abandoned rail spur that serves the waterfront. The combination of expanded transit linked with abundant parking could be utilized not just for arena events, but also function as a large “park and ride” facility for commuters, which would result in less BQE/ Battery Tunnel traffic, less fuel consumption, and less pollution. The waterfront site also offers the option ferry connections, and a whole new harbor community complementing, and maybe improving, businesses in the local industrial areas. Perhaps, even, the Ikea project (currently threatening to destroy Red Hook) could be relocated there and incorporated into the plan. This site could accommodate four projects the size of Atlantic Yards and still have space left over. (572)

Response 20-31:

The site proposed as an alternative location for an arena is known as the South Brooklyn Marine Terminal (SBMT). This waterfront site has already been identified for industrial redevelopment as part of the New York City Economic Development Corporation’s (EDC’s) Strategic Port Plan, which serves as a blueprint for the maximization of the City’s maritime investments over the next 20 years. The Strategic Port Plan

outlines a series of short- and long-term capital investments for SBMT facilities, and several projects are currently being advanced, including renovations to pier sheds, rail track improvements, and installation of an on-dock rail yard. This area has a history of industrial use and is considered an appropriate site for programs and facilities to improve New York City's port infrastructures. The SBMT has a number of industrial tenants and will include a modern automobile-processing facility and a modern recycling facility, which would be a vital component of the City's long-term plan for solid waste management. This waterfront site is ideally suited for cargo handling and other maritime support functions because it offers the shortest sailing time to the open ocean of any port facility in New York and New Jersey. The site also has rail freight functions, combined with the maritime capabilities, that would allow substantial intermodal freight movement of goods; this would result in fewer truck trips through the City's street network and their associated effects on infrastructure and roadway congestion.

The proposed siting of an arena at SBMT would be inconsistent with the public planning for this site and would be inferior as compared to the location of the proposed project. While this site would be in close proximity to a highway, it would be removed from major transit facilities. The suggestion to reestablish a rail spur for subway use would likely preclude EDC's plans to provide for intermodal freight movement at this location. The spur would also require reconstruction of the 4th Avenue line if direct subway service would be provided. This would disrupt service on the four subway routes that operate along 4th Avenue to serve the residents of South Brooklyn. Direct LIRR service would not be possible at this location. For these reasons, the SBMT site is not considered an appropriate location for an arena.

Comment 20-32: The chapter inadequately explores alternative designs to avoid blocking views of the Williamsburgh Savings Bank from Grand Army Plaza and Flatbush Avenue, notably by rotating the arena, moving "Miss Brooklyn" east, and eliminating Building 2. (87)

Response 20-32: The realignment of the proposed project's arena to allow for the relocation of Building 1 farther east is not feasible. In order to accommodate LIRR's drill track, the bowl of the arena must be oriented east-west rather than north-south. Furthermore, if the arena were oriented north-south, the upper concourse of the project arena would extend beyond the property line. In addition, the facades of the arena along 6th Avenue, Dean Street, and parts of Atlantic Avenue would result in predominantly 100-foot-tall blank street fronts because arena program uses, which would be shielded by the proposed project's arena-

block buildings, would not benefit from that buffer; retail along the streets would be almost impossible without seriously impacting arena operations and vertical circulation.

Relocating Building 1 east of 5th Avenue would require that a 620-foot-tall building rest upon a 500-foot-long span structure on the western end of the arena roof. The core of the tower would penetrate the seating inside the arena bowl and would obstruct the circulation on all concourses, and the core of the building would need to land on the loading dock area, requiring a significant portion of the gravity and lateral loads to transfer around this space. The net effect of these changes would make construction of the arena impracticable.

Shifting both Building 1 and the arena to the east would have a ripple effect, requiring numerous other significant changes to project buildings on the arena block. Furthermore, it is likely that portions of the truck loading area would need to be located beneath the bowl of the arena, which would be problematic due to security reasons and operational and constructability considerations.

Comment 20-33:

Since the open space will be regularly closed to the public, and could be closed indefinitely, the question arises, would that risk to publicly accessible open space be equally true of the alternatives to the proposed project? Further, given the importance to the community of open space, one has to question the ESDC's position that the inclusion of an arena trumps every other possible alternative to the extent that no other alternatives to AY need be considered for any other societal value whatsoever. (107)

Response 20-33:

The statement that the proposed project's open space would be regularly or indefinitely closed to the public is inaccurate. As described in the Chapter 6, "Open Space and Recreational Resources," the proposed project's publicly accessible open space would have hours of operations similar to parks under the jurisdiction of the DPR (7:00 AM to 10:30 PM from May through September, and from 7:00 AM to the later of 8:00 PM and sunset in other months). It is assumed that the open space proposed by the alternatives would have similar hours of operation. As shown in Chapter 20, "Alternatives," the DEIS thoroughly assessed the alternatives' impacts and benefits.

CHAPTER 21: UNAVOIDABLE ADVERSE IMPACTS

Comment 21-1:

There are unavoidable adverse impacts that cannot be fully mitigated and are ignored for the sake of questionable public benefits. (10, 411)

Adverse impacts that cannot be mitigated will be outweighed by the benefits the project would bring. (425)

Response 21-1: ESDC will consider the unavoidable adverse impacts in making its Findings under SEQRA.

GENERAL COMMENTS

Comment G-1: There is no guarantee that Phase II of this project will go forward. We have seen no real plan for the eastern section of this project. The GPP shows only five buildings and the proposed arena would be built in the first phase, leaving the entire eastern section of the site for temporary surface parking and staging. (37)

Response G-1: The GPP includes both Phase I and Phase II development and governs the development of the entire proposed project. It is this program that is subject to environmental analysis under the SEQRA process. Any significant changes to the GPP would be subject to additional environmental review.

Comment G-2: The DEIS is deficient in scope; recommended mitigations are inadequate; causes and effects are general; findings are made without technical supporting documents. (10, 165, 411)

The proposed mitigations in the DEIS in regards to areas like traffic, transportation, noise, and construction are minimal and ineffective. (324)

There is insufficient modeling in the DEIS, including but not limited to traffic and parking, public transportation, air quality and noise, and especially regarding response times. (25, 68)

The DEIS is biased in favor of the proposed project. (282, 285)

The DEIS reads like a document prepared as an exercise intended not to evaluate the impact of a development on the host community, but merely one intended to meet the letter of the law. It serves only to advance the interests of a private developer at the expense of the host communities. (69)

The DEIS does not adequately address the consequences of the proposed project. (507)

Response G-2: A draft scope of work for the EIS was issued on September 16, 2005 and was widely distributed to concerned citizens, public agencies, and other interested groups. A public scoping meeting was held on October 18, 2005 and written comments on the draft scope were accepted

through October 28, 2005. The final Scope of Work, issued on March 31, 2006, reflects comments made during the scoping period.

All DEIS analyses were conducted in accordance with the methodologies outlined in the *CEQR Technical Manual*. The DEIS analyses are detailed in their methodologies and provide ample supporting data. Technical supporting documents were either provided as appendices to the DEIS or made available to the public upon request.

The DEIS disclosed significant adverse impacts in several areas and identified mitigation measures where they were feasible. Those impacts for which there was no practicable mitigation were also identified. The FEIS contains additional description of mitigation measures that were further developed subsequent to the DEIS.

Comment G-3: The proposed project could create a possibility of hazard due to falling snow and ice, especially with regards to the poorly understood dynamics resulting from the complex building structures. (426)

Response G-3: Buildings constructed as part of the proposed project would comply with all New York City Building Code requirements. The buildings would not pose any special hazard in terms of falling snow or ice.

Comment G-4: Who will market the arena, the homes, and the commercial spaces? To whom will they target the marketing? We'll have to go regional, national, and international in marketing. The places that come to mind that need space are Taipei and Hong Kong. They're built to capacity. (133)

Who will be the office inhabitants in the new development and what kind of state subsidies will they receive? Tenants in other Ratner developments tend to be government-related resulting in frequent street closures for security reasons. (271)

Half of the office space is already being rented by government agencies. We do not need more. (150)

Response G-4: The project sponsors would be responsible for marketing the proposed development. As described in Chapter 1, "Project Description" of the DEIS, there is a strong need for new housing and commercial office space in New York City. Based on population and employment forecasts from the New York Metropolitan Transportation Council (NYMTC), the demand for housing in Brooklyn is for 40,000 additional units between 2005 and 2015, and the demand for office space in Brooklyn is for an additional 15 million square feet between 2005 and 2015. It is not known at this time who would occupy the proposed

office space. Street closures other than those described in the DEIS are not anticipated to occur as a result of the proposed project.

Comment G-5: The FEIS needs to account for insurance impacts on property values, local homeownership, affordable housing, and small business enterprises. (107)

The PACB will need information as to whether this project will impact the State Workers Compensation Insurance Pool, and even whether similar state insurance pools will have to be set up for property owners or businesses unable to obtain or afford private terrorism or other forms of insurance. (107)

In 2007, after the Federal Terrorism Risk Insurance Extension Act (TRIEA) expires, insurance becomes either a project cost or another subsidy, or both. The PACB needs to know if “unanticipated costs” are being manufactured by simply not acknowledging TRIEA’s statutory expiration. (107)

Homeowners insurance is bound to increase if the terrorism risk insurance coverage is even available with TRIEA expires. (499)

Response G-5: An analysis of the insurance industry’s reaction to the proposed project is speculative and is outside the scope of the EIS.

Comment G-6: Simple things like mail delivery will be adversely impacted by the project. (272, 358)

If the project goes forward FCRC will need to build a post office for its development. The 11217 is already at capacity. (108, 349)

Where is the plan for new post offices? It is not in the DEIS nor in the developer’s plan. (119)

Response G-6: The *CEQR Technical Manual* does not suggest an analysis of the potential impacts on USPS services for new developments. As recognized in the latest United States Postal Service (USPS) Strategic Transformation Plan 2006-2010, the USPS expects that high-speed broadband, which makes Internet-based services easier to use, will continue to increase the use of online alternatives to mail, and the USPS is projecting a continuing decline of First-Class Mail. To respond, over the next five years the USPS will focus on continuing to increase efficiency to account for reduced revenue, improve the value of its products and to focus primarily on advertising mail and package delivery services. As noted in other response to comments, the growth from the proposed project is considered in the long term growth projections for Brooklyn.

Comment G-7: I would like to see more open space, more green space. The micro-climates in the area are already affected by the amount of pavement. (509)

Response G-7: Comment noted.

WIND

Comment G-8: Was a wind analysis done to determine whether the buildings will create wind tunnels? (461)

The height of the proposed buildings will create a tunnel- or canyon-effect, resulting in a darker and windier environment. (387, 427, 461, 530)

Will the west-east alley from Flatbush to Vanderbilt Avenues become a wind tunnel making the interior space inhospitable? (107)

Big buildings affect airflow in ways that cause discomfort and accidents. (228)

How will hurricane winds interact with Gehry's design? (376)

Brooklyn is in a hurricane path as discussed in *New York Times* article, "High Winds, Then Premiums," Dated September 26, 2006. (107)

In Canada, projects like this one require a wind analysis. (106)

It is already necessary to avoid Ashland Place, Hanson Place, and Flatbush Avenue Extension when windy because of extreme conditions. These will probably get worse with 16 very tall buildings. There are other streets near the Pratt Institute where the residential towers create serious wind tunnel effects on the streets. (69, 119, 235, 289, 341)

A supplemental EIS is required because the DEIS ignored wind impacts. (69)

A wind effects study should be conducted on any planned construction to prevent unnecessary localized problems. (37, 122, 289)

With towers proposed literally on the Bear's Garden's door step, we will definitely feel the effects of winter and summer blasts of air, and everything else that entails: dust, garbage, damage to trees and plants, hazards to pedestrians, homes and business. Increased wind speeds at the ground level created by the proposed towers would produce significantly dryer conditions for the garden, damaging plants and requiring increased irrigation. It would cause adverse effects for existing street trees surrounding the garden, exacerbating conditions they already struggle to overcome. Wind shear and wind chill would cause further

damage and could potentially compromise the safety of members working in the garden. (39)

Wind tunnel effects from the proposed project will pose potential negative impacts for residents and trees as well as other environmental concerns. (474)

Response G-8:

The DEIS fully describes the effects of the proposed project on publicly accessible open spaces in the study area (see Chapter 6, “Open Space and Recreational Facilities”). As discussed in Chapter 9, “Shadows,” the proposed project would result in a significant adverse impact to the Atlantic Terminal housing development north of the project site. Since issuance of the DEIS, the project sponsors and NYCHA have developed measures for this open space, which would include a combination of some of the following: new landscaping and shade-tolerant plantings, upgrading of existing play areas and additional play equipment, and replacement of benches and other fixtures. The FEIS has been modified to include these additional details (see Chapter 19, “Mitigation”).

In response to comments, an evaluation of wind conditions was conducted, and indicated that although some increase in wind speed at pedestrian levels would be expected, the proposed project would not result in adverse wind conditions in or around the project site. At the Brooklyn Bear’s Community Garden, the wind conditions would be suitable for the type of activity expected in such a space, i.e., sitting, standing, gardening, and leisurely walking. In the area of the garden as a whole, the evaporative capability of the winds above the vegetation would increase somewhat, but since plants draw the needed amount of water from the surrounding soil, and the soil, when irrigated, usually contains more water than actually used by the plants, additional irrigation may not be necessary. In any case, for a small garden, this small increase would not represent a significant amount of water.

The proposed project would not result in any significant adverse impacts on air quality in the surrounding neighborhoods, including this area’s open spaces (see Chapter 14, “Air Quality”).

As discussed in Chapter 17, “Construction Impacts,” three open spaces in the study area would experience temporary significant adverse impacts from construction-related noise due to construction activities on the project site: the Brooklyn Bear’s Pacific Street Community Garden, the Dean Playground, and South Oxford Park. Mitigation for the significant noise impact on Dean Playground (see Chapter 15, “Noise”), which would include a number of improvements to make this space more enjoyable to the general public, would also serve to partially mitigate the significant adverse impact in the non-residential study area. The increase in traffic as a result of the proposed project is not expected

to substantially affect the usability of other open spaces in the surrounding areas as these open spaces are not located along the primary travel routes for project-generated traffic.

REFLECTED HEAT AND LIGHT

Comment G-9: The proposed project would create the possibility of hazard due to complex geometric shapes potentially leading to reflected sunlight being focused to a high intensity. Depending on where the reflected sunlight is directed, pedestrians, motorists, occupants of surrounding buildings, surrounding buildings, but also distant persons and aircraft, could be affected. (426, 529)

Frank Gehry buildings are known to create heat and glare from reflective surfaces. (179)

Neighbors of existing Gehry projects in LA, Cleveland, and Spain have had to contend with glare off the materials used. In Los Angeles, neighbors increased heat from that glare, causing a sauna effect that cost them higher cooling bills and the need for extensive window coverings. (39)

We are certain that the building materials shown in some of FCR's current project renderings would result in heavy reflective glare and higher local temperatures, further magnifying the drying effect on the garden's plant and causing visual discomfort for gardeners and visitors. (39)

The glare created by metal-sheathed buildings may also result in increased summer air-conditioning costs. (461)

Response G-9: The proposed project's design includes a variety of building materials including metal, but also masonry, glass, and other materials often used to clad typical commercial and residential buildings. It is not anticipated that the project would create conditions that would result in more intense glare or greater heat than other developments.

SECURITY

Comment G-10: How would the project sponsors deal with security issues at the arena and in buildings over the rail yard? (289, 402, 461)

Response G-10: As described in Chapter 1, "Project Description," the proposed project would implement its own site security plan, which includes measures such as the deployment of security staff and monitoring and screening procedures. Private security staff and security systems would be provided for the project, including: additional security personnel at

arena events, screening of office tenants and visitors, and private security for the residential and open space components of the proposed project.

The project sponsors have consulted with the FDNY regarding access needs of emergency vehicles and other safety considerations, such as evacuation plans for places of public gathering and fire protection and security measures. The project sponsors also met with NYPD to review the overall project and public safety and security measures. The FEIS has been modified to note this.

As described in Chapter 5, "Community Facilities," according to the NYPD Office of Management, Analysis and Planning (OMAP), NYPD has protocols to successfully police large venues, such as Madison Square Garden and Yankee Stadium, which have similar events to those that would take place at the proposed arena. For large events, officers are brought in from throughout the city. It is expected that similar arrangements would be made for the arena in the proposed project.

Comment G-11:

The EIS should have a comprehensive evaluation of security risks. (14, 474, 475)

The EIS should study the impact on traffic leading to the Brooklyn Bridge from a security perspective. It is crazy to build a 60-story building at this location. (406)

The project concentrates at the near gridlocked intersection of Atlantic, Flatbush and 4th Avenues (three of the Department of Homeland Security's acknowledged Terrorist Targets) a sports arena with a glass clad skyscraper above an urban transportation hub that was already the target in 1997. (45, 69, 102, 103, 107, 119, 122, 152, 195, 289, 290, 341, 376, 461, 437)

The plan to blow up the Atlantic Avenue Station was, as you know, thwarted prior to 9/11 thus the document must analyze emergency plans. (26, 37, 324, 536)

How would access points to the development be determined to prevent a truck or car bomb? (376)

The DEIS provides no discussion regarding the protection of signature buildings and facilities (e.g. the arena or "Miss Brooklyn") in the post 9/11 era, nor any discussion of exit and evacuation strategies in the case of emergencies and/or disasters within and around the proposed project site. The DEIS should disclose how security needs created by the project will be met. (364, 376)

Emergency evacuation plans should ensure public safety. (37)

Is this development not a terrorist target? What about a glass-enclosed arena with residential towers in closer proximity than city zoning would allow? A terrorist attack was already planned at Atlantic Avenue Station. These issues are left out of the GPP and the DEIS and call for a Supplemental DEIS. (69, 369)

The DEIS doesn't address security in any meaningful way. The new buildings proposed for the World Trade Center site are being audited in a city, state, and federal capacity. Much smaller projects are being analyzed too. It is unthinkable that this same kind of attention would not be brought to bear on this project. Not including it is a very serious omission. (119)

In the event of a WTC-like attack, and given post 9/11 EPA findings, how would air toxicity be minimized given population density? (376)

In the event of a bio or chemical attack, what mitigating air circulation, monitoring, cut out and purification systems might be required? What are costs associated with this? (376)

In event of a bomb, how will impact of glass shrapnel from buildings be mitigated? (376)

What's the mitigation for truck or car bombs? (376)

What procedures exist at local hospitals and emergency services to handle the aftermath of a terrorist attack? (376)

It is not sufficient to say that the NYPD has conducted a thorough security study—which is, of course, still kept secret. Ultimately, this being a State, not City-run project, the police have neither the reason nor resources to work out how events ranging from false alarms to elevated terror alerts out of Washington, DC might create total gridlock, affect the number of asthma incidents and deaths, disrupt local business, etc. ESDC has these resources, and the PACB needs this information in accordance with its responsibility as the final elected decision-making body regarding AY. (107)

The design of AY determines that there are only two roads—6th and Carlton Avenues, three if Flatbush is considered—passing through the site. Should any truck bomb gain entry to the central “publicly accessible open space,” it will be surrounded by numerous towers, and that immediately puts multiple structures at risk. (107)

Emergency evacuation is ignored in the DEIS. The NYPD and MTA have developed master evacuation plans for hurricanes and other emergency events that rely on public transportation. ESDC must not persist in avoiding a determination of whether the proposed project's monumental density, in emergency situations when it matters most, will

overwhelm NYC's third and Brooklyn's largest transportation hub upon which these evacuation plans depend. (107, 122)

The massive glass roofed arena is in a heavily used flight path making it a potential bull's eye for a terrorist. When the security study was done for the World Trade Center, the security experts required the builders to use special glass for the far smaller expanse of the subway entrance canopy because of the threat shattering glass poses. (69)

The federal protocols issued after September 11 strongly advise against an enclosed design scheme. This type of design scheme, in essence, creates a bowl surrounded by tall buildings. It presents the ideal environment to maximize destruction by terrorist bombs. Yet, it is exactly this discredited design that the Atlantic Yards developers plan for the site. This is not addressed in the DEIS. (69)

The Urban Room requires special note regarding its location at the center of the concentration, at one of Brooklyn's busiest intersections. Since the Urban Room provides entry to both the arena and the MTA's Atlantic Avenue Station complex, questions about security issues affecting the LIRR and transit systems will come into play. Conversely, it is equally clear that security issues affecting the project buildings, and the arena in particular, could prevent people from utilizing this entry to the Atlantic Avenue Station complex, thus denying many or all of the benefits associated with having a direct entry to the station from the project and its arena, currently envisioned by ESDC. (107)

The use of glass in the Urban Room, Building 1, and the arena itself raises questions as to whether ESDC, in light of decisions made for the Freedom Tower, will make any determination about the required strength of the glass used. Are the arena's glass walls even at a 500 lbs standard? (107)

There is a real probability of the all-glass Urban Room entryway becoming a bottleneck in various security scenarios, and even completely shut down in others. Given that the DEIS' positive conclusion rests so heavily on the Atlantic Avenue/Pacific Street subway station complex's new southern exits, any interference with the functions that the southern entrance must provide will have dramatic effects elsewhere within the already over-burdened station complex. This also raises concerns regarding congestion and how it relates to the LIRR, TA, MTA, NYPD, and FDNY. (107)

With all the increased population growth, even traffic, and human concentration, terrorism is even more likely at the project site. (499)

There are significant safety risks posed by developing super-high density development above railyards, which serve as a subterranean pocket where dozens of trains pass in and out daily. (582)

It would be difficult to prevent a potential terrorist attack at the Atlantic Avenue subway and LIRR stations. (483)

Response G-11:

In accordance with SEQRA, the DEIS focuses on the impacts of the potential reasonable worst case from construction and operation of the proposed project. Emergency scenarios such as a large-scale terrorist attack similar to the World Trade Center attack, a biological or chemical attack, or a bomb are not considered a reasonable worst-case scenario and are therefore outside of the scope of the EIS. However, as indicated in Chapter 1, "Project Description," the proposed project would implement its own site security plan, which includes measures such as the deployment of security staff and monitoring and screening procedures. In addition, as noted in the FEIS, the project sponsors have consulted with the FDNY regarding access needs of emergency vehicles and other safety considerations, such as evacuation plans for places of public gathering and fire protection and security measures, and have met with NYPD to review the overall project and public safety and security measures. Consultation with NYPD and FDNY has been taking place and would continue should the project move forward. Disclosing detailed security plans is not appropriate for an EIS.

Comment G-12:

Frank Gehry has a reputation for creating buildings that are unsafe and closed off to the street. This might be appropriate for business buildings but not for residential. (446)

Response G-12:

Frank Gehry is a world renowned, Pritzker prize-winning architect. The proposed project's design would not create buildings that are unsafe or closed off to the street. On the contrary, the proposed project would incorporate design elements along the project's street frontages that would create an active, transparent streetscape through the introduction of local retail and significant glazing requirements throughout the project, with a focus on the Atlantic Avenue corridor. As addressed in Chapter 3, "Land Use, Zoning, and Public Policy," and Chapter 8, "Urban Design and Visual Resources," the proposed project would increase street-level activity on the project site by providing local retail and community facility uses on the ground floors of the residential buildings throughout the project site. The Design Guidelines require that each of the residential buildings would have a streetwall component reinforcing the building's relationship to the street.

Comment G-13: Frank Gehry's designs are more suitable to the west coast and mildly temperate climates. Each of his designs has flaws. What guarantee do the surrounding neighborhoods have that, a few years on, this Gehry complex will not be a danger, an eyesore, or a blight on our communities? (349)

No matter how inspired the design, the project will be built with profit in mind and end up growing shabby and out of style. (478)

Response G-13: Buildings constructed as part of the proposed project would comply with all New York City Building Code requirements and would not pose a danger to surrounding neighborhoods. As described in Chapter 1, "Project Description," all buildings constructed as part of the proposed project would conform to the project's Design Guidelines, which were developed in close consultation with City Planning and ESDC.

Comment G-14: The DEIS does not address the impact on building maintenance, insurance costs, restrictions on the use of what green space there will be, police protection, fire protection, all the issues connected with the security that will be called for in this densely packed project. (45, 324)

Response G-14: Building maintenance and insurance costs are costs that would be typical for any development, and would be borne by the project sponsors. As described in Chapter 6, "Open Space," the proposed open space would be owned by a conservancy or other not-for-profit entity established by the project sponsors, which would be responsible for maintenance, operation and security, with the project buildings responsible for the costs associated with these services.

Comment G-15: How will over-flights be handled (commercial, private, helicopter, etc.), by what agencies, and in what circumstances (Orange and Red Alerts, special and scheduled arena events)? What will be the effect on the regional economy and airports, including flight delays, if flights must be curtailed or rerouted? (376)

Response G-15: The proposed project is not expected to affect flight patterns, result in flight delays, or have an effect on the regional economy due to flight-related issues.

Comment G-16: How will the arena be evacuated in emergency situations? (376)

Response G-16: The proposed project would comply with the New York City Building Code and New York City Fire Code requirements pertaining to emergency egress. As indicated in the FEIS, the project sponsors have consulted with the FDNY regarding access needs of emergency vehicles and other safety considerations, such as evacuation plans for places of

public gathering and fire protection and security measures. Detailed security plans are outside of the scope of the EIS.

Comment G-17: How will underground parking facilities be secured? (376, 483)

Response G-17: The arena and Building 1 would have enclosed, below-grade loading areas that would be accessed from Dean Street. All security screening and loading dock activities would take place internally within this enclosed, below-grade area. All other parking on the proposed project site would be operated as is typical for attended parking facilities that support residential and commercial developments.

Comment G-18: How will security measures affect local thoroughfare and side street traffic flow, parking, movement of goods and people? (376)

Even if terrorists never come to Brooklyn there are security concerns associated with how police security will affect traffic when vehicles have to be diverted or inspected and stopped, or if trucks must be rerouted to safeguard the glass urban room, or what will the consequences of the closure of this privately controlled open space be. (376)

Regardless of whether the below-grade parking is located beneath the Vanderbilt Rail Yards platform or not, there are concerns about access to those parking facilities. The need to control access will inevitably affect traffic flow. For this reason the FEIS must consider the alternative methods used to secure below-grade parking under various scenarios. (107)

Response G-18: Security measures are not anticipated to affect traffic flow, parking, or the movement of goods and people in the vicinity of the project site. In fact, the successful operation of the proposed project necessitates that pedestrian and vehicle access to the site is adequately maintained. Security measures will be designed by the project sponsors in consultation with NYPD so that they would not negatively affect traffic flow, parking, or the movement of goods and people. As described in Chapter 1, "Project Description," of the DEIS, the entrance to the below-grade loading areas for the arena and Building 1 would be located on Dean Street. All security screening and loading dock activities would take place internally within the enclosed, below-grade area and there would be sufficient internal reservoir space so that there would be no anticipated on-street queuing of delivery vehicles. All deliveries to the arena would be pre-scheduled.

- Comment G-19:** Will CBA agreements regarding the use of local businesses and the employment of neighborhood residents be overridden by the need to meet bonding and background check requirements, or as with anti-terrorist bag searches, by the nature of the job's requirements? (376)
- Response G-19:** The CBA is an agreement between the project sponsors and certain community-based organizations and is separate from the EIS and GPP. The DEIS includes some elements of the CBA as they relate to the implementation of the program elements that are part of the GPP and analyzes any significant adverse impact of the proposed project. A review of the project sponsor's future hiring practices as specified in the CBA is outside the scope of the EIS, but it is not anticipated that the security needs of the proposed project would affect hiring practices.
- Comment G-20:** What is the level of planned surveillance and who will pay for it? (376)
- Response G-20:** As described in the DEIS, (Chapter 1, "Project Description"), the project sponsors would implement and pay for its own site security plan, which includes measures such as the deployment of security staff and monitoring and screening procedures. Private security staff and security systems would be provided for the project: additional security personnel at arena events, screening of office tenants and visitors, and private security for the residential and open space components of the proposed project.
- Comment G-21:** What is cost/benefit of the project when security measures and their costs are factored in? (376)
- What are the costs associated with implementing security measures? (102, 103, 376)
- Even in non-emergency situations there will be numerous occasions requiring increased surveillance, bag inspections, and so forth. What would be the public cost in dollars for both regular and overtime service requirements? (376)
- These costs should be considered public subsidies in support of this private developer's luxury project. (107)
- Response G-21:** The economic benefits analysis presented in Chapter 4, "Socioeconomic Conditions," estimates economic benefits associated with the proposed project and discloses available information with respect to direct public financing for the proposed project. The analysis does not include security costs or other externalities.

Comment G-22: Atlantic Avenue is a designated New York City evacuation route. How can we put the city in danger with blocked thoroughfares caused by this bad choice of placing an arena at this location? What would an evacuation of Manhattan and Brooklyn look like along the traffic corridors, which could result from this project if implemented as proposed? (69)

Response G-22: Evacuation routes are designated in low-lying areas to be used in the event of extreme storm conditions. The proposed project is not anticipated to adversely affect evacuation routes or the potential use of such routes. Furthermore, it is unlikely that an event would be held at the arena during the extreme weather conditions that would require the use of an evacuation route.

Comment G-23: The Dean Street loading scenario represents normal usage. Unfortunately, any DHS Elevated Terror Alert, or a terrorist event at another US sports venue, or a particular high profile arena event, could abruptly alter the scenario anticipated in the DEIS. Emergency security measures would never allow for “security screening and loading functions (to) take place entirely within” any of the project’s buildings. Thus, there will be consequences for traffic that will not be addressed if this assumption is allowed to stand and an FEIS is submitted to the PACB without reference to security conditions that can reasonably be anticipated to occur multiple times over the full life of the project. (107)

Response G-23: In accordance with SEQRA, the DEIS focuses on the potential reasonable worst case scenario impacts from construction and operation of the proposed project. The scenarios described, a DHS Elevated Terror Alert or a terrorist event at another US sports venue, are speculative. It is not anticipated that the proposed project would have to implement emergency security measures. It is expected that screening would occur as described in the DEIS.

Comment G-24: Given a reciprocal relationship between emergency response and traffic, the DEIS’ failure to address security means the DEIS’ conclusions regarding both are in error. (107)

What impact on evacuation and rescue operations can be expected from damage to, or overloading of, public and street facilities? (376)

Impact on evacuation and rescue operations from street closures. (376)

The current design fails to address security concerns because of its closed streets. After the security review of the planned new World Trade Center, the formerly closed streets were required to be reopened prior to the rebuilding. The reopening of the streets is being done to

enable first responder's vehicles access in case of an emergency. The Atlantic Yards plan is clearly courting tragedy. There is no plan for first responders to reach victims in the event of an emergency. And in the DEIS review of street closing this very important issue is not even mentioned. This design element must be studied in relation to emergency response needs. (69)

Response G-24: As described in Chapter 5, "Community Facilities," police response times are not expected to be significantly affected by the closing of local streets or increased traffic on the surrounding street network as the project site is accessible by three of the borough's major thoroughfares and service to surrounding areas is from police precincts and FDNY facilities that have a broad geographic distribution. Furthermore, NYPD and FDNY vehicles are not bound to standard traffic controls when responding to emergencies and are therefore less affected by traffic congestion.

Comment G-25: The traffic analysis needs to include reference to not just getting there, but what happens once there, which in major emergency events means evacuation. The public safety issue needs to be addressed within the FEIS as the PACB must be satisfied that existing and evolving emergency plans are not compromised by incessant gridlock. (107)

Assessing the impact of security and public safety issues means looking at various sorts of traffic controls that are commonly employed within different security and emergency management scenarios. The use of traffic cones, barriers of various sorts, lane changes, road closings, along with their locations and frequency of use, are among the factors that reasonably can be expected to alter the already pretty bleak picture presented within the DEIS. (107)

Response G-25: As described in Chapter 1, "Project Description," the project sponsors have consulted with the FDNY regarding access needs of emergency vehicles and other safety considerations, such as evacuation plans for places of public gathering and fire protection and security measures. The project sponsors also met with NYPD to review the overall project and public safety and security measures. During events at the arena, special events coordination measures will be in place to ensure that vehicular and pedestrian traffic flows are maintained.

Comment G-26: The mitigation of allowing bike paths through portions of the project's open space to improve the connection between the north-south and east-west bike lanes relies upon the continued availability of unencumbered passage through the project site. This assumption remains valid only so long as security requirements, as detailed above, do not create

limitations on such free passage through the project and its open space. This is a risky assumption and really does not address the added traffic along Dean and Bergen Streets, both of which are relatively narrow streets to begin with. (107)

Response G-26: Plans for the proposed bike paths were developed in consultation with the New York City Department of Transportation (DOT) and are intended to improve the connection between north-south on-street bike lanes planned by the New York City Department of Transportation (DOT) for Cumberland Street/Carlton Avenue and existing east-west bike lanes along Dean and Bergen Streets. It is not anticipated that the proposed project's open space would be closed for security reasons. However, even if the bike path were temporarily closed for some unforeseen reason, bicyclists could utilize on-street routes.

Comment G-27: It is not sufficient to declare that the elimination of the under-arena parking also eliminates all security concerns and the need to reliably secure unauthorized access. (107)

Response G-27: The DEIS does not state that the elimination of parking under the arena eliminates all security concerns. Chapter 1, "Project Description," discusses security and screening measures that would be put in place for the arena parking. As also mentioned in that chapter, the project sponsors have met with NYPD to review the overall project and public safety and security measures, including security concerns related to the arena and the parking facilities.

Comment G-28: Pedestrians too may be caught up in situations where security for arena events impacts their free movement. Surveillance and searches of pedestrians in the vicinity of the arena are well within the realm of probability. (107)

Response G-28: The proposed project is not expected to adversely impact the free movement of pedestrians around the project site. Neither surveillance nor searches of pedestrians in the vicinity of the project site are expected to occur during arena events or at any other time.

Comment G-29: There is a lack of recognition of what impact security will have on air quality. Since some elevated level of security considerations will certainly come into play for various arena events, and arena events contribute so disproportionately to traffic impacts, their synergistic combination warrants scrutiny by ESDC as regards air quality and associated public health impacts in the vicinity of the proposed project. (107)

- Response G-29:** Operation of the proposed project under normal security circumstances would not result in any significant adverse impacts on air quality. The impact on air quality from any extraordinary security measures that could be implemented under emergency situations is speculative.
- Comment G-30:** The DEIS should acknowledge that insurance premiums for the project will be reduced should the interior ‘accessible open space’ be closed off out of security concerns. (107)
- Response G-30:** The proposed project’s eight acres of open space would be publicly accessible and there are no plans for its closure. Moreover, the effects of any such closure on insurance premiums are not relevant to the analysis of environmental impacts under SEQRA.

BLIGHT AND EMINENT DOMAIN

- Comment G-31:** The designation of Prospect Heights, an up-and-coming neighborhood with new co-ops and condos, as blighted is bogus. (58, 69, 107, 119, 122, 160, 172, 197, 235, 239, 241, 256, 265, 274, 281, 325, 337, 338, 339)
- How is the surrounding neighborhood blighted when residences are selling for upward of \$1 million? (10, 31, 421, 160, 411, 445)
- With housing values going up every day and out of reach of the common person, how is the area blighted? (144, 172, 204, 228, 229, 268, 385)
- The area is already developing in an independent way through small businesses and individuals. This area is far from blighted. (144, 214)
- The community has already transformed a blighted area into a vibrant mixed use community. (31, 107, 191, 235, 397, 438)
- Response G-31:** The DEIS states that the proposed project site is characterized by blighted conditions, including dilapidated and structurally unsound buildings, debris-filled vacant lots, and underutilized properties. The DEIS does not state that the neighborhoods or blocks surrounding the project site are blighted. In addition, ESDC has prepared a Blight Study, which is appended to the General Project Plan.
- Comment G-32:** The most absurd claim, that the site would remain blighted if the sponsor's project were not built, is disproved by the content of the DEIS itself. This developer and others have clearly identified northern Prospect Heights as an attractive area for new projects. (108)

Blighted areas have no economic value and little hope of acquiring any. These buildings have value and without this project will acquire more value by private investment, the same way the surrounding neighborhoods have. (235)

Two buildings demolished by the developer on Dean Street were appraised by a local realtor as prime renovation opportunities that would have immediately sold for over \$1 million each. The DEIS conclusion that this neighborhood would not improve without the AY development is patently false. (461)

The DEIS claims the area would remain blighted without this project. This ignores viable existing developer interest as expressed in the Extell Plan. (202, 241)

ESDC assumes that without the proposed project the yards wouldn't be developed, which flies in the face of reality if one considers the competing proposals. The only reason they wouldn't be developed is if Ratner refused to sell or develop his properties. (144)

Response G-32:

As described in Chapter 1, "Project Description," of the DEIS, five of the eight blocks comprising the proposed project site were included in the 1968 Atlantic Terminal Urban Renewal Area (ATURA). Over the past several decades, a vast majority of ATURA, as well as areas south of ATURA, have experienced substantial redevelopment. The proposed project site (which comprises the southernmost portion of ATURA) is an exception to this otherwise widespread revitalization in this area. Currently, the project site's below-grade rail yard and dilapidated, vacant, and underutilized properties perpetuate a visual and physical barrier between the redeveloped areas to the north of Atlantic Avenue and the neighborhoods to the south. Although neighborhoods such as Prospect Heights continue to experience residential and commercial growth, conditions on the project site have remained largely unchanged over the past several decades.

Comment G-33:

The blight that is being referred to has long been removed and is outdated and fallacious information. (24)

The definition of urban blight has been stretched too thin to take over so much. (31, 292)

If there is blight on the project site, it started with the Atlantic Yards proposal and the threat of eminent domain, which scared local residents into selling their properties to the project sponsors. Properties have fallen into disrepair from intentional neglect. (108, 119, 136, 144, 366, 461, 560, 585)

- The privately owned properties the state seeks to condemn are not blighted (468)
- Response G-33:** The Blight Study appended to the General Project Plan describes conditions on the proposed project site as of May 1, 2006. As described in that study, the project site is currently characterized by blighted conditions, including dilapidated and structurally unsound buildings, debris-filled vacant lots, and underutilized properties, and has been characterized by such conditions for several decades.
- Comment G-34:** The DEIS bootstraps support for the improvements of the proposal by comparing the proposed Site 5 development with the unattractive conditions existing in the form of the Modells and PC Richards stores. The DEIS fails to note that the creator of this blight is the same developer who now proposes to save the arena by yet another controversial development. (37, 53)
- Response G-34:** At the time Site 5 was developed, market conditions did not support a large-scale development as permitted under zoning and envisioned in the ATURA plan.
- Comment G-35:** MTA didn't keep up the visual aesthetics of its property. Otherwise the areas surrounding the Atlantic Yards are solidly middle class. (273, 274, 461)
- The rail yards are not well lit. This is not the result of urban decay but the neglect of the MTA. The DEIS states that street lighting needs improvement. That may be true, but that is a conscious decision by the City of New York, not evidence of decay. (37, 39)
- Both the City and the MTA have failed to maintain the appearance of the rail yards and have ignored local residents when we requested such attention. That said, we would support the development of the rail yards in a plan that improves, rather than destroys, our community. (461)
- The only thing you could possibly see as blight are properties owned by the City, the State's MTA, and Forest City Ratner. (39)
- The only blighted area is the open space and sidewalk beside the LIRR yards. (226)
- Response G-35:** Chapter 1, "Project Description," and Chapter 3, "Land Use, Zoning, and Public Policy," describe in detail the present condition of the project site, including the Vanderbilt Yard.

Comment G-36: Atlantic Center and Atlantic Terminal blight the neighborhood. The Atlantic Center is “vital” (as stated in the DEIS) only because of state agencies such as DMV. (235)

Response G-36: The Atlantic Center and Atlantic Terminal shopping centers are major commercial uses in the study area, containing approximately 875,000 square feet of retail space and the 10-story Bank of New York office tower. Atlantic Center and Atlantic Terminal were developed in accordance with the goals set out in the ATURA Plan and have helped to draw a large number of employees and visitors to the area.

Comment G-37: Eminent Domain is supposed to be for public works projects, not private projects. Why is the process not being respected and the rights of residents not being considered? (150, 172, 206, 268, 398, 520, 549, 555)

It is disturbing that eminent domain could be used for anything but a public project like a road. In an area where natural development is occurring without Ratner, it is disturbing that the EDC would dare to invoke eminent domain for a private developer. (140, 195, 289, 344, 367, 404, 579)

The goal of creating a new sports venue and home for the Nets basketball team is something which has been promoted by the Borough President and the developer. This is a personal preference and an investment opportunity for the developer. Whether this goal alone would support the use of eminent domain, the unprecedented direct and indirect public subsidies, and the use of state sponsorship to avoid any local oversight or application of local zoning and building codes and laws is highly questionable. (119)

The privately owned properties the state seeks to condemn are not blighted, unsanitary, or substandard. The alleged blighted conditions are in large part Ratner’s fault. (191, 349, 438, 468, 480)

Eminent domain should not be used for the project. (13, 30, 37, 58, 122, 134, 150, 164, 218, 228, 239, 246, 257, 263, 269, 285, 295, 315, 316, 318, 322, 326, 339, 340, 351, 404, 409, 453, 476, 495, 505, 523)

The use of eminent domain is an act of violence against the community. (210)

It is criminal to allow the developer to use eminent domain to take over other people’s property for his own financial gain and personal agenda. (174, 324, 354, 373, 398, 414)

The abuse of eminent domain is an act of terrorism. (444)

The use of eminent domain amounts to sanctioned grand larceny. (47, 345)

Destroying property simply to construct something bigger and gaudier is not sufficient reason to go ahead with this very controversial takeover of personal property. (273, 372)

The use of eminent domain to displace hundreds and favor one developer is abusive. (201)

Unless the need for additional community services is better addressed and incorporated into the Forest City Ratner Atlantic Yards plan, there may be an additional significant potential for eminent domain in the surrounding neighborhoods to provide these additional buildings for these services. (110)

Eminent domain might be required for a new firehouse, police station, emergency command post, power stations, water treatment facilities, or schools. (107)

Support for using eminent domain for the arena but not to tear down city blocks to create a housing project. (181)

The notion that the area surrounding the proposed Nets stadium is “blighted” and worthy of using the extreme governmental action of eminent domain as a “remedy” to the neighborhood's problems is reminiscent of Robert Moses’ oblivious attitude toward the numerous neighborhoods that he destroyed during his reign. (57)

The developer has the choice to buy out individual homeowners within the footprint of his proposed developer. If he chooses not to do so, the state has no grounds to take property for his use. This project should/could become New York State’s court test case, bringing New York in line with 26 other states which have set limits on the use of eminent domain. (160)

ESDC and FCR represented to the public and undertook that, in furtherance of the project, ESDC would acquire FCR-owned property by conveyance, and not by eminent domain, and that eminent domain would only be used against the private properties not owned by FCR. (58)

ESDC’s condemnation of FCR’s own rent stabilized leases is a violation of other state laws, which take precedence, and which are intended to limit and restrict the cancellation of rent stabilized leases and the demolition of rent stabilized buildings. The use of condemnation by ESDC against rent stabilized leases assumed by, or entered into by FCR, deprives tenants of a valuable constellation of

property rights, which, in addition to the protection of state laws, are constitutionally protected. (58)

Condemnation of 700 Atlantic Avenue will have various negative impacts on Global Exhibition Services. As our company has provided jobs for fellow Brooklynites and paid the city and state substantial taxes for 29 years, we are getting a bad deal to have to even consider such a proposition. The complexities of moving our business will be devastating and our business could see its demise with this prospective change. (74)

To avoid what happened in the 70s, when urban renewal and eminent domain was used to tear down six square blocks of housing and businesses to make way for Baruch College, and to prevent the blighting effect of complete demolition, no building should be torn down unless the construction financing is in place and the contract signed to build on each section of the site. (105)

The argument that this project is eliminating blight and therefore justifies the use of eminent domain is specious. The developer is hoping to have million dollar condos condemned for his project. How can million dollar condos exist in a blighted area? (119)

State and city agencies should disavow taking private property by eminent domain. (330)

Response G-37: Pursuant to Section 13 of the UDC Act, the ESDC is authorized to use eminent domain to acquire property.

Comment G-38: PACC is against the use of eminent domain in this project because its public benefit has not been proven. The assessment of the “no build” alternative in the DEIS does not take into account the natural progression of rehabilitation, investment, and conversion to residential use on the blocks not over the rail yards which is and would continue to occur without the use of eminent domain and would be a benefit to the community. The project should be limited to building over the rail yards. (105)

The displacement of long-term property owners is a serious matter. Since this is a long-term project we recommend that every effort be made to allow existing uses to remain through a modification and scale and scope of the project. (95, 155)

The project encompasses a larger area than necessary to accomplish its purported public interest and that interest could be achieved without condemning any properties. (468)

Response G-38: Pursuant to Section 13 of the UDC Act, the ESDC is authorized to use eminent domain to acquire property.

PROJECT COSTS AND FINANCING

Comment G-39: The DEIS neglects to mention that with more than \$1 billion in public subsidies FCR will make more than \$1 billion in profit. (55, 206, 273, 242)

Nobody supports using our badly needed tax dollars to construct 4,610 units of luxury housing, to provide a billion dollar profit to a man who's already a billionaire. (47, 58, 204, 238, 369)

Ratner will receive windfall profits because, for example, he will be given long-term leases for only \$1 each, to massive areas of land located in a very desirable area of Brooklyn. (468)

The developer will make a profit of \$4 million with all the tax breaks he is getting. (242)

The developer's profits and additional hidden costs, which will be borne by the taxpayer, need to be more fully revealed than they are in the DEIS. A 20-year profit and loss statement has not been issued. (69, 122, 206)

Forest City Ratner is not even going to give a penny for this project, and it will instead involve taxpayers from all over the state of New York paying for this project, while FCR gets subsidized bonds and revenue. (152, 204)

Taxpayers of New York State would pay Ratner in excess of \$1 billion in subsidies, including direct financing, tax breaks, and payments in lieu of taxes, to finance this project and when completed it would be owned by Forest City Ratner. These numbers are based on estimates using similar developments in New York, because Ratner has not disclosed the required projected income statements or balance sheet financials. (160)

Taxpayer money should not be used for this development. (174, 480, 503, 505, 529)

We have no indication whatsoever as to what kind of profit the developer is projecting. We need to understand just how much Ratner needs and is projecting in profits. We cannot just take the ESDC's statement that this is a good economic deal. We need a full audit of this project so that we, who live with the results and those who will make the final decision as to whether and how it will proceed, can make an informed decision. (119)

Who will ultimately pay for the project? (308)

There should be an independent cost-benefit analysis to ensure a cost effective project, including an estimate of financial return to New York City and State, the cost of permanent jobs created, and number of truly affordable housing units for low and moderate income families. (168, 246, 269, 315, 384)

ESDC claims in the GPP that the City and state will receive \$1.4 billion in revenue in excess of the taxpayer subsidies over the next 30 years. However, the GPP and attachments do not offer any explanation or support for these assertions. If the significant taxpayer subsidies mentioned above were not included in these tax calculations, the numbers would not be credible. (119)

Response G-39: Chapter 4, "Socioeconomic Conditions," estimates economic benefits associated with the proposed project and discloses available information with respect to direct public financing for the proposed project.

Comment G-40: This project has been put together using public funds to benefit a private development and because the Supreme Court has backed away from eminent domain it means that there will be cost overruns that will be covered by public funds. (298)

Response G-40: The proposed project is a Land Use Improvement and Civic project under the UDC Act, and is intended to achieve the significant public benefits set forth in Chapter 1, "Project Description." As outlined in the EIS and the General Project Plan, the City and State have indicated that they would provide direct funding to the proposed project of \$100 million each. Funding provided by the State would be used for infrastructure improvements necessary for the construction of the arena and for the redevelopment of the rail yard. Funding provided by the City would also be used for necessary infrastructure and rail yard improvements. The City's contribution could also be used for acquisition costs related to the arena site (other than for the acquisition of properties owned by the MTA/LIRR). As described in Chapter 4, "Socioeconomic Conditions," the total construction cost for either program variation (residential mixed-use variation or commercial mixed-use variation) is estimated to be approximately \$3.4 billion.

Comment G-41: We can't realistically afford the massive public subsidies this proposal envisions. New York State already has extremely high debt and one of the lowest credit ratings among states in the United States. (238)

Response G-41: An analysis of New York State's debt levels and credit rating is beyond the scope of the FEIS.

Comment G-42: Why is it so terrible for the first developer in the history of New York City, who got tax incentives like all the other developers, to give back to that community in the form of affordable housing units, recreation and jobs? (28)

Response G-42: Comment noted.

Comment G-43: Alan Hevesi, the State Comptroller, should audit the proposed Atlantic Yards project. The financial numbers and the environmental impact conclusions that we have heard or read about are so widely divergent that an audit by a comparatively unbiased party is in order. (119, 143, 249)

The estimated cost of the project has significantly increased while the number of proposed jobs created by the project has shrunk. (316)

Response G-43: ESDC has been consistent in its assessment of economic, fiscal, and environmental impacts of the proposed project throughout the project planning process. The economic benefits of the proposed project depend on the characteristics of the proposed project—the total construction cost, total amount of retail, office, and community facility space provided, and to a more limited degree, the total number of residential units. Therefore, as shown in the FEIS, the estimated economic benefits of the proposed project have changed since issuance of the DEIS in accordance with the reduction in the build program. Over the course of proposed project planning process, entities such as the New York City Independent Budget Office (IBO) and the project sponsors have produced reports estimating the economic impacts of various elements of the proposed project at different stages in the planning process. Such analyses were conducted independent of any ESDC efforts and are not relied upon in the analyses presented in the EIS or the General Project Plan.

Conclusions regarding the environmental impacts of the proposed project were presented in the DEIS and modified as appropriate in the FEIS to reflect the reduced build program and any other project elements that were refined between issuance of the draft and final EIS.

Comment G-44: I object to the fact that public land was sold at below market price and thus privatized—this was a breach of commitment to the tax paying public. (273)

There is concern that the MTA sold the development rights to the favored developer for \$100 million, which is less than the Extell offer of \$150 million and substantially less than the appraisal by the MTA's own selected appraiser. The difference between the \$100 million the

developer paid for the rail yards and the formal appraisal, or at a minimum, the Extell offer of \$150 million, should be treated as part of the developer subsidy package. (119, 390)

How will selling MTA property at under market value contribute anything towards these increased transit service demands? (145)

Response G-44: The MTA carefully considered all alternatives in response to its May 24, 2005 request for proposals soliciting interest in the sale or lease of the air space above the Vanderbilt Yards. On July 6, 2005, MTA received proposals from Forest City Ratner Companies and the Extell Development Company. After considering both proposals, the MTA Board decided on September 14, 2005 to reject the Extell proposal and to authorize continuing negotiations with Forest City Ratner Companies regarding its proposal.

Comment G-45: By delaying security and insurance cost analysis until after PACB project approval, costs that such analysis would uncover will not be included in the financial information provided for use in PACB decision-making. (107)

Response G-45: Project financing would include the cost of providing adequate insurance for the proposed development. ESDC would provide detailed financial information to the PACB, as is typical for any large project presented to that Authority.

Comment G-46: Even in cases where the DEIS identifies required upgrades to mitigate impacts, no cost estimates are provided. For example, no costs are provided for the schools mitigation measures, including creating new satellite facilities in less crowded schools, leasing school space, and building new school facilities off-site. (55)

Mitigation should include a developer contribution covering costs related to ongoing impacts of this project. The DEIS quantifies the benefit of increased government revenue to be generated by this project in taxes, but does not quantify at any point the increased costs for the government services to this project. Funds should also be allocated to deal with the direct impacts of the project: traffic cops to direct traffic, and quality-of-life enforcement officers to give out tickets for double parking and car horn blowing. The fiscal benefit projections of the project should be adjusted downward accordingly to reflect the true, net fiscal impact. (224)

The GPP does not tell us how the public contributions for schools, water, energy, sanitation, fire, police, and other infrastructure costs are to be paid. (119)

There is so much that has not been stated in terms of overall cost, whether it's the fire, police, schools, other infrastructure, electric grid, that have not been identified. What is the true cost and how is this money being spent, and is it being spent in another manner? (69, 105)

Response G-46: As with all developments, municipal services would be provided and there would be a cost associated with the provision of these services. Chapter 4, "Socioeconomic Conditions," indicates the tax revenues expected to result from the proposed project. These revenues would be available to support municipal services and other mitigation costs not assumed by the project sponsors.

Comment G-47: Who would foot the bill for the bike paths and the traffic cops? (155)

Response G-47: The bike path and all other components of the 8 acres of publicly accessible open space would be paid for by the project sponsors. It is anticipated that on days when a basketball game or other major event is scheduled at the arena, police or traffic control officers would be deployed at key locations to maintain traffic flow and minimize conflicts between vehicles and pedestrians, as is standard practice at many major event venues in the City. The project sponsor is committed to working with DOT and NYPD to ensure that needed resources are available for this purpose.

Comment G-48: Taxpayers should not allocate giant subsidies to FCR for creating affordable housing that could be built more efficiently and effectively if the same subsidies were made available to other developers, or the experienced agencies already active in the neighborhoods, such as the Fifth Avenue Committee and the Pratt Area Community Council, and who would also deliver it sooner. (20, 69, 369)

The state and city should create a level financial playing field for all potential developers by offering similar subsidies (330)

Response G-48: The project sponsors would utilize affordable housing incentives that are available to any other developer in New York City. As discussed in Chapter 20, "Alternatives," the proposed project site is particularly well-suited for mixed-income housing, and the provision of affordable units at this location has major benefits for low- and moderate-income residents. The project site's proximity to LIRR, subway, and bus services provides ample transit access for low- and moderate-income families, and the combination of existing and future employment opportunities on and near the project site would provide employment opportunities for future residents.

*