DEPARTMENT OF CITY PLANNING
CITY OF NEW YORK

ENVIRONMENTAL ASSESSMENT AND REVIEW DIVISION

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ERRATA

TO: **Recipients of the First Avenue Properties Rezoning Draft Supplemental Environmental Impact Statement (DSEIS)**

FROM: Robert Dobruskin

DATE: November 16, 2007

RE: **Errata – Minor Corrections**
Replacement Pages for the First Avenue Properties DSEIS
CEQR No. 06DCP039M
ULURP Nos. C070522ZMM, C070523ZSM, C070523(A)ZSM C070524ZSM, C070525ZSM, C070529ZMM, N070530ZRM, N070530(A)ZRM, C070531ZSM, C070531(A)ZSM, C070532ZSM, C070532(A)ZSM, C070533ZSM, C070534ZSM

Since the issuance of the First Avenue Properties DSEIS on August 17, 2007, minor errors relating to the traffic study were identified. Specifically, the inbound and outbound PM peak hour for the Queens Midtown Tunnel (QMT) portals analysis was inadvertently omitted as part of the significant adverse impacts identified. The corrections do not alter the number of significant adversely impacted locations or the type of mitigation required, as the DSEIS disclosed the QMT as a location that would experience unavoidable significant adverse impacts to the inbound and outbound AM peak hour. The corrections, initially appearing in the Traffic and Parking Chapter, are repeated in several locations throughout the DSEIS, including the Mitigation, Alternatives and Unavoidable Significant Adverse Impacts Chapters. Please replace the pages listed below with the corrected replacement pages attached. We apologize for any inconvenience this may have caused.

Replacement Pages
Executive Summary, pages S-38 and S-39
Chapter 15, Traffic and Parking, pages 15-4, 15-47, 15-48, 15-49, 15-55, 15-56, and 15-57
Chapter 23, Mitigation, page 23-20
Chapter 24, Alternatives, pages 24-19, 24-38, and 24-68
Chapter 25, Unavoidable Significant Adverse Impacts, page 25-5

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northbound mainline would operate at LOS F, with speeds decreasing to about 22 mph. No Build midday peak conditions would be in the LOS C to marginally acceptable/unacceptable D range (37 to 39 mph) for all analysis locations. PM peak hour conditions would operate at LOS E at the northbound 42nd Street diverge. Saturday peak hour conditions would operate at LOS C under projected 2014 No Build conditions on the northbound mainline north of the 34th Street merge.

AM peak hour Build conditions would operate at the same levels of service and about the same speeds as the 2014 No Build conditions. Weekday midday peak hour Build conditions would operate at the same levels of service and about the same speeds as the 2014 No Build conditions, with the exception of the southbound mainline at the 34th Street diverge to the "slip ramp," which would deteriorate from LOS C to marginally acceptable/unacceptable LOS D, with a loss in speed of less than 1 mph. PM peak hour Build conditions would operate at the same levels of service and about the same speeds as the 2014 No Build conditions, with the exception of the southbound mainline at the 34th Street merge, which would deteriorate from LOS E to F, with a loss in speed of less than one mph. Saturday midday peak hour Build conditions would operate at the same levels of service and about the same speeds as the 2014 No Build conditions.

Under 2014 Build conditions, the draft SEIS's analyses indicate that there would be no significant adverse impacts on the FDR Drive.

PORTALS ANALYSIS FOR QMT AND QUEENSBORO BRIDGE

Utilization of traffic capacity within the Queens-Midtown Tunnel (QMT) and along the Queensboro Bridge was also analyzed for this draft SEIS—referred to as a "portals analysis"—as was conducted for the Hudson Yards Rezoning FGEIS. According to the methodologies used in that study, mainline vehicle capacities were estimated for each facility based on its lane and shoulder widths, peak hour lane directions, and mixture of heavy vehicles—all of which would affect peak hour capacity. The Hudson Yards FGEIS developed the criteria that a volume/capacity (v/c) ratio greater than 0.90, or 90 percent of the capacity, "might be approaching [its] estimated mainline capacity," and that any increase in the v/c ratio of 0.02 or more when No Build conditions are above 0.90 would constitute a significant adverse impact.

Project-generated increments under the Proposed Actions were added to No Build volumes for the QMT and Queensboro Bridge. The analyses projected that significant adverse impacts would occur at the QMT inbound and outbound in the AM and PM peak hours, according to the significant impact definition, above. There would be no significant impacts at the Queensboro Bridge.

FUTURE WITH THE PROPOSED ACTIONS AND THE UNDC PROJECT

An additional set of analyses was conducted with one additional potential development included in background conditions—a potential one million square foot building proposed by the United Nations Development Corporation (UNDC) which may or may not proceed. The SEIS traffic analyses under Build conditions with the UNDC project conclude that significant adverse impacts would occur at 65 intersections in the three Manhattan study areas in the AM peak hour (one more than conditions without UNDC), 30 intersections in the midday peak hour (two more than conditions without UNDC), 57 intersections in the PM peak hour, and 22 intersections in the Saturday midday peak hour out of 88 study intersections (both the same as without UNDC).

Portals analyses were conducted with the UNDC project, and project that there would be no significant impacts at the Queensboro Bridge, and, as reported for Build conditions without

UNDC, significant impacts would occur on the QMT mainline inbound and outbound in the AM and PM peak hours.

When comparing the FDR Drive 2014 No Build conditions with UNDC to 2014 Build conditions with UNDC, the weekday AM, weekday midday, and Saturday midday peak hour conditions would remain at the same levels of service and speeds after adding Build increment trips. However, the weekday PM peak hour deterioration from LOS E under 2014 No Build with UNDC conditions to LOS F under 2014 Build with UNDC conditions on the southbound FDR Drive at the 34th Street on-ramp merge would result in a density increase of 2.0 passenger cars per mile per lane, which is defined as a significant impact.

QUEENS PLAZA APPROACH TO THE QUEENSBORO BRIDGE

New traffic counts were conducted for the Queens Plaza approach to the Queensboro Bridge in April 2007 for weekday and Saturday midday periods using manual intersection counts and 24-hour Automatic Traffic Recorder (ATR) machine counts. These volumes were used along with observations of actual traffic conditions to determine levels of service for the weekday 8:00 to 9:00 AM, 1:00 to 2:00 PM midday, and 5:00 to 6:00 PM peak hours, and for the Saturday 1:00 to 2:00 PM midday peak traffic hour using *2000 Highway Capacity Manual (HCM)* procedures.

The SEIS's traffic analyses of conditions at 12 locations in the Queens Plaza Area determined that significant adverse impacts would occur at 7 intersections in the AM peak hour, 2 intersections in the midday peak hour, 5 intersections in the PM peak hour, and 2 intersections in the Saturday midday peak hour.

MITIGATION OF SIGNIFICANT TRAFFIC IMPACTS

As noted above, the Proposed Actions would result in significant adverse impacts at 64 intersections in the three Manhattan study areas in the AM peak hour, 28 intersections in the midday peak hour, 57 intersections in the PM peak hour, and 22 intersections in the Saturday midday peak hour out of 88 study intersections. The major overall finding of the traffic mitigation analysis is that the vast majority of locations analyzed under the Proposed Actions would either not be significantly impacted or could be mitigated with a series of traffic improvements. The improvements include signal phasing and/or timing changes, parking regulation changes to gain a travel lane at key intersections, intersection or street channelization improvements, lane markings and signage, strict enforcement of existing parking regulations, and installation of traffic signals at some currently unsignalized intersections. These measures represent the standard range of traffic capacity improvements that are available to improve operating conditions and mitigate impacts and are deployed by the New York City Department of Transportation (DOT) and/or the New York Police Department (NYPD), and are the same types of measures identified in the FGEIS completed for this site previously.

Out of the 88 intersections analyzed in the three Manhattan traffic study areas in the weekday AM, midday, and PM peak hours, all significant adverse traffic impacts could be mitigated with these exceptions: in the weekday AM peak hour, three intersections could only be partially mitigated and nine additional intersections (the FDR Drive service road at 34th and 35th Streets, First Avenue at 49th Street, Second Avenue at 36th, 40th, and 59th Streets and at the exit from the Queensboro Bridge, and 42nd Street at Broadway and Madison Avenue) could not be mitigated at all; in the weekday midday peak hour, two intersections could only be partially mitigated and five additional intersections could not be mitigated at all (the same two locations along Second Avenue near the Queensboro Bridge, 42nd Street at Broadway, and the FDR Drive Service Road at 34th Street as

to the FGEIS. At the 86 existing intersections analyzed in the three Manhattan study areas in both studies, significant impacts identified in this draft SEIS would occur at 64 intersections in the AM peak hour compared to 33 in the FGEIS; at 28 intersections in the midday peak hour compared to 24 in the FGEIS; and at 57 intersections in the PM peak hour as compared to 36 in the FGEIS.

- The proposed development site plan at the Waterside/708 First Avenue parcels would have a different garage access plan and overall site access than the plan developed for the FGEIS. Whereas the FGEIS's garage access plan had provided for garage access along the east side of First Avenue at both East 39th and 40th Streets, as well as along the other sides of this superblock, the plan proposed and analyzed in this draft SEIS does not provide for garage access via First Avenue (there is site access provided for drop-offs on East 39th Street but without access to the development's garage underground from this new road). As a result, traffic access and egress to/from the site's garage would be more concentrated at the other garage access/egress locations.
- Parking occupancy would reach about 94 percent in the draft SEIS compared to 95 percent in the FGEIS.

FDR DRIVE ANALYSES

- The FDR Drive analysis was conducted at the same locations as in the FGEIS. The draft SEIS Build analyses indicate a deterioration of LOS E to LOS F at one location during one peak hour with no significant impact, compared to the FGEIS under its Base Build condition, which showed a deterioration of LOS E to LOS F at one location for two peak hours. At the time the FGEIS was being prepared, there were no CEQR criteria for significant highway impacts. Subsequently, a methodology was developed by city agencies that now defines significant adverse highway impacts for EIS purposes.

PORTALS ANALYSIS FOR QMT AND QUEENSBORO BRIDGE

- A portals analysis was conducted for the draft SEIS on the typical mainline segments of the QMT and Queensboro Bridge; this was not required for the FGEIS. Using the methodology that was developed for the *Hudson Yards Rezoning EIS*, the QMT would have significant adverse impacts inbound and outbound during the AM and PM peak hours. There would be no significant adverse impacts on the Queensboro Bridge.

FUTURE CONDITIONS WITH THE UNDC PROJECT

- Inclusion of the potential one million square foot UNDC building in the No Build condition would result in one additional significantly impacted intersection during the weekday AM peak hour, two additional significant impacts during the midday peak hour, and no additional significant impacts in the PM and Saturday midday peak hours. The FDR Drive analysis in the SEIS, with the UNDC project included, shows a significant impact during the PM peak hour on the southbound FDR Drive at the 34th Street on-ramp merge. In the draft SEIS portals analysis, the same portals would be impacted with the UNDC project.

CONDITIONS IN THE QUEENS PLAZA AREA

- The FGEIS indicated that significant adverse traffic impacts could be expected at intersections on the Queens side of the Queensboro Bridge within Long Island City. Quantitative level of service analyses conducted at 12 intersections as part of the SEIS confirm this—7 intersections would be significantly impacted in the AM peak hour, 2

0.90, i.e., under 90 percent, during the weekday peak hours. According to the Hudson Yards EIS, a v/c ratio greater than 0.90 would indicate facilities whose mainlines "might be approaching their estimated mainline capacity." In general, the mainline capacity is not the constraint to smooth traffic flow—conditions at intersections on the Manhattan side are the "limiting" factor, and are depicted in the intersection level of service analyses that have been presented earlier.

Table 15-22
Queens-Midtown Tunnel Existing Portals Analysis

	AM Peak Hour		Midday Peak Hour		PM Peak Hour	
	In	Out	In	Out	In	Out
Existing Volumes	4,349	1,422	3,198	2,105	3,086	3,204
Capacity	5,382	1,794	3,588	3,588	3,588	3,588
Volume/Capacity Ratio	0.81	0.79	0.89	0.59	0.86	0.89
Note: "In" = Inbound to Manhattan; "Out" = outbound from Manhattan						

Total QMT volumes and v/c ratios are highest in the PM peak hour, which corresponds to higher traffic volumes at many intersections on Second and Third Avenues adjacent to the QMT portal on the Manhattan side, compared to the weekday AM and midday peak hours.

Table 15-23 presents the existing weekday peak hour volumes, mainline capacities, and v/c ratios for the Queensboro Bridge. As shown in Table 15-23, the Queensboro Bridge operates at v/c ratios in the 0.49 to 0.76 range, i.e., up to 76 percent of capacity, during the weekday peak hours. Volumes and v/c ratios are highest in the PM peak hour, which corresponds to higher traffic volumes at intersections on Second Avenue leading to and from the Queensboro Bridge on the Manhattan side, compared to the weekday AM and midday peak hours. As stated above for the QMT, intersection level of service on the Manhattan side is the critical factor for traffic flow.

Table 15-23
Queensboro Bridge Existing Portals Analysis

	AM Peak Hour		Midday Peak Hour		PM Peak Hour	
	In	Out	In	Out	In	Out
Existing Volumes	5,883	2,881	3,945	3,864	4,631	6,012
Capacity	9,546	4,773	6,364	7,955	6,364	7,955
Volume/Capacity Ratio	0.62	0.60	0.62	0.49	0.73	0.76
Note: "In" = Inbound to Manhattan; "Out" = outbound from Manhattan						

FUTURE WITHOUT THE PROPOSED ACTIONS

2014 No Build capacities would remain the same as existing since no capacity improvements are planned for the QMT or Queensboro Bridge mainlines. Existing inbound and outbound volumes were increased by 0.5 percent per year, and No Build project trips were added to form the basis for the 2014 No Build conditions.

Table 15-24 presents the 2014 No Build weekday peak hour volumes, mainline capacities, and v/c ratios for the QMT. As shown in Table 15-24, under 2014 No Build conditions, the QMT mainline would operate at v/c ratios at or over 0.90 in both directions in the AM and PM peak hours and inbound towards Manhattan in the midday peak hour. This includes 2014 No Build conditions with approximately 30 million square feet of development buildout in Midtown

Manhattan. This means that given the projected increase in background traffic to the year 2014, mainline QMT traffic will start to approach or exceed the capacity of its tubes just as adjacent intersections on the Manhattan side continue to operate with demand volumes at or above their capacity.

Table 15-24
Queens-Midtown Tunnel 2014 No Build Portals Analysis

	AM Peak Hour		Midday Peak Hour		PM Peak Hour	
	In	Out	In	Out	In	Out
2014 No Build Volumes	4,878	1,612	3,437	2,342	3,316	3,828
Capacity	5,382	1,794	3,588	3,588	3,588	3,588
Volume/Capacity Ratio	0.91	0.90	0.96	0.65	0.92	1.07
Note: "In" = Inbound to Manhattan; "Out" = outbound from Manhattan						

Table 15-25 presents the 2014 No Build weekday peak hour volumes, mainline capacities, and v/c ratios for the Queensboro Bridge. As shown in Table 15-25, the Queensboro Bridge would operate at v/c ratios in the 0.52 to 0.82 range, i.e., below the 0.90 threshold.

Table 15-25
Queensboro Bridge 2014 No Build Portals Analysis

	AM Peak Hour		Midday Peak Hour		PM Peak Hour	
	In	Out	In	Out	In	Out
2014 No Build Volumes	6,450	3,618	4,288	4,150	4,987	6,487
Capacity	9,546	4,773	6,364	7,955	6,364	7,955
Volume/Capacity Ratio	0.68	0.76	0.67	0.52	0.78	0.82
Note: "In" = Inbound to Manhattan; "Out" = outbound from Manhattan						

PROBABLE IMPACTS OF THE PROPOSED ACTIONS

2014 Build capacities would remain the same as existing and No Build since no capacity improvements are planned for the QMT or Queensboro Bridge mainlines. Build volumes were calculated by adding project-generated Build increment trips to the 2014 No Build volumes.

Table 15-26 presents the 2014 Build weekday peak hour volumes, mainline capacities, and v/c ratios for the QMT. As shown in Table 15-26, under 2014 Build conditions, the QMT mainline would operate at v/c ratios at or over 0.90 in both directions in the AM and PM peak hours and inbound towards Manhattan in the midday peak hour. Because the increase in v/c ratios for the AM and PM peak hour inbound and outbound directions would increase by 0.02 or more between No Build and Build conditions, these movements would be significantly impacted. No additional in or out movements would cross the 0.90 v/c ratio threshold as a result of project-generated Build increment volumes. However, the five movements that would operate at more than 90 percent of their capacity would increase by up to four percent. This means that under 2014 Build conditions, mainline QMT traffic will continue to approach or exceed the capacity of its tubes, just as adjacent intersections on the Manhattan side would continue to operate with demand volumes at or above their capacity.

Table 15-27 presents the 2014 Build weekday peak hour volumes, mainline capacities, and v/c ratios for the Queensboro Bridge. As shown in Table 15-27, the Queensboro Bridge would operate at v/c ratios in the 0.53 to 0.83 range, below the 0.90 threshold. Individual movements would increase by up to two percent, but there would be no significant impacts.

Table 15-26
Queens-Midtown Tunnel 2014 Build Portals Analysis

	AM Peak Hour		Midday Peak Hour		PM Peak Hour	
	In	Out	In	Out	In	Out
2014 Build Volumes	5,006	1,688	3,466	2,374	3,386	3,935
Capacity	5,382	1,794	3,588	3,588	3,588	3,588
Volume/Capacity Ratio	0.93	0.94	0.97	0.66	0.94	1.10
Note: "In" = Inbound to Manhattan; "Out" = outbound from Manhattan						

Table 15-27
Queensboro Bridge 2014 Build Portals Analysis

	AM Peak Hour		Midday Peak Hour		PM Peak Hour	
	In	Out	In	Out	In	Out
2014 Build Volumes	6,602	3,722	4,335	4,199	5,077	6,612
Capacity	9,546	4,773	6,364	7,955	6,364	7,955
Volume/Capacity Ratio	0.69	0.78	0.68	0.53	0.80	0.83
Note: "In" = Inbound to Manhattan; "Out" = outbound from Manhattan						

H. FUTURE CONDITIONS WITH THE UNDC PROJECT

Traffic and parking analyses conducted for other sections of this chapter were re-analyzed with the inclusion of a proposed development by the United Nations Development Corporation (UNDC) of approximately one million square feet of office and conference center space on the east side of First Avenue between 41st and 42nd Streets, where the Robert Moses Playground and a QMT ventilation tower currently exist. Although the UNDC project is not currently committed and its future is uncertain, it is analyzed nonetheless as a potential "worst-case" condition. The analysis below includes the traffic and parking No Build and Build conditions with UNDC, the FDR Drive analysis with UNDC, and the portals analysis for the QMT and Queensboro Bridge with UNDC, with comparisons in each to conditions without the UNDC project.

FUTURE CONDITIONS WITHOUT THE PROPOSED ACTIONS WITH THE UNDC PROJECT

2014 No Build traffic and parking conditions with the UNDC project are analyzed in this section. It includes travel demand estimates of the volume of traffic that would be generated by the proposed UNDC building and its distribution within the street network, followed by level of service comparison to 2014 No Build traffic conditions without the UNDC project. Details of the trip generation and level of service analyses are presented below.

UNDC PROJECT TRIP GENERATION

The general office trip generation and temporal distribution rates used in the draft SEIS to estimate trips for the Proposed Actions were also applied to this analysis of No Build conditions with the UNDC project (see Tables 15-28 and 15-29).

NO BUILD TRAFFIC ANALYSES WITH THE UNDC PROJECT

CORSIM analyses were conducted for 2014 No Build conditions with the UNDC project and compared to 2014 No Build conditions without UNDC. The analyses show that conditions including UNDC-generated trips would remain at the same levels of service and speeds during weekday AM, weekday midday, and Saturday midday peak hours. However, due to a very modest amount of additional traffic generated by UNDC on the northbound FDR Drive exiting at 42nd Street in the PM peak hour (approximately five vph), the 2014 No Build conditions without UNDC would deteriorate from LOS E conditions to LOS F conditions with UNDC; the speed would decrease at the 42nd Street diverge by less than one mph.

BUILD TRAFFIC ANALYSES WITH UNDC

UNDC-generated trips were added to Build conditions without UNDC to produce 2014 Build conditions with UNDC for CORSIM analyses. As with No Build conditions, weekday AM, weekday midday, and Saturday midday peak hour conditions would remain at the same levels of service and speeds after adding UNDC-generated trips. The weekday PM peak hour northbound FDR Drive at the 42nd Street diverge would deteriorate from LOS E under 2014 Build conditions without UNDC to LOS F under 2014 Build conditions with UNDC. The speed would decrease at the 42nd Street diverge by less than one mph due to additional traffic generated by the UNDC project.

When comparing 2014 No Build conditions with UNDC to 2014 Build conditions with UNDC, the weekday AM, weekday midday, and Saturday midday peak hour conditions would remain at the same levels of service and speeds after adding Build increment trips. However, the weekday PM peak hour deterioration from LOS E under 2014 No Build with UNDC conditions to LOS F under 2014 Build with UNDC conditions on the southbound FDR Drive at the 34th Street on-ramp merge would result in a density increase of 2.0 pc/mi/ln, which is defined as a significant impact.

PORTALS ANALYSIS FOR QMT AND QUEENSBORO BRIDGE WITH UNDC

As detailed below, future No Build and Build conditions in the QMT and on the Queensboro Bridge with the UNDC project-generated trips included would not be substantially different from conditions previously documented without UNDC-generated trips. Significant impacts would occur on the QMT mainline inbound and outbound in the AM peak hour, and on the QMT mainline inbound in the PM peak hour.

NO BUILD CONDITIONS WITH THE UNDC PROJECT

UNDC project-generated trips were added to 2014 No Build conditions without UNDC to get 2014 No Build conditions with UNDC. Table 15-32 shows the 2014 No Build with UNDC weekday peak hour volumes, mainline capacities, and v/c ratios for the QMT. When comparing 2014 No Build conditions with and without UNDC, the QMT mainline would continue to operate at v/c ratios at or over 0.90 in both directions in the AM and PM peak hours and inbound towards Manhattan in the midday peak hour with and without UNDC. The peak AM hour inbound v/c ratio would increase from 0.91 to 0.92 and the outbound v/c ratio would remain at 0.90 with UNDC-generated trips. The midday peak hour inbound and outbound v/c ratios would remain at the same levels of 0.96 and 0.65, respectively, with and without UNDC. The PM peak hour inbound v/c ratio would remain the same at 0.92, while the outbound v/c ratio would increase from 1.07 to 1.08 with UNDC-generated trips.

Table 15-32
Queens-Midtown Tunnel 2014 No Build Portals Analysis With the UNDC Project

	AM Peak Hour		Midday Peak Hour		PM Peak Hour	
	In	Out	In	Out	In	Out
2014 No Build Volumes	4,952	1,621	3,441	2,348	3,330	3,889
Capacity	5,382	1,794	3,588	3,588	3,588	3,588
Volume/Capacity Ratio	0.92	0.90	0.96	0.65	0.92	1.08
Note: "In" = Inbound to Manhattan; "Out" = outbound from Manhattan						

Table 15-33 shows the 2014 No Build with UNDC weekday peak hour volumes, mainline capacities, and v/c ratios for the Queensboro Bridge. As shown in Table 15-33, the Queensboro Bridge would operate at v/c ratios in the 0.52 to 0.82 range with UNDC-generated trips, below the 0.90 threshold. Compared to 2014 No Build conditions without UNDC, the 2014 No Build conditions with UNDC would increase the v/c ratios by no more than 0.01 during any weekday peak hour.

Table 15-33
Queensboro Bridge 2014 No Build Portals Analysis With the UNDC Project

	AM Peak Hour		Midday Peak Hour		PM Peak Hour	
	In	Out	In	Out	In	Out
2014 No Build Volumes	6,519	3,639	4,296	4,158	5,010	6,528
Capacity	9,546	4,773	6,364	7,955	6,364	7,955
Volume/Capacity Ratio	0.68	0.76	0.68	0.52	0.79	0.82
Note: "In" = Inbound to Manhattan; "Out" = outbound from Manhattan						

BUILD CONDITIONS WITH THE UNDC PROJECT

UNDC project-generated trips were added to 2014 Build conditions without UNDC to produce 2014 Build conditions with UNDC. Table 15-34 shows the 2014 Build with UNDC weekday peak hour volumes, mainline capacities, and v/c ratios for the QMT. When comparing 2014 Build conditions with and without UNDC, the QMT mainline would continue to operate at v/c ratios at or over 0.90 in both directions in the AM and PM peak hours and inbound towards Manhattan in the midday peak hour with and without UNDC. The peak AM hour inbound v/c ratio would increase from 0.93 to 0.94 and the outbound v/c ratio would increase from 0.94 to 0.95 with UNDC-generated trips. The midday peak hour inbound and outbound v/c ratios would remain at the same levels with and without UNDC of 0.97 and 0.66, respectively. The PM peak hour inbound v/c ratio would increase from 0.94 to 0.95, and the outbound v/c ratio would increase from 1.10 to 1.11 with UNDC-generated trips. As reported for Build conditions without UNDC, significant impacts would occur on the QMT mainline inbound and outbound in the AM and PM peak hours.

Table 15-34
Queens-Midtown Tunnel 2014 Build Portals Analysis With the UNDC Project

	AM Peak Hour		Midday Peak Hour		PM Peak Hour	
	In	Out	In	Out	In	Out
2014 Build Volumes	5,080	1,697	3,470	2,380	3,400	3,996
Capacity	5,382	1,794	3,588	3,588	3,588	3,588
Volume/Capacity Ratio	0.94	0.95	0.97	0.66	0.95	1.11
Note: "In" = Inbound to Manhattan; "Out" = outbound from Manhattan						

Table 15-35 shows the 2014 Build with UNDC weekday peak hour volumes, mainline capacities, and v/c ratios for the Queensboro Bridge. As shown in Table 15-35, the Queensboro Bridge would operate at v/c ratios in the 0.53 to 0.84 range, below the 0.90 threshold. Compared to 2014 Build conditions without UNDC, the 2014 Build conditions with UNDC would increase the v/c ratios by no more than 0.01 during any weekday peak hour, and no significant impacts would occur.

Table 15-35
Queensboro Bridge 2014 Build Portals Analysis With the UNDC Project

	AM Peak Hour		Midday Peak Hour		PM Peak Hour	
	In	Out	In	Out	In	Out
2014 Build Volumes	6,671	3,743	4,343	4,207	5,100	6,653
Capacity	9,546	4,773	6,364	7,955	6,364	7,955
Volume/Capacity Ratio	0.70	0.78	0.68	0.53	0.80	0.84
Note: "In" = Inbound to Manhattan; "Out" = outbound from Manhattan						

I. QUEENS PLAZA APPROACH TO THE QUEENSBORO BRIDGE

INTRODUCTION

The Proposed Actions are expected to generate vehicular traffic over the Queensboro Bridge into Manhattan and pass through the Queens Plaza Area on the Queens side of the Bridge. Therefore, additional traffic analyses were conducted to assess the potential for significant adverse traffic impacts in the Queens Plaza Area.

The proposed development program analyzed in the draft SEIS is expected to generate the following volume of vehicle trips across the Queensboro Bridge: 152 inbound vehicle trips to Manhattan and 104 outbound vehicle trips from Manhattan in the weekday AM peak hour; 47 inbound vehicle trips to Manhattan and 49 outbound vehicle trips from Manhattan in the weekday midday peak hour; 90 inbound vehicle trips to Manhattan and 125 outbound vehicle trips from Manhattan in the weekday PM peak hour; and 72 inbound vehicle trips to Manhattan and 64 outbound vehicle trips from Manhattan in the Saturday midday peak hour.

The routing of these vehicle trips to and from the Queensboro Bridge is the basis of the assessments that follow, with the potential for significant traffic impacts and mitigation addressed at twelve key intersections along the major approaches to and from the Bridge: 1) Queens Boulevard/Thomson Avenue and Van Dam Street; 2) Northern Boulevard/ 31st Street and 40th Avenue; 3) Queens Plaza North/41st Avenue and Northern Boulevard; 4) Queens

Northern Boulevard/31st Street and 40th Avenue: Significant impacts are expected during the weekday AM peak hour only and could be fully mitigated by signal timing modifications.

FDR DRIVE

There were no significant adverse traffic impacts identified in Chapter 15, "Traffic and Parking" for conditions without the potential UNDC building included in future No Build conditions, but one such impact was identified for conditions with the UNDC building included in the future No Build condition. That one significant adverse impact location was along the southbound FDR Drive mainline where the entrance ramp from 34th Street merges onto the mainline. This impact could be mitigated by installing an alternative route message sign at 34th Street and the FDR Drive service road, advising motorists—and diverting a portion of those motorists—to stay on the southbound service road south of 34th Street and enter the FDR Drive at its 30th Street entrance ramp.

PORTALS ANALYSIS

Chapter 15, "Traffic and Parking", identified significant traffic impacts for the mainline of the Queens-Midtown Tunnel (but not for the Queensboro Bridge)—inbound and outbound in the weekday AM and PM peak hours using criteria established for the *Hudson Yards Rezoning FEIS*. These impacts cannot be mitigated, since it would not be possible to increase the capacity of the tunnel itself. However, with the exception of the outbound direction in the PM peak hour, projected utilization of the tunnel's capacity would still be under 100 percent, so available capacity would remain. Moreover, QMT conditions are most related to conditions at the intersections on the Manhattan side of the QMT, where existing capacity bottlenecks, at times, are the major influence over flow within the tunnel itself. Those capacity conditions and impacts would be addressed by the intersection mitigation measures described in detail above.

MITIGATION WITH THE UNDC BUILDING

The number and location of significant adverse traffic impacts projected for conditions with the potential UNDC building included in the analysis are nearly identical to those identified without it in the baseline analysis. The analysis of mitigation needs indicates that for the vast majority of intersections analyzed, traffic capacity improvements needed to mitigate significant adverse traffic impacts would be nearly identical. Significant differences in impact mitigation between conditions with and without UNDC included in the analysis are summarized below.

First Avenue Corridor

In the weekday AM peak hour, one additional intersection would be significantly impacted with UNDC traffic included in the future No Build analysis—i.e., at the intersection of First Avenue and 47th Street, where signal timing modifications would fully mitigate the impacts. The number and location of significant impacts would remain the same in the other three peak traffic analysis hours as identified for conditions without the UNDC building in the analysis.

There would be some additions in the mitigation improvements needed at some intersections (other than differences in the amount of signal timing shifts that would be needed with UNDC as opposed to without UNDC, set forth in Appendix B), and only these additions are described below:

First Avenue and 34th Street: In the weekday AM peak hour, it would also be necessary to modify existing "No Parking" regulations along the west side of First Avenue to prohibit

Parking

The amount of off-street parking that would be provided under the As-of-Right Alternative would be sufficient to accommodate its parking demand. The As-of-Right Alternative would provide for a total of 610 parking spaces with a maximum occupancy of 76 percent. There would be 150 public and 60 accessory spaces at 616 First Avenue, and 300 public and 100 accessory spaces at the Waterside and 708 First Avenue parcels.

FDR Drive Analysis

Just as under the Proposed Actions, there would be no significant traffic impacts in the AM, midday, PM or Saturday midday peak hours under the As-of-Right Alternative.

Portals Analysis for the Queens-Midtown Tunnel and Queensboro Bridge

The following analysis discusses weekday peak hour conditions for the Queens-Midtown Tunnel and the Queensboro Bridge under the As-of-Right Alternative. Because weekday peak hours would be considered the critical conditions for these facilities, analyses were not done for Saturday conditions.

Queens-Midtown Tunnel. Under the As-of-Right Alternative, traffic volumes would be lower than under the Proposed Actions and there would be no significant impacts; under the Proposed Action there would be four movements with significant impacts.

Queensboro Bridge. Under the As-of-Right Alternative, traffic volumes at the Queensboro Bridge would be less than or the same as volumes under the Proposed Actions. Just as under the Proposed Actions, there would be no significant impacts with the As-of-Right Alternative.

Queens Plaza Area. The volume of traffic generated by the As-of-Right Alternative through intersections on the Queens side of the Queensboro Bridge would be lower than for the Proposed Actions in the weekday AM and PM peak hours, comparable in the weekday midday peak hour, and higher than the Proposed Actions in the Saturday midday peak hour, as shown in Table 24-8.

Table 24-8
Vehicle Trips Generated by the As-of-Right Alternative vs. the Proposed Actions in the Queens Plaza Area

	As-of-Right Alternative Trips to Queens	As-of-Right Alternative Trips to Manhattan	Proposed Actions Trips to Queens	Proposed Actions Trips to Manhattan
Weekday AM Peak Hour	17	45	104	152
Weekday Midday Peak Hour	49	49	49	47
Weekday PM Peak Hour	73	53	125	90
Saturday Midday Peak hour	107	107	64	72

Even with the reduced volumes generated by the As-of-Right Alternative in two of the four peak hours, it can be expected that this alternative—due to existing and No Build congestion in this area—would still generate significant traffic impacts on the Queens side of the Queensboro Bridge for which standard traffic improvements would not be sufficient to fully mitigate the impacts. An additional impact could occur during the Saturday midday peak hour at Bridge Plaza North and Crescent Street when compared to the Proposed Actions. A comprehensive

Street, but there would be impacts at the Queens Midtown Tunnel Entrance Street at 36th Street, and at Madison Avenue and 34th Street.

In the Saturday peak hour, there would be one additional impact at First Avenue and East 34th Street. During the weekday midday peak hour, the same number and location of significant impacts would result in the Primary Study Area.

Within the Queensboro Bridge traffic study area during the AM and PM peak hours, there would be one less significant impact under the All-Residential Alternative than under the Proposed Actions, and during the midday peak hour, the All-Residential Alternative would result in one additional significant impact—at Second Avenue and East 57th Street. During the Saturday midday peak hour in the Queensboro Bridge study area and during all peak hours in the West Side traffic study area, the same number and location of significant impacts would occur. Impacts at these locations could be mitigated via the same types of traffic capacity improvements described in Chapter 23, "Mitigation."

Under the All-Residential Alternative, there would be ten unmitigated impacts in the AM and PM peak hours, six unmitigated impacts in the midday peak hour, and one unmitigated impact during the Saturday midday peak hour. This compares to the Proposed Actions where there would be nine unmitigated impacts in the AM, five in the midday, and seven in the PM peak hours, and no unmitigated impacts during the Saturday midday peak hour. The locations of all unmitigated impacts under the All-Residential Alternative would be the same as those under the Proposed Actions, with these exceptions: the All-Residential Alternative would have additional unmitigated impacts at Eighth Avenue and 42nd Street in the midday and PM peak hours; the QMT Entrance Street at 36th Street and First Avenue at 37th Street in the PM peak hour; and the FDR Drive Service Road at 34th Street in the Saturday midday peak hour.

Parking

The amount of off-street parking that would be provided under the All-Residential Alternative would be sufficient to accommodate the total parking demands of the alternative. The All-Residential Alternative would provide for a total of 1,554 parking spaces with an estimated maximum occupancy of 97 percent. At 616 First Avenue, 294 public spaces would be provided, at 685 First Avenue, 110 accessory spaces would be provided, and at 700/708 First Avenue, 651 public and 499 accessory spaces would be provided.

FDR Drive Analysis

As under the Proposed Actions, no significant traffic impacts would result in the AM, midday, PM, or Saturday midday peak hours under the All-Residential Alternative.

Portals Analysis for the Queens-Midtown Tunnel and Queensboro Bridge

The following analyses discuss weekday peak hour conditions for the Queens-Midtown Tunnel and the Queensboro Bridge under the All-Residential Alternative. Because weekday peak hours would be considered the critical conditions for these facilities, analyses were not done for Saturday conditions.

Queens-Midtown Tunnel. Under the All-Residential Alternative, traffic volumes at the Queens-Midtown Tunnel would be less than or approximately the same as volumes under the Proposed Actions. There would be two significantly impacted movements under the All-Residential Alternative, as compared to four significant impacts under the Proposed Actions. The two significant impacts would occur during the AM peak hour for the outbound direction (to

Parking

Unlike the Proposed Actions, the CB6 Alternative does not include any public parking spaces. The amount of off-street accessory parking that would be provided under the CB6 Alternative, which would be less than under the Proposed Actions, would be sufficient to accommodate the weekday peak hour parking demands of the alternative, but not the total overnight demand for spaces. The CB6 Alternative would provide 78 accessory parking spaces at 616 First Avenue, 85 accessory spaces at 685 First Avenue, and 263 accessory spaces at Waterside and 708 First Avenue. At 4,216 dwelling units and an average auto ownership of one auto per four dwelling units, the CB6 Alternative would need to provide 1,054 parking spaces to satisfy overnight parking demands. There would be a shortfall of 628 spaces, which could be accommodated within one-quarter mile of the site according to off-street parking projections contained in Chapter 13, "Traffic and Parking" (1,500 to 1,800 spaces would be unoccupied after 6 PM and before 8 AM on a typical weekday). Daytime parking occupancy on site would range from about 80 percent occupied in the PM to about five percent in the midday.

FDR Drive Analysis

As under the Proposed Actions, no significant traffic impacts would result under the CB6 Alternative in the AM, midday, PM, or Saturday midday peak hours, assuming existing roadway conditions. Construction of this alternative would include decking over the FDR Drive between East 38th and 41st Streets to provide 2.39 acres of open space. Decking over the FDR Drive would cause increased difficulties in managing traffic on the FDR Drive during the construction period and would also necessitate reconfiguration of the roadway (i.e., shortening the length of the northbound exit ramp "flyover" to 42nd Street). Depending on maintenance and protection of traffic plans that would be developed by NYSDOT for this major reconstruction, it is possible that temporary traffic diversions onto the local street networks would occur. In the event that this alternative is selected, a separate environmental review would be required that would provide a detailed analysis of potential traffic impacts caused by the deck over the FDR Drive.

Portals Analysis for the Queens-Midtown Tunnel and Queensboro Bridge

The following analyses discuss weekday peak hour conditions for the Queens-Midtown Tunnel and the Queensboro Bridge under the CB6 Alternative. Because weekday peak hours would be considered the critical conditions for these facilities, analyses were not done for Saturday conditions.

Queens-Midtown Tunnel. Under the CB6 Alternative, traffic volumes at the Queens-Midtown Tunnel would be less than or approximately the same as volumes under the Proposed Actions. There would be two significantly impacted movements under the CB6 Alternative, as compared to four significant impacts under the Proposed Actions. The two significant impacts would occur during the AM peak hour for the outbound direction (to Queens) and PM peak hour for the inbound direction (to Manhattan). The AM peak hour inbound direction, which would be significantly impacted under the Proposed Actions, would not be significantly impacted under the CB6 Alternative.

Queensboro Bridge. Under the CB6 Alternative, traffic volumes at the Queensboro Bridge would be less than or the same as volumes under the Proposed Actions. Just as under the Proposed Actions, there would be no significant impacts under the CB6 Alternative.

42nd Street at Third Avenue, Lexington Avenue, Park Avenue, and Sixth Avenue. Specific peak hours affected are described in detail in Chapter 23, "Mitigation."

At several of the above locations, congestion typifies conditions even under existing conditions and would be exacerbated under future conditions in year 2014 without the proposed project. Project-generated traffic would generally add 1 to 2.5 percent additional traffic to prevailing traffic volumes generated by all of Midtown and regional traffic through the locations on Second Avenue at the Queensboro Bridge, on 42nd Street at Madison Avenue and Broadway, and the intersection on Sixth Avenue at Broadway at 34th Street. At the intersection of First Avenue and 49th Street, and Second Avenue at 36th and 40th Streets, the project-generated traffic increment would add approximately 2 to 4.5 percent more traffic to the total volumes through the intersection during the peak analysis periods. At the FDR Drive Service Road at 34th and 35th Streets and at First Avenue at 40th Street, the project-generated increment would add approximately 10 to 20 percent more traffic to the total volumes through the intersection during the peak analysis period.

In the Queens Plaza area approach to the Queensboro Bridge, an additional five intersections could experience unmitigatable impacts by the 2014 analysis year: Queens Plaza North at Crescent Street, approaching the Queensboro Bridge; Queens Plaza North at JFK Commuter Plaza; Queens Plaza North/41st Street at Northern Boulevard; Thomson Avenue at the Queensboro Bridge Upper Level Ramp; and the intersection of Thomson and Skillman Avenues. Significant traffic volumes across the Queensboro Bridge under the existing conditions consistently cause congestion along the corridors leading to the upper and lower levels of the bridge. The traffic conditions would persist and likely worsen for the 2014 future analysis year without the proposed project. Project-generated traffic would add approximately 1 percent up to 5.5 percent additional traffic to the total traffic volumes through the three intersections along Queens Plaza North during the peak analysis periods, and generally 0.5 to 2.5 percent through the two intersections on Thomson Avenue. The traffic improvements cited above and detailed within Chapter 23, "Mitigation," would not be able to mitigate significant adverse impacts at these locations.

At eight additional intersections in the Manhattan study areas, significant impacts would be partially mitigated. This means that traffic improvements would be able to mitigate one or more—but not all—approaches that would be significantly impacted. These locations are generally on 42nd Street between Broadway and First Avenue.

One other unmitigatible significant adverse impact was identified in Chapter 23, "Mitigation", for the mainline of the QMT, inbound and outbound in the weekday AM and PM peak hours. These impacts were identified using criteria and data from the *Hudson Yards Rezoning FEIS*. However, with the exception of the outbound direction in the PM peak hour, projected utilization of the tunnel's capacity would still be under 100 percent, so available capacity would remain.

As described in Chapter 16, "Transit and Pedestrians," the Proposed Actions would impact the E203 and E204 escalators at Grand Central Station. As described in Chapter 23, "Mitigation," options are being explored to increase the capacity of these escalators to meet project-generated demand. However, in the vent that a feasible measure or measures cannot be implemented, then the impacts on the E203 and E024 escalators would be unmitigated.