
Chapter 19: Mitigation

19.1 Introduction

In accordance with the 2014 *CEQR Technical Manual*, where significant adverse impacts are identified, mitigation is developed and evaluated to reduce or eliminate the impacts to the fullest extent practicable.

As described below, measures to further mitigate adverse impacts have been refined and evaluated between the Draft and Final Environmental Impact Statement (EIS). Therefore, the Final EIS includes more complete information and commitments on all practicable mitigation measures to be implemented with the Proposed Action.

Principal Conclusions

Where significant adverse impacts have been identified—in the areas of open space, shadows, historic and cultural resources, transportation, air quality, and construction (historic and cultural resources, traffic and noise)—measures have been examined to minimize or eliminate the anticipated impacts.

Open Space

As discussed in Chapter 4, “Open Space,” the Proposed Action would result in significant adverse indirect open space impacts. These indirect impacts result from a reduction in the passive open space ratio, which, in the open space study area was found to be below the CEQR guidelines in the existing condition (i.e., below the citywide guidance of 0.15 acres of passive open space per 1,000 non-residential users). However, while CEQR guidelines recognize that the goals for open space ratios are not feasible for areas such as Midtown Manhattan, and are not, therefore an impact threshold, the indirect effects analysis demonstrated that the Proposed Action would result in a significant adverse open space impact due to the decrease in the passive open space ratios by 3.85 percent for the non-residential population and 3.43 percent for the combined non-residential and residential population.

The *CEQR Technical Manual* lists potential mitigation measures for open space impacts. These measures include, but are not limited to, creating new open space within the study area; funding for improvements, renovation, or maintenance at existing local parks; or improving existing open spaces to increase their utility or capacity to meet identified open space needs in the area, such as through the provision of additional open space facilities.

Substantial public realm improvements to the open space network in the East Midtown Subdistrict are planned as part of the Proposed Action. As noted in Chapter 1, “Project Description,” the public realm improvements would be implemented subject to the Governing Group’s approval and funding, and the exact timing of the improvements is unknown. The minimum amount of additional open space to fully mitigate the open space impacts would be 1.20 acres. The proposed public realm improvements identified would total at least 2.43 acres and would increase the passive open space ratio by 2.01 percent for the non-residential population and by 2.46 percent for the combined non-residential and residential

population.¹ Therefore, the proposed public realm improvements would offset the impact identified in Chapter 4, "Open Space." If less than 1.20 acres of the planned public realm improvements are built, then the significant adverse open space impact would only be partially mitigated.

The other standard mitigation measures listed above such as funding for improvements, renovation, or maintenance at existing local parks; or improving existing open spaces to increase their utility or capacity were explored by the Department of City Planning (DCP) and NYC Parks and found to be unpracticable. However, as described above, the inclusion of public realm improvements would fully or partially mitigate any impacts on open space that would occur as a result of the Proposed Action.

Shadows

As discussed in Chapter 5, "Shadows," the Proposed Action would result in a significant adverse shadows impact on one historic architectural resource, St. Bartholomew's Church and Community House. These impacts are the result of incremental shadows during limited time periods on certain analysis days cast by Projected Development Site 7. Based on shadow modeling, it was determined that the height of any new development on Projected Development Site 7 would need to be limited to the height of the existing buildings on this site (approximately 300 feet tall) in order to eliminate the significant adverse shadows impacts on St. Bartholomew's Church and Community House. However, if Projected Development Site 7 were limited to its existing height of 300 feet, it is anticipated significant adverse shadow impacts would be caused by Potential Development Sites C and D which are directly southwest of Projected Development Site 7 and would cast shadows in the same direction towards St. Bartholomew's. It should be noted, as discussed further in Chapter 5, that both the individual building massings and their projected combined shadow effect on sunlight sensitive resources in the shadow screening study area represent an overly conservative approach to this analysis that by definition would not occur.

Between the Draft and Final EIS, measures to mitigate the identified shadows impact on St. Bartholomew's Church and Community House were examined, including exploration of feasible changes to the bulk and setback regulations governing Projected Development Site 7 and Potential Development Sites C and D that would reduce or eliminate the incremental shadow that causes the impact. Specifically, a design option was considered where restrictions would be placed to require narrower towers on these sites (see Appendix O, "Additional Shadows Mitigation Analysis of St. Bartholomew's Episcopal Church." However the alternative scenario did not significantly reduce the incremental shadowing on the resource such that there would not be a significant adverse impact. Additionally, having more restrictive height and setback regulations on this site would not be in line with the project's goals and objectives to promote world-class office space. Therefore, any feasible design for the Proposed Action that meets the goals and objectives would result in a significant adverse shadow impact on this resource.

Further, another mitigation measure that was explored was the provision of artificial lighting of the resource to simulate sunlit conditions. However, it was found that such lighting mitigation, if placed on the interior or exterior of the windows might have a detrimental effect on the historic structure, and might not be realistically feasible to provide partial or full shadows mitigation. Heliostats (reflective discs that would redirect sunlight towards the church) were explored, however these are not generally

¹ The identified public realm improvements comprise 2.43 acres of open space consisting of two 0.16 acre plazas on either side of Park Avenue between 40th Street and 41st Street, a 0.16-acre plaza at Pershing Square East, and the 1.95 acres of improvements to the Park Avenue median.

effective in providing a diffuse lighting effect and instead often result in spotlight conditions that would not result in mitigating the shadows. Additionally, exterior lighting features may detrimentally effect the surrounding buildings and may create new visual conditions that likely would have a negative effect on the streetscape and the street character.

Based on the foregoing, it was found that there are no reasonable means to partially or fully mitigate significant adverse shadows impacts on the St. Bartholomew's Church and Community House at this time. Therefore, this shadow impact would be an unavoidable significant adverse impact of the Proposed Action. This is disclosed in Chapter 22, "Unavoidable Adverse Impacts."

Historic and Cultural Resources

As discussed in Chapter 6, "Historic and Cultural Resources," the Proposed Action could result in significant adverse impacts due to potential partial or complete demolition of six historic resources that are eligible for New York City Landmark (NYCL) designation and/or inclusion on the State and/or National Register of Historic Places (S/NR). These eligible resources are located on Projected Development Sites 2, 4, 6 and 10 and Potential Development Site J.

In summary, based on the above evaluation, the Proposed Action is anticipated to result in direct adverse impacts to the following six eligible resources: the NYCL-eligible 22-24 East 41st Street Building (#94), the NYCL-eligible Title Guarantee and Trust Company Building at 6 East 45th Street (#99), the S/NR-eligible Barclay/Inter-Continental Hotel at 111 East 48th Street (#103), the NYCL- and S/NR-eligible Postum Building at 250 Park Avenue (#129), the NYCL-eligible Girl Scout Building at 830 Third Avenue (#133), and the 346 Madison Avenue Building (#141). These eligible resources are listed in Table 6.2 and mapped on Figure 6-5 and Figure 6-8. Photographs of the eligible resources that fall in Projected and Potential Development Sites are included on Figure 6-6.

Redesigning or relocating the Proposed Action so that it does not disturb the eligible resources by eliminating those development sites from the rezoning proposal would be inconsistent with the overall purpose and need of the Proposed Action and is considered infeasible and impracticable as it would result in an incoherent zoning plan that would not allow for the establishment of an area-wide East Midtown Subdistrict. Contextual redesign, adaptive reuse and the use of a construction protection plan are not available as mitigation measures, given the nature of the Proposed Action as an area-wide rezoning.

Measures that would partially mitigate these significant adverse impacts could include photographically documenting the eligible structures in accordance with Historic American Buildings Survey (HABS) level II, in a manner acceptable to LPC and/or placement of an interpretive exhibit within the lobby of new construction. In order to adopt these measures in the absence of a site-specific approval, a mechanism would have to be developed to ensure implementation and compliance since it is not known and cannot be assumed that owners of these properties would voluntarily implement this partial mitigation. DCP, as lead agency, explored the viability of these mitigation measures between the Draft EIS and Final EIS, and found that there would not be a practicable mechanism to require the mitigation described above.

For those structures that are NYCL-eligible, the New York City Landmarks Preservation Commission (LPC) may elect to calendar, and then conduct a hearing and designate the structures, either in whole or in part, as landmark buildings. In the event that landmark designation is approved, LPC approval would be required for any alteration or demolition of the designated structures.

Designation would avoid any impacts with respect to the eligible resources. However, as the potential for use and results of any designation process cannot be assumed or predicted, designation is not considered a mitigation measure.

Additionally, as mentioned in the Shadows section above, an unmitigated significant adverse impact would result from shadows from Projected Development Site 7 on parts of the façade of the St. Bartholomew’s Church and Community House. Mitigation explored between the Draft and Final EIS was not determined to be feasible nor practicable.

Consequently, these impacts would not be eliminated and they would constitute unavoidable significant adverse impacts on these historic resources as a result of the Proposed Action.

Transportation

Traffic

As described in Chapter 12, “Transportation,” the Proposed Action would result in significant adverse traffic impacts at 116 intersections during one or more analyzed peak hours; specifically, the impact locations comprise 190 approach movements at 101 intersections during the AM peak hour, 179 approach movements at 101 intersections during the Midday peak hour, and 201 approach movements at 106 intersections during the PM peak hour. Implementation of traffic engineering improvements, such as signal timing changes or modifications to curbside parking regulations, would provide mitigation for some of the anticipated traffic impacts. Table 19.1 shows that some of the significant adverse impacts would be fully mitigated, but unmitigated significant adverse impacts would remain at 159 approach movements at 82 intersections during the AM peak hour, 126 approach movements at 59 intersections during the Midday peak hour, and 160 approach movements at 82 intersections during the PM peak hour. Table 19.2 provides a more detailed summary of the intersections and approach movements that would have significant adverse traffic impacts and specifies if the impacts would be fully mitigated.

Table 19.1: Summary of Movements/Intersections with Significant Adverse Traffic Impacts

Peak Hour	Movements/ Intersections Analyzed	Movements/ Intersections With No Significant Impacts	Movements/ Intersections With Significant Impacts	Mitigated Movements/ Intersections	Unmitigated Movements/ Intersections
AM	<u>454/119</u>	<u>264/18</u>	<u>190/101</u>	<u>31/19</u>	<u>159/82</u>
Midday	<u>436/119</u>	<u>257/18</u>	179/101	<u>53/42</u>	<u>126/59</u>
PM	<u>442/119</u>	<u>241/13</u>	<u>201/106</u>	<u>41/24</u>	<u>160/82</u>

Implementation of the recommended traffic engineering improvements is subject to review and approval by the New York City Department of Transportation (DOT), except for the enforcement of existing parking regulations, which is under the jurisdiction of the New York Police Department (NYPD), and the removal of diplomat/consular parking is subject to review and approval by the U.S. Department of State. The removal of diplomat/consular and NYP parking spaces would require the identification of alternate parking spaces where the parking could be relocated. If, prior to implementation, DOT determines that an identified mitigation measure is infeasible, an alternative and equivalent mitigation measure will be identified.

The traffic analysis uses an extremely conservative approach that assigns vehicle trips to the shortest route. This method does not contemplate diversions from areas of congestion to other routes or times

of the day and thus conservatively portrays impacts at areas of concern. As such, the future conditions analyses represent a worst-case scenario and may not be entirely indicative of what will occur as development proceeds during the approximate 20-year period.

DCP and DOT will work together to identify other interventions to help mitigate congestion. As new development occurs, DCP will coordinate with DOT to identify areas where new development could exacerbate to existing vehicular and pedestrian congestion in the traffic and pedestrian networks.

In between the Draft and Final EIS, the City explored options for developing a comprehensive traffic management plan for Greater East Midtown. In order to verify the need and effectiveness of the proposed mitigation measures identified in the EIS and to determine the extent to which future volume projections presented in the EIS may occur, the City has committed to conduct a traffic monitoring program (TMP). The TMP will address traffic resulting from project-generated development in the project area over time, and consider changes that may occur in travel patterns. The City will implement a multi-tiered monitoring program once either a net increase of 1.5 million square feet of commercial development or four new buildings associated with the rezoning are built and occupied, whichever occurs first. The findings of the TMP (i.e., actual volumes, and capacity and level of service analyses) will be used by DOT as the basis for determining whether actual future Build conditions have, in fact, resulted in significant traffic and/or pedestrian impacts and verifying the need for the mitigation measures identified in the EIS and/or developing recommendations to improve traffic and/or pedestrian conditions.

Table 19.2: Summary of Locations with Significant Adverse Traffic Impacts

Intersection	AM Peak Hour		Midday Peak Hour		PM Peak Hour	
	Impacted Movement(s)	Mitigated	Impacted Movement(s)	Mitigated	Impacted Movement(s)	Mitigated
1st Ave. & E. 40th St.	EB-L, NB-T	No	EB-L	Yes	EB-L, NB-T	No
1st Ave. & E. 42nd St.	WB-TR (East), WB-R (East), NB-LT (East)	No			NB-LT (East), NB-R (East), NB-L (West)	No
1st Ave. & E. 44th St.			EB-L	Yes		
1st Ave. & E. 46th St.			EB-L	Yes	EB-L, NB-T	No
1st Ave. & E. 47th St.					NB-T (East)	No
1st Ave. & E. 48th St.	EB-L (West)	No			NB-R (East)	No
1st Ave. & E. 49th St.	WB-T (East), NB-LT (West)	No			NB-T (East), NB-LT (West)	No
1st Ave. & E. 54th St.			EB-LT	Yes	EB-LT	No
1st Ave. & E. 55th St.	NB-L	No			NB-T	Yes
1st Ave. & E. 57th St.	NB-T	No			NB-L	No
2nd Ave. & E. 36th St.	EB-TR, SB-L, SB-T	No			EB-TR, SB-T	No
2nd Ave. & E. 37th St.	SB-T	No	SB-TR	Yes	SB-T	No
2nd Ave. & E. 38th St.	EB-TR, SB-LT	No	SB-LT	Yes	EB-TR, SB-LT	No
2nd Ave. & E. 39th St.	WB-T, SB-T, SB-R	No	SB-TR	Yes	SB-T	Yes
2nd Ave. & E. 40th St.	SB-LT	No	EB-R, SB-LT	No	EB-T, EB-R, SB-LT	No
2nd Ave. & E. 41st St.	SB-LT	No	SB-LT	No	EB-TR, SB-LT	No
2nd Ave. & E. 42nd St.	EB-TR, WB-LT, SB-LT	No	WB-LT, SB-L, SB-T, SB-R	No	EB-TR, WB-LT, SB-LT	No
2nd Ave. & E. 43rd St.	SB-T, SB-R	No	SB-TR	Yes	SB-T, SB-R	No
2nd Ave. & E. 44th St.	SB-LT	No	EB-TR, SB-T	No	EB-TR, SB-LT	No
2nd Ave. & E. 45th St.	WB-LT, SB-T, SB-R	Yes	SB-TR	Yes	SB-T, SB-R	Yes
2nd Ave. & E. 46th St.	SB-LT	Yes	EB-R, SB-T	No	EB-TR, SB-LT	No
2nd Ave. & E. 47th St.	SB-T, SB-R	No	SB-TR	Yes	SB-T, SB-R	Yes
2nd Ave. & E. 48th St.	EB-TR, SB-T	No	EB-TR, SB-T	No	EB-TR, SB-LT	No
2nd Ave. & E. 49th St.	WB-L, SB-T	No	SB-TR	Yes	WB-L	Yes
2nd Ave. & E. 50th St.	EB-TR, SB-T	No	EB-TR, SB-T	No	EB-TR, SB-LT	No
2nd Ave. & E. 51st St.	SB-T	No	SB-TR	Yes		
2nd Ave. & E. 52nd St.	SB-T	No	SB-T	No	SB-T	No
2nd Ave. & E. 53rd St.	WB-LT, SB-T	Yes	WB-LT, SB-TR	No	SB-T	No
2nd Ave. & E. 54th St.	SB-T	Yes	SB-T	Yes	SB-T	Yes
2nd Ave. & E. 55th St.	SB-T	No	SB-TR	No	SB-T	No
2nd Ave. & E. 56th St.	EB-R, SB-T	No	SB-T	Yes	SB-T	Yes
2nd Ave. & E. 57th St.	EB-R, WB-L, WB-LT, SB-T	No	EB-TR, SB-TR	No	EB-T	No
2nd Ave. & E. 59th St.	EB-L, SB-LT	No	EB-L, SB-LT	No	EB-L, SB-LT	No
2nd Ave. & E. 60th St.	WB-L (Bridge)	No	SB-LTR, WB-L (Bridge)	No	WB-L (Bridge)	No

Table 19.2: Summary of Locations with Significant Adverse Traffic Impacts (Continued)

Intersection	AM Peak Hour		Midday Peak Hour		PM Peak Hour	
	Impacted Movement(s)	Mitigated	Impacted Movement(s)	Mitigated	Impacted Movement(s)	Mitigated
Tunnel Exit St. & E. 39th St.	WB-TR	Yes	NB-L	Yes		
Tunnel Exit St. & E. 40th St.			EB-LT	Yes	EB-LT	Yes
3rd Ave. & E. 36th St.	EB-LT, NB-TR, NB-R	No	NB-TR	Yes	EB-LT, NB-R	No
3rd Ave. & E. 37th St.	WB-R	No	WB-R	No	WB-R	Yes
3rd Ave. & E. 39th St.	WB-T, WB-R, NB-LT	No	WB-T, NB-LT	Yes	WB-T	Yes
3rd Ave. & E. 40th St.	NB-T	No	NB-T, NB-R	No	EB-LT, NB-T	No
3rd Ave. & E. 41st St.	EB-LT, WB-R, NB-T	No	EB-L, WB-R	No	EB-LT, WB-R, NB-T	No
3rd Ave. & E. 42nd St.	EB-L, WB-R, NB-LT	No	EB-T, WB-R, NB-LT	No	EB-T, WB-R, NB-R	No
3rd Ave. & E. 43rd St.	NB-LT	Yes				
3rd Ave. & E. 44th St.	NB-R	No	NB-R	No	NB-T, NB-R	No
3rd Ave. & E. 45th St.	WB-T, NB-LT	No	NB-LT	Yes	NB-LT	No
3rd Ave. & E. 46th St.			NB-T, NB-R	Yes	NB-T	Yes
3rd Ave. & E. 47th St.	WB-T, NB-LT	No	WB-T, NB-LT	No	WB-T, NB-LT	No
3rd Ave. & E. 48th St.			NB-T, NB-R	Yes	NB-T, NB-R	Yes
3rd Ave. & E. 49th St.	WB-T, NB-LT	No	NB-LT	Yes	NB-LT	No
3rd Ave. & E. 50th St.	NB-T, NB-R	Yes	NB-T, NB-R	Yes	NB-T	No
3rd Ave. & E. 51st St.	NB-LT	Yes	NB-LT	Yes	WB-T, NB-LT	No
3rd Ave. & E. 52nd St.	NB-T, NB-R	Yes	NB-T, NB-R	Yes	EB-LT, NB-T, NB-R	No
3rd Ave. & E. 53rd St.	WB-T, WB-R, NB-LT	No	NB-LT	Yes	WB-T, WB-R, NB-LT	No
3rd Ave. & E. 54th St.	EB-L, NB-T	No	EB-L	No	NB-T	No
3rd Ave. & E. 55th St.	WB-T, WB-R, NB-LT	No	WB-R, NB-LT	No	WB-T, WB-R, NB-LT	No
3rd Ave. & E. 56th St.	NB-T (West)	No	NB-T (West)	Yes	EB-LT (West), NB-T (West), NB-TR (East)	No
3rd Ave. & E. 57th St.	NB-LT (West)	No	NB-LT (West), EB-T (East), NB-R (East)	No	EB-LT (West), NB-LT (West), NB-TR (East), NB-R (East), EB-T (East)	No
3rd Ave. & E. 59th St.	NB-R	No	NB-R	No	NB-R	Yes
Lexington Ave. & E. 36th St.	SB-LT	Yes	SB-LT	Yes	EB-TR, SB-LT	No
Lexington Ave. & E. 38th St.	EB-R, SB-T	Yes	EB-R	Yes	EB-R	Yes
Lexington Ave. & E. 39th St.	WB-L, WB-T, SB-T	No	WB-L, WB-T, SB-T	No	WB-T	No
Lexington Ave. & E. 40th St.	EB-T, SB-LT	No	SB-LT	Yes	EB-R, SB-LT	No
Lexington Ave. & E. 42nd St.	SB-T, SB-R	No	EB-T, SB-T	No	EB-T, WB-LT, SB-L, SB-R	No
Lexington Ave. & E. 44th St.	SB-LT	Yes	SB-LT	Yes	SB-LT	Yes
Lexington Ave. & E. 45th St.					WB-LT	No
Lexington Ave. & E. 46th St.	SB-LT	No	EB-T, SB-LT	No	EB-T, SB-LT	No
Lexington Ave. & E. 47th St.	SB-R	No	WB-L, WB-T, SB-T, SB-R	No	WB-L, WB-T, SB-T, SB-R	No
Lexington Ave. & E. 48th St.	EB-R, SB-LT	No	EB-T, EB-R	No	EB-T, EB-R	No
Lexington Ave. & E. 49th St.			SB-T	Yes		
Lexington Ave. & E. 50th St.	EB-TR, SB-LT	No	SB-LT	Yes	SB-LT	Yes
Lexington Ave. & E. 51st St.	SB-T	Yes	WB-L, SB-T, SB-R	No	WB-L, WB-T	Yes
Lexington Ave. & E. 52nd St.	SB-LT	No	EB-T	Yes	EB-R	No
Lexington Ave. & E. 53rd St.	WB-T, SB-T	No	SB-T, SB-R	No	WB-T	Yes
Lexington Ave. & E. 54th St.	EB-T, SB-LT	No	EB-TR, SB-LT	No	SB-LT	No
Lexington Ave. & E. 55th St.	SB-T	No			WB-L, SB-T	No
Lexington Ave. & E. 56th St.	SB-LT	Yes				
Lexington Ave. & E. 57th St.	EB-R, SB-LT	No	SB-LT	No	EB-T	Yes

Table 19.2: Summary of Locations with Significant Adverse Traffic Impacts (Continued)

Intersection	AM Peak Hour		Midday Peak Hour		PM Peak Hour	
	Impacted Movement(s)	Mitigated	Impacted Movement(s)	Mitigated	Impacted Movement(s)	Mitigated
Park Ave. & E. 36th St.					EB-TR (West)	Yes
Park Ave. & E. 38th St.					EB-TR (West), NB-TR	Yes
Park Ave. & E. 39th St.	WB-TR (East), WB-LT (West), SB-R	No	WB-TR (East), WB-LT (West), SB-T	No	WB-TR (East), WB-LT (West), SB-R	No
Park Ave. & E. 40th St.	(West), SB-T, EB-LT (Center), EB-LT (East), NB-TR	No	(West), SB-T, EB-LT (Center), EB-LT (East)	No	(West), SB-T, EB-LT (Center), EB-LT (East)	No
Park Ave. & E. 46th St.			EB-T (West), SB-T, EB-L (East), EB-T (East)	No	EB-T (West), SB-T, EB-T (East)	No
Park Ave. & E. 47th St.	NB-L, WB-LT (West)	No	NB-T, WB-LT (West), SB-TR	No	(West), NB-L, WB-LT (West), SB-TR	No
Park Ave. & E. 48th St.	SB-L, SB-T, NB-TR	No	SB-L, SB-T	No	SB-L	No
Park Ave. & E. 49th St.	NB-T, WB-LT (West), SB-TR	No	NB-T, SB-TR	No	(West), NB-L, WB-LT (West), SB-TR	No
Park Ave. & E. 50th St.	SB-T, NB-TR	No	EB-LT (East)	No	EB-LT (East), NB-TR	No
Park Ave. & E. 51st St.	SB-R	No	WB-T (East), WB-LT (West)	Yes		
Park Ave. & E. 52nd St.	SB-L, SB-T	No	EB-TR (West), SB-L, NB-TR	No	SB-L, SB-T, EB-LT (East)	No
Park Ave. & E. 53rd St.	WB-T (East), WB-R (East), WB-LT (West)	No	WB-LT (West)	No	NB-T, WB-LT (West)	No
Park Ave. & E. 54th St.	SB-T, EB-T (East)	No	SB-T, NB-TR	No		
Park Ave. & E. 55th St.	NB-L, SB-T	No	WB-TR (East), NB-L, NB-T, WB-LT (West)	No	(East), NB-L, NB-T, WB-LT (West), SB-TR	No
Park Ave. & E. 56th St.	SB-L, NB-TR	No	EB-TR (West), EB-LT (East), NB-TR	No	EB-TR (West), EB-LT (East)	No
Park Ave. & E. 57th St.	EB-LT (East), NB-L (East)	No	EB-T (West), EB-LT (East)	No	NB-T	No
Madison Ave. & E. 39th St.	WB-T, WB-R, NB-LT	No	WB-T, WB-R	Yes	WB-T, WB-R	No
Madison Ave. & E. 40th St.	EB-L, NB-TR	No	NB-TR	Yes	EB-L, NB-TR	No
Madison Ave. & E. 41st St.	NB-TR	No	NB-TR	No	NB-TR	No
Madison Ave. & E. 42nd St.	EB-LT, WB-T, NB-LT	No	EB-LT, WB-T, NB-LT, NB-R	No	EB-LT, WB-T, NB-LT	No
Madison Ave. & E. 43rd St.	WB-R, NB-L	No	WB-T, WB-R, NB-L, NB-T	No	NB-L, NB-T	No
Madison Ave. & E. 46th St.			NB-T	No	NB-T, NB-R	No
Madison Ave. & E. 48th St.	NB-T	No	EB-L, NB-T	No	NB-T	Yes
Madison Ave. & E. 49th St.			WB-TR	Yes	WB-TR	No
Madison Ave. & E. 53rd St.	WB-TR	No			NB-T	No
Madison Ave. & E. 54th St.	NB-R	Yes	EB-LT, NB-T	No		
5th Ave. & 38th St.	EB-R, SB-LT	No	SB-LT	No	SB-LT	No
5th Ave. & 39th St.	WB-L, SB-T, SB-R	No	WB-L, WB-T, SB-T	No	SB-T	No
5th Ave. & 40th St.	EB-TR, SB-LT	No	EB-TR	No	EB-TR, SB-LT	No
5th Ave. & 42nd St.	EB-T, WB-LT, SB-LT	No	WB-LT, SB-LT	No	WB-LT, SB-LT	No
5th Ave. & 43rd St.	SB-T, SB-R	No	SB-T, SB-R	Yes	SB-T, SB-R	Yes
5th Ave. & 44th St.	EB-R, SB-LT	No	EB-R, SB-LT	No	EB-R, SB-LT	No
5th Ave. & 47th St.	SB-T	Yes	WB-L, SB-T, SB-R	No	WB-L, WB-T, SB-T, SB-R	No
5th Ave. & 48th St.	SB-LT	Yes	SB-LT	No	EB-T, EB-R, SB-LT	No
5th Ave. & 49th St.	SB-T	Yes	SB-T	Yes	WB-LT, SB-T	No
5th Ave. & 54th St.	SB-LT	Yes	EB-TR, SB-LT	No	SB-LT	No
5th Ave. & 57th St.	EB-T, EB-R, WB-LT, SB-LT	No	EB-T, WB-LT	Yes	WB-LT, SB-LT	No
6th Ave. & W. 48th St.	EB-T	No	EB-T	Yes		
6th Ave. & W. 49th St.					WB-T, WB-R	Yes

Notes:
 EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound; L = Left-turn; T = Through; R= Right-turn
 Shading indicates unmitigated impacts
 This Table has been updated for the FEIS

As part of the Proposed Action, a public realm improvement fund would provide the ability to finance above-grade improvements as identified by DOT (see Section 1.4 of Chapter 1, "Project Description"). These improvements include pedestrian plazas, shared streets, widening of the Park Avenue median, bus bulbs, curb extensions and sidewalk widenings, and turn bays. A conceptual plan of these improvements is assessed in Chapter 12, "Transportation" as the Action-With-Improvements condition. All study area intersections were evaluated quantitatively to determine if significant impacts in the Action-With-Improvements condition could be mitigated.

As described in Chapter 12, "Transportation," the Action-With-Improvements condition would result in significant adverse traffic impacts at 199 approach movements at 103 intersections during the AM peak hour, 179 approach movements at 98 intersections during the Midday peak hour, and 210 approach movements at 107 intersections during the PM peak hour. Some of the significant adverse impacts would be fully mitigated with implementation of traffic engineering improvements, such as signal timing changes or modifications to curbside parking regulations, but unmitigated significant adverse impacts would remain at 172 approach movements at 83 intersections during the AM peak hour, 139 approach movements at 64 intersections during the Midday peak hour, and 168 approach movements at 83 intersections during the PM peak hour.

Transit

Incremental demand from the Proposed Action would result in significant adverse impacts at three subway stations/station complexes in the weekday AM and PM commuter peak hours. Recommended mitigation measures to address these impacts are discussed below.

Subway Stations

Grand Central 42nd Street Subway Station

At the Grand Central 42nd Street subway station, there would be a significant adverse transit impact at one stairway during the PM peak hour. Additionally, a significant adverse transit impact would occur at eight escalators during the AM peak hour and at four escalators during the PM peak hour. Some of the significant adverse impacts to escalators at this station could be mitigated by operating the escalators at a higher speed (100 feet per minute versus 90 feet per minute). Implementation of these measures would mitigate the significant adverse impacts at four escalators during the AM peak hour and two escalators during the PM peak hour. Conditions at the other escalators would also improve in both the AM and PM peak hours as a result of the higher operating speeds, but the significant adverse impacts at four escalators during the AM peak hour and two escalators during the PM peak hour would remain unmitigated. Operating the escalators at a higher speed would also allow some of the passenger load from the impacted stairway to shift to the escalators, which would mitigate the significant adverse impact to the one stairway during the PM peak hour. NYCT will perform a monitoring program to assess pedestrian operations and conditions at this subway station as developments are constructed and reevaluate the need for improvement measures.

42nd St-Bryant Park Subway Station

At the 42nd St-Bryant Park subway station, a significant adverse impact would occur at one stairway during the PM peak hour. Mitigation measures are considered infeasible and this impact would remain unmitigated.

Lexington Avenue-53rd Street Subway Station

At the Lexington Avenue-53rd Street subway station, there would be a significant adverse impact at three escalators during the AM peak hour and at three escalators during the PM peak hour as a result of the Proposed Action. Some of the significant adverse impacts to escalators at this station could be mitigated by operating the escalators at a higher speed (100 feet per minute versus 90 feet per minute). Implementation of these measures would mitigate the significant adverse impacts at two escalators during the AM peak hour and one escalator during the PM peak hour. Conditions at the other escalators would also improve in both the AM and PM peak hours as a result of the higher operating speeds, but the significant adverse impacts at one escalator during the AM peak hour and two escalators during the PM peak hour would remain unmitigated. NYCT will perform a monitoring program to assess pedestrian operations and conditions at this subway station as developments are constructed and reevaluate the need for improvement measures.

Pedestrians

As described in Chapter 12, “Transportation,” the Proposed Action would result in significant adverse pedestrian impacts at 62 of the 238 pedestrian elements analyzed during one or more peak hours. As summarized in Table 19.3, there would be a total of 52 elements with significant adverse impacts during the AM peak hour, 20 during the Midday, and 54 during the PM peak hour. Some of the pedestrian elements impacted in the With-Action condition could be fully mitigated with corner/sidewalk extensions, removal of street furniture, crosswalk widenings, and/or signal timing adjustments; however unmitigated significant adverse pedestrian impacts would remain at: eight, three, and ten sidewalks during the AM, Midday, and PM peak hours, respectively; 22, 6, and 20 crosswalks during the AM, Midday, and PM peak hours, respectively; and 18, 7, and 19 corner areas during the AM, Midday, and PM peak hours, respectively.

Table 19.3 Summary of Elements with Significant Adverse Pedestrian Impacts

Peak Hour	Elements Analyzed	Elements with No Significant Impacts	Elements with Significant Impacts	Unmitigated Elements ¹
Sidewalks				
AM	<u>69</u>	<u>61</u>	<u>8</u>	<u>8</u>
Midday	<u>69</u>	<u>66</u>	3	3
PM	<u>69</u>	<u>59</u>	<u>10</u>	<u>10</u>
Crosswalks				
AM	48	<u>23</u>	<u>25</u>	<u>22</u>
Midday	48	38	10	6
PM	48	<u>24</u>	<u>24</u>	<u>20</u>
Corner Areas				
AM	121	102	19	18
Midday	121	<u>114</u>	<u>7</u>	<u>7</u>
PM	121	<u>101</u>	<u>20</u>	<u>19</u>
Notes:				
¹ Includes unmitigated significant impacts due to traffic, corner, or air quality mitigation measures.				

Table 19.4 provides a more detailed summary of the pedestrian elements that would have significant adverse pedestrian impacts and specifies if the impacts would be fully mitigated. As shown in Table 19.4 and discussed below, incremental demand from the Proposed Action would significantly adversely impact a total of ten sidewalks, 29 crosswalks and 23 corner areas in one or more peak hours. Recommended mitigation measures to address these impacts are discussed below. Implementation of these measures would be subject to review and approval by DOT, except for the removal of garbage bins, which are subject to review and approval by the Grand Central Partnership. If, prior to implementation, DOT determines that an identified mitigation measure is infeasible, an alternative and equivalent mitigation measure will be identified. In the absence of the application of mitigation measures, the impacts would remain unmitigated.

Sidewalks

Ten of the 69 sidewalks analyzed would be significantly adversely impacted by new pedestrian demand generated by the Proposed Action during one or more peak hours. However, the removal of street furniture and obstructions was not deemed a feasible mitigation measure as each of the sidewalk locations has multiple obstructions of similar widths. Therefore, the removal of any single obstruction would not increase the effective sidewalk widths as the location of the narrowest point would be moved to a different location on the block.

Crosswalks

Twenty-nine of the 48 crosswalks analyzed would be significantly adversely impacted by new pedestrian demand generated by the Proposed Action during one or more peak hours. Measures recommended to mitigate these crosswalk impacts generally consist of crosswalk widening and/or minor signal timing adjustments. With the recommended mitigation measures, the significant crosswalk impacts at five of the 29 impacted crosswalks would be fully mitigated. At a number of crosswalks, air quality and traffic mitigation measures increase or decrease the square feet per pedestrian within the crosswalk. In the PM peak hour, a signal timing change due to air quality mitigation measures would create a significant adverse impact at the south crosswalk of Third Avenue and East 43rd Street. Since no practicable mitigation was identified for impacts at the remaining 24 crosswalks that fully mitigates the identified significant adverse impacts during one or more peak hours (as shown in Table 19.4), they would remain unmitigated.

Corner Areas

Twenty-three of the 121 analyzed corner areas would be significantly adversely impacted during one or more peak hours as a result of new demand generated by the Proposed Action. The proposed mitigation measures consist of relocating sidewalk furniture out of the corner area. With the recommended mitigation measures, significant impacts at the southwest corner of Second Avenue and East 42nd Street would be mitigated during the AM and PM peak hours. Although the proposed mitigation measures would result in increased pedestrian space at two locations, it would not be large enough to mitigate the significant adverse impacts. As shown in Table 19.4, since no practicable mitigation was identified that would fully mitigate significant adverse impacts during all peak hours at the affected 23 corner areas, they would remain unmitigated.

Table 19.4: Unmitigated Pedestrian Impacts

Sidewalk/Intersection	Impacted Element	Impacted Peak Hour		
		AM	Midday	PM
E 43rd Street between 5th Avenue and Madison Avenue	North Sidewalk	X	X	X
E 43rd Street between Madison Avenue and Vanderbilt Avenue	North Sidewalk	X		X
E 45th Street between 5th Avenue and Madison Avenue	North Sidewalk			X
E 46th Street between 5th Avenue and Madison Avenue	South Sidewalk		X	X
<u>Lexington Avenue between E 42nd and E 43rd Street</u>	<u>West Sidewalk</u>	<u>X</u>		<u>X</u>
Lexington Avenue between E 44th Street and E 45th Street	East Sidewalk	X		X
	West Sidewalk	X		X
Lexington Avenue between E 45th Street and E 46th Street	East Sidewalk	X		X
Lexington Avenue between E 48th Street and E 49th Street	East Sidewalk	X	X	X
Lexington Avenue between E 51st Street and E 52nd Street	East Sidewalk	X		X
Madison Avenue and E 42nd Street	Northeast Corner			X
	Northwest Corner	X		X
Madison Avenue and E 43rd Street	Northeast Corner	X	X	X
	Southwest Corner	X		X
	North Crosswalk	X	X	X
	West Crosswalk	X	X	X
Madison Avenue and E 45th Street	Northeast Corner	X	X	X
	Southeast Corner	X		X
	South Crosswalk	X		X
Madison Avenue and E 53rd Street	North Crosswalk	X		
Park Avenue Southbound and E 46th Street	West Crosswalk	X		X
Park Avenue Southbound and E 49th Street	Northwest Corner	X		
Park Avenue Southbound and E 50th Street	West Crosswalk	X	X	X
Lexington Avenue and E 41st Street	Southwest Corner	X		X
Lexington Avenue and E 42nd Street	<u>Northeast Corner</u>			<u>X</u>
	<u>Southwest Corner</u>	X		<u>X</u>
	Northwest Corner	X		<u>X</u>
	<u>North Crosswalk</u>	<u>X</u>		<u>X</u>
	<u>East Crosswalk</u>			<u>X</u>
	<u>West Crosswalk</u>	<u>X</u>		
Lexington Avenue and E 43rd Street	Southeast Corner			X
	South Crosswalk	X		X
Lexington Avenue and E 45th Street	Southeast Corner	X		
	Southwest Corner	X		X
	West Crosswalk	X		X
Lexington Avenue and E 46th Street	Southeast Corner	X	X	
Lexington Avenue and E 47th Street	South Crosswalk	X	X	X

Table 19.4: Unmitigated Pedestrian Impacts (Continued)

Sidewalk/Intersection	Impacted Element	Impacted Peak Hour		
		AM	Midday	PM
Lexington Avenue and E 49th Street	East Crosswalk	X		X
	West Crosswalk	X		X
Lexington Avenue and E 50th Street	Southwest Corner	X		X
	Northwest Corner	X		X
	West Crosswalk	X		X
Lexington Avenue and E 51st Street	Northeast Corner	X		X
	North Crosswalk	X		X
3rd Avenue and E 42nd Street	North Crosswalk	X	X	X
	South Crosswalk	X		X
	West Crosswalk	X		
3rd Avenue and E 43rd Street	Northeast Corner		X	X
	Southeast Corner	X		X
	Southwest Corner	X	X	X
	Northwest Corner	X	X	X
	East Crosswalk	X		X
	South Crosswalk	X		X
3rd Avenue and E 44th Street	East Crosswalk	X		X
3rd Avenue and E 53rd Street	West Crosswalk	X	X	X
2nd Avenue and E 42nd Street	Southwest Corner		X	

As part of the Proposed Action, a public realm improvement fund would provide the ability to finance above-grade improvements as identified by DOT (see Section 1.4 of Chapter 1, "Project Description.") These improvements include pedestrian plazas, shared streets, widening of the Park Avenue median, bus bulbs, curb extensions and sidewalk widenings, and turn bays. A conceptual plan of these improvements is assessed in Chapter 12, "Transportation" as the Action-With-Improvements condition. All analyzed pedestrian elements were evaluated quantitatively to determine if significant impacts in the Action-With-Improvements condition could be mitigated.

As described in Chapter 12, "Transportation," the Action-With-Improvements condition would result in significant adverse pedestrian impacts at 44 elements during the AM peak hour, 17 elements during the Midday, and 43 elements during the PM peak hour. Some of the pedestrian elements impacted in the Action-With-Improvements condition could be fully mitigated with removal of street furniture, crosswalk widenings, and/or signal timing adjustments; however unmitigated significant adverse pedestrian impacts would remain at: eight, three, and ten sidewalks during the AM, Midday, and PM peak hours, respectively; 24, 10, and 21 crosswalks during the AM, Midday, and PM peak hours, respectively; and six, two, and seven corner areas during the AM, Midday, and PM peak hours, respectively.

Air Quality (Mobile Source)

As discussed in Chapter 13, "Air Quality," annual concentrations of particulate matter less than 2.5 microns in diameter (PM_{2.5}) related to traffic generated by the Proposed Action could result in

significant air quality impacts at the intersections of Third Avenue and East 44th Street, Third Avenue and East 46th Street and Third Avenue and East 54th Street. Traffic mitigation measures were developed to reduce congestion and increase speeds along Third Avenue, which would mitigate these impacts. No unmitigated significant adverse air quality impacts would remain upon incorporation of the mitigation measures.

As described previously, as part of the Proposed Action, a public realm improvement fund would provide the ability to finance above-grade improvements as identified by DOT (see Section 1.4 of Chapter 1, “Project Description”). As discussed in Chapter 13, “Air Quality,” it is anticipated that traffic generated by the Proposed Action with public realm improvements (Proposed Action with PRI) could result in the 24-hour incremental PM_{2.5} concentration that exceeds the City’s *de minimis* criteria of 4.4 µg/m³ at the intersection of Third Avenue and East 41st Street. Additionally, traffic generated by the Proposed Action with PRI is predicted to result in the annual incremental PM_{2.5} concentrations that exceed the City’s *de minimis* criteria of 0.1 µg/m³ at four analyzed intersections, including Third Avenue and East 44th Street, Third Avenue and East 46th Street, Third Avenue and East 54th Street, and Third Avenue and East 41st Street. However, with the application of the same mitigation measures required by the Amended Application with PRI, as discussed in Section 25.4 of Chapter 25, “Amended Application Analysis”, it’s expected that the Proposed Action with PRI would not result in any significant adverse impacts from air quality mobile source emissions.

Construction

Historic and Cultural Resources

As discussed in Chapter 18, “Construction,” development under the Proposed Action—specifically, on Projected Development Sites 2, 4, 5, 6, 7, and 11 and Potential Development Sites B, C, E, F and K—could result in inadvertent construction-related damage to 12 NYCL- and/or S/NR-eligible historic resources, as they are located within 90 feet of Projected and/or Potential Development Sites. Should these remain undesignated, the additional protective measures of New York City Department of Buildings (DOB) Technical Policy and Procedure Notice (TPPN)#10/88 would not apply, and the potential for significant adverse construction-related impacts would not be mitigated.

In order to make TPPN #10/88 applicable to eligible historic resources in the absence of a site-specific approval, such as a special permit with an accompanying restrictive declaration, a mechanism would have to be developed to ensure implementation and compliance, since it is not known and cannot be assumed that owners of these properties would voluntarily implement this mitigation. DCP, as lead agency, explored the viability of this mitigation measure between the Draft EIS and Final EIS and determined it was neither feasible nor practicable.

Absent measures that can be implemented to mitigate these impacts, the Proposed Action’s significant adverse construction-related impacts on historic resources would therefore remain unmitigated.

Traffic

As described in Chapter 18, “Construction,” construction-related traffic would have significant adverse impacts to four intersections during the construction AM peak hour (6:00–7:00 a.m.) and 14 intersections during the construction PM peak hour (3:00–4:00 p.m.). Implementation of traffic engineering improvements such as signal timing changes or modifications to curbside parking regulations would provide mitigation for most of the anticipated traffic impacts, but unmitigated

significant adverse impacts would remain at one intersection during the construction AM peak hour and eight intersections during the construction PM peak hour.

In addition, impacts could occur from the construction of the pre-identified transit improvements. Construction of new subway station entrances and fare control areas at the Lexington Avenue-51st/53rd Streets subway station complex and the Fifth Avenue-53rd Street subway station could necessitate closing sidewalks and adjacent moving lanes of traffic, resulting in impacts to pedestrian and traffic conditions during the subway entrance construction period.

Noise

As discussed in Chapter 18, "Construction," construction activities associated with the Proposed Action would occur on multiple development sites within the same geographic area and, as a result, has the potential to increase interior noise levels of existing adjacent commercial and residential buildings. These increases would likely approach or marginally exceed the impact threshold for short periods of time. The same potential to exceed the noise limits exist during other construction quarters bordering the peak construction period.

Partial mitigation for construction noise impacts could include, in addition to the requirements under the New York City Noise Control Code, noise barriers, use of low noise emission equipment, locating stationary equipment as far as feasible away from receptors, enclosing areas, limiting the duration of activities, specifying quiet equipment, scheduling of activities to minimize impacts (either time of day or seasonal considerations), and locating noisy equipment near natural or existing barriers that would shield sensitive receptors.

The proposed measures discussed above are considered partial mitigations only. Consequently, these impacts would not be completely eliminated and they would constitute an unmitigated significant adverse construction noise impact.

19.2 Open Space

As discussed in Chapter 4, "Open Space," the Proposed Action would result in significant adverse indirect open space impacts. These indirect impacts result from a significant reduction in the passive open space ratio, which, in the open space study area was found to be below the CEQR guidelines in the existing condition (i.e., below the citywide guidance of 0.15 acres of passive open space per 1,000 non-residential users). However, while CEQR guidelines recognize that the goals for open space ratios are not feasible for areas such as Midtown Manhattan, and are not, therefore an impact threshold, the indirect effects analysis demonstrated that the Proposed Action would decrease passive open space ratios by 3.85 percent for the non-residential population and 3.43 percent for the combined non-residential and residential population.

The *CEQR Technical Manual* lists potential mitigation measures for open space impacts. These measures include, but are not limited to, creating new open space within the study area; funding for improvements, renovation, or maintenance at existing local parks; or improving existing open spaces to increase their utility or capacity to meet identified open space needs in the area, such as through the provision of additional open space facilities.

The qualitative open space analysis determined that although the open space ratios in the study area would fall below the City's planning goals in both the No-Action and With-Action Conditions, there are mitigating factors that would affect the usage and enjoyment of available open spaces. These factors include that residents in the study area would have access to other open space resources located within and in the vicinity of the study area, in particular, Central Park. In addition, it was determined that the majority of the Projected Development Sites are located in the greatest proximity to certain open spaces that exhibit lower utilization compared to heavy or moderate-used open spaces in the same proximity, potentially lessening impacts on existing open space resources. Given this, it is anticipated many of the existing open spaces nearest the new Projected Development Sites would have the qualitative capacity to serve additional workers generated by the Proposed Action.

Furthermore, substantial public realm improvements to the open space network in the East Midtown Subdistrict could be implemented as part of the Proposed Action. As noted in the Chapter 1, "Project Description," the public realm improvements would be implemented subject to the Governing Group's approval and funding, and the exact timing of the improvements is unknown. The minimum additional amount of open space necessary to fully mitigate the impact, meaning a less than one percent decrease in the passive open space ratio, would be 1.20 acres.

With the inclusion of a subset of possible public realm improvements targeted to enhance passive open space, the significant impact identified in Chapter 4, "Open Space," would be offset. The public realm improvements assumed in the following analysis in total account for 2.43 acres of open space and are as follows:

- Corridor improvements to Park Avenue consisting of the widening of the central median, which would result in an additional 1.95 acres of passive open space;
- Two public plazas, each 0.16 acres. Each would be located on either side of Park Avenue between East 40th Street and East 41st Street; and,
- The 0.16-acre interim plaza at Pershing Square East (the east side of the Park Avenue viaduct between East 41st and 42nd Street) would be reprogrammed with spaces of higher quality and utility to the public.

With these four public realm improvements providing additional passive open space improvements, the total acreage in the study area would be 42.50 acres in the With-Action Condition, comprising 42.29 acres of passive open space (2.43 acres greater than in the No-Action Condition) and 0.21 acres of active open space.

As a result, with the inclusion of the identified public realm improvements, both the non-residential and the combined passive open space ratio would be greater in the With-Action Condition than in the No-Action Condition. The resulting non-residential passive open space ratio in the With-Action Condition with the identified public realm improvements would be 0.068 acres per 1,000 non-residents, which is less than the CEQR benchmark of 0.15 acres but is 0.001 acres (or 2.01 percent) greater than the ratio under the No-Action Condition (0.066). The combined open space ratio would be 0.61 acres per 1,000 non-residents and residents, which is less than the recommended weighted average of 0.187 acres but is 0.001 (or 2.46 percent) greater than the ratio under the No-Action Condition (0.059). See Table 19.5 for a comparison of the resulting passive open space ratios with and without the inclusion of the identified public realm improvements.

Table 19.5: 2036 Future with the Proposed Action: Passive Open Space Ratios Summary

Ratio	CEQR Open Space Ratio Benchmark	Open Space Ratios per 1,000 People			Change from No-Action to With-Action	
		Existing	No-Action	With-Action	Absolute Change	Percentage Change
<u>Exclusive of Public Realm Improvements</u>						
<u>Non-Residents</u>	<u>0.15</u>	<u>0.069</u>	<u>0.066</u>	<u>0.064</u>	<u>0.003</u>	<u>- 3.85 %</u>
<u>Combined Non-Residents and Residents</u>	<u>Weighted 0.183 / 0.189 / 0.187 (Existing / No-Action / With-Action)¹</u>	<u>0.062</u>	<u>0.059</u>	<u>0.057</u>	<u>0.002</u>	<u>- 3.43 %</u>
<u>Inclusive of Public Realm Improvements</u>						
<u>Non-Residents</u>	<u>0.15</u>	<u>0.069</u>	<u>0.066</u>	<u>0.068</u>	<u>0.001</u>	<u>2.01 %</u>
<u>Combined Non-Residents and Residents</u>	<u>Weighted 0.183 / 0.189 / 0.187 (Existing / No-Action / With-Action)¹</u>	<u>0.062</u>	<u>0.059</u>	<u>0.061</u>	<u>0.001</u>	<u>2.46 %</u>
<u>Notes:</u>						
<u>¹ Based on a target open space ratio established by creating a weighted average of the amount of open space necessary to meet the CEQR benchmark of 0.5 acres of passive open space per 1,000 residents and 0.15 acres of passive open space per 1,000 non-residents. Since this benchmark depends on the proportion of non-residents and residents in the study area's population, it is different for Existing, No-Action, and With-Action Conditions.</u>						

Therefore, with the inclusion of a subset of the public realm improvements that would enhance passive open space, the significant adverse impact to open space resources would be offset. If less than 1.20 acres of the identified public realm improvements are built, then the significant adverse open space impact would be only partially offset.

The standard mitigation measures listed above, such as funding for improvements, renovation, or maintenance at existing local parks; or improving existing open spaces to increase their utility or capacity were explored by DCP and NYC Parks and found to be unpracticable. However, as described above, the inclusion of the identified public realm improvements would fully or partially offset any impacts on open space that would occur as a result of the Proposed Action.

19.3 Shadows

As discussed in Chapter 5, "Shadows," the Proposed Action would result in significant adverse shadows impacts on one designated historic architectural resource, St. Bartholomew's Church and Community House. There would be no significant adverse shadows impacts on open spaces.

The sunlight-sensitive stained-glass windows of St. Bartholomew's Church and Community House would experience significant adverse shadows impacts on the May 6th and June 21st analysis days. Since the stained-glass windows are all experienced within a single large interior space, as opposed to multiple spaces where each individual space experiences only a portion of the windows, the assessment of the potential impact caused by the incremental shadows considered the cumulative effect on all the windows together. On the May 6th/August 6th analysis day, between 1:54 PM and 4:41 PM, the effect of the incremental shadows—cast by Projected Development Site 7—would be to completely eliminate all direct sunlight on the building's stained-glass windows. On June 21st, incremental

shadows, also cast by Projected Development Site 7, from these sites would also affect stained-glass windows between 1:41 PM to 4:45 PM. Portions or the entirety of the majority of the stained glass windows on these facades would be covered in new incremental shadows for approximately 1 hour, 45 minutes, from 1:45 PM to 3:30 PM. During this time frame, sunlight to these stained glass windows would be completely eliminated, with the potential to affect the public's enjoyment of these features. The incremental shadows that would be cast on these two analysis days would result in a reduction in sunlight available for the enjoyment or appreciation of the building's stained-glass windows, and thus the incremental shadows are being considered significant adverse shadows impacts.

Based on shadow modeling, it was determined that the height of any new development on Projected Development Site 7 would need to be limited to the height of the existing buildings on this site (approximately 300 feet tall) in order to eliminate the unmitigated significant adverse shadows impacts on St. Bartholomew's Church and Community House. However, if Projected Development Site 7 were limited to its existing height of 300 feet, it is anticipated significant adverse shadow impacts would be caused by Potential Development Sites C and D which are directly southwest of Projected Development Site 7 and would cast shadows in the same direction towards St. Bartholomew's. Consequently, if the existing height of Projected Site 7 is limited to 300 feet, any additional development on Potential Development Sites C and D beyond 300 feet in height is anticipated to extend the shadow duration that covers all of the sunlight sensitive stained glass windows on St. Bartholomew's Church to result in a significant shadows impact. It should be noted, as discussed further in Chapter 5, that both the individual building massings and their projected combined shadow effect on sunlight sensitive resources in the shadow screening study area represent an overly conservative approach to this analysis, that by definition would not occur.

The DEIS stated that mitigation measures for this impact would be explored between the DEIS and FEIS, including exploration of feasible changes to the bulk and setback regulations governing Projected Development Site 7 and Potential Development Sites C and D that would reduce or eliminate the incremental shadow that causes the impact. Specifically, a design option was considered where restrictions would be placed to require narrower towers on these sites (see Appendix O, "Additional Shadows Mitigation Analysis of St. Bartholomew's Episcopal Church." However the alternative scenario did not significantly reduce the incremental shadowing on the resource such that there would not be a significant adverse impact. Additionally, having more restrictive height and setback regulations on this site would not be in line with the project's goals and objectives to promote world-class office space. As such, modification to the building massing does not offer a practical mitigation measure to reduce significant adverse impacts associated with shadows on this historic resource.

Further, another mitigation measure that was explored was the provision of artificial lighting of the resource to simulate sunlit conditions. However, it was found that such lighting mitigation, if placed on the interior or exterior of the windows may have a detrimental effect on the historic structure, and may not be realistically feasible to provide partial or full shadows mitigation. Heliostats (reflective discs that would redirect sunlight towards the church) were explored, however these are not generally effective in providing a diffuse lighting effect and instead often result in spotlight conditions that would not result in mitigating the shadows. Additionally, exterior lighting features may detrimentally effect the surrounding buildings and may create new visual conditions that likely would have a negative effect on the streetscape and the street character.

Based on the above, there are no reasonable means to avoid or mitigate shadows impacts on the St. Bartholomew's Church and Community House. Therefore, this shadow impacts would be an

unavoidable significant adverse impact of the Proposed Action. This is disclosed in Chapter 22, "Unavoidable Adverse Impacts."

19.4 Historic and Cultural Resources

As discussed in Chapter 6, "Historic and Cultural Resources," the Proposed Action could result in direct significant adverse impacts to six resources that are eligible for NYCL designation and/or S/NR listing on four Projected Development Sites and one Potential Development Site:

- Projected Development Site 2 encompasses the NYCL-eligible building at 22-24 East 41st Street (#94).
- Projected Development Site 4 encompasses the NYCL-eligible 6 East 45th Street Building (#99) and the S/NR-eligible 346 Madison Avenue Building (#141).
- Projected Development Site 6 includes the NYCL- and S/NR-eligible 250 Park Avenue Building (#129).
- Projected Development Site 10 includes the S/NR-eligible Barclay Hotel at 111 East 48th Street (#103).
- Potential Development Site J contains the NYCL-eligible Girl Scout Building at 830 Third Avenue (#133).

The *CEQR Technical Manual* identifies several ways in which impacts on architectural resources can be mitigated, including: redesigning the action so that it does not disturb the resource; relocating the action to avoid the resource altogether; contextual redesign of a project that does not actually physically affect an architectural resource but would alter its setting; adaptive reuse to incorporate the resource into the project rather than demolishing it; or a construction protection plan to protect historic resources that may be affected by construction activities related to a proposed action. Redesigning or relocating the Proposed Action so that it does not disturb the eligible resources located on Projected Development Sites 2, 4, 6, 10 and Potential Development Site J would be inconsistent with the overall purpose and need of the Proposed Action and is considered infeasible and impracticable as it would result in an incoherent zoning plan that would not allow for the establishment of an area-wide East Midtown Subdistrict. Contextual redesign, adaptive reuse and the use of a construction protection plan are not available as mitigation measures, given the nature of the Proposed Action as an area-wide rezoning.

Other mitigation measures identified in the *CEQR Technical Manual* that could minimize or reduce these impacts include photographically documenting the eligible structures in accordance with Historic American Buildings Survey (HABS) level II, in a manner acceptable to LPC. The scope of work for documentation would be submitted to the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) and LPC for approval prior to any demolition. Two copies of the completed documentation would be submitted to OPRHP, one of which would be for archival storage in the New York State Archives and the other for retention in OPRHP files, and a third copy of the documentation would also be provided to the Museum of the City of New York. A fourth copy would be submitted to LPC, and, in addition, an online digital archive would be produced and transmitted to the New York Public Library for permanent inclusion in its database. Further, an interpretive exhibit could be produced within the lobby of new construction, using the completed HABS documentation as a starting point. The exhibit design would be submitted to OPRHP and LPC for review and approval

prior to execution and installation. With implementation of the HABS documentation measure, and the related measure to create an interpretive exhibit, the identified significant adverse direct impact to historic architectural resources would be partially mitigated.

In order to adopt these measures in the absence of a site-specific approval, such as a Special Permit with an accompanying restrictive declaration, a mechanism would have to be developed to ensure implementation and compliance since it is not known and cannot be assumed that owners of these properties would voluntarily implement this partial mitigation. DCP, as lead agency, explored the viability of these mitigation measures between the Draft EIS and Final EIS, and found that there would not be a practicable mechanism to require the mitigation described above.

For those structures that are NYCL-eligible—the buildings at 22-24 East 41st Street, 6 East 45th Street, 250 Park Avenue and the Girl Scout Building at 830 Third Avenue (potential Site J) LPC may elect to calendar, and then conduct a hearing and designate the structures, either in whole or in part, as landmark buildings. In the event that landmark designation is approved, LPC approval would be required for any alteration or demolition of the designated structures. Designation would avoid the potential for impacts to the eligible resources. However, as the potential for use and results of any designation process cannot be assumed or predicted, designation is not considered a mitigation measure herein.

In addition, those structures that are S/NR-eligible are given a measure of protection under Section 106 of the National Historic Preservation Act from the impacts of projects sponsored, assisted, or approved by federal agencies. Although preservation is not mandated, federal agencies must attempt to avoid adverse impacts on such resources through a notice, review, and consultation process. Additionally, the OPRHP could elect to designate these structures as S/NR-listed properties. Properties listed on the Registers are similarly protected against impacts resulting from projects sponsored, assisted, or approved by state agencies under the State Historic Preservation Act. However, private owners of properties eligible for, or even listed on, the Registers using private funds can alter or demolish their properties without such a review process. Redevelopment under the Proposed Action of the sites containing S/NR-eligible structures is expected to be privately sponsored. Further, the potential for use and results of any designation process cannot be assumed or predicted, and S/NR designation is therefore not considered a mitigation measure herein.

Additionally, as mentioned in the Shadows section above, an unmitigated significant adverse impact would result from shadows from Projected Development Site 7 on to parts of the façade of the St. Bartholomew’s Church and Community House. Mitigation explored between the Draft and Final EIS was not determined to be feasible nor practicable.

The above mitigation measures were not determined to be feasible nor practicable. As a consequence, these impacts would not be completely eliminated and they would constitute unavoidable significant adverse impacts on these historic resources as a result of the Proposed Action (refer to Chapter 22, “Unavoidable Adverse Impacts”).

19.5 Transportation

Traffic

As described in Chapter 12, "Transportation," DOT has prepared a suite of conceptual options for above-grade public realm improvements that could be implemented within the Greater East Midtown area, which would be financed through the public realm improvement fund. The Concept Plan of improvements include pedestrian plazas, shared streets, widening of the Park Avenue median, bus bulbs, curb extensions and sidewalk widenings, and turn bays. The traffic analysis is presented first as the future with the Proposed Action without above-grade public realm improvements described in the Concept Plan (Action-Without-Improvements) and then as the future with the Proposed Action with above-grade public realm improvements described in the Concept Plan (Action-With-Improvements).

Action-Without-Improvements

As described in Chapter 12, "Transportation," the Proposed Action would result in significant adverse traffic impacts at 116 study area intersections during one or more analyzed peak hours; specifically, the impact locations comprise 190 approach movements at 101 intersections during the AM peak hour, 179 approach movements at 101 intersections during the Midday peak hour, and 201 approach movements at 106 intersections during the PM peak hour.

As demonstrated below, some of these impacts could be mitigated through the implementation of traffic engineering improvements, including:

- Modification of traffic signal phasing and/or timing;
- Elimination of on-street parking within 150 feet of intersections to add a limited travel lane, known as "daylighting";
- Channelization and lane designation changes to make more efficient use of available street widths.

All of these improvements are low-cost, readily implementable measures that conform to the guidelines of DOT's 2015 Street Design Manual. The types of mitigation measures proposed herein are standard measures that are routinely identified by the City and considered feasible for implementation. Table 19.6 through Table 19.8 summarize the recommended mitigation measures for each of the intersections with significant adverse traffic impacts during the AM, Midday, and PM peak hours, respectively. These tables also include the air quality and pedestrian mitigation measures described in Section 19.7 that have the potential to affect traffic conditions. Implementation of the recommended traffic engineering improvements is subject to review and approval by DOT, except for the enforcement of existing parking regulations, which is under the jurisdiction of the New York Police Department (NYPD), and the removal of diplomat/consular parking is subject to review and approval by the U.S. Department of State. The removal of diplomat/consular and New York Press (NYP) parking spaces would require the identification of alternate parking spaces where the parking could be relocated. If, prior to implementation, DOT determines that an identified mitigation measure is infeasible, an alternative and equivalent mitigation measure will be identified.

Table 19.6: AM Proposed Traffic Mitigation Measures

Intersection	No-Action	Mitigated Condition	Proposed Mitigation
1st Ave. & E. 40th St.			Impacts cannot be fully mitigated in this time period
1st Ave. & E. 42nd St.			Impacts cannot be fully mitigated in this time period
1st Ave. & E. 48th St.			Impacts cannot be fully mitigated in this time period
1st Ave. & E. 49th St.			Impacts cannot be fully mitigated in this time period
1st Ave. & E. 55th St.			Impacts cannot be fully mitigated in this time period
1st Ave. & E. 57th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 36th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 37th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 38th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 39th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 40th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 41st St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 42nd St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 43rd St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 44th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 45th St.	WB: 1 LT (10') WB: G=27 SB: G=53	WB: 2 LT (10') WB: G=25 SB: G=55	-Implement No Standing 7AM-7PM Mon - Fri for 100' along north curb on WB approach. This would result in the elimination of up to 4 authorized vehicle (NYP) parking spaces. -Modify signal timing. -Enforce No Standing 7A-7PM Mon-Fri along north curb of 45th Street on the receiving side of WB approach.
2nd Ave. & E. 46th St.	EB: G=27 SB: G=53	EB: G=25 SB: G=55	Modify signal timing
2nd Ave. & E. 47th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 48th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 49th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 50th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 51st St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 52nd St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 53rd St.	WB: 2 LT (10') Ped: G=7 WB: G=28 SB: G=45	WB: L (10'), 2T (10') Ped: G=7 WB: G=26 SB: G=47	-Implement No Standing 7-10 AM Mon-Fri for 100' along south curb on WB approach to create a left-turn lane. This would result in the elimination of up to 4 commercial parking spaces. -Modify signal timing
2nd Ave. & E. 54th St.	EB: G=31 SB: G=49	EB: G=29 SB: G=51	Modify signal timing

Table 19.6: AM Proposed Traffic Mitigation Measures (Continued)

Intersection	No-Action	Mitigated Condition	Proposed Mitigation
2nd Ave. & E. 55th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 56th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 57th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 59th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 60th St.			Impacts cannot be fully mitigated in this time period
Tunnel Exit St. & E. 39th St.	WB: G=31 NB: G=49	WB: G=34 NB: G=46	Modify signal timing
3rd Ave. & E. 36th St.			Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 37th St.			Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 39th St.	NB: 4 LT (10') WB: G=34 NB: G=45	NB: 1L (10'), 4T (10') WB: G=36 NB: G=43	-Implement No Standing Anytime for 100' along west curb on NB approach. This would result in the elimination of up to 4 commercial parking vehicles. -Modify signal timing -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 40th St.			Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 41st St.	EB/WB: G=35 NB: G=45	EB/WB: G=32 NB: G=48	-Modify signal timing as per air quality mitigation -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 42nd St.	NB: 4 LT (10'), R (11')	NB: L (10'), 4T (10'), R (11')	-Implement No Standing Anytime for 100' along west curb on NB approach to create a left-turn lane as per air quality mitigation. This would result in the elimination of up to 4 authorized vehicle (NYP) parking spaces. -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 43rd St.	WB: G=40 NB: G=40	WB: G=38 NB: G=42	Modify signal timing
3rd Ave. & E. 44th St.	EB: G=40 NB: G=40	EB: G=37 NB: G=43	-Modify signal timing as per air quality mitigation -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 45th St.	WB T: G=27 WB TR: G=17 NB: G=36	WB T: G=27 WB TR: G=14 NB: G=39	-Modify signal timing as per air quality mitigation -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 46th St.	EB T: G=27 EB LT: G=17 NB: G=36	EB T: G=27 EB LT: G=16 NB: G=37	-Modify signal timing as per air quality mitigation -No significant adverse traffic impacts in With-Action condition
3rd Ave. & E. 47th St.	WB: G=45 NB: G=35	WB: G=42 NB: G=38	-Modify signal timing as per air quality mitigation -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 48th St.	EB: G=45 NB: G=35	EB: G=42 NB: G=38	-Modify signal timing as per air quality mitigation -No significant adverse traffic impacts in With-Action condition
3rd Ave. & E. 49th St.	WB T: G=29 WB TR: G=17 NB: G=34	WB T: G=29 WB TR: G=14 NB: G=37	-Modify signal timing as per air quality mitigation -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 50th St.	EB: G=45 NB: G=35	EB: G=43 NB: G=37	Modify signal timing
3rd Ave. & E. 51st St.	WB: G=45 NB: G=33	WB: G=43 NB: G=35	Modify signal timing
3rd Ave. & E. 52nd St.	EB: G=45 NB: G=35	EB: G=41 NB: G=39	Modify signal timing
3rd Ave. & E. 53rd St.	WB T: G=27 WB TR: G=17 NB: G=36	WB T: G=27 WB TR: G=14 NB: G=39	-Modify signal timing as per air quality mitigation -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 54th St.	EB T: G=27 EB LT: G=17 NB: G=36	EB T: G=27 EB LT: G=14 NB: G=39	-Modify signal timing as per air quality mitigation -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 55th St.	WB: G=38 NB: G=35 Ped: G=7	WB: G=35 NB: G=38 Ped: G=7	-Modify signal timing as per air quality mitigation -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 56th St.	EB: G=37 NB: G=43	EB: G=34 NB: G=46	-Modify signal timing as per air quality mitigation -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 57th St.	NB (West): 3 LT (10')	NB (West): 3 LT (10')	-Implement No Standing 7AM-7PM Mon-Fri for 200' along the west curb of NB approach (west side) as per air quality mitigation. This would result in the elimination

Table 19.6: AM Proposed Traffic Mitigation Measures (Continued)

Intersection	No-Action	Mitigated Condition	Proposed Mitigation
			of up to 8 commercial parking spaces. -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 59th St.			Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 36th St.	EB: G=28 Ped: G=7 SB: G=45	EB: G=27 Ped: G=7 SB: G=46	Modify signal timing
Lexington Ave. & E. 38th St.	EB T: G=23 EB TR: G=13 SB: G=44	EB T: G=23 EB TR: G=14 SB: G=43	-Implement No Standing 7AM-10AM Mon-Fri for 50' along east curb on SB approach. This would result in the elimination of up to 2 commercial parking spaces. -Modify signal timing
Lexington Ave. & E. 39th St.			Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 40th St.			Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 42nd St.			Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 44th St.	SB: G=49 Ped: G=36	SB: G=52 Ped: G=33	Modify signal timing
Lexington Ave. & E. 46th St.			Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 47th St.	WB T: G=23 WB LT: G=14 SB: G=43	WB T: G=23 WB LT: G=13 SB: G=44	-Modify signal timing as per pedestrian mitigation -Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 48th St.	EB T: G=23 EB TR: G=14 SB: G=43	EB T: G=23 EB TR: G=11 SB: G=46	-Modify signal timing as per pedestrian mitigation -Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 50th St.			Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 51st St.	WB T: G=23 WB LT: G=14 SB: G=43	WB T: G=23 WB LT: G=13 SB: G=44	Modify signal timing
Lexington Ave. & E. 52nd St.			Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 53rd St.			Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 54th St.			Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 55th St.			Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 56th St.	EB T: G=26 EB TR: G=14 SB: G=40	EB T: G=23 EB TR: G=14 SB: G=43	Modify signal timing
Lexington Ave. & E. 57th St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 39th St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 40th St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 47th St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 48th St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 49th St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 50th St.	SB: L, 2T	SB: L, 2T	-Enforcement of existing parking regulations (No Standing 7AM-10AM Mon-Fri) along the west curb of SB approach -Impacts cannot be fully mitigated in this time period
Park Ave. & E. 51st St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 52nd St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 53rd St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 54th St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 55th St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 56th St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 57th St.			Impacts cannot be fully mitigated in this time period
Madison Ave. & E. 39th St.			Impacts cannot be fully mitigated in this time period

Table 19.6: AM Proposed Traffic Mitigation Measures (Continued)

Intersection	No-Action	Mitigated Condition	Proposed Mitigation
Madison Ave. & E. 40th St.			Impacts cannot be fully mitigated in this time period
Madison Ave. & E. 41st St.			Impacts cannot be fully mitigated in this time period
Madison Ave. & E. 42nd St.			Impacts cannot be fully mitigated in this time period
Madison Ave. & E. 43rd St.			Impacts cannot be fully mitigated in this time period
Madison Ave. & E. 48th St.			Impacts cannot be fully mitigated in this time period
Madison Ave. & E. 53rd St.			Impacts cannot be fully mitigated in this time period
Madison Ave. & E. 54th St.	EB: G=35 NB: G=45	EB: G=32 NB: G=48	Modify signal timing
5th Ave. & 38th St.			Impacts cannot be fully mitigated in this time period
5th Ave. & 39th St.			Impacts cannot be fully mitigated in this time period
5th Ave. & 40th St.			Impacts cannot be fully mitigated in this time period
5th Ave. & 42nd St.	EB/WB: G=35 SB: G=45	EB/WB: G=34 SB: G=46	Modify signal timing as per pedestrian mitigation Impacts cannot be fully mitigated in this time period
5th Ave. & 43rd St.			Impacts cannot be fully mitigated in this time period
5th Ave. & 44th St.			Impacts cannot be fully mitigated in this time period
5th Ave. & 47th St.	WB T: G=23 WB LT: G=15 SB: G=42	WB T: G=23 WB LT: G=14 SB: G=43	Modify signal timing
5th Ave. & 48th St.	EB T: G=24 EB TR: G=15 SB: G=41	EB T: G=24 EB TR: G=14 SB: G=42	Modify signal timing
5th Ave. & 49th St.	WB: G=35 SB: G=45	WB: G=34 SB: G=46	Modify signal timing
5th Ave. & 54th St.	EB: G=35 SB: G=45	EB: G=34 SB: G=46	Modify signal timing
5th Ave. & 57th St.			Impacts cannot be fully mitigated in this time period
6th Ave. & W. 48th St.			Impacts cannot be fully mitigated in this time period
Notes: EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound "G" indicates amount of green phase time, in seconds This Table has been updated for the FEIS			

Table 19.7: Midday Proposed Traffic Mitigation Measures

Intersection	No-Action	Mitigated Condition	Proposed Mitigation
1st Ave. & E. 40th St.	EB: G=35 NB: G=45	EB: G=36 NB: G=44	Modify signal timing
2nd Ave. & E. 37th St.	WB: G=31 SB: G=49	WB: G=30 SB: G=50	Modify signal timing
2nd Ave. & E. 38th St.	EB: G=31 SB: G=49	EB: G=30 SB: G=50	Modify signal timing
2nd Ave. & E. 39th St.	WB: G=31 SB: G=49	WB: G=29 SB: G=51	Modify signal timing
2nd Ave. & E. 40th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 41st St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 42nd St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 43rd St.	WB: G=31 SB: G=49	WB: G=29 SB: G=51	Modify signal timing
2nd Ave. & E. 44th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 45th St.	WB: 1 LT (10') EB: G=27 SB: G=53	WB: 2 LT (10') EB: G=25 SB: G=55	-Implement No Standing 7AM-7PM Mon - Fri for 100' along north curb on WB approach. This would result in the elimination of up to 4 authorized vehicle (NYP) parking spaces. -Modify signal timing. -Enforce No Standing 7A-7PM Mon-Fri along north curb of 45th Street on the receiving side of WB approach.
2nd Ave. & E. 46th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 47th St.	WB: G=27 SB: G=53	WB: G=25 SB: G=55	Modify signal timing
2nd Ave. & E. 48th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 49th St.	WB T: G=7 WB LT: G=25 SB: G=48	WB T: G=7 WB LT: G=24 SB: G=49	Modify signal timing
2nd Ave. & E. 50th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 51st St.	EB: G=31 SB: G=49	EB: G=30 SB: G=50	Modify signal timing
2nd Ave. & E. 52nd St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 53rd St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 54th St.	EB: G=31 SB: G=49	EB: G=30 SB: G=50	Modify signal timing
2nd Ave. & E. 55th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 56th St.	EB: G=31 SB: G=49	EB: G=29 SB: G=51	Modify signal timing
2nd Ave. & E. 57th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 59th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 60th St.			Impacts cannot be fully mitigated in this time period
Tunnel Exit St. & E. 39th St.	WB: G=31 NB: G=49	WB: G=30 NB: G=50	Modify signal timing
3rd Ave. & E. 36th St.	EB LT: G=40 NB T: G=22 NB TR: G=18	EB LT: G=37 NB T: G=25 NB TR: G=18	Modify signal timing
3rd Ave. & E. 37th St.			Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 39th St.	NB: 4 LT (10') WB: G=34 NB: G=45	NB: 1L (10'), 4T (10') WB: G=36 NB: G=43	-Implement No Standing Anytime for 100' along west curb on NB approach. This would result in the elimination of up to 4 commercial parking vehicles. -Modify signal timing

Table 19.7: Midday Proposed Traffic Mitigation Measures (Continued)

Intersection	No-Action	Mitigated Condition	Proposed Mitigation
3rd Ave. & E. 40th St.			Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 41st St.	EB/WB: G=35 NB: G=45	EB/WB: G=32 NB: G=48	-Modify signal timing as per air quality mitigation -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 42nd St.	NB: 4 LT (10'), R (11')	NB: L (10'), 4T (10'), R (11')	-Implement No Standing Anytime for 100' along west curb on NB approach to create a left-turn lane as per air quality mitigation. This would result in the elimination of up to 4 authorized vehicle (NYP) parking spaces. -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 43rd St.	WB: G=40 NB: G=40	WB: G=38 NB: G=42	-Modify signal timing as per pedestrian mitigation -No significant adverse traffic impacts in With-Action condition
3rd Ave. & E. 44th St.	EB: G=40 NB: G=40	EB: G=37 NB: G=43	-Modify signal timing as per pedestrian mitigation -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 45th St.	WB T: G=27 WB TR: G=17 NB: G=36	WB T: G=27 WB TR: G=15 NB: G=38	Modify signal timing
3rd Ave. & E. 46th St.	EB T: G=27 EB LT: G=17 NB: G=36	EB T: G=27 EB LT: G=15 NB: G=38	Modify signal timing
3rd Ave. & E. 47th St.	WB: G=45 NB: G=35	WB: G=42 NB: G=38	-Modify signal timing as per air quality mitigation -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 48th St.	EB: G=45 NB: G=35	EB: G=43 NB: G=37	Modify signal timing
3rd Ave. & E. 49th St.	WB T: G=29 WB TR: G=17 NB: G=34	WB T: G=29 WB TR: G=15 NB: G=36	Modify signal timing
3rd Ave. & E. 50th St.	EB: G=45 NB: G=35	EB: G=43 NB: G=37	Modify signal timing
3rd Ave. & E. 51st St.	WB: G=45 NB: G=33	WB: G=43 NB: G=35	Modify signal timing
3rd Ave. & E. 52nd St.	EB: G=45 NB: G=35	EB: G=42 NB: G=38	Modify signal timing
3rd Ave. & E. 53rd St.	WB T: G=27 WB TR: G=17 NB: G=36	WB T: G=27 WB TR: G=15 NB: G=38	Modify signal timing
3rd Ave. & E. 54th St.	EB T: G=27 EB LT: G=17 NB: G=36	EB T: G=27 EB LT: G=14 NB: G=39	-Modify signal timing as per air quality mitigation -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 55th St.	WB: G=38 NB: G=35 Ped: G=7	WB: G=35 NB: G=38 Ped: G=7	-Modify signal timing as per air quality mitigation -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 56th St.	EB: G=37 NB: G=43	EB: G=33 NB: G=47	Modify signal timing
3rd Ave. & E. 57th St.	NB (West): 3 LT (10')	NB (West): 3 LT (10')	-Implement No Standing 7AM-7PM Mon-Fri for 200' along the west curb of NB approach (west side) as per air quality mitigation. This would result in the elimination of up to 8 commercial parking spaces. -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 59th St.			Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 36th St.	EB: G=28 Ped: G=7 SB: G=45	EB: G=27 Ped: G=7 SB: G=46	Modify signal timing
Lexington Ave. & E. 38th St.	EB T: G=23 EB TR: G=13 SB: G=44	EB T: G=23 EB TR: G=14 SB: G=43	Modify signal timing
Lexington Ave. & E. 39th St.			Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 40th St.	EB T: G=23 EB TR: G=13 SB: G=44	WB T: G=23 WB TR: G=11 SB: G=46	Modify signal timing
Lexington Ave. & E. 42nd St.			Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 44th St.	SB: G=49	SB: G=51	Modify signal timing

Table 19.7: Midday Proposed Traffic Mitigation Measures (Continued)

Intersection	No-Action	Mitigated Condition	Proposed Mitigation
	Ped: G=36	Ped: G=34	
Lexington Ave. & E. 46th St.	EB: G=31 SB: G=49	EB: G=30 SB: G=50	-Modify signal timing as per pedestrian mitigation -Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 47th St.	WB T: G=23 WB LT: G=14 SB: G=43	WB T: G=23 WB LT: G=12 SB: G=45	-Modify signal timing as per pedestrian mitigation -Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 48th St.			Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 50th St.	EB: G=35 SB: G=45	EB: G=34 SB: G=46	Modify signal timing
Lexington Ave. & E. 51st St.			Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 52nd St.	EB T: G=23 EB TR: G=14 SB: G=43	EB T: G=24 EB TR: G=14 SB: G=42	Modify signal timing
Lexington Ave. & E. 53rd St.			Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 54th St.			Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 57th St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 39th St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 40th St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 47th St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 48th St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 49th St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 50th St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 51st St.	EB: G=38 NB/SB: G=41	EB: G=39 NB/SB: G=40	Modify signal timing
Park Ave. & E. 52nd St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 53rd St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 54th St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 55th St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 56th St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 57th St.			Impacts cannot be fully mitigated in this time period
Madison Ave. & E. 39th St.	WB: G=23 WB TR: G=12 NB: G=45	WB: G=24 WB TR: G=14 NB: G=42	Modify signal timing
Madison Ave. & E. 40th St.	EB T: G=23 EB LT: G=12 NB: G=45	EB T: G=23 EB LT: G=11 NB: G=46	Modify signal timing
Madison Ave. & E. 41st St.			Impacts cannot be fully mitigated in this time period
Madison Ave. & E. 42nd St.			Impacts cannot be fully mitigated in this time period
Madison Ave. & E. 43rd St.			Impacts cannot be fully mitigated in this time period
Madison Ave. & E. 48th St.			Impacts cannot be fully mitigated in this time period
Madison Ave. & E. 54th St.			Impacts cannot be fully mitigated in this time period
5th Ave. & 38th St.			Impacts cannot be fully mitigated in this time period
5th Ave. & 39th St.			Impacts cannot be fully mitigated in this time period
5th Ave. & 40th St.			Impacts cannot be fully mitigated in this time period
5th Ave. & 42nd St.			Impacts cannot be fully mitigated in this time period
5th Ave. & 43rd St.	WB: G=35 SB: G=45	WB: G=32 SB: G=48	Modify signal timing

Table 19.7: Midday Proposed Traffic Mitigation Measures (Continued)

Intersection	No-Action	Mitigated Condition	Proposed Mitigation
	Offset: 43	Offset: 40	
5th Ave. & 44th St.			Impacts cannot be fully mitigated in this time period
5th Ave. & 47th St.			Impacts cannot be fully mitigated in this time period
5th Ave. & 48th St.			Impacts cannot be fully mitigated in this time period
5th Ave. & 49th St.	WB: G=35 SB: G=45	WB: G=34 SB: G=46	Modify signal timing
5th Ave. & 54th St.			Impacts cannot be fully mitigated in this time period
5th Ave. & 57th St.	EB: G=35 SB: G=45	EB: G=36 SB: G=44	Modify signal timing
6th Ave. & W. 48th St.	EB: G=35 NB: G=45	EB: G=36 NB: G=44	Modify signal timing
Notes: EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound *G* indicates amount of green phase time, in seconds This Table has been updated for the FEIS			

Table 19.8: PM Proposed Traffic Mitigation Measures

Intersection	No-Action	Mitigated Condition	Proposed Mitigation
1st Ave. & E. 40th St.			Impacts cannot be fully mitigated in this time period
1st Ave. & E. 42nd St.			Impacts cannot be fully mitigated in this time period
1st Ave. & E. 46th St.			Impacts cannot be fully mitigated in this time period
1st Ave. & E. 47th St.			Impacts cannot be fully mitigated in this time period
1st Ave. & E. 48th St.			Impacts cannot be fully mitigated in this time period
1st Ave. & E. 49th St.			Impacts cannot be fully mitigated in this time period
1st Ave. & E. 54th St.			Impacts cannot be fully mitigated in this time period
1st Ave. & E. 55th St.	WB: G=35 NB LT: G=38 NB T/Ped: G=7	WB: G=34 NB LT: G=39 NB T/Ped: G=7	Modify signal timing
1st Ave. & E. 57th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 36th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 37th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 38th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 39th St.	WB: G=31 SB: G=49	WB: G=29 SB: G=51	Modify signal timing
2nd Ave. & E. 40th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 41st St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 42nd St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 43rd St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 44th St.			Impacts cannot be fully mitigated in this time period

Table 19.8: PM Proposed Traffic Mitigation Measures (Continued)

Intersection	No-Action	Mitigated Condition	Proposed Mitigation
2nd Ave. & E. 45th St.	WB: 1 LT (10') WB: G=27 SB: G=53	WB: 2 LT (10') WB: G=24 SB: G=56	-Implement No Standing 7AM-7PM Mon - Fri for 100' along north curb on WB approach. This would result in the elimination of up to 4 authorized vehicle (NYP) parking spaces. -Modify signal timing. -Enforce No Standing 7A-7PM Mon-Fri along north curb of 45th Street on the receiving side of WB approach.
2nd Ave. & E. 46th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 47th St.	WB: G=27 SB: G=53	WB: G=24 SB: G=56	Modify signal timing
2nd Ave. & E. 48th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 49th St.	WB T: G=7 WB LT: G=25 SB: G=48 Offset: 82*	WB T: G=7 WB LT: G=28 SB: G=45 Offset: 83*	Modify signal timing *Offset changed to mitigate impact due to adjacent intersections.
2nd Ave. & E. 50th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 51st St.	EB: G=31 SB: G=49	WB: G=30 SB: G=50	-Modify signal timing -Intersection was not impacted by the Proposed Action. Mitigation was necessary to mitigate impacts caused by effects of mitigation measures at adjacent intersections.
2nd Ave. & E. 52nd St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 53rd St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 54th St.	EB: G=31 SB: G=49	EB: G=30 SB: G=50	Modify signal timing
2nd Ave. & E. 55th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 56th St.	EB: G=31 SB: G=49	EB: G=30 SB: G=50	Modify signal timing
2nd Ave. & E. 57th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 59th St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 60th St.			Impacts cannot be fully mitigated in this time period
Tunnel Exit St. & E. 40th St.	EB: G=31 NB: G=49	EB: G=32 NB: G=48	Modify signal timing
3rd Ave. & E. 36th St.			Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 37th St.	WB T: G=28 WB TR: G=16 NB: G=36	WB T: G=28 WB TR: G=17 NB: G=35	Modify signal timing
3rd Ave. & E. 39th St.	NB: 4 LT (10') WB: G=34 NB: G=45	NB: 1L (10'), 4T (10') WB: G=38 NB: G=41	-Implement No Standing Anytime for 100' along west curb on NB approach. This would result in the elimination of up to 4 commercial parking vehicles. -Modify signal timing
3rd Ave. & E. 40th St.			Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 41st St.	EB/WB: G=36 NB: G=44	EB/WB: G=33 NB: G=47	-Modify signal timing as per air quality mitigation -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 42nd St.	NB: 4 LT (10'), R (11')	NB: L (10'), 4T (10'), R (11')	-Implement No Standing Anytime for 100' along west curb on NB approach to create a left-turn lane as per air quality mitigation. This would result in the elimination of up to 4 authorized vehicle (NYP) parking spaces. -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 43rd St.	WB: G=40 NB: G=40	WB: G=37 NB: G=43	-Modify signal timing as per air quality mitigation -No significant adverse traffic impacts in With-Action condition
3rd Ave. & E. 44th St.	EB: G=40 NB: G=40	EB: G=37 NB: G=43	-Modify signal timing as per air quality mitigation -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 45th St.	WB T: G=27 WB TR: G=17 NB: G=36	WB T: G=27 WB TR: G=14 NB: G=39	-Modify signal timing as per air quality mitigation -Impacts cannot be fully mitigated in this time period

Table 19.8: PM Proposed Traffic Mitigation Measures (Continued)

Intersection	No-Action	Mitigated Condition	Proposed Mitigation
3rd Ave. & E. 46th St.	EB T: G=27 EB LT: G=17 NB: G=36	EB T: G=27 EB LT: G=15 NB: G=38	Modify signal timing
3rd Ave. & E. 47th St.	WB: G=45 NB: G=35	WB: G=42 NB: G=38	-Modify signal timing as per air quality mitigation -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 48th St.	EB: G=45 NB: G=35	EB: G=41 NB: G=39	Modify signal timing
3rd Ave. & E. 49th St.	WB T: G=29 WB TR: G=17 NB: G=34	WB T: G=29 WB TR: G=14 NB: G=37	-Modify signal timing as per air quality mitigation -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 50th St.	EB: G=45 NB: G=35	EB: G=42 NB: G=38	-Modify signal timing as per air quality mitigation -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 51st St.	WB: G=45 NB: G=28	WB: G=42 NB: G=31	-Modify signal timing as per air quality mitigation -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 52nd St.	EB: G=45 NB: G=35	EB: G=42 NB: G=38	-Modify signal timing as per air quality mitigation -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 53rd St.	WB T: G=27 WBTR: G=17 NB: G=36	WB T: G=27 WB TR: G=14 NB: G=39	-Modify signal timing as per air quality mitigation -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 54th St.	EB T: G=27 EB LT: G=17 NB: G=36	EB T: G=27 EB LT: G=14 NB: G=39	-Modify signal timing as per air quality mitigation -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 55th St.	WB: G=38 NB: G=35 Ped: G=7	WB: G=35 NB: G=38 Ped: G=7	-Modify signal timing as per air quality mitigation -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 56th St.	EB: G=37 NB: G=43	EB: G=34 NB: G=46	-Modify signal timing as per air quality mitigation -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 57th St.	NB (West): 3 LT (10')	NB (West): 3 LT (10')	-Implement No Standing 7AM-7PM Mon-Fri for 200' along the west curb of NB approach (west side) as per air quality mitigation. This would result in the elimination of up to 8 commercial parking spaces. -Impacts cannot be fully mitigated in this time period
3rd Ave. & E. 59th St.	EB: G=40 NB T: G=17 NB TR: G=23	EB: G=38 NB T: G=17 NB TR: G=25	Modify signal timing
Lexington Ave. & E. 36th St.			Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 38th St.	EB T: G=23 EB TR: G=13 SB: G=44	EB T: G=23 EB TR: G=14 SB: G=43	Modify signal timing
Lexington Ave. & E. 39th St.			Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 40th St.			Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 42nd St.			Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 44th St.	SB: G=49 Ped: G=36	SB: G=51 Ped: G=34	Modify signal timing
Lexington Ave. & E. 45th St.			Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 46th St.	EB: G=31 SB: G=49	EB: G=30 SB: G=50	-Modify signal timing as per pedestrian mitigation -Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 47th St.	WB T: G=23 WB LT: G=14 SB: G=43	WB T: G=23 WB LT: G=11 SB: G=46	-Modify signal timing as per pedestrian mitigation -Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 48th St.			Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 50th St.	EB: G=35 SB: G=45	EB: G=32 SB: G=48	Modify signal timing
Lexington Ave. & E. 51st St.	WB T: G=23 WB LT: G=14 SB: G=43	WB T: G=23 WB LT: G=15 SB: G=42	Modify signal timing
Lexington Ave. & E. 52nd St.			Impacts cannot be fully mitigated in this time period

Table 19.8: PM Proposed Traffic Mitigation Measures (Continued)

Intersection	No-Action	Mitigated Condition	Proposed Mitigation
Lexington Ave. & E. 53rd St.	WB: G=35 SB: G=45	WB: G=36 SB: G=44	Modify signal timing
Lexington Ave. & E. 54th St.			Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 55th St.			Impacts cannot be fully mitigated in this time period
Lexington Ave. & E. 57th St.	EB/WB: G=37 SB: G=43	EB/WB: G=38 SB: G=42	Modify signal timing
Park Ave. & E. 36th St.	EB: G=35 NB/SB: G=45	EB: G=37 NB/SB: G=43	Modify signal timing
Park Ave. & E. 38th St.	NB: T (11'), TR (12) NB/SB: G=45 EB: G=35	NB: T (11'), T (11'), R (12) NB/SB: G=43 EB: G=37	-Implement No Standing 4PM-7PM on east curb of NB approach for 100' to create a right-turn lane. This would result in the elimination of up to 3 diplomat parking spaces and 1 commercial parking space. -Modify signal timing
Park Ave. & E. 39th St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 40th St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 46th St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 47th St.	SB: 3LT	SB: 3LT	-Enforcement of existing parking regulations (No Standing 4PM-7PM Mon-Fri) along the west curb of SB approach. -Impacts cannot be fully mitigated in this time period
Park Ave. & E. 48th St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 49th St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 50th St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 52nd St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 53rd St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 55th St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 56th St.			Impacts cannot be fully mitigated in this time period
Park Ave. & E. 57th St.			Impacts cannot be fully mitigated in this time period
Madison Ave. & E. 39th St.			Impacts cannot be fully mitigated in this time period
Madison Ave. & E. 40th St.			Impacts cannot be fully mitigated in this time period
Madison Ave. & E. 41st St.			Impacts cannot be fully mitigated in this time period
Madison Ave. & E. 42nd St.			Impacts cannot be fully mitigated in this time period
Madison Ave. & E. 43rd St.			Impacts cannot be fully mitigated in this time period
Madison Ave. & E. 46th St.			Impacts cannot be fully mitigated in this time period
Madison Ave. & E. 48th St.	EB T: G=23 EB LT: G=14 NB: G=43	EB T: G=23 EBLT: G=13 NB: G=44	Modify signal timing
Madison Ave. & E. 49th St.			Impacts cannot be fully mitigated in this time period
Madison Ave. & E. 53rd St.			Impacts cannot be fully mitigated in this time period
5th Ave. & 38th St.			Impacts cannot be fully mitigated in this time period
5th Ave. & 39th St.			Impacts cannot be fully mitigated in this time period
5th Ave. & 40th St.			Impacts cannot be fully mitigated in this time period
5th Ave. & 42nd St.	EB/WB: G=35 SB: G=45	EB/WB: G=37 SB: G=43	-Modify signal timing as per pedestrian mitigation -Impacts cannot be fully mitigated in this time period
5th Ave. & 43rd St.	SB: G=45 WB: G=35	SB: G=49 WB: G=31	Modify signal timing
5th Ave. & 44th St.			Impacts cannot be fully mitigated in this time period

Table 19.8: PM Proposed Traffic Mitigation Measures (Continued)

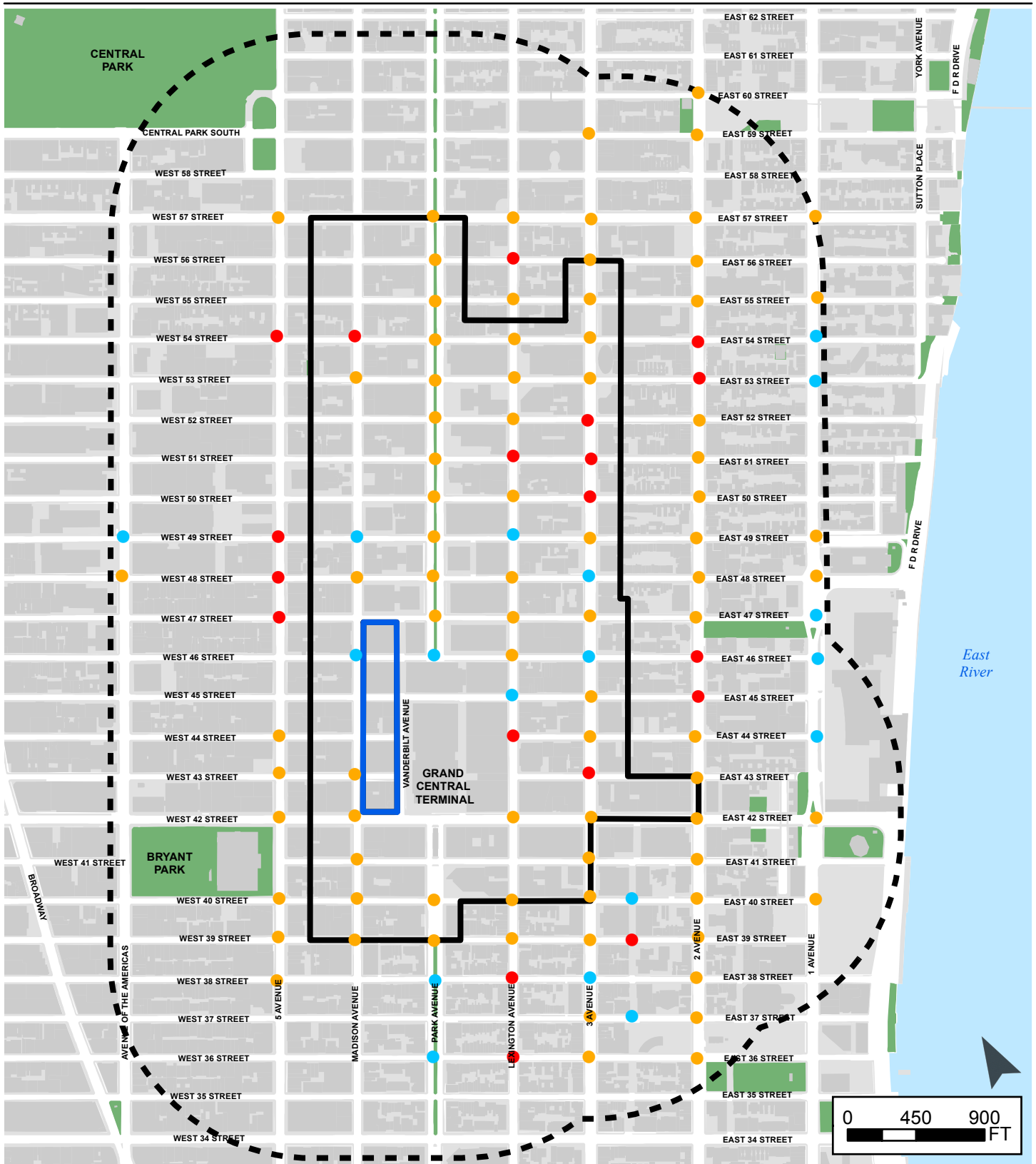
Intersection	No-Action	Mitigated Condition	Proposed Mitigation
5th Ave. & 47th St.			Impacts cannot be fully mitigated in this time period
5th Ave. & 48th St.			Impacts cannot be fully mitigated in this time period
5th Ave. & 49th St.			Impacts cannot be fully mitigated in this time period
5th Ave. & 54th St.			Impacts cannot be fully mitigated in this time period
5th Ave. & 57th St.			Impacts cannot be fully mitigated in this time period
Notes: EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound "G" indicates amount of green phase time, in seconds This Table has been updated for the FEIS			

Tables 19.9 through Table 19.11 provide a comparison of the v/c ratios, delays, and levels of service (LOS) at impacted intersections with implementation of these mitigation measures to No-Action and With-Action Conditions for the AM, Midday, and PM peak hours, respectively. According to the *CEQR Technical Manual*, an impact is considered fully mitigated when the resulting LOS degradation under the Action-with-Mitigation Condition compared to the No-Action Condition is no longer deemed significant following the impact criteria described in Chapter 12, "Transportation." Tables 19.8 through 19.10 show that some of the significant adverse impacts would be fully mitigated, but unmitigated significant adverse impacts would remain at 159 approach movements at 82 intersections during the AM peak hour, 126 approach movements at 59 intersections during the Midday peak hour, and 160 approach movements at 82 intersections during the PM peak hour. Proposed air quality and pedestrian mitigation measures (discussed later in this chapter) would potentially affect traffic conditions and have therefore been incorporated into the analyses. These measures would worsen some of the previously identified unmitigated impacts or create new impacts to other movements at previously impacted intersections, but would not result in the potential for any additional significant adverse traffic impacts at new intersections. Figures 19-1 through 19-3 show the location of intersections where significant adverse impacts are expected to occur during the weekday AM, Midday, and PM peak hours, respectively.

The traffic analysis uses an extremely conservative approach that assigns vehicle trips to the shortest route. This method does not contemplate diversions from areas of congestion to other routes or times of the day and thus conservatively portrays impacts at areas of concern. As such, the future conditions analyses represent a worst-case scenario and may not be entirely indicative of what will occur as development proceeds during the approximate 20-year period.

DCP and DOT will work together to identify other interventions to help mitigate congestion. As new development occurs, DCP will coordinate with DOT to identify areas where new development could exacerbate vehicular and pedestrian congestion. Due to the existing congestion in the area, it is anticipated that small increases in project-generated vehicle and pedestrian trips could create significant adverse impacts and/or unmitigatable impacts based on the criteria specified in the *CEQR Technical Manual*. DOT's currently active Midtown in Motion program, which includes intersections throughout much of the study area, is one of the tools that may be employed to help address traffic congestion as they are identified. This program enables DOT's Traffic Management Center to pinpoint and respond to traffic congestion in real-time by remotely adjusting traffic signal patterns to improve traffic operations.

The City continues to explore options for developing a comprehensive traffic management plan for Manhattan including Greater East Midtown that is consistent with the City's goals to provide a safe



- Proposed Greater East Midtown Rezoning Boundary
- Vanderbilt Corridor (Existing Regulations Apply)
- No Significant Impact
- Unmitigated Intersection
- Mitigated Intersection
- Quarter-Mile Study Area

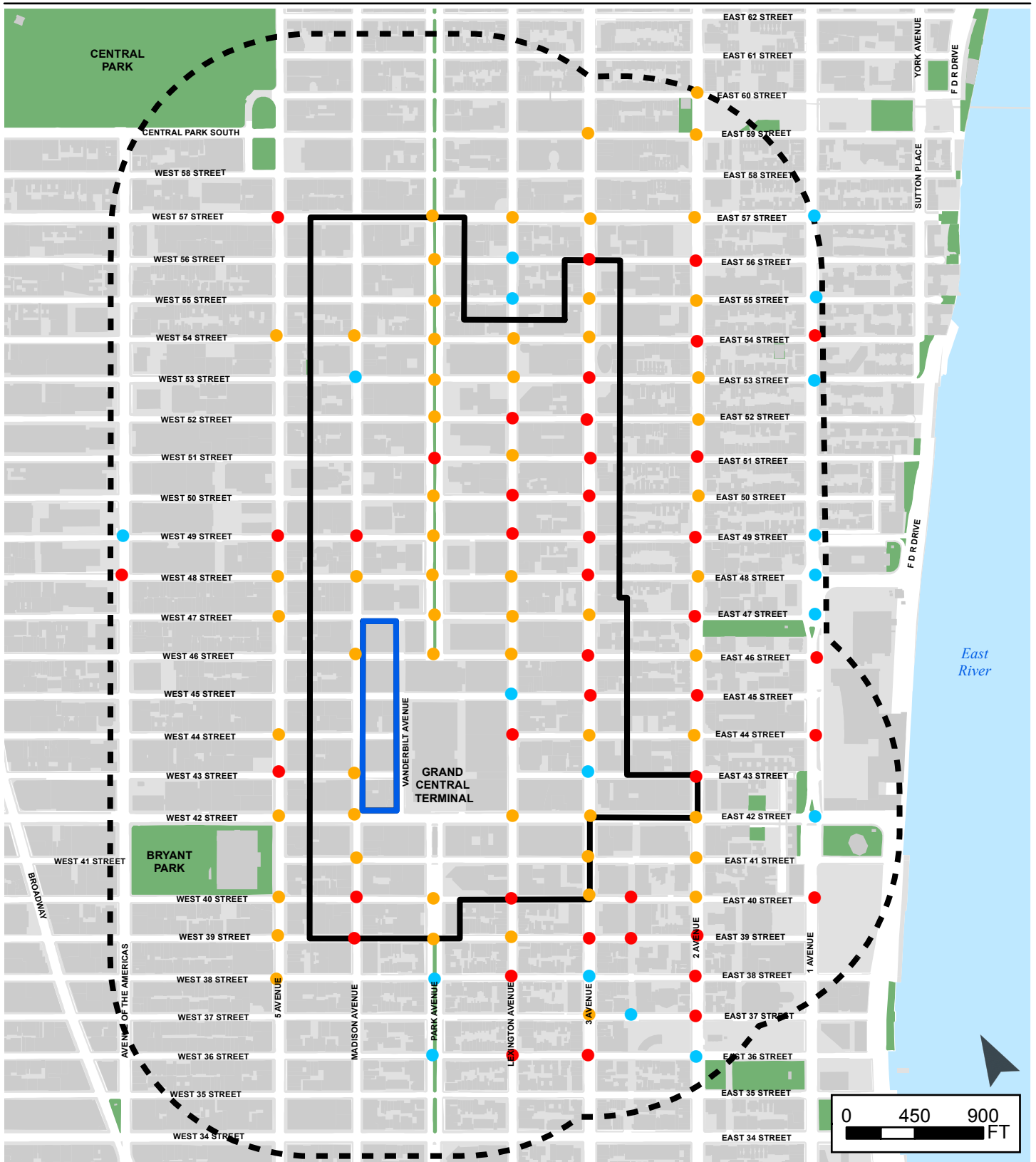
Greater East Midtown Rezoning
 Manhattan, New York

With-Action Intersection Mitigation
 Weekday AM Peak Hour

Figure
19-1

This Figure has been updated for the FEIS





- Proposed Greater East Midtown Rezoning Boundary
- Vanderbilt Corridor (Existing Regulations Apply)
- Quarter-Mile Study Area
- No Significant Impact
- Unmitigated Intersection
- Mitigated Intersection

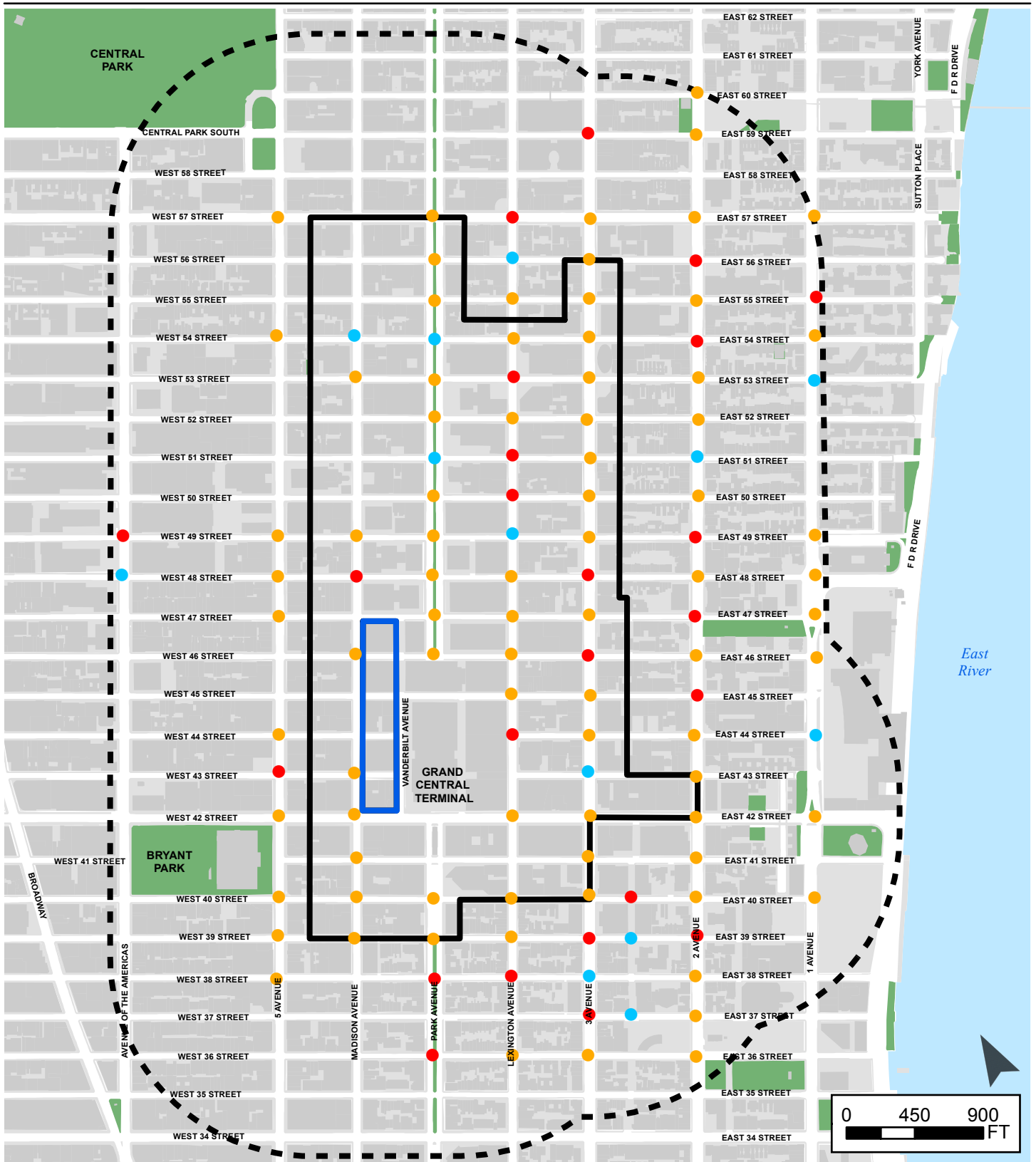
Greater East Midtown Rezoning
Manhattan, New York

With-Action Intersection Mitigation
Weekday Midday Peak Hour

Figure
19-2

This Figure has been updated for the FEIS





- Proposed Greater East Midtown Rezoning Boundary
- Vanderbilt Corridor (Existing Regulations Apply)
- Quarter-Mile Study Area
- No Significant Impact
- Unmitigated Impact
- Mitigated Impact

Greater East Midtown Rezoning
 Manhattan, New York

With-Action Intersection Mitigation
 Weekday PM Peak Hour

Figure
19-3

This Figure has been updated for the FEIS



environment for all street users and to reduce auto use in highly dense areas where public transportation is readily available. To account for a changing environment, this plan will consider factors such as an enhanced transit network (taking into account projects such as the previously mentioned East Side Access project and the Second Avenue Subway (Phase I)), and use of travel demand management techniques (i.e., telecommuting, transit incentives, staggered hours, compressed work week, carpooling incentives, etc.), which may reduce the use of personal vehicles and improve traffic and pedestrian operations and safety over the decades to come. The traffic management plan could include, but is not limited to: (1) deployment of innovative Intelligent Transportation Systems (ITS) technology, which would improve the City's ability to manage traffic congestion, respond to traffic incidents, and deliver information to drivers in real-time; (2) potential implementation of an off-hours delivery program, which could further decrease the amount of truck deliveries during peak periods and help reduce traffic congestion by shifting deliveries to overnight hours; and (3) increasing the number of traffic enforcement agents (TEAs) in coordination with NYPD, to better manage traffic operations at strategic locations and avoid spillback at intersections.

In order to verify the need and effectiveness of the proposed mitigation measures identified in the EIS and to determine the extent to which future volume projections presented in the EIS may occur, the City has committed to conduct a traffic monitoring program (TMP). The TMP will address traffic resulting from project-generated development in the project area over time, and consider changes that may occur in travel patterns. The City will implement a multi-tiered monitoring program once either a net increase of 1.5 million square feet of commercial development or four new buildings associated with the rezoning are built and occupied, whichever occurs first. The initial phase of the TMP will consist of travel demand surveys conducted at new commercial buildings to provide the most up-to-date representation of site-generated trips and travel behavior in Greater East Midtown. DCP, in consultation with DOT, will prepare a detailed scope of work and sample questionnaire prior to conducting the surveys. Based on a review of the survey findings, DCP and DOT will then determine the extent to which additional monitoring and/or analysis is needed.

Commencement of subsequent phases of the TMP will be determined based upon the results of the initial monitoring. Subsequent phases could include more extensive field data collection (e.g., Automatic Traffic Recorder (ATR) machine counts, manual counts, sample vehicle classification counts, pedestrian counts, physical inventories, field observations of intersection operations) that would be needed to perform detailed traffic and pedestrian analyses at critical intersections near completed development sites where significant traffic and pedestrian impacts have been identified in the EIS for which mitigations were identified or were determined to be unmitigable. The findings of the TMP (i.e., actual volumes, and capacity and level of service analyses) will be used by DOT as the basis for determining whether actual future Build conditions have, in fact, resulted in significant traffic and/or pedestrian impacts and verifying the need for the mitigation measures identified in the EIS and/or developing recommendations to improve traffic and/or pedestrian conditions.

Table 19.9: AM Level of Service Analysis with and without Proposed Mitigation

Intersection & Approach (Signalized Intersections)	No-Action				With-Action				Mitigation			
	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS
1st Avenue & East 40th Street												
Eastbound	L	1.13	100.3	F	L	1.15	105.1	F +	L	1.15	105.0	F +
Northbound	T	1.23	134.5	F	T	1.25	140.3	F +	T	1.25	140.3	F +
1st Avenue & East 42nd Street												
Eastbound (East Side)	T	1.32	174.0	F	T	1.32	172.3	F	T	1.32	172.3	F
Westbound (East Side)	TR	1.15	116.7	F	TR	1.23	146.7	F +	TR	1.23	146.7	F +
	R	1.12	134.7	F	R	1.19	157.3	F +	R	1.19	157.3	F +
Northbound (East Side)	LT	0.67	92.7	F	LT	0.69	99.2	F +	LT	0.69	99.2	F +
	R	1.66	327.1	F	R	1.66	326.8	F	R	1.66	326.8	F
Eastbound (West Side)	L	0.95	113.1	F	L	0.98	113.6	F	L	0.98	113.7	F
	T	0.80	74.6	E	T	0.80	74.6	E	T	0.80	74.6	E
Westbound (West Side)	TR	0.99	21.2	C	TR	1.04	37.2	D	TR	1.04	37.2	D
	L	0.77	26.6	C	L	0.78	26.7	C	L	0.78	26.7	C
Northbound (West Side)	T	0.73	81.9	F	T	0.76	82.0	F	T	0.76	82.0	F
1st Avenue & East 49th Street												
Westbound (East Side)	T	0.94	50.0	D	T	1.06	81.3	F +	T	1.06	81.3	F +
	R	0.19	16.9	B	R	0.20	17.0	B	R	0.20	17.0	B
Northbound (East Side)	T	1.00	80.4	F	T	1.02	80.4	F	T	1.02	80.4	F
Westbound (West Side)	T	0.94	16.5	B	T	1.06	37.9	D	T	1.06	37.9	D
Northbound (West Side)	LT	1.02	49.9	D	LT	1.05	58.5	E +	LT	1.05	58.5	E +
1st Avenue & East 55th Street												
Westbound	TR	0.82	42.0	D	TR	0.84	43.4	D	TR	0.84	43.4	D
Northbound	L	1.06	69.8	E	L	1.21	123.6	F +	L	1.21	123.6	F +
	T	1.04	61.4	E	T	1.05	60.8	E	T	1.05	60.8	E
1st Avenue & East 57th Street												
Eastbound	LT	1.20dl	58.0	E	LT	1.20dl	58.2	E	LT	1.20dl	58.3	E
Westbound	TR	0.39	30.2	C	TR	0.39	30.2	C	TR	0.39	30.2	C
	L	0.38	21.3	C	L	0.38	21.4	C	L	0.38	21.4	C
Northbound	T	1.37	190.7	F	T	1.38	197.3	F +	T	1.38	197.3	F +
	R	0.23	9.1	A	R	0.23	9.1	A	R	0.23	9.1	A
2nd Avenue & East 36th Street												
Eastbound	TR	1.31	168.3	F	TR	1.32	176.6	F +	TR	1.32	176.6	F +
Southbound	L	1.65	316.8	F	L	1.72	345.6	F +	L	1.72	345.6	F +
	T	1.17	97.5	F	T	1.20	110.0	F +	T	1.20	110.0	F +
South-Westbound	L	1.14	113.9	F	L	1.14	115.7	F	L	1.14	115.7	F
2nd Avenue & East 37th Street												
Westbound	LT	0.97dl	44.1	D	LT	1.01dl	45.6	D	LT	1.01dl	45.6	D
Southbound	T	1.24	119.4	F	T	1.27	135.4	F +	T	1.27	135.4	F +
	R	0.10	3.3	A	R	0.10	3.3	A	R	0.10	3.3	A
2nd Avenue & East 38th Street												
Eastbound	TR	1.13	112.7	F	TR	1.18	127.4	F +	TR	1.18	127.4	F +
Southbound	LT	1.28	139.7	F	LT	1.31	156.0	F +	LT	1.31	156.0	F +
2nd Avenue & East 39th Street												
Westbound	L	0.25	23.7	C	L	0.26	23.8	C	L	0.26	23.8	C
	T	0.84	42.8	D	T	1.01	94.0	F +	T	1.01	80.5	F +
Southbound	T	1.23	122.3	F	T	1.26	138.5	F +	T	1.26	138.4	F +
	R	1.01	37.5	D	R	1.16	94.6	F +	R	1.16	94.5	F +
2nd Avenue & East 40th Street												
Eastbound	T	0.81	44.1	D	T	0.86	45.2	D	T	0.86	44.9	D
	R	0.55	36.8	D	R	0.60	36.6	D	R	0.60	36.4	D
Southbound	LT	1.11	68.8	E	LT	1.15	88.8	F +	LT	1.15	90.0	F +
2nd Avenue & East 41st Street												
Eastbound	TR	0.56	45.3	D	TR	0.58	46.1	D	T	0.16	34.4	C
									R	0.45	43.8	D
Southbound	LT	1.25	127.4	F	LT	1.29	148.4	F +	LT	1.24	122.9	F
	R	0.64	13.9	B	R	0.76	17.7	B	R	0.72	14.3	B
2nd Avenue & East 42nd Street												
Eastbound	TR	1.36	192.0	F	TR	1.38	199.4	F +	TR	1.38	199.5	F +
Westbound	LT	1.63dl	112.1	F	LT	2.02dl	164.4	F +	LT	2.02dl	164.4	F +
Southbound	LT	1.16	100.0	F	LT	1.20	116.5	F +	LT	1.20	116.3	F +
	R	0.72	26.4	C	R	0.77	27.6	C	R	0.77	27.6	C

Table 19.9: AM Level of Service Analysis with and without Proposed Mitigation (Continued)

Intersection & Approach (Signalized Intersections)	No-Action				With-Action				Mitigation			
	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS
2nd Avenue & East 43rd Street												
Westbound	LT	0.34	24.9	C	LT	0.34	25.5	C	LT	0.34	25.5	C
Southbound	T	1.12	74.1	E	T	1.16	89.6	F +	T	1.16	89.6	F +
	R	1.01	39.1	D	R	1.18	104.7	F +	R	1.18	104.7	F +
2nd Avenue & East 44th Street												
Eastbound	TR	0.95	58.1	E	TR	1.03	55.7	E	TR	1.03	56.9	E
Southbound	LT	1.17	93.0	F	LT	1.21	113.2	F +	LT	1.21	114.2	F +
2nd Avenue & East 45th Street												
Westbound	LT	0.98	87.5	F	LT	1.01	93.9	F +	LT	0.53	41.1	D
Southbound	T	1.16	87.8	F	T	1.20	108.1	F +	T	1.16	86.1	F
	R	1.13	84.4	F	R	1.25	133.9	F +	R	0.78	16.1	B
2nd Avenue & East 46th Street												
Eastbound	TR	0.63	35.9	D	TR	0.67	38.0	D	TR	0.90dr	41.3	D
Southbound	LT	1.16	86.0	F	LT	1.20	106.6	F +	LT	1.15	83.0	F
2nd Avenue & East 47th Street												
Westbound	LT	0.77	62.3	E	LT	0.80	62.9	E	LT	0.80	63.0	E
Southbound	T	1.19	99.8	F	T	1.24	121.6	F +	T	1.24	121.5	F +
	R	0.95	21.7	C	R	1.10	67.3	E +	R	1.10	67.3	E +
2nd Avenue & East 48th Street												
Eastbound	TR	1.07	84.0	F	TR	1.18	121.5	F +	TR	1.18	121.3	F +
Southbound	L	0.48	10.9	B	L	0.57	11.6	B	L	0.57	11.6	B
	T	1.48	234.8	F	T	1.55	266.7	F +	T	1.55	266.7	F +
2nd Avenue & East 49th Street												
Westbound	L	0.79	48.6	D	L	0.90	92.0	F +	L	0.90	92.0	F +
	T	0.38	23.0	C	T	0.40	23.6	C	T	0.40	23.6	C
Southbound	T	1.28	145.4	F	T	1.34	172.3	F +	T	1.34	172.3	F +
	R	0.97	31.4	C	R	1.02	44.1	D	R	1.02	44.2	D
2nd Avenue & East 50th Street												
Eastbound	TR	1.18	134.6	F	TR	1.22	150.9	F +	TR	1.22	151.2	F +
Southbound	L	0.09	8.0	A	L	0.09	7.9	A	L	0.09	8.0	A
	T	1.55	269.0	F	T	1.62	299.1	F +	T	1.62	299.1	F +
2nd Avenue & East 51st Street												
Westbound	LT	1.39	231.3	F	LT	1.40	233.2	F	LT	1.40	233.2	F
Southbound	T	1.55	266.7	F	T	1.62	297.9	F +	T	1.62	297.9	F +
	R	0.90	22.8	C	R	0.97	32.3	C	R	0.97	32.3	C
2nd Avenue & East 52nd Street												
Eastbound	TR	0.80	39.4	D	TR	0.84	40.1	D	TR	0.84	38.7	D
Southbound	L	0.15	7.1	A	L	0.15	7.2	A	L	0.15	8.2	A
	T	1.49	239.1	F	T	1.55	269.8	F +	T	1.55	270.5	F +
2nd Avenue & East 53rd Street												
Westbound	LT	0.99	60.4	E	LT	1.08	83.8	F +	L	1.03	111.0	F
Southbound	T	1.48	234.6	F	T	1.53	261.5	F +	T	1.47	231.8	F
	R	0.64	18.6	B	R	0.69	20.0	C	R	0.66	18.0	B
2nd Avenue & East 54th Street												
Eastbound	TR	0.62	27.7	C	TR	0.63	27.9	C	TR	0.67	28.2	C
Southbound	L	0.02	8.3	A	L	0.02	8.2	A	L	0.02	6.5	A
	T	1.58	281.0	F	T	1.65	311.8	F +	T	1.58	279.6	F
2nd Avenue & East 55th Street												
Westbound	L	0.32	17.5	B	L	0.32	18.0	B	L	0.32	18.0	B
	T	0.86	31.8	C	T	0.95	38.3	D	T	0.95	38.3	D
Southbound	T	1.60	292.0	F	T	1.68	324.6	F +	T	1.68	324.4	F +
	R	0.30	11.4	B	R	0.46	12.1	B	R	0.46	12.1	B
2nd Avenue & East 56th Street												
Eastbound	T	0.76	31.1	C	T	0.76	31.6	C	T	0.76	30.6	C
	R	0.82	38.0	D	R	0.90	47.3	D +	R	0.90	45.1	D +
Southbound	L	0.11	2.2	A	L	0.11	2.2	A	L	0.11	2.2	A
	T	1.49	239.1	F	T	1.57	275.8	F +	T	1.57	275.8	F +

Table 19.9: AM Level of Service Analysis with and without Proposed Mitigation (Continued)

Intersection & Approach (Signalized Intersections)	No-Action				With-Action				Mitigation			
	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS
2nd Avenue & East 57th Street												
Eastbound	T	0.57	54.2	D	T	0.57	54.2	D	T	0.57	54.3	D
	R	1.34	226.5	F	R	1.44	264.2	F +	R	1.44	264.2	F +
Westbound	L	1.19	140.6	F	L	1.22	151.8	F +	L	1.22	151.8	F +
	LT	1.13	103.6	F	LT	1.16	112.5	F +	LT	1.16	112.5	F +
Southbound	L	0.52	39.3	D	L	0.52	39.9	D	L	0.52	39.9	D
	T	1.19	117.6	F	T	1.25	146.3	F +	T	1.25	146.3	F +
	R	1.10	110.6	F	R	1.10	111.6	F	R	1.10	111.6	F
2nd Avenue & East 59th Street												
Eastbound	L	1.12	80.4	F	L	1.14	89.6	F +	L	1.14	89.6	F +
	TR	0.40	271.5	F	TR	0.40	271.7	F	TR	0.40	271.7	F
Southbound	L	1.08	66.3	E	L	1.08	66.4	E	L	1.08	66.4	E
	LT	1.30	154.7	F	LT	1.35	179.1	F +	LT	1.35	179.1	F +
2nd Avenue & East 60th Street												
Westbound	LT	0.02	14.2	B	LT	0.02	14.2	B	LT	0.02	14.2	B
	L	0.05	14.6	B	L	0.05	14.6	B	L	0.05	14.6	B
Southbound	T	1.04	83.1	F	T	1.07	81.8	F	T	1.07	81.8	F
	R	0.14	16.0	B	R	0.14	16.0	B	R	0.14	16.0	B
Westbound (Bridge Exit)	L	1.37	200.0	F	L	1.42	222.7	F +	L	1.42	222.7	F +
	T	1.26	156.7	F	T	1.27	159.1	F	T	1.27	159.1	F
Tunnel Exit Street & East 39th Street												
Westbound	TR	0.78	69.6	E	TR	0.91	74.6	E +	TR	0.83	72.9	E
	LT	0.34	10.2	B	LT	0.37	11.0	B	LT	0.39	14.8	B
3rd Avenue & East 36th Street												
Eastbound	LT	1.09	86.6	F	LT	1.19	124.0	F +	LT	1.19	123.3	F +
	TR	0.83	33.0	C	TR	0.88	51.8	D +	TR	0.88	51.8	D +
Northbound	R	1.06	117.6	F	R	1.12	136.7	F +	R	1.12	136.7	F +
3rd Avenue & East 37th Street												
Westbound	TR	0.65	17.1	B	TR	0.70	18.4	B	TR	0.70	18.4	B
	R	0.90	85.6	F	R	1.10	133.1	F +	R	1.10	133.1	F +
Northbound	LT	0.97	65.2	E	LT	1.05	65.8	E	LT	1.05	65.8	E
3rd Avenue & East 39th Street												
Westbound	T	1.62	306.1	F	T	1.76	368.4	F +	T	1.65	321.3	F +
	R	1.17	132.1	F	R	1.31	182.1	F +	R	1.22	148.1	F +
Northbound	LT	1.23	124.4	F	LT	1.35	178.7	F +	L	1.12	87.2	F
									T	1.24	129.2	F
3rd Avenue & East 40th Street												
Eastbound	LT	0.92	89.1	F	LT	1.03	87.0	F	LT	1.03	87.0	F
	T	1.16	89.9	F	T	1.26	139.6	F +	T	1.26	138.1	F +
Northbound	R	0.71	101.5	F	R	0.76	102.0	F	R	0.76	100.4	F
3rd Avenue & East 41st Street												
Eastbound	LT	0.70	61.5	E	LT	0.77	68.9	E +	LT	0.87	79.7	E ††
	R	1.05	108.7	F	R	1.07	116.7	F +	R	1.22	159.1	F ††
Westbound	T	1.10	64.6	E	T	1.20	111.9	F +	T	1.12	71.0	E +
	R	0.31	12.7	B	R	0.33	12.8	B	R	0.30	9.2	A
3rd Avenue & East 42nd Street												
Eastbound	L	1.04	72.7	E	L	1.15	109.4	F +	L	1.15	109.3	F +
	T	1.11	77.3	E	T	1.12	79.4	E	T	1.12	79.3	E
Westbound	T	0.91	42.2	D	T	0.91	42.4	D	T	0.91	42.4	D
	R	1.19	131.0	F	R	1.30	174.9	F +	R	1.30	174.9	F +
Northbound	LT	1.18	107.0	F	LT	1.28	155.2	F +	L	1.34	181.5	F
									T	1.01	71.9	E
	R	0.46	22.8	C	R	0.52	23.6	C	R	0.52	24.3	C
3rd Avenue & East 43rd Street												
Westbound	TR	0.51	20.4	C	TR	0.60	19.3	B	TR	0.63	20.9	C
	R	0.56	22.2	C	R	0.66	21.0	C	R	0.71	23.2	C
Northbound	LT	1.03	59.1	E	LT	1.14	79.0	E +	LT	1.08	58.1	E
3rd Avenue & East 44th Street												
Eastbound	LT	0.31	27.1	C	LT	0.35	27.6	C	LT	0.38	29.5	C
	T	0.99	65.3	E	T	1.07	64.5	E	T	1.00	58.6	E
Northbound	R	1.04	65.5	E	R	2.88	865.5	F +	R	2.36	630.1	F +

Table 19.9: AM Level of Service Analysis with and without Proposed Mitigation (Continued)

Intersection & Approach (Signalized Intersections)	No-Action				With-Action				Mitigation			
	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS
3rd Avenue & East 45th Street												
Westbound	T	1.09	85.7	F	T	1.13	98.3	F +	T	1.22	148.8	F ††
	R	0.76	58.6	E	R	0.85	61.4	E	R	1.08	148.0	F †
Northbound	LT	1.09	68.6	E	LT	1.17	97.9	F +	LT	1.08	67.1	E
3rd Avenue & East 46th Street												
Eastbound	L	0.55	38.4	D	L	0.64	40.2	D	L	0.68	43.0	D
	T	0.36	12.0	B	T	0.38	11.7	B	T	0.38	12.6	B
Northbound	T	1.01	65.0	E	T	1.09	68.6	E	T	1.06	67.7	E
	R	0.55	19.3	B	R	0.68	21.7	C	R	0.65	21.3	C
3rd Avenue & East 47th Street												
Westbound	T	1.22	135.0	F	T	1.34	180.9	F +	T	1.44	227.6	F ††
	R	0.57	19.1	B	R	0.58	18.3	B	R	0.64	22.6	C
Northbound	LT	1.13	82.5	F	LT	1.24	131.8	F +	LT	1.14	84.5	F
3rd Avenue & East 48th Street												
Eastbound	L	0.25	19.2	B	L	0.29	19.7	B	L	0.32	21.8	C
	T	0.53	23.9	C	T	0.57	24.5	C	T	0.62	26.9	C
Northbound	T	0.99	63.7	E	T	1.06	66.7	E	T	0.98	52.8	D
	R	0.68	21.5	C	R	0.84	26.7	C	R	0.75	20.8	C
3rd Avenue & East 49th Street												
Westbound	T	1.03	69.4	E	T	1.08	86.1	F +	T	1.16	117.8	F ††
	R	0.56	42.4	D	R	0.56	42.5	D	R	0.68	52.9	D †
Northbound	LT	1.05	71.9	E	LT	1.13	83.4	F +	LT	1.04	69.8	E
3rd Avenue & East 50th Street												
Eastbound	L	0.26	12.6	B	L	0.29	12.9	B	L	0.31	14.0	B
	T	0.48	13.6	B	T	0.50	13.9	B	T	0.52	15.1	B
Northbound	T	1.11	73.9	E	T	1.18	106.9	F +	T	1.11	74.5	E
	R	1.07	70.6	E	R	1.10	81.9	F +	R	1.00	48.8	D
3rd Avenue & East 51st Street												
Westbound	T	0.77	24.4	C	T	0.78	24.2	C	T	0.82	26.6	C
	R	0.38	17.3	B	R	0.39	17.0	B	R	0.41	18.5	B
Northbound	LT	1.16	92.5	F	LT	1.23	128.1	F +	LT	1.16	92.5	F
3rd Avenue & East 52nd Street												
Eastbound	LT	0.75	24.9	C	LT	0.78	25.8	C	LT	0.87	42.7	D
Northbound	T	1.10	68.8	E	T	1.18	103.2	F +	T	1.04	57.3	E
	R	1.05	61.4	E	R	1.17	105.4	F +	R	0.94	26.2	C
3rd Avenue & East 53rd Street												
Westbound	T	1.07	79.5	E	T	1.16	111.8	F +	T	1.25	159.4	F ††
	R	0.97	100.2	F	R	1.03	119.6	F +	R	1.31	215.5	F ††
Northbound	LT	1.07	68.9	E	LT	1.15	91.9	F +	LT	1.06	70.8	E
3rd Avenue & East 54th Street												
Eastbound	L	0.87	55.8	E	L	1.00	71.2	E +	L	1.22	146.3	F ††
	T	0.56	19.9	B	T	0.58	19.7	B	T	0.63	22.6	C
Northbound	T	1.04	76.9	E	T	1.11	82.8	F +	T	1.02	72.0	E
	R	0.72	33.3	C	R	0.79	35.2	D	R	0.71	28.8	C
3rd Avenue & East 55th Street												
Westbound	T	1.03	70.2	E	T	1.10	87.2	F +	T	1.20	127.8	F ††
	R	0.95	68.1	E	R	1.01	79.3	E +	R	1.13	118.7	F ††
Northbound	LT	1.14	84.2	F	LT	1.26	141.5	F +	LT	1.15	88.9	F +
3rd Avenue & East 56th Street												
Eastbound (West Side)	LT	0.86	51.5	D	LT	0.87	51.7	D	LT	0.95	79.2	E †
Northbound (West Side)	T	1.14	83.3	F	T	1.22	121.4	F +	T	1.14	80.9	F
Eastbound (East Side)	LT	0.96	39.7	D	LT	0.98	43.4	D	LT	1.08	70.7	E †
Northbound (East Side)	TR	0.54	14.2	B	TR	0.56	14.3	B	TR	0.52	12.2	B
3rd Avenue & East 57th Street												
Eastbound (West Side)	LT	1.08	111.7	F	LT	1.11	114.2	F	LT	1.11	114.2	F
Westbound (West Side)	TR	0.97	27.5	C	TR	0.97	27.6	C	TR	0.97	27.6	C
Northbound (West Side)	LT	1.01	38.5	D	LT	1.07	64.3	E +	LT	1.03	54.9	D +
Eastbound (East Side)	T	0.65	12.3	B	T	0.67	12.5	B	T	0.67	12.5	B
Westbound (East Side)	T	0.93	64.2	E	T	0.93	64.0	E	T	0.93	64.0	E
	R	0.76	20.4	C	R	0.77	20.4	C	R	0.77	20.4	C
Northbound (East Side)	TR	0.83	42.6	D	TR	0.83	42.1	D	TR	0.83	44.2	D
	R	0.33	26.4	C	R	0.33	26.4	C	R	0.33	27.7	C

Table 19.9: AM Level of Service Analysis with and without Proposed Mitigation (Continued)

Intersection & Approach (Signalized Intersections)	No-Action				With-Action				Mitigation			
	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS
3rd Avenue & East 59th Street												
Eastbound	LT	0.97	52.2	D	LT	0.98	53.5	D	LT	0.98	53.5	D
Northbound	T	0.72	9.3	A	T	0.75	9.6	A	T	0.75	9.6	A
	R	1.15	108.8	F	R	1.18	121.0	F +	R	1.18	121.0	F +
Lexington Avenue & East 36th Street												
Eastbound	TR	0.64	54.8	D	TR	0.68	55.9	E	TR	0.70	57.6	E
Southbound	LT	1.10	60.8	E	LT	1.12	72.7	E +	LT	1.10	60.0	E
Lexington Avenue & East 38th Street												
Eastbound	T	0.44	38.2	D	T	0.48	39.2	D	T	0.47	38.1	D
	R	0.97	111.5	F	R	1.01	120.0	F +	R	0.94	100.4	F
Southbound	L	0.13	1.2	A	L	0.15	1.2	A	L	0.14	2.1	A
	T	1.11	57.6	E	T	1.13	68.2	E +	T	1.11	59.0	E
Lexington Avenue & East 39th Street												
Westbound	L	1.14	107.1	F	L	1.20	130.8	F +	L	1.20	130.5	F +
	T	1.78	372.5	F	T	1.98	458.6	F +	T	1.98	458.5	F +
Southbound	T	1.10	66.6	E	T	1.13	77.1	E +	T	1.13	77.1	E +
	R	0.88	29.7	C	R	0.97	40.9	D	R	0.97	40.9	D
Lexington Avenue & East 40th Street												
Eastbound	T	0.96	32.7	C	T	1.09	72.4	E +	T	1.09	72.4	E +
	R	1.09	87.2	F	R	1.10	89.5	F	R	1.10	89.5	F
Southbound	LT	1.20	108.8	F	LT	1.23	126.2	F +	LT	1.23	126.2	F +
Lexington Avenue & East 42nd Street												
Eastbound	T	0.92	27.3	C	T	0.96	38.3	D	T	0.96	38.3	D
	R	0.31	12.7	B	R	0.31	12.2	B	R	0.31	12.2	B
Westbound	LT	1.09	70.2	E	LT	1.10	71.5	E	LT	1.10	71.7	E
	L	0.68	20.4	C	L	0.70	21.0	C	L	0.70	20.9	C
Southbound	T	1.12	76.9	E	T	1.15	91.3	F +	T	1.15	91.1	F +
	R	1.19	114.8	F	R	1.29	158.9	F +	R	1.29	158.8	F +
Lexington Avenue & East 44th Street												
Southbound	LT	1.16	90.4	F	LT	1.22	118.0	F +	LT	1.15	82.2	F
Lexington Avenue & East 46th Street												
Eastbound	T	0.67	57.5	E	T	0.73	58.7	E	T	0.73	58.7	E
	R	0.68	61.6	E	R	0.69	60.5	E	R	0.69	60.5	E
Southbound	LT	1.09	60.0	E	LT	1.15	82.4	F +	LT	1.15	82.4	F +
Lexington Avenue & East 47th Street												
Westbound	L	0.80	37.3	D	L	0.85	39.7	D	L	0.92	45.3	D †
	T	0.77	16.8	B	T	0.86	19.4	B	T	0.89	20.8	C
Southbound	T	1.04	64.0	E	T	1.08	66.4	E	T	1.06	65.7	E
	R	1.01	47.6	D	R	1.38	196.2	F +	R	1.30	163.4	F +
Lexington Avenue & East 48th Street												
Eastbound	T	0.68	35.3	D	T	0.79	38.5	D	T	0.86	46.4	D †
	R	0.98	99.7	F	R	1.06	113.7	F +	R	1.34	219.5	F ††
Southbound	LT	1.13	82.1	F	LT	1.21	112.3	F +	LT	1.12	72.6	E
Lexington Avenue & East 50th Street												
Eastbound	TR	1.01	56.8	E	TR	1.06	69.1	E +	TR	1.06	69.1	E +
Southbound	LT	1.24	126.8	F	LT	1.33	169.6	F +	LT	1.33	170.1	F ##
Lexington Avenue & East 51st Street												
Westbound	L	0.65	45.1	D	L	0.66	44.7	D	L	0.71	48.2	D
	T	0.52	21.7	C	T	0.53	21.6	C	T	0.54	22.4	C
Southbound	T	1.04	60.7	E	T	1.11	67.6	E +	T	1.08	62.1	E
	R	0.61	13.3	B	R	0.65	14.6	B	R	0.62	12.5	B
Lexington Avenue & East 52nd Street												
Eastbound	T	0.57	20.2	C	T	0.59	20.1	C	T	0.59	20.1	C
	R	0.80	52.3	D	R	0.80	50.2	D	R	0.80	50.2	D
Southbound	LT	1.17	97.7	F	LT	1.26	135.2	F +	LT	1.26	135.0	F +
Lexington Avenue & East 53rd Street												
Westbound	L	0.52	16.1	B	L	0.56	16.0	B	L	0.56	15.2	B
	T	1.11	77.3	E	T	1.21	120.2	F +	T	1.21	119.5	F +
Southbound	T	1.23	124.7	F	T	1.31	162.6	F +	T	1.31	162.7	F +
	R	0.89	96.4	F	R	0.96	85.9	F	R	0.96	85.9	F
Lexington Avenue & East 54th Street												
Eastbound	T	0.95	36.7	D	T	1.04	55.6	E +	T	1.04	55.9	E ##
	R	0.47	12.5	B	R	0.49	12.2	B	R	0.49	12.3	B
Southbound	LT	1.07	60.9	E	LT	1.13	78.0	E +	LT	1.13	77.9	E +

Table 19.9: AM Level of Service Analysis with and without Proposed Mitigation (Continued)

Intersection & Approach (Signalized Intersections)	No-Action				With-Action				Mitigation			
	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS
Lexington Avenue & East 55th Street												
Westbound	L	0.77	34.8	C	L	0.81	37.1	D	L	0.81	35.9	D
	T	0.64	15.6	B	T	0.64	16.7	B	T	0.64	15.3	B
Southbound	T	1.15	87.7	F	T	1.23	123.8	F +	T	1.23	125.5	F ##
	R	0.34	12.2	B	R	0.35	12.3	B	R	0.35	14.4	B
Lexington Avenue & East 56th Street												
Eastbound	T	0.55	16.2	B	T	0.56	16.0	B	T	0.60	19.1	B
	R	0.77	55.4	E	R	0.77	55.0	E	R	0.77	55.0	E
Southbound	LT	1.17	103.5	F	LT	1.24	137.2	F +	LT	1.15	93.8	F
Lexington Avenue & East 57th Street												
Eastbound	T	0.90	26.9	C	T	0.93	28.7	C	T	0.93	28.7	C
	R	0.79	81.4	F	R	0.84	90.5	F +	R	0.84	77.2	E
Westbound	LT	0.96	53.7	D	LT	0.97	53.3	D	LT	0.97	53.8	D
Southbound	LT	1.12	91.8	F	LT	1.20	123.8	F +	LT	1.20	123.8	F +
	R	0.23	16.5	B	R	0.23	16.6	B	R	0.23	16.6	B
Park Avenue & East 39th Street												
Westbound (East Side)	TR	1.54	262.3	F	TR	1.70	337.7	F +	TR	1.70	337.7	F +
Northbound (East Side)	LT	0.63	74.5	E	LT	0.65	74.2	E	LT	0.65	74.3	E
Westbound (West Side)	LT	1.39	200.1	F	LT	1.53	265.5	F +	LT	1.53	265.5	F +
Southbound (West Side)	T	0.70	68.9	E	T	0.71	68.9	E	T	0.71	68.9	E
	R	1.12	90.9	F	R	1.17	109.2	F +	R	1.17	109.2	F +
Park Avenue & East 40th Street												
Eastbound (West Side)	TR	1.12	115.8	F	TR	1.28	173.7	F +	TR	1.28	173.7	F +
Southbound (West Side)	T	1.15	102.6	F	T	1.17	109.5	F +	T	1.17	109.5	F +
Eastbound (Tunnel Exit)	LT	1.15	100.6	F	LT	1.45	229.4	F +	LT	1.45	229.4	F +
Northbound (Tunnel Exit)	T	0.81	15.3	B	T	0.83	16.2	B	T	0.83	16.2	B
Eastbound (East Side)	LT	1.29	153.7	F	LT	1.45	226.9	F +	LT	1.45	226.9	F +
Northbound (East Side)	TR	0.99	52.8	D	TR	1.08	77.0	E +	TR	1.08	77.0	E +
Park Avenue & East 47th Street												
Westbound (East Side)	T	0.88	32.3	C	T	1.00	38.7	D	T	1.00	38.3	D
	R	0.43	16.9	B	R	0.51	16.2	B	R	0.51	16.1	B
Northbound (East Side)	L	0.12	11.6	B	L	0.12	241.3	F +	L	0.12	241.3	F +
	T	0.87	15.3	B	T	0.91	33.1	C	T	0.91	33.1	C
Westbound (West Side)	LT	0.97	36.4	D	LT	1.08	66.1	E +	LT	1.08	66.1	E +
Southbound (West Side)	TR	0.99	60.0	E	TR	1.02	60.9	E	TR	1.02	60.9	E
Park Avenue & East 48th Street												
Eastbound (West Side)	T	0.58	21.8	C	T	0.61	22.4	C	T	0.61	22.2	C
	R	0.26	15.5	B	R	0.27	15.3	B	R	0.27	15.3	B
Southbound (West Side)	L	0.38	101.6	F	L	0.43	119.1	F +	L	0.43	119.1	F +
	T	1.18	96.2	F	T	1.20	105.3	F +	T	1.20	105.3	F +
Eastbound (East Side)	LT	0.81	30.1	C	LT	0.87	36.6	D	LT	0.87	36.5	D
Northbound (East Side)	TR	0.95	31.9	C	TR	1.01	55.2	E +	TR	1.01	55.2	E +
Park Avenue & East 49th Street												
Westbound (East Side)	T	0.98	55.9	E	T	1.08	85.8	F +	T	1.08	83.2	F +
	R	0.59	26.9	C	R	0.65	30.6	C	R	0.65	27.9	C
Northbound (East Side)	L	0.19	13.4	B	L	0.21	15.0	B	L	0.21	15.1	B
	T	0.98	37.1	D	T	1.00	52.6	D +	T	1.00	51.4	D +
Westbound (West Side)	LT	1.07	58.4	E	LT	1.18	100.0	F +	LT	1.18	100.0	F +
Southbound (West Side)	TR	0.98	56.9	E	TR	1.01	68.1	E +	TR	1.01	70.0	E ##
Park Avenue & East 50th Street												
Eastbound (West Side)	T	0.70	19.0	B	T	0.73	19.4	B	T	0.73	19.4	B
	R	0.30	13.1	B	R	0.32	13.0	B	R	0.32	13.0	B
Southbound (West Side)	L	0.17	82.3	F	L	0.17	82.8	F	L	0.17	82.8	F
	T	0.96	45.0	D	T	0.98	63.0	E +	T	0.92	36.5	D
Eastbound (East Side)	LT	0.92	36.4	D	LT	0.96	41.4	D	LT	0.96	41.4	D
Northbound (East Side)	TR	0.98	33.2	C	TR	1.01	47.9	D +	TR	1.01	47.9	D +
Park Avenue & East 51st Street												
Westbound (East Side)	T	0.70	25.4	C	T	0.70	25.4	C	T	0.70	24.8	C
	R	0.65	42.5	D	R	0.68	45.1	D	R	0.68	44.6	D
Northbound (East Side)	L	0.14	32.5	C	L	0.14	32.4	C	L	0.14	32.4	C
	T	0.92	31.1	C	T	0.95	37.1	D	T	0.95	37.1	D
Westbound (West Side)	LT	0.87	28.3	C	LT	0.87	28.8	C	LT	0.87	28.8	C
Southbound (West Side)	T	0.82	23.3	C	T	0.84	30.2	C	T	0.84	30.2	C
	R	1.10	78.6	E	R	1.32	169.3	F +	R	1.32	169.3	F +

Table 19.9: AM Level of Service Analysis with and without Proposed Mitigation (Continued)

Intersection & Approach (Signalized Intersections)	No-Action				With-Action				Mitigation			
	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS
Park Avenue & East 52nd Street												
Eastbound (West Side)	TR	0.79	25.5	C	TR	0.81	26.4	C	TR	0.81	26.4	C
Southbound (West Side)	L	0.16	89.3	F	L	0.17	155.1	F +	L	0.17	155.1	F +
	T	1.15	86.2	F	T	1.18	98.0	F +	T	1.18	98.0	F +
Eastbound (East Side)	LT	0.83	22.9	C	LT	0.86	25.6	C	LT	0.86	25.6	C
Northbound (East Side)	TR	0.95	24.9	C	TR	0.97	31.2	C	TR	0.97	31.3	C
Park Avenue & East 53rd Street												
Westbound (East Side)	T	1.13	87.7	F	T	1.21	120.9	F +	T	1.21	120.9	F +
	R	1.02	57.0	E	R	1.09	80.9	F +	R	1.09	80.9	F +
Northbound (East Side)	L	0.17	15.4	B	L	0.18	16.3	B	L	0.18	16.3	B
	T	0.92	25.8	C	T	0.94	31.6	C	T	0.94	31.6	C
Westbound (West Side)	LT	1.07	52.5	D	LT	1.14	78.1	E +	LT	1.14	78.1	E +
Southbound (West Side)	TR	1.05	59.5	E	TR	1.08	60.5	E	TR	1.08	60.5	E
Park Avenue & East 54th Street												
Eastbound (West Side)	TR	0.88	29.5	C	TR	0.94	35.4	D	TR	0.94	37.7	D
Southbound (West Side)	L	0.31	12.8	B	L	0.31	13.5	B	L	0.31	13.8	B
	T	1.16	87.0	F	T	1.18	98.3	F +	T	1.18	98.3	F +
Eastbound (East Side)	L	0.33	10.6	B	L	0.33	10.2	B	L	0.33	10.7	B
	T	0.94	35.1	D	T	1.02	50.0	D +	T	1.02	50.8	D ##
Northbound (East Side)	T	0.84	17.4	B	T	0.86	19.4	B	T	0.86	19.4	B
	R	0.60	15.4	B	R	0.65	16.8	B	R	0.65	16.8	B
Park Avenue & East 55th Street												
Westbound (East Side)	TR	0.96	72.3	E	TR	0.97	73.5	E	TR	0.97	73.5	E
Northbound (East Side)	L	0.21	550.1	F	L	0.21	685.0	F +	L	0.21	685.0	F +
	T	1.05	69.3	E	T	1.07	68.4	E	T	1.07	68.4	E
Westbound (West Side)	LT	0.91	29.5	C	LT	0.92	29.9	C	LT	0.92	29.9	C
Southbound (West Side)	T	0.98	52.6	D	T	1.00	59.0	E +	T	1.00	59.0	E +
	R	0.53	15.1	B	R	0.55	14.0	B	R	0.55	14.0	B
Park Avenue & East 56th Street												
Eastbound (West Side)	TR	0.71	28.8	C	TR	0.72	29.2	C	TR	0.72	29.2	C
Southbound (West Side)	L	0.14	93.3	F	L	0.14	155.4	F +	L	0.14	155.4	F +
	T	1.03	65.6	E	T	1.06	65.5	E	T	1.06	65.5	E
Eastbound (East Side)	LT	0.64	14.7	B	LT	0.65	15.0	B	LT	0.65	15.0	B
Northbound (East Side)	TR	1.00	43.3	D	TR	1.02	51.9	D +	TR	1.02	51.9	D +
Park Avenue & East 57th Street												
Eastbound (West Side)	T	0.72	32.4	C	T	0.75	33.5	C	T	0.75	33.5	C
	R	0.59	31.4	C	R	0.62	31.6	C	R	0.62	31.6	C
Westbound (West Side)	T	1.07	60.8	E	T	1.07	61.7	E	T	1.07	61.7	E
Southbound (West Side)	LTR	0.89	77.7	E	LTR	0.91	78.7	E	LTR	0.91	78.7	E
Eastbound (East Side)	LT	1.13	92.7	F	LT	1.17	109.7	F +	LT	1.17	109.7	F +
	T	0.75	44.0	D	T	0.76	44.0	D	T	0.76	44.0	D
Westbound (East Side)	R	0.60	40.8	D	R	0.61	40.9	D	R	0.61	40.9	D
	L	0.18	400.0	F	L	0.18	686.1	F +	L	0.18	686.1	F +
Northbound (East Side)	T	0.94	29.8	C	T	0.97	34.9	C	T	0.97	34.9	C
	R	0.26	11.9	B	R	0.26	11.8	B	R	0.26	11.8	B
Madison Avenue & East 39th Street												
Westbound	T	1.22	121.3	F	T	1.27	147.2	F +	T	1.27	147.2	F +
	R	1.01	66.2	E	R	1.23	143.5	F +	R	1.23	143.5	F +
Northbound	LT	1.08	85.5	F	LT	1.11	89.2	F +	LT	1.11	89.2	F +
Madison Avenue & East 40th Street												
Eastbound	L	0.86	46.5	D	L	0.97	58.0	E +	L	0.97	58.0	E +
	T	0.80	25.0	C	T	0.94	30.1	C	T	0.94	30.1	C
Northbound	TR	1.13	76.9	E	TR	1.18	102.1	F +	TR	1.18	102.1	F +
Madison Avenue & East 41st Street												
Eastbound	L	0.45	50.9	D	L	0.45	51.0	D	L	0.45	50.9	D
	T	0.27	29.1	C	T	0.29	29.4	C	T	0.29	29.4	C
Northbound	TR	1.14	80.0	E	TR	1.21	111.4	F +	TR	1.21	111.4	F +
Madison Avenue & East 42nd Street												
Eastbound	LT	1.50	254.2	F	LT	1.58	288.4	F +	LT	1.58	288.1	F +
Westbound	T	1.52	257.6	F	T	1.53	264.2	F +	T	1.53	264.2	F +
	R	0.31	23.1	C	R	0.31	23.1	C	R	0.31	23.1	C
Northbound	LT	1.17	95.3	F	LT	1.24	125.5	F +	LT	1.24	125.5	F +
	R	0.52	16.3	B	R	0.55	16.9	B	R	0.55	16.9	B

Table 19.9: AM Level of Service Analysis with and without Proposed Mitigation (Continued)

Intersection & Approach (Signalized Intersections)	No-Action				With-Action				Mitigation			
	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS
Madison Avenue & East 43rd Street												
Westbound	T	0.73	34.7	C	T	0.78	37.9	D	T	0.78	37.9	D
	R	0.97	120.8	F	R	0.97	126.3	F +	R	0.97	126.3	F +
Northbound	L	1.05	60.4	E	L	1.46	235.6	F +	L	1.46	235.6	F +
	T	1.02	59.1	E	T	1.07	62.1	E	T	1.07	62.1	E
Madison Avenue & East 48th Street												
Eastbound	L	1.09	112.9	F	L	1.10	114.4	F	L	1.10	114.5	F
	T	0.71	24.6	C	T	0.75	27.1	C	T	0.75	27.8	C
Northbound	T	1.09	65.2	E	T	1.12	77.0	E +	T	1.12	77.0	E +
	R	0.56	19.3	B	R	0.60	20.7	C	R	0.60	20.7	C
Madison Avenue & East 53rd Street												
Westbound	TR	1.10	75.6	E	TR	1.17	106.3	F +	TR	1.17	106.2	F +
	L	0.51	11.5	B	L	0.53	11.8	B	L	0.53	11.8	B
Northbound	T	0.99	54.6	D	T	1.02	55.7	E	T	1.02	55.3	E
Madison Avenue & East 54th Street												
Eastbound	LT	0.55	29.3	C	LT	0.59	31.0	C	LT	0.65	34.8	C
	T	1.03	66.9	E	T	1.04	63.2	E	T	0.98	58.1	E
Northbound	R	0.83	32.4	C	R	1.08	70.1	E +	R	1.00	40.8	D
5th Avenue & 38th Street												
Eastbound	T	0.41	17.7	B	T	0.44	18.2	B	T	0.44	18.2	B
	R	1.04	121.4	F	R	1.05	124.7	F +	R	1.05	124.7	F +
Southbound	LT	1.35	170.7	F	LT	1.40	192.8	F +	LT	1.40	192.8	F +
5th Avenue & 39th Street												
Westbound	L	0.92	59.0	E	L	1.15	118.9	F +	L	1.15	118.9	F +
	T	0.66	29.4	C	T	0.67	29.6	C	T	0.67	29.6	C
Southbound	T	1.30	163.7	F	T	1.31	170.3	F +	T	1.31	170.3	F +
	R	1.33	175.3	F	R	1.34	182.3	F +	R	1.34	182.3	F +
5th Avenue & 40th Street												
Eastbound	TR	1.41	226.1	F	TR	1.60	306.9	F +	TR	1.60	306.9	F +
	Southbound	LT	1.50	250.5	F	LT	1.53	260.7	F +	LT	1.53	260.7
5th Avenue & 42nd Street												
Eastbound	T	1.09	89.1	F	T	1.14	105.8	F +	T	1.17	119.5	F ++
	R	0.21	23.8	C	R	0.21	23.8	C	R	0.21	24.9	C
Westbound	LT	1.45	224.3	F	LT	1.47	232.0	F +	LT	1.51	252.8	F ++
	Southbound	LT	1.47	233.7	F	LT	1.50	245.6	F +	LT	1.46	229.5
	R	0.05	13.9	B	R	0.05	14.0	B	R	0.05	12.9	B
5th Avenue & 43rd Street												
Westbound	L	0.56	28.1	C	L	0.64	29.8	C	L	0.64	27.7	C
	T	0.63	26.1	C	T	0.67	25.2	C	T	0.67	25.2	C
Southbound	T	1.25	137.7	F	T	1.26	142.3	F +	T	1.26	142.2	F +
	R	1.54	268.1	F	R	2.19	557.1	F +	R	2.19	557.1	F +
5th Avenue & 44th Street												
Eastbound	T	0.40	23.7	C	T	0.42	24.1	C	T	0.42	24.1	C
	R	0.77	61.1	E	R	0.87	99.7	F +	R	0.87	99.7	F +
Southbound	LT	1.40	200.5	F	LT	1.43	213.5	F +	LT	1.43	213.5	F +
5th Avenue & 47th Street												
Westbound	L	0.97	106.0	F	L	1.02	105.1	F	L	1.10	106.5	F
	T	0.59	34.4	C	T	0.65	34.3	C	T	0.66	35.2	D
Southbound	T	1.43	213.3	F	T	1.44	219.1	F +	T	1.40	202.9	F
	R	0.79	21.8	C	R	0.87	26.2	C	R	0.83	23.2	C
5th Avenue & 48th Street												
Eastbound	T	0.57	17.2	B	T	0.60	17.6	B	T	0.61	18.4	B
	R	1.06	101.2	F	R	1.06	89.3	F	R	1.13	102.0	F
Southbound	LT	1.42	211.3	F	LT	1.44	220.3	F +	LT	1.40	204.0	F
5th Avenue & 49th Street												
Westbound	LT	0.55	27.6	C	LT	0.57	27.7	C	LT	0.59	28.9	C
	Southbound	T	1.42	209.8	F	T	1.43	216.8	F +	T	1.40	201.0
	R	0.63	16.9	B	R	0.63	16.9	B	R	0.61	15.1	B
5th Avenue & 54th Street												
Eastbound	TR	0.48	22.9	C	TR	0.53	23.9	C	TR	0.55	24.9	C
	Southbound	LT	1.40	202.5	F	LT	1.43	217.1	F +	LT	1.40	201.4

Table 19.9: AM Level of Service Analysis with and without Proposed Mitigation (Continued)

Intersection & Approach (Signalized Intersections)	No-Action				With-Action				Mitigation			
	Movt.	V/C Ratio	Delay Sec/Veh	LOS	Movt.	V/C Ratio	Delay Sec/Veh	LOS	Movt.	V/C Ratio	Delay Sec/Veh	LOS
5th Avenue & 57th Street												
Eastbound	T	1.09	92.4	F	T	1.14	111.0	F +	T	1.14	111.0	F +
	R	0.82	136.9	F	R	0.85	143.2	F +	R	0.85	143.2	F +
Westbound	LT	1.14	112.8	F	LT	1.17	124.2	F +	LT	1.17	124.2	F +
Southbound	LT	1.48	247.6	F	LT	1.51	259.4	F +	LT	1.51	259.4	F +
	R	0.43	22.3	C	R	0.43	22.3	C	R	0.43	22.3	C
6th Avenue & East 48th Street												
Eastbound	L	0.33	22.5	C	L	0.33	22.5	C	L	0.33	22.5	C
	T	1.08	99.8	F	T	1.18	132.7	F +	T	1.18	132.7	F +
Northbound	TR	0.76	24.3	C	TR	0.89dr	32.0	C	TR	0.89dr	32.0	C
1st Avenue & East 48th Street (West Side)												
Eastbound	L	0.88	42.1	E	L	0.92	48.8	E +	L	0.92	48.8	E +
Northbound	T	0.33	0.0	A	T	0.34	0.0	A	T	0.34	0.0	A
Notes:												
+ Denotes a significant adverse traffic impact Unmitigated approach movements denoted by shading												
† No significant adverse impact for the With-Action condition. Significant adverse impact is due to changes in traffic signal timing as part of air quality mitigation measures												
†† Impact worsened by air quality mitigation signal timing changes												
‡ No significant adverse impact for the With-Action condition. Significant adverse impact is due to changes in traffic signal timing as part of air quality mitigation measures												
‡‡ Impact worsened by air quality mitigation signal timing changes												
# No significant adverse impact for the With-Action condition. Significant adverse impact is due to traffic mitigation measures at an adjacent intersection												
## Impact worsened due to traffic mitigation measures at an adjacent intersection												
Proposed mitigation may be infeasible and will be reviewed as part of the traffic monitoring program. Significant adverse impact is identified as a worst-case scenario.												
<u>This Table has been updated for the FEIS</u>												

Table 19.10: Midday Level of Service Analysis with and without Proposed Mitigation

Intersection & Approach (Signalized Intersections)	No-Action				With-Action				Mitigation			
	Movt.	V/C Ratio	Delay Sec/Veh	LOS	Movt.	V/C Ratio	Delay Sec/Veh	LOS	Movt.	V/C Ratio	Delay Sec/Veh	LOS
1st Avenue & East 40th Street												
Eastbound	L	0.99	71.4	E	L	1.03	80.3	F +	L	1.00	71.6	E
Northbound	T	0.91	29.8	C	T	0.91	30.5	C	T	0.93	33.5	C
1st Avenue & East 44th Street												
Eastbound	L	1.03	72.7	E	L	1.05	78.4	E +	L	1.02	68.4	E
Northbound	T	0.54	1.1	A	T	0.55	1.1	A	T	0.56	1.3	A
1st Avenue & East 46th Street												
Eastbound	L	1.09	94.0	F	L	1.11	99.3	F +	L	1.08	86.5	F
Northbound	T	0.64	2.3	A	T	0.66	2.6	A	T	0.67	3.0	A
1st Avenue & East 54th Street												
Eastbound	LT	1.10	98.6	F	LT	1.12	105.0	F +	LT	1.08	88.9	F
Northbound	TR	0.94	11.9	B	TR	0.95	13.0	B	TR	0.97	17.0	B
2nd Avenue & East 37th Street												
Westbound	LT	0.40	17.0	B	LT	0.41	17.1	B	LT	0.42	18.2	B
Southbound	TR	1.08	56.1	E	TR	1.11	63.6	E +	TR	1.09	56.3	E
2nd Avenue & East 38th Street												
Eastbound	TR	0.79	33.3	C	TR	0.82	34.4	C	TR	0.85	37.1	D
Southbound	LT	1.09	55.5	E	LT	1.12	64.7	E +	LT	1.09	56.6	E
2nd Avenue & East 39th Street												
Westbound	L	0.31	24.4	C	L	0.31	24.4	C	L	0.34	26.6	C
Southbound	T	0.39	24.9	C	T	0.40	25.1	C	T	0.43	27.1	C
Southbound	TR	1.18	100.6	F	TR	1.23	121.4	F +	TR	1.18	95.8	F
2nd Avenue & East 40th Street												
Eastbound	T	0.56	20.4	C	T	0.60	21.9	C	T	0.60	22.9	C
Southbound	R	1.01	73.5	E	R	1.06	85.5	F +	R	1.06	87.7	F ##
Southbound	LT	1.12	72.2	E	LT	1.16	91.6	F +	LT	1.16	92.6	F ##
2nd Avenue & East 41st Street												
Eastbound	TR	0.57	30.6	C	TR	0.61	31.0	C	T	0.16	21.2	C
Southbound	LT	1.18	95.9	F	LT	1.22	113.8	F +	LT	1.17	89.5	F
Southbound	R	0.15	8.3	A	R	0.17	8.4	A	R	0.16	6.3	A
2nd Avenue & East 42nd Street												
Eastbound	TR	1.04	69.9	E	TR	1.06	73.4	E	TR	1.06	73.5	E
Westbound	LT	1.09	99.3	F	LT	1.18dl	111.4	F +	LT	1.18dl	111.4	F +
Southbound	L	1.23	133.2	F	L	1.34	178.7	F +	L	1.34	179.2	F ##
Southbound	T	1.11	75.4	E	T	1.15	93.4	F +	T	1.15	93.9	F ##
Southbound	R	0.94	35.4	D	R	1.05	59.7	E +	R	1.05	60.5	E ##
2nd Avenue & East 43rd Street												
Westbound	LT	0.24	23.2	C	LT	0.25	23.4	C	LT	0.27	25.2	C
Southbound	TR	1.44	216.7	F	TR	1.50	247.4	F +	TR	1.44	217.4	F
2nd Avenue & East 44th Street												
Eastbound	TR	0.86	23.9	C	TR	1.01	48.7	D +	TR	1.01	45.6	D +
Southbound	L	0.54	8.7	A	L	0.55	8.7	A	L	0.55	9.7	A
Southbound	T	1.16	90.4	F	T	1.20	105.0	F +	T	1.20	105.9	F ##
2nd Avenue & East 45th Street												
Westbound	LT	0.73	43.3	D	LT	0.74	44.0	D	LT	0.39	28.2	C
Southbound	TR	1.43	212.3	F	TR	1.47	230.8	F +	TR	1.38	190.6	F
2nd Avenue & East 46th Street												
Eastbound	T	0.57	32.6	C	T	0.58	31.9	C	T	0.58	30.5	C
Southbound	R	1.18	138.5	F	R	1.25	162.1	F +	R	1.25	160.7	F +
Southbound	L	0.56	10.4	B	L	0.56	10.4	B	L	0.56	11.3	B
Southbound	T	1.21	112.4	F	T	1.24	125.8	F +	T	1.24	126.5	F ##
2nd Avenue & East 47th Street												
Westbound	LT	0.50	54.1	D	LT	0.52	54.4	D	LT	0.57	57.8	E
Southbound	TR	1.49	238.0	F	TR	1.53	257.0	F +	TR	1.47	231.1	F
2nd Avenue & East 48th Street												
Eastbound	TR	1.09	92.3	F	TR	1.13	104.1	F +	TR	1.13	103.6	F +
Southbound	L	1.28	149.2	F	L	1.28	149.2	F	L	1.28	149.6	F
Southbound	T	1.34	173.2	F	T	1.37	188.2	F +	T	1.37	188.4	F ##
2nd Avenue & East 49th Street												
Westbound	L	0.99	101.3	F	L	0.99	101.4	F	L	1.04	103.2	F
Southbound	T	0.22	19.8	B	T	0.23	19.8	B	T	0.23	20.5	C
Southbound	TR	1.17	92.3	F	TR	1.20	105.4	F +	TR	1.17	93.1	F

**Table 19.10: Midday Level of Service Analysis with and without Proposed Mitigation
(Continued)**

Intersection & Approach (Signalized Intersections)	No-Action				With-Action				Mitigation			
	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS
2nd Avenue & East 50th Street												
Eastbound	TR	1.27	174.0	F	TR	1.32	191.6	F +	TR	1.32	191.5	F +
Southbound	L	0.60	11.1	B	L	0.60	11.2	B	L	0.60	11.7	B
	T	1.33	171.0	F	T	1.37	184.8	F +	T	1.37	185.1	F ##
Westbound	LT	0.73	38.7	D	LT	0.73	38.7	D	LT	0.76	41.6	D
Southbound	TR	1.34	172.6	F	TR	1.38	187.5	F +	TR	1.35	174.0	F
2nd Avenue & East 52nd Street												
Eastbound	TR	0.89	45.5	D	TR	0.93	45.5	D	TR	0.93	44.5	D
Southbound	L	0.18	7.3	A	L	0.18	7.3	A	L	0.18	7.3	A
	T	1.33	167.8	F	T	1.36	181.6	F +	T	1.36	181.5	F +
2nd Avenue & East 53rd Street												
Westbound	LT	1.10dl	78.1	E	LT	1.12dl	82.5	F +	LT	1.12dl	82.5	F +
Southbound	TR	1.33	168.2	F	TR	1.37	186.7	F +	TR	1.37	187.1	F ##
2nd Avenue & East 54th Street												
Eastbound	TR	0.59	25.0	C	TR	0.61	25.1	C	TR	0.63	24.0	C
Southbound	L	0.06	8.1	A	L	0.06	8.1	A	L	0.06	7.3	A
	T	1.42	208.7	F	T	1.45	225.2	F +	T	1.42	210.9	F
2nd Avenue & East 55th Street												
Westbound	L	0.78	25.1	C	L	0.78	24.8	C	L	0.78	24.8	C
Southbound	T	1.06	73.3	E	T	1.08	77.2	E	T	1.08	77.1	E
	TR	1.63	302.4	F	TR	1.68	328.5	F +	TR	1.68	328.8	F ##
2nd Avenue & East 56th Street												
Eastbound	T	0.52	11.8	B	T	0.53	11.9	B	T	0.56	11.1	B
	R	0.56	15.6	B	R	0.58	15.8	B	R	0.62	15.4	B
Southbound	L	0.33	4.5	A	L	0.33	4.5	A	L	0.31	2.3	A
	T	1.42	210.3	F	T	1.46	230.4	F +	T	1.40	202.7	F
2nd Avenue & East 57th Street												
Eastbound	TR	1.18	130.0	F	TR	1.20	134.8	F +	TR	1.20	136.0	F ##
Westbound	LT	0.79	37.4	D	LT	0.79	37.4	D	LT	0.79	49.3	D #
Southbound	L	0.22	21.3	C	L	0.22	21.6	C	L	0.22	21.6	C
	TR	1.42	214.4	F	TR	1.45	230.1	F +	TR	1.45	229.0	F +
2nd Avenue & East 59th Street												
Eastbound	L	1.12	84.7	F	L	1.15	98.5	F +	L	1.15	98.5	F +
	TR	0.51	272.4	F	TR	0.51	272.3	F	TR	0.51	272.3	F
Southbound	L	1.05	62.3	E	L	1.09	63.9	E	L	1.09	63.9	E
	LT	1.17	94.9	F	LT	1.19	103.2	F +	LT	1.19	103.2	F +
2nd Avenue & East 60th Street												
Westbound	LT	0.01	14.2	B	LT	0.01	14.2	B	LT	0.01	14.2	B
Southbound	LTR	1.10	80.0	E	LTR	1.12	87.3	F +	LTR	1.12	87.3	F +
Westbound (Bridge Exit)	L	1.26	151.7	F	L	1.29	165.2	F +	L	1.29	165.2	F +
	T	0.70	29.5	C	T	0.70	29.5	C	T	0.70	29.5	C
Tunnel Exit Street & East 39th Street												
Westbound	TR	0.90dr	33.2	C	TR	0.93dr	33.8	C	TR	0.97dr	35.7	D
Northbound	L	1.09	113.2	F	L	1.12	120.3	F +	L	1.10	112.1	F
	T	0.11	20.0	B	T	0.13	20.0	B	T	0.12	19.2	B
Tunnel Exit Street & East 40th Street												
Eastbound	LT	0.93	77.1	E	LT	0.96	82.1	F +	LT	0.90	71.6	E
Northbound	TR	0.23	6.8	A	TR	0.24	7.0	A	TR	0.25	6.9	A
3rd Avenue & East 36th Street												
Eastbound	LT	0.69	22.4	C	LT	0.70	22.6	C	LT	0.76	24.4	C
Northbound	TR	0.94	48.0	D	TR	0.99	74.6	E +	TR	0.91	46.8	D
	R	0.56	45.6	D	R	0.57	45.9	D	R	0.57	45.9	D
3rd Avenue & East 37th Street												
Westbound	TR	0.56	16.1	B	TR	0.58	16.5	B	TR	0.58	16.6	B
Northbound	R	0.82	68.7	E	R	0.90	82.8	F +	R	0.90	82.9	F ##
	LT	0.96	60.7	E	LT	1.01	60.8	E	LT	1.01	64.6	E
3rd Avenue & East 39th Street												
Westbound	T	1.45	232.5	F	T	1.54	273.0	F +	T	1.45	232.0	F
Northbound	R	0.84	43.9	D	R	0.87	44.5	D	R	0.80	37.5	D
	LT	1.17	100.3	F	LT	1.25	133.7	F +	L	1.08	69.1	E
									T	1.05	66.6	E

Table 19.10: Midday Level of Service Analysis with and without Proposed Mitigation (Continued)

Intersection & Approach (Signalized Intersections)	No-Action				With-Action				Mitigation			
	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS
3rd Avenue & East 40th Street												
Eastbound	LT	0.97	105.7	F	LT	1.03	104.0	F	LT	1.03	101.5	F
Northbound	T	1.13	75.8	E	T	1.19	104.6	F +	T	1.19	102.8	F +
	R	0.93	50.7	D	R	0.96	64.7	E +	R	0.96	60.5	E +
3rd Avenue & East 41st Street												
Eastbound	L	1.05	125.8	F	L	1.12	137.5	F +	L	1.26	189.5	F ††
	T	0.31	39.6	D	T	0.33	40.3	D	T	0.36	43.8	D
Westbound	R	1.09	123.3	F	R	1.12	130.8	F +	R	1.26	184.1	F ††
	T	0.93	63.2	E	T	0.98	62.1	E	T	0.91	27.5	C
Northbound	R	0.30	14.0	B	R	0.31	14.1	B	R	0.27	10.4	B
3rd Avenue & East 42nd Street												
Eastbound	L	0.98	75.8	E	L	0.99	77.2	E	L	0.99	77.2	E
	T	1.15	111.8	F	T	1.16	116.5	F +	T	1.16	116.5	F +
Westbound	T	0.84	33.5	C	T	0.85	34.1	C	T	0.85	34.1	C
	R	1.18	119.9	F	R	1.20	128.6	F +	R	1.20	128.6	F +
Northbound	LT	1.10	79.8	E	LT	1.17	105.4	F +	L	1.05	72.9	E
	R	0.78	39.2	D	R	0.86	36.4	D	R	0.86	44.3	D
3rd Avenue & East 43rd Street												
Westbound	TR	0.79	18.8	B	TR	0.87	21.8	C	TR	0.92	26.2	C
Northbound	LT	1.04	60.2	E	LT	1.09	62.7	E	LT	1.03	60.8	E
3rd Avenue & East 44th Street												
Eastbound	LT	0.24	26.6	C	LT	0.28	27.0	C	LT	0.30	30.2	C
Northbound	T	1.03	62.3	E	T	1.08	64.9	E	T	1.00	58.6	E
	R	1.33	171.4	F	R	2.06	498.6	F +	R	1.69	331.3	F +
3rd Avenue & East 45th Street												
Westbound	T	0.57	17.5	B	T	0.58	17.4	B	T	0.60	20.1	C
	R	0.65	35.7	D	R	0.68	36.1	D	R	0.77	39.4	D
Northbound	LT	1.14	87.9	F	LT	1.20	112.8	F +	LT	1.13	85.6	F
3rd Avenue & East 46th Street												
Eastbound	L	0.30	28.3	C	L	0.39	28.2	C	L	0.44	29.7	C
	T	0.49	10.4	B	T	0.52	10.0	B	T	0.54	11.4	B
Northbound	T	1.09	70.4	E	T	1.15	94.9	F +	T	1.09	68.6	E
	R	1.21	122.0	F	R	1.31	165.1	F +	R	1.18	106.5	F
3rd Avenue & East 47th Street												
Westbound	T	1.06	59.5	E	T	1.14	92.7	F +	T	1.23	131.9	F ††
	R	0.69	21.6	C	R	0.72	22.6	C	R	0.79	26.5	C
Northbound	LT	1.12	74.9	E	LT	1.22	118.8	F +	LT	1.11	69.8	E
3rd Avenue & East 48th Street												
Eastbound	L	0.25	21.1	C	L	0.27	21.5	C	L	0.29	23.2	C
	T	0.39	23.3	C	T	0.41	23.5	C	T	0.43	25.3	C
Northbound	T	1.10	73.6	E	T	1.18	105.9	F +	T	1.11	74.1	E
	R	0.93	40.4	D	R	0.99	49.8	D +	R	0.90	36.0	D
3rd Avenue & East 49th Street												
Westbound	T	0.48	17.1	B	T	0.49	17.3	B	T	0.51	18.8	B
	R	0.43	39.6	D	R	0.44	39.8	D	R	0.49	43.4	D
Northbound	LT	1.13	83.0	F	LT	1.20	117.7	F +	LT	1.13	82.9	F
3rd Avenue & East 50th Street												
Eastbound	L	0.39	7.5	A	L	0.43	7.8	A	L	0.46	8.7	A
	T	0.50	8.3	A	T	0.51	8.5	A	T	0.54	9.9	A
Northbound	T	1.13	79.5	E	T	1.20	113.8	F +	T	1.14	81.2	F
	R	1.06	71.0	E	R	1.09	82.5	F +	R	1.00	52.0	D
3rd Avenue & East 51st Street												
Westbound	T	0.79	24.9	C	T	0.81	25.2	C	T	0.85	28.2	C
	R	0.38	17.4	B	R	0.40	17.5	B	R	0.42	19.2	B
Northbound	LT	1.10	72.1	E	LT	1.18	105.7	F +	LT	1.10	71.1	E
3rd Avenue & East 52nd Street												
Eastbound	LT	0.80	21.1	C	LT	0.85	21.4	C	LT	0.91	38.5	D
Northbound	T	1.06	65.4	E	T	1.14	83.4	F +	T	1.04	58.0	E
	R	1.02	49.9	D	R	1.18	113.0	F +	R	0.98	35.3	D
3rd Avenue & East 53rd Street												
Westbound	T	0.58	10.4	B	T	0.62	11.5	B	T	0.65	13.1	B
	R	0.75	31.9	C	R	0.75	32.5	C	R	0.85	37.8	D
Northbound	LT	1.04	73.4	E	LT	1.12	84.7	F +	LT	1.06	75.6	E

**Table 19.10: Midday Level of Service Analysis with and without Proposed Mitigation
(Continued)**

Intersection & Approach (Signalized Intersections)	No-Action				With-Action				Mitigation			
	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS
3rd Avenue & East 54th Street												
Eastbound	L	1.21	133.6	F	L	1.27	159.7	F +	L	1.55	278.7	F ††
	T	0.67	20.0	B	T	0.69	20.5	C	T	0.75	23.8	C
Northbound	T	1.02	74.5	E	T	1.09	76.8	E	T	1.00	70.0	E
	R	0.71	31.3	C	R	0.73	32.3	C	R	0.65	25.9	C
3rd Avenue & East 55th Street												
Westbound	T	0.86	23.8	C	T	0.91	27.1	C	T	1.00	40.7	D
	R	1.02	49.9	D	R	1.09	73.0	E +	R	1.19	118.7	F ††
Northbound	LT	1.16	95.0	F	LT	1.25	137.0	F +	LT	1.14	87.1	F
3rd Avenue & East 56th Street												
Eastbound (West Side)	LT	0.96	106.2	F	LT	0.98	106.6	F	LT	1.11	108.3	F
Northbound (West Side)	T	1.07	67.8	E	T	1.18	103.6	F +	T	1.08	66.1	E
Eastbound (East Side)	LT	0.90	23.2	C	LT	0.91	23.7	C	LT	1.04	43.8	D
Northbound (East Side)	TR	1.05	72.9	E	TR	1.08	74.2	E	TR	0.98	65.3	E
3rd Avenue & East 57th Street												
Eastbound (West Side)	LT	1.08	109.6	F	LT	1.09	108.9	F	LT	1.09	108.9	F
Westbound (West Side)	TR	0.89	30.0	C	TR	0.89	30.1	C	TR	0.89	30.1	C
Northbound (West Side)	LT	1.14	87.1	F	LT	1.24	128.2	F +	LT	1.18	108.0	F +
Eastbound (East Side)	T	1.24	129.9	F	T	1.25	133.1	F +	T	1.25	133.1	F +
Westbound (East Side)	T	0.77	31.1	C	T	0.77	31.1	C	T	0.77	31.1	C
	R	0.58	25.9	C	R	0.58	25.9	C	R	0.58	25.9	C
Northbound (East Side)	TR	1.08	68.8	E	TR	1.08	68.6	E	TR	1.08	82.4	F †
	R	1.08	79.1	E	R	1.12	90.6	F +	R	1.12	111.0	F ††
3rd Avenue & East 59th Street												
Eastbound	LT	1.06	84.5	F	LT	1.07	87.4	F	LT	1.07	87.4	F
Northbound	T	0.63	8.2	A	T	0.68	8.5	A	T	0.68	8.4	A
	R	1.01	64.2	E	R	1.05	74.3	E +	R	1.05	74.3	E +
Lexington Avenue & East 36th Street												
Eastbound	TR	0.72	47.3	D	TR	0.74	48.0	D	TR	0.76	49.9	D
Southbound	LT	1.05	46.3	D	LT	1.08	57.3	E +	LT	1.05	45.3	D
Lexington Avenue & East 38th Street												
Eastbound	T	0.62	43.9	D	T	0.64	44.7	D	T	0.63	43.5	D
	R	1.12	147.9	F	R	1.14	154.0	F +	R	1.06	127.8	F
Southbound	L	0.16	2.0	A	L	0.18	2.0	A	L	0.18	2.8	A
	T	0.88	14.7	B	T	0.91	18.8	B	T	0.93	25.5	C
Lexington Avenue & East 39th Street												
Westbound	L	1.08	87.7	F	L	1.11	99.1	F +	L	1.11	98.8	F +
	T	1.51	253.6	F	T	1.65	313.1	F +	T	1.65	312.9	F +
Southbound	T	1.05	55.3	E	T	1.08	63.8	E +	T	1.08	65.4	E ##
	R	0.84	21.7	C	R	0.89	24.5	C	R	0.89	25.9	C
Lexington Avenue & East 40th Street												
Eastbound	T	0.74	20.8	C	T	0.77	21.7	C	T	0.82	24.1	C
	R	0.52	34.7	C	R	0.54	34.8	C	R	0.63	38.6	D
Southbound	LT	1.12	73.4	E	LT	1.16	92.4	F +	LT	1.11	65.6	E
Lexington Avenue & East 42nd Street												
Eastbound	T	1.06	65.0	E	T	1.08	71.3	E +	T	1.08	71.3	E +
	R	0.91	43.4	D	R	0.91	43.3	D	R	0.91	43.3	D
Westbound	LT	0.94	50.8	D	LT	0.96	51.6	D	LT	0.96	52.8	D
	L	0.49	22.6	C	L	0.50	22.7	C	L	0.50	22.7	C
Southbound	T	0.90	47.0	D	T	0.93	72.4	E +	T	0.93	72.4	E +
	R	0.68	26.2	C	R	0.71	27.1	C	R	0.71	27.1	C
Lexington Avenue & East 44th Street												
Southbound	LT	1.13	77.6	E	LT	1.19	103.3	F +	LT	1.14	78.2	E
Lexington Avenue & East 46th Street												
Eastbound	T	0.91	58.6	E	T	0.99	66.2	E +	T	1.02	74.2	E ††
	R	0.14	45.8	D	R	0.15	45.6	D	R	0.15	46.6	D
Southbound	LT	1.05	57.7	E	LT	1.11	62.6	E +	LT	1.08	59.0	E
Lexington Avenue & East 47th Street												
Westbound	L	1.13	103.5	F	L	1.20	131.8	F +	L	1.47	245.6	F ††
	T	1.20	116.8	F	T	1.34	178.5	F +	T	1.42	214.9	F ††
Southbound	T	1.02	58.6	E	T	1.07	66.6	E +	T	1.02	61.5	E
	R	1.27	162.9	F	R	1.72	347.3	F +	R	1.38	194.7	F +

**Table 19.10: Midday Level of Service Analysis with and without Proposed Mitigation
(Continued)**

Intersection & Approach (Signalized Intersections)	No-Action				With-Action				Mitigation			
	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS
Lexington Avenue & East 48th Street												
Eastbound	T	1.07	94.1	F	T	1.13	110.6	F +	T	1.13	110.6	F +
	R	1.11	127.0	F	R	1.16	141.9	F +	R	1.16	141.9	F +
Southbound	LT	0.96	59.0	E	LT	1.02	59.3	E	LT	1.02	59.9	E
Lexington Avenue & East 49th Street												
Westbound	LT	0.55	30.2	C	LT	0.57	30.2	C	LT	0.58	34.3	C
Southbound	T	1.06	60.8	E	T	1.12	72.1	E +	T	1.09	63.8	E
	R	0.27	12.9	B	R	0.37	13.4	B	R	0.36	12.8	B
Lexington Avenue & East 50th Street												
Eastbound	TR	0.42	27.3	C	TR	0.44	27.5	C	TR	0.45	28.4	C
Southbound	LT	1.06	60.6	E	LT	1.13	77.2	E +	LT	1.11	64.0	E
Lexington Avenue & East 51st Street												
Westbound	L	1.05	95.6	F	L	1.07	99.3	F +	L	1.07	99.7	F ##
	T	0.89	46.8	D	T	0.93	49.8	D	T	0.93	50.0	D
Southbound	T	1.11	71.8	E	T	1.18	104.9	F +	T	1.18	103.6	F +
	R	1.11	113.8	F	R	1.20	140.7	F +	R	1.20	137.5	F +
Lexington Avenue & East 52nd Street												
Eastbound	T	0.94	44.7	D	T	0.99	54.5	D +	T	0.97	47.2	D
	R	0.96	71.6	E	R	0.96	69.9	E	R	0.96	69.8	E
Southbound	LT	0.91	63.5	E	LT	0.97	62.8	E	LT	0.99	63.6	E
Lexington Avenue & East 53rd Street												
Westbound	L	0.07	21.2	C	L	0.07	21.0	C	L	0.07	20.0	C
	T	0.82	37.5	D	T	0.87	40.4	D	T	0.87	39.8	D
Southbound	T	1.03	42.0	D	T	1.10	62.9	E +	T	1.10	63.0	E ##
	R	0.78	66.4	E	R	0.80	94.7	F +	R	0.80	94.7	F +
Lexington Avenue & East 54th Street												
Eastbound	TR	1.02	58.4	E	TR	1.07	71.7	E +	TR	1.07	71.7	E +
Southbound	LT	1.08	61.2	E	LT	1.15	83.4	F +	LT	1.15	83.4	F +
Lexington Avenue & East 57th Street												
Eastbound	T	0.86	24.7	C	T	0.86	24.9	C	T	0.86	24.9	C
	R	0.66	19.5	B	R	0.67	20.2	C	R	0.67	20.2	C
Westbound	LT	0.95	52.8	D	LT	0.96	51.2	D	LT	0.96	52.3	D
Southbound	LT	0.95	68.2	E	LT	1.01	88.6	F +	LT	1.01	88.6	F +
	R	0.38	21.7	C	R	0.38	21.7	C	R	0.38	21.7	C
Park Avenue & East 39th Street												
Westbound (East Side)	TR	1.34	180.1	F	TR	1.44	224.2	F +	TR	1.44	224.3	F ##
Northbound (East Side)	LT	0.56	36.6	D	LT	0.57	41.2	D	LT	0.57	41.2	D
Westbound (West Side)	LT	1.06	73.0	E	LT	1.14	93.4	F +	LT	1.14	93.4	F +
Southbound (West Side)	T	0.61	48.7	D	T	0.63	58.1	E +	T	0.63	58.1	E +
	R	0.52	18.8	B	R	0.53	19.0	B	R	0.53	19.0	B
Park Avenue & East 40th Street												
Eastbound (West Side)	TR	1.24	162.5	F	TR	1.30	183.3	F +	TR	1.30	182.9	F +
Southbound (West Side)	T	1.16	107.5	F	T	1.18	117.8	F +	T	1.18	117.8	F +
Eastbound (Tunnel Exit)	LT	1.37	187.5	F	LT	1.43	215.8	F +	LT	1.43	215.8	F +
Northbound (Tunnel Exit)	T	0.72	16.9	B	T	0.72	17.1	B	T	0.72	17.1	B
Eastbound (East Side)	LT	1.29	153.7	F	LT	1.35	180.5	F +	LT	1.35	180.5	F +
Northbound (East Side)	TR	0.81	27.2	C	TR	0.83	31.8	C	TR	0.83	31.8	C
Park Avenue & East 46th Street												
Eastbound (West Side)	T	0.86	44.5	D	T	0.92	58.5	E +	T	0.92	58.5	E +
	R	0.32	30.0	C	R	0.33	29.8	C	R	0.33	29.8	C
Southbound (West Side)	L	0.30	15.6	B	L	0.32	16.3	B	L	0.32	16.3	B
	T	1.10	69.1	E	T	1.13	80.4	F +	T	1.13	80.4	F +
Eastbound (East Side)	L	0.76	27.6	C	L	0.93	48.7	D +	L	0.93	48.7	D +
	T	1.17	111.7	F	T	1.26	147.7	F +	T	1.26	147.7	F +
Northbound (East Side)	T	0.84	32.4	C	T	0.85	33.2	C	T	0.85	33.2	C
Park Avenue & East 47th Street												
Westbound (East Side)	T	1.32	174.2	F	T	1.49	245.4	F +	T	1.49	245.9	F ##
	R	0.81	33.1	C	R	0.92	40.4	D	R	0.92	41.2	D
Northbound (East Side)	L	0.16	94.9	F	L	0.16	95.3	F	L	0.16	95.3	F
	T	0.99	44.1	D	T	1.01	62.4	E +	T	1.01	62.4	E +
Westbound (West Side)	LT	1.38	192.7	F	LT	1.53	257.6	F +	LT	1.53	257.5	F +
Southbound (West Side)	TR	0.96	39.8	D	TR	1.00	57.4	E +	TR	1.00	57.4	E +

**Table 19.10: Midday Level of Service Analysis with and without Proposed Mitigation
(Continued)**

Intersection & Approach (Signalized Intersections)	No-Action				With-Action				Mitigation			
	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS
Park Avenue & East 48th Street												
Eastbound (West Side)	T	0.58	20.8	C	T	0.59	20.8	C	T	0.59	20.9	C
	R	0.25	18.5	B	R	0.28	18.9	B	R	0.28	18.9	B
Southbound (West Side)	L	0.24	94.5	F	L	0.26	143.9	F +	L	0.26	143.9	F +
	T	1.12	77.8	E	T	1.15	88.8	F +	T	1.15	88.9	F ##
Eastbound (East Side)	LT	0.88	30.5	C	LT	0.91	35.3	D	LT	0.91	35.3	D
Northbound (East Side)	TR	0.92	28.9	C	TR	0.95	38.5	D	TR	0.95	38.5	D
Park Avenue & East 49th Street												
Westbound (East Side)	T	0.81	23.2	C	T	0.85	27.6	C	T	0.85	25.9	C
	R	0.38	9.6	A	R	0.40	10.4	B	R	0.40	7.9	A
Northbound (East Side)	L	0.21	15.4	B	L	0.21	15.3	B	L	0.21	15.5	B
	T	1.01	42.4	D	T	1.03	50.0	D +	T	1.03	50.0	D +
Westbound (West Side)	LT	0.87	20.7	C	LT	0.92	26.6	C	LT	0.92	26.5	C
Southbound (West Side)	TR	0.96	44.2	D	TR	0.98	58.3	E +	TR	0.98	58.4	E ##
Park Avenue & East 50th Street												
Eastbound (West Side)	T	0.79	17.5	B	T	0.84	19.8	B	T	0.84	19.8	B
	R	0.71	16.7	B	R	0.75	18.1	B	R	0.75	18.1	B
Southbound (West Side)	L	0.23	13.5	B	L	0.23	13.5	B	L	0.23	12.2	B
	T	1.06	60.5	E	T	1.09	61.7	E	T	1.09	60.8	E
Eastbound (East Side)	LT	1.05	67.3	E	LT	1.09	81.2	F +	LT	1.09	81.2	F +
Northbound (East Side)	TR	0.87	26.4	C	TR	0.89	31.6	C	TR	0.89	31.5	C
Park Avenue & East 51st Street												
Westbound (East Side)	T	1.12	102.9	F	T	1.16	113.9	F +	T	1.13	100.0	F
	R	0.68	35.2	D	R	0.71	34.9	C	R	0.69	32.2	C
Northbound (East Side)	L	0.21	28.7	C	L	0.21	31.7	C	L	0.22	36.9	D
	T	1.03	65.8	E	T	1.05	66.6	E	T	1.08	67.9	E
Westbound (West Side)	LT	1.06	63.3	E	LT	1.09	69.2	E +	LT	1.06	60.0	E
Southbound (West Side)	TR	1.05	63.7	E	TR	1.07	61.3	E	TR	1.10	63.7	E
Park Avenue & East 52nd Street												
Eastbound (West Side)	TR	0.99	56.4	E	TR	1.01	61.5	E +	TR	1.01	61.4	E +
Southbound (West Side)	L	0.21	164.4	F	L	0.24	178.2	F +	L	0.24	178.2	F +
	T	1.00	67.3	E	T	1.02	66.5	E	T	1.02	66.7	E
Eastbound (East Side)	LT	0.93	30.2	C	LT	0.96	36.6	D	LT	0.96	36.6	D
Northbound (East Side)	TR	0.99	40.3	D	TR	1.01	47.7	D +	TR	1.01	46.5	D +
Park Avenue & East 53rd Street												
Westbound (East Side)	T	0.74	40.9	D	T	0.76	41.3	D	T	0.76	41.4	D
	R	0.58	37.7	D	R	0.64	39.2	D	R	0.64	39.2	D
Northbound (East Side)	L	0.20	17.0	B	L	0.20	17.8	B	L	0.20	17.9	B
	T	1.04	64.4	E	T	1.06	61.4	E	T	1.06	61.6	E
Westbound (West Side)	LT	1.08	74.3	E	LT	1.11	85.8	F +	LT	1.11	85.7	F +
Southbound (West Side)	TR	0.94	32.0	C	TR	0.96	39.7	D	TR	0.96	39.7	D
Park Avenue & East 54th Street												
Eastbound (West Side)	TR	0.59	18.1	B	TR	0.62	18.5	B	TR	0.62	18.5	B
Southbound (West Side)	L	0.22	10.7	B	L	0.22	10.8	B	L	0.22	10.8	B
	T	1.00	41.1	D	T	1.02	58.1	E +	T	1.02	58.1	E +
Eastbound (East Side)	L	0.33	10.6	B	L	0.34	10.5	B	L	0.34	10.5	B
	T	0.63	12.5	B	T	0.65	16.2	B	T	0.65	16.2	B
Northbound (East Side)	TR	0.96	44.4	D	TR	0.99	53.3	D +	TR	0.99	53.3	D +
Park Avenue & East 55th Street												
Westbound (East Side)	TR	1.09	105.7	F	TR	1.12	110.4	F +	TR	1.12	110.3	F +
Northbound (East Side)	L	0.29	106.8	F	L	0.29	115.0	F +	L	0.29	115.0	F +
	T	1.09	66.9	E	T	1.12	74.1	E +	T	1.12	74.1	E +
Westbound (West Side)	LT	1.04	66.9	E	LT	1.06	71.5	E +	LT	1.06	71.5	E +
Southbound (West Side)	TR	1.07	60.6	E	TR	1.08	61.4	E	TR	1.08	61.4	E
Park Avenue & East 56th Street												
Eastbound (West Side)	TR	1.35	188.3	F	TR	1.36	191.8	F +	TR	1.36	191.8	F +
Southbound (West Side)	L	0.18	143.3	F	L	0.18	145.9	F	L	0.18	145.9	F
	T	1.00	65.3	E	T	1.02	65.0	E	T	1.02	65.0	E
Eastbound (East Side)	LT	1.16	89.7	F	LT	1.16	92.8	F +	LT	1.16	92.8	F +
Northbound (East Side)	TR	0.91	46.1	D	TR	0.94	57.0	E +	TR	0.94	57.0	E +

**Table 19.10: Midday Level of Service Analysis with and without Proposed Mitigation
(Continued)**

Intersection & Approach (Signalized Intersections)	No-Action				With-Action				Mitigation			
	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS
Park Avenue & East 57th Street												
Eastbound (West Side)	T	1.19	124.2	F	T	1.20	127.3	F +	T	1.20	127.3	F +
	R	1.06	93.7	F	R	1.08	96.4	F	R	1.08	96.4	F
Westbound (West Side)	T	1.18	101.9	F	T	1.19	104.3	F	T	1.19	104.3	F
Southbound (West Side)	LTR	0.95	87.0	F	LTR	0.97	88.1	F	LTR	0.97	88.1	F
Eastbound (East Side)	LT	1.21	112.6	F	LT	1.22	117.4	F +	LT	1.22	117.5	F +
Westbound (East Side)	T	1.17	126.7	F	T	1.17	129.1	F	T	1.17	129.1	F
	R	1.03	97.9	F	R	1.03	97.7	F	R	1.03	97.7	F
Northbound (East Side)	L	0.29	686.2	F	L	0.29	686.1	F	L	0.29	686.1	F
	T	1.01	35.8	D	T	1.04	44.7	D	T	1.04	44.7	D
	R	0.69	21.7	C	R	0.69	21.2	C	R	0.69	21.2	C
Madison Avenue & East 39th Street												
Westbound	T	1.35	187.4	F	T	1.42	215.8	F +	T	1.30	162.3	F
	R	1.29	179.6	F	R	1.44	234.0	F +	R	1.23	144.2	F
Northbound	LT	0.98	85.8	F	LT	1.00	86.8	F	LT	1.08	85.8	F
Madison Avenue & East 40th Street												
Eastbound	L	0.70	39.5	D	L	0.72	40.2	D	L	0.78	42.8	D
	T	0.64	21.8	C	T	0.67	22.2	C	T	0.69	22.9	C
Northbound	TR	1.07	60.0	E	TR	1.11	66.9	E +	TR	1.09	58.4	E
Madison Avenue & East 41st Street												
Eastbound	L	0.49	49.3	D	L	0.49	49.6	D	L	0.49	49.5	D
	T	0.29	27.9	C	T	0.32	28.4	C	T	0.32	28.4	C
Northbound	TR	1.15	87.5	F	TR	1.19	107.4	F +	TR	1.19	108.1	F ##
Madison Avenue & East 42nd Street												
Eastbound	LT	1.16	100.5	F	LT	1.18	108.5	F +	LT	1.18	108.5	F +
Westbound	T	1.22	135.4	F	T	1.24	143.6	F +	T	1.24	143.6	F +
	R	0.23	25.5	C	R	0.23	25.2	C	R	0.23	25.2	C
Northbound	LT	1.17	96.7	F	LT	1.21	114.3	F +	LT	1.21	114.3	F +
	R	0.71	91.4	F	R	0.74	94.6	F +	R	0.74	94.7	F ##
Madison Avenue & East 43rd Street												
Westbound	T	1.22	154.6	F	T	1.28	180.0	F +	T	1.28	180.0	F +
	R	1.47	265.4	F	R	1.54	296.9	F +	R	1.54	296.9	F +
Northbound	L	0.83	28.4	C	L	1.18	118.2	F +	L	1.18	118.2	F +
	T	1.10	66.2	E	T	1.13	78.8	E +	T	1.13	78.8	E +
Madison Avenue & East 46th Street												
Eastbound	LT	0.88	48.2	D	LT	0.92	50.4	D	LT	0.92	50.4	D
Northbound	T	1.14	85.5	F	T	1.16	94.6	F +	T	1.16	94.6	F +
	R	0.66	14.3	B	R	0.77	17.6	B	R	0.77	17.6	B
Madison Avenue & East 48th Street												
Eastbound	L	0.94	76.7	E	L	0.96	80.1	F +	L	0.96	80.1	F +
	T	0.67	22.4	C	T	0.69	23.6	C	T	0.69	23.6	C
Northbound	T	0.98	62.8	E	T	1.00	68.1	E +	T	1.00	68.2	E ##
	R	0.70	28.7	C	R	0.72	28.9	C	R	0.72	28.9	C
Madison Avenue & East 49th Street												
Westbound	TR	1.03	56.1	E	TR	1.07	64.8	E +	TR	1.03	52.8	D
Northbound	L	0.29	10.6	B	L	0.29	10.7	B	L	0.30	11.9	B
	T	1.02	64.8	E	T	1.04	64.3	E	T	1.07	66.0	E
Madison Avenue & East 54th Street												
Eastbound	LT	1.13	99.8	F	LT	1.16	113.3	F +	LT	1.16	113.3	F +
Northbound	T	1.13	81.9	F	T	1.15	89.6	F +	T	1.15	89.6	F +
	R	0.87	36.9	D	R	0.93	42.6	D	R	0.93	42.6	D
5th Avenue & 38th Street												
Eastbound	T	0.57	22.5	C	T	0.58	22.7	C	T	0.58	22.7	C
	R	1.06	120.1	F	R	1.06	121.5	F	R	1.06	121.5	F
Southbound	LT	1.35	172.0	F	LT	1.37	182.8	F +	LT	1.37	182.8	F +
5th Avenue & 39th Street												
Westbound	L	0.85	54.6	D	L	0.93	60.8	E +	L	0.93	61.4	E ##
	T	1.33	182.1	F	T	1.38	204.1	F +	T	1.38	204.5	F ##
Southbound	T	1.13	88.4	F	T	1.14	92.5	F +	T	1.14	92.5	F +
	R	1.06	63.2	E	R	1.06	63.2	E	R	1.06	63.2	E
5th Avenue & 40th Street												
Eastbound	TR	1.31	186.0	F	TR	1.34	199.5	F +	TR	1.34	199.5	F +
Southbound	LT	1.08	67.4	E	LT	1.10	67.8	E	LT	1.10	67.8	E

**Table 19.10: Midday Level of Service Analysis with and without Proposed Mitigation
(Continued)**

Intersection & Approach (Signalized Intersections)	No-Action				With-Action				Mitigation				
	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	
5th Avenue & 42nd Street	Eastbound	T	0.72	28.1	C	T	0.72	28.3	C	T	0.72	28.3	C
		R	0.17	21.8	C	R	0.17	21.9	C	R	0.17	21.9	C
	Westbound	LT	1.35	179.2	F	LT	1.37	189.4	F +	LT	1.37	189.4	F +
		RT	1.49	243.8	F	RT	1.52	255.6	F +	RT	1.52	255.4	F +
Southbound	R	0.11	14.1	B	R	0.11	14.1	B	R	0.11	13.5	B	
	L	0.79	18.8	B	L	0.88	29.4	C	L	1.00	37.8	D	
5th Avenue & 43rd Street	Westbound	T	0.65	12.1	B	T	0.68	12.9	B	T	0.75	14.2	B
		R	1.18	105.8	F	R	1.19	110.2	F +	R	1.11	72.9	E
	Southbound	T	1.76	365.2	F	R	1.88	418.8	F +	R	1.53	261.0	F
		LT	1.41	203.5	F	LT	1.43	212.4	F +	LT	1.43	212.1	F +
5th Avenue & 44th Street	Eastbound	T	0.40	23.0	C	T	0.42	23.4	C	T	0.42	23.4	C
		R	1.12	122.4	F	R	1.17	139.2	F +	R	1.17	139.2	F +
	Southbound	LT	1.41	203.5	F	LT	1.43	212.4	F +	LT	1.43	212.1	F +
		RT	1.46	229.7	F	RT	1.47	235.1	F +	RT	1.47	235.1	F +
5th Avenue & 47th Street	Westbound	L	0.95	64.9	E	L	0.99	70.8	E +	L	0.99	70.8	E +
		T	0.53	34.2	C	T	0.55	34.6	C	T	0.55	34.6	C
	Southbound	T	1.46	229.7	F	T	1.47	235.1	F +	T	1.47	235.1	F +
		R	1.00	51.0	D	R	1.03	57.7	E +	R	1.03	57.7	E +
5th Avenue & 48th Street	Eastbound	T	0.64	19.8	B	T	0.67	20.2	C	T	0.67	20.8	C
		R	0.98	90.5	F	R	0.99	92.5	F	R	0.99	94.6	F #
	Southbound	LT	1.31	162.2	F	LT	1.32	166.9	F +	LT	1.32	167.4	F ##
		RT	1.31	162.2	F	RT	1.32	166.9	F +	RT	1.32	167.4	F ##
5th Avenue & 49th Street	Westbound	LT	0.48	23.0	C	LT	0.50	23.2	C	LT	0.51	24.6	C
		T	1.47	235.1	F	T	1.49	240.5	F +	T	1.45	224.8	F
	Southbound	R	0.37	11.7	B	R	0.37	11.7	B	R	0.36	10.3	B
		TR	1.05	88.7	F	TR	1.08	97.0	F +	TR	1.08	97.0	F +
5th Avenue & 54th Street	Eastbound	TR	1.05	88.7	F	TR	1.08	97.0	F +	TR	1.08	97.0	F +
		LT	1.39	197.6	F	LT	1.41	206.4	F +	LT	1.41	206.4	F +
	Westbound	T	1.18	124.7	F	T	1.19	128.8	F +	T	1.15	114.0	F
		R	1.07	125.5	F	R	1.07	126.8	F	R	1.03	124.4	F
Southbound	LT	0.78	77.8	E	LT	0.79	89.4	F +	LT	0.76	61.7	E	
	RT	1.04	84.9	F	RT	1.06	84.1	F	RT	1.08	83.7	F	
6th Avenue & East 48th Street	Eastbound	L	0.33	22.7	C	L	0.33	22.7	C	L	0.32	21.7	C
		T	1.00	72.9	E	T	1.02	78.4	E +	T	0.99	69.6	E
	Northbound	TR	0.76	34.9	C	TR	0.76	35.9	D	TR	0.78	44.0	D
		RT	0.76	34.9	C	RT	0.76	35.9	D	RT	0.78	44.0	D

Notes:
+ Denotes a significant adverse traffic impact
Unmitigated approach movements denoted by shading
† No significant adverse impact for the With-Action condition. Significant adverse impact is due to changes in traffic signal timing as part of air quality mitigation measures
†† Impact worsened by air quality mitigation signal timing changes
‡ No significant adverse impact for the With-Action condition. Significant adverse impact is due to changes in traffic signal timing as part of air quality mitigation measures
‡‡ Impact worsened by air quality mitigation signal timing changes
No significant adverse impact for the With-Action condition. Significant adverse impact is due to traffic mitigation measures at an adjacent intersection
Impact worsened due to traffic mitigation measures at an adjacent intersection
|| Proposed mitigation may be infeasible and will be reviewed as part of the traffic monitoring program. Significant adverse impact is identified as a worst-case scenario.
This Table has been updated for the FEIS

Table 19.11: PM Level of Service Analysis with and without Proposed Mitigation

Intersection & Approach (Signalized Intersections)	No-Action				With-Action				Mitigation			
	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS
1st Avenue & East 40th Street												
Eastbound	L	1.16	119.0	F	L	1.37	195.4	F +	L	1.37	195.4	F +
Northbound	T	1.37	193.5	F	T	1.40	205.4	F +	T	1.40	205.4	F +
1st Avenue & East 42nd Street												
Eastbound (East Side)	T	0.70	15.0	B	T	0.77	16.8	B	T	0.77	16.8	B
Westbound (East Side)	TR	0.83	40.0	D	TR	0.82	39.6	D	TR	0.82	39.6	D
	R	1.30	196.5	F	R	1.30	197.2	F	R	1.30	197.2	F
Northbound (East Side)	LT	1.15	117.7	F	LT	1.25	154.5	F +	LT	1.25	154.5	F +
	R	1.31	183.2	F	R	1.37	205.9	F +	R	1.37	205.9	F +
Eastbound (West Side)	L	1.05	93.3	F	L	1.08	93.7	F	L	1.08	93.7	F
	T	0.45	15.7	B	T	0.50	15.9	B	T	0.50	15.9	B
Westbound (West Side)	TR	0.59	5.5	A	TR	0.59	5.5	A	TR	0.59	5.5	A
	L	1.02	52.3	D	L	1.07	68.8	E +	L	1.07	68.8	E +
Northbound (West Side)	T	0.82	89.1	F	T	0.92	87.3	F	T	0.92	87.3	F
1st Avenue & East 46th Street												
Eastbound	L	1.20	123.1	F	L	1.48	243.5	F +	L	1.48	243.5	F +
Northbound	T	0.89	56.4	E	T	0.96	60.9	E +	T	0.96	60.9	E +
1st Avenue & East 47th Street												
Northbound (East Side)	T	1.06	67.4	E	T	1.23	124.1	F +	T	1.23	124.1	F +
	L	0.55	12.5	B	L	0.62	12.8	B	L	0.62	12.8	B
Northbound (West Side)	T	0.70	15.4	B	T	0.71	13.0	B	T	0.71	13.0	B
1st Avenue & East 48th Street (East Side)												
Northbound	T	0.28	0.1	A	T	0.29	0.2	A	T	0.29	0.2	A
	R	1.14	74.4	E	R	1.43	206.1	F +	R	1.43	206.1	F +
1st Avenue & East 49th Street												
Westbound (East Side)	T	0.89	42.4	D	T	0.87	40.5	D	T	0.87	40.5	D
	R	0.21	17.0	B	R	0.22	17.1	B	R	0.22	17.1	B
Northbound (East Side)	T	1.23	133.5	F	T	1.25	140.6	F +	T	1.25	140.6	F +
Westbound (West Side)	T	0.89	13.1	B	T	0.87	12.2	B	T	0.87	12.2	B
Northbound (West Side)	LT	1.07	65.9	E	LT	1.14	96.1	F +	LT	1.14	96.1	F +
1st Avenue & East 54th Street												
Eastbound	LT	1.10	97.2	F	LT	1.22	140.0	F +	LT	1.22	139.2	F +
Northbound	T	1.06	52.6	D	T	1.08	53.6	D	T	1.08	53.6	D
	R	0.82	11.6	B	R	0.82	12.0	B	R	0.82	12.0	B
1st Avenue & East 55th Street												
Westbound	TR	0.73	34.7	C	TR	0.73	34.7	C	TR	0.75	37.1	D
Northbound	L	1.09	62.1	E	L	1.09	60.9	E	L	1.05	46.2	D
	T	0.97	33.5	C	T	1.00	47.7	D +	T	0.98	37.5	D
1st Avenue & East 57th Street												
Eastbound	LT	0.58	33.2	C	LT	0.58	33.4	C	LT	0.58	33.4	C
Westbound	TR	0.87	48.2	D	TR	0.87	48.2	D	TR	0.87	48.2	D
	L	1.02	62.6	E	L	1.04	69.9	E +	L	1.04	69.9	E +
Northbound	T	0.86	11.1	B	T	0.90	13.7	B	T	0.90	13.7	B
	R	0.15	7.5	A	R	0.15	7.6	A	R	0.15	7.6	A
2nd Avenue & East 36th Street												
Eastbound	TR	1.56	281.2	F	TR	1.73	355.1	F +	TR	1.73	355.1	F +
Southbound	L	0.84	15.4	B	L	0.84	15.3	B	L	0.84	15.3	B
	T	1.11	66.5	E	T	1.12	73.1	E +	T	1.12	73.1	E +
2nd Avenue & East 37th Street												
Westbound	LT	0.49	19.2	B	LT	0.49	19.2	B	LT	0.49	19.2	B
Southbound	T	1.22	111.7	F	T	1.28	140.5	F +	T	1.28	140.5	F +
	R	0.34	4.5	A	R	0.35	4.5	A	R	0.35	4.5	A
2nd Avenue & East 38th Street												
Eastbound	TR	1.04	79.6	E	TR	1.14	110.8	F +	TR	1.14	110.8	F +
Southbound	LT	1.24	122.1	F	LT	1.30	149.7	F +	LT	1.30	150.7	F ##
2nd Avenue & East 39th Street												
Westbound	L	0.34	25.0	C	L	0.37	25.6	C	L	0.41	28.0	C
	T	0.40	25.1	C	T	0.44	25.8	C	T	0.47	28.0	C
Southbound	T	1.23	117.7	F	T	1.28	144.6	F +	T	1.23	118.4	F
	R	0.73	11.6	B	R	0.87	20.8	C	R	0.83	15.5	B

Table 19.11: PM Level of Service Analysis with and without Proposed Mitigation
(Continued)

Intersection & Approach (Signalized Intersections)	No-Action				With-Action				Mitigation			
	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS
2nd Avenue & East 40th Street												
Eastbound	T	0.93	28.6	C	T	1.17	104.7	F +	T	1.17	105.0	F ##
	R	1.26	144.3	F	R	1.41	209.6	F +	R	1.41	209.8	F ##
Southbound	LT	1.12	65.1	E	LT	1.19	98.3	F +	LT	1.19	99.8	F ##
2nd Avenue & East 41st Street												
Eastbound	TR	0.88	55.6	E	TR	1.01	84.4	F +	T	0.15	19.7	B II
									R	0.85	52.3	D
Southbound	LT	1.20	107.8	F	LT	1.26	136.2	F +	LT	1.19	101.1	F II
	R	0.19	5.5	A	R	0.21	5.4	A	R	0.19	5.2	A
2nd Avenue & East 42nd Street												
Eastbound	TR	1.16	95.8	F	TR	1.18	107.5	F +	TR	1.18	107.6	F +
	Westbound	LT	1.81dl	168.6	F	LT	1.98dl	186.3	F +	LT	1.98dl	186.3
Southbound	LT	1.13	77.6	E	LT	1.21	112.9	F +	LT	1.21	112.8	F +
	R	0.75	16.7	B	R	0.88	22.0	C	R	0.88	22.0	C
2nd Avenue & East 43rd Street												
Westbound	LT	0.38	25.6	C	LT	0.38	25.7	C	LT	0.38	25.7	C
	T	1.10	58.4	E	T	1.17	93.7	F +	T	1.17	93.7	F +
Southbound	R	1.06	53.4	D	R	1.24	129.2	F +	R	1.24	129.2	F +
2nd Avenue & East 44th Street												
Eastbound	TR	0.92	27.0	C	TR	1.27	147.8	F +	TR	1.27	149.1	F ##
	Southbound	LT	1.12	62.7	E	LT	1.17	88.2	F +	LT	1.17	90.8
2nd Avenue & East 45th Street												
Westbound	LT	1.09	86.4	F	LT	1.09	86.0	F	LT	0.59	12.7	B
	T	1.11	61.4	E	T	1.16	87.8	F +	T	1.10	55.3	E
Southbound	R	0.90	22.5	C	R	1.10	72.5	E +	R	0.67	6.2	A
2nd Avenue & East 46th Street												
Eastbound	TR	1.22dr	63.7	E	TR	1.29dr	90.3	F +	TR	1.29dr	89.8	F +
	Southbound	LT	1.09	53.6	D	LT	1.16	84.2	F +	LT	1.16	86.1
2nd Avenue & East 47th Street												
Westbound	LT	0.58	24.4	C	LT	0.66	27.6	C	LT	0.74	34.6	C
	T	1.12	63.2	E	T	1.19	95.3	F +	T	1.12	63.4	E
Southbound	R	1.17	94.2	F	R	1.24	123.2	F +	R	1.14	80.1	F
2nd Avenue & East 48th Street												
Eastbound	TR	1.10	99.4	F	TR	1.19	132.8	F +	TR	1.19	131.4	F +
	Southbound	LT	1.07	62.2	E	LT	1.12	71.0	E +	LT	1.12	68.3
2nd Avenue & East 49th Street												
Westbound	L	1.11	93.2	F	L	1.28	162.1	F +	L	1.11	89.6	F
	T	0.39	18.2	B	T	0.41	20.1	C	T	0.38	18.4	B
Southbound	T	0.91	47.5	D	T	0.95	48.4	D	T	1.01	50.7	D
	R	0.46	1.9	A	R	0.46	1.9	A	R	0.50	4.1	A
2nd Avenue & East 50th Street												
Eastbound	TR	1.09	89.0	F	TR	1.15	109.6	F +	TR	1.15	108.9	F +
	Southbound	LT	1.11	60.7	E	LT	1.15	76.7	E +	LT	1.15	77.7
2nd Avenue & East 52nd Street												
Eastbound	TR	0.85	51.2	D	TR	0.92	51.8	D	TR	0.92	46.7	D
	Southbound	L	0.21	2.0	A	L	0.21	1.9	A	L	0.21	1.9
	T	1.29	145.4	F	T	1.33	163.6	F +	T	1.33	163.5	F +
2nd Avenue & East 53rd Street												
Westbound	LT	0.96	60.1	E	LT	0.96	61.0	E	LT	0.96	61.0	E
	T	1.38	191.5	F	T	1.43	213.3	F +	T	1.43	213.8	F ##
Southbound	R	0.65	10.6	B	R	0.69	12.0	B	R	0.69	12.8	B
2nd Avenue & East 54th Street												
Eastbound	TR	0.48	30.2	C	TR	0.57	31.5	C	TR	0.59	32.0	C
	Southbound	L	0.05	1.1	A	L	0.05	1.1	A	L	0.05	1.1
	T	1.46	221.2	F	T	1.49	237.9	F +	T	1.46	222.8	F
2nd Avenue & East 55th Street												
Westbound	L	0.35	27.7	C	L	0.35	27.7	C	L	0.35	27.6	C
	T	1.09	87.1	F	T	1.08	86.4	F	T	1.08	86.7	F
Southbound	T	1.45	219.1	F	T	1.49	236.4	F +	T	1.49	236.9	F ##
	R	0.25	3.4	A	R	0.26	3.5	A	R	0.26	4.3	A

Table 19.11: PM Level of Service Analysis with and without Proposed Mitigation (Continued)

Intersection & Approach (Signalized Intersections)	No-Action				With-Action				Mitigation			
	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS
2nd Avenue & East 56th Street												
Eastbound	T	0.62	26.6	C	T	0.66	27.3	C	T	0.68	27.6	C
	R	0.43	23.3	C	R	0.49	24.4	C	R	0.51	24.7	C
Southbound	L	0.11	1.5	A	L	0.11	1.5	A	L	0.10	1.5	A
	T	1.32	158.8	F	T	1.34	171.2	F +	T	1.31	158.1	F
2nd Avenue & East 57th Street												
Eastbound	T	1.22	127.7	F	T	1.24	139.7	F +	T	1.24	139.7	F +
	R	0.30	23.6	C	R	0.31	23.5	C	R	0.31	23.5	C
Westbound	LT	0.88dl	23.6	C	LT	0.88dl	23.4	C	LT	0.88dl	23.4	C
	L	0.60	16.8	B	L	0.60	16.7	B	L	0.60	16.7	B
Southbound	T	1.07	68.8	E	T	1.09	68.6	E	T	1.09	68.6	E
	R	0.82	26.9	C	R	0.82	26.4	C	R	0.82	26.5	C
2nd Avenue & East 59th Street												
Eastbound	L	1.35	183.5	F	L	1.42	211.6	F +	L	1.42	211.1	F +
	TR	0.76	298.5	F	TR	0.76	298.7	F	TR	0.76	297.6	F
Southbound	L	1.08	62.0	E	L	1.10	62.6	E	L	1.10	62.6	E
	LT	1.15	83.1	F	LT	1.16	87.7	F +	LT	1.16	87.7	F +
2nd Avenue & East 60th Street												
Westbound	LT	0.02	14.2	B	LT	0.02	14.2	B	LT	0.02	14.2	B
	L	0.07	14.9	B	L	0.07	14.9	B	L	0.07	14.9	B
Southbound	T	1.09	77.5	E	T	1.11	79.7	E	T	1.11	79.7	E
	R	0.11	15.7	B	R	0.12	15.7	B	R	0.12	15.7	B
Westbound (Bridge Exit)	L	1.16	111.4	F	L	1.17	116.1	F +	L	1.17	116.1	F +
	T	1.02	69.4	E	T	1.02	69.4	E	T	1.02	69.4	E
Tunnel Exit Street & East 40th Street												
Eastbound	LT	1.27	140.3	F	LT	1.31	162.2	F +	LT	1.27	142.3	F
	TR	0.22	12.4	B	TR	0.24	12.1	B	TR	0.24	12.3	B
3rd Avenue & East 36th Street												
Eastbound	LT	1.50	252.7	F	LT	1.66	321.8	F +	LT	1.66	321.8	F +
	TR	0.57	19.8	B	TR	0.58	20.0	B	TR	0.58	20.0	B
Northbound	R	1.13	141.2	F	R	1.16	149.7	F +	R	1.16	149.7	F +
3rd Avenue & East 37th Street												
Westbound	TR	0.56	16.3	B	TR	0.57	16.4	B	TR	0.56	15.6	B
	R	1.03	112.9	F	R	1.07	124.4	F +	R	1.01	104.9	F
Northbound	LT	0.60	5.7	A	LT	0.61	5.9	A	LT	0.63	6.9	A
3rd Avenue & East 39th Street												
Westbound	T	1.15	117.4	F	T	1.27	167.2	F +	T	1.13	106.9	F
	R	0.50	30.0	C	R	0.56	33.4	C	R	0.49	28.6	C
Northbound	LT	1.03	70.7	E	LT	1.09	69.5	E	L	0.91	70.6	E
									T	1.05	71.5	E
3rd Avenue & East 40th Street												
Eastbound	LT	1.54	285.5	F	LT	1.61	318.3	F +	LT	1.61	317.5	F +
	T	1.14	87.1	F	T	1.19	106.2	F +	T	1.19	104.7	F +
Northbound	R	1.04	77.4	E	R	1.09	78.6	E	R	1.09	90.7	F #
3rd Avenue & East 41st Street												
Eastbound	LT	1.10	96.5	F	LT	1.14	107.8	F +	LT	1.25	155.5	F ††
	R	0.80	53.6	D	R	0.88	67.8	E +	R	0.98	88.7	F ††
Westbound	T	1.09	65.7	E	T	1.13	81.2	F +	T	1.06	60.2	E
	R	0.28	13.8	B	R	0.30	14.1	B	R	0.26	10.3	B
Northbound												
	R	0.91	40.9	D	R	1.12	97.2	F +	R	1.12	97.5	F ††
3rd Avenue & East 42nd Street												
Eastbound	L	1.12	101.9	F	L	1.10	96.9	F	L	1.10	96.9	F
	T	1.05	66.5	E	T	1.07	76.6	E +	T	1.07	76.6	E +
Westbound	T	0.91	34.1	C	T	0.96	38.2	D	T	0.96	38.1	D
	R	1.21	133.2	F	R	1.22	136.3	F +	R	1.22	136.4	F +
Northbound	LT	1.04	72.7	E	LT	1.10	74.3	E	L	0.96	40.5	D
									T	0.89	54.0	D
3rd Avenue & East 43rd Street												
Westbound	TR	0.71	20.2	C	TR	0.80	19.8	B	TR	0.88	24.4	C
	LT	1.03	61.6	E	LT	1.06	63.9	E	LT	0.98	60.1	E
3rd Avenue & East 44th Street												
Eastbound	LT	0.30	27.2	C	LT	0.31	27.3	C	LT	0.34	29.3	C
	T	1.15	78.2	E	T	1.20	104.6	F +	T	1.11	64.5	E
Northbound	R	1.44	219.9	F	R	5.24	1923.9	F +	R	3.58	1182.2	F +

**Table 19.11: PM Level of Service Analysis with and without Proposed Mitigation
(Continued)**

Intersection & Approach (Signalized Intersections)	No-Action				With-Action				Mitigation			
	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS
3rd Avenue & East 45th Street												
Westbound	T	0.67	14.2	B	T	0.73	16.3	B	T	0.78	27.0	C
	R	0.80	38.7	D	R	0.84	41.0	D	R	1.02	98.4	F †
Northbound	LT	1.11	66.0	E	LT	1.17	92.1	F +	LT	1.07	58.6	E
3rd Avenue & East 46th Street												
Eastbound	L	0.35	41.1	D	L	0.40	41.9	D	L	0.45	43.7	D
	T	0.69	27.8	C	T	0.76	31.5	C	T	0.80	33.1	C
Northbound	T	1.14	73.8	E	T	1.20	105.6	F +	T	1.14	75.2	E
	R	0.93	21.3	C	R	0.96	25.4	C	R	0.88	18.2	B
3rd Avenue & East 47th Street												
Westbound	T	1.00	58.2	E	T	1.09	81.3	F +	T	1.17	116.5	F ††
	R	0.64	25.8	C	R	0.71	27.9	C	R	0.79	34.6	C
Northbound	LT	1.13	81.6	F	LT	1.21	120.7	F +	LT	1.11	69.4	E
3rd Avenue & East 48th Street												
Eastbound	L	0.24	21.4	C	L	0.30	22.3	C	L	0.34	25.1	C
	T	0.50	23.6	C	T	0.53	24.3	C	T	0.59	27.4	C
Northbound	T	1.11	75.5	E	T	1.18	106.7	F +	T	1.05	65.3	E
	R	0.97	45.4	D	R	1.13	95.2	F +	R	0.95	36.8	D
3rd Avenue & East 49th Street												
Westbound	T	0.61	23.0	C	T	0.63	23.7	C	T	0.68	28.4	C
	R	0.56	48.5	D	R	0.61	51.1	D	R	0.78	72.6	E †
Northbound	LT	1.13	86.3	F	LT	1.23	128.5	F +	LT	1.12	79.9	E
3rd Avenue & East 50th Street												
Eastbound	L	0.80	38.7	D	L	0.84	42.4	D	L	0.92	57.1	E †
	T	0.79	33.5	C	T	0.83	36.1	D	T	0.89	45.2	D †
Northbound	T	1.10	69.5	E	T	1.17	98.6	F +	T	1.07	64.4	E
	R	0.61	21.1	C	R	0.66	22.5	C	R	0.57	17.1	B
3rd Avenue & East 51st Street												
Westbound	T	1.11	100.0	F	T	1.14	110.4	F +	T	1.23	146.6	F ††
	R	0.66	28.5	C	R	0.71	31.8	C	R	0.77	39.7	D
Northbound	LT	1.12	82.7	F	LT	1.18	108.6	F +	LT	1.07	69.9	E
3rd Avenue & East 52nd Street												
Eastbound	LT	0.90	45.2	D	LT	0.96	52.9	D +	LT	1.03	99.2	F ††
	T	1.12	76.3	E	T	1.19	105.0	F +	T	1.08	62.6	E
Northbound	R	0.93	43.1	D	R	1.17	116.0	F +	R	0.93	52.2	D +
3rd Avenue & East 53rd Street												
Westbound	T	1.04	60.1	E	T	1.07	70.4	E +	T	1.15	100.2	F ††
	R	0.84	69.1	E	R	0.83	107.9	F +	R	1.04	120.5	F ††
Northbound	LT	1.15	92.6	F	LT	1.21	123.4	F +	LT	1.11	79.0	E
3rd Avenue & East 54th Street												
Eastbound	L	1.05	100.4	F	L	1.07	102.6	F	L	1.30	188.4	F †
	T	0.67	37.9	D	T	0.76	40.1	D	T	0.81	44.6	D
Northbound	T	1.09	77.2	E	T	1.15	98.0	F +	T	1.05	73.2	E
	R	0.85	37.6	D	R	0.87	38.6	D	R	0.80	31.6	C
3rd Avenue & East 55th Street												
Westbound	T	1.10	84.0	F	T	1.23	141.8	F +	T	1.34	191.2	F ††
	R	1.00	92.8	F	R	1.15	126.4	F +	R	1.27	169.5	F ††
Northbound	LT	1.23	124.3	F	LT	1.30	154.8	F +	LT	1.19	106.0	F
3rd Avenue & East 56th Street												
Eastbound (West Side)	LT	1.09	84.5	F	LT	1.16	111.0	F +	LT	1.28	162.4	F ††
Northbound (West Side)	T	1.27	146.1	F	T	1.36	185.4	F +	T	1.27	141.7	F
Eastbound (East Side)	LT	0.63	3.9	A	LT	0.67	4.1	A	LT	0.73	5.7	A
Northbound (East Side)	TR	1.13	78.9	E	TR	1.21	116.0	F +	TR	1.12	75.0	E
3rd Avenue & East 57th Street												
Eastbound (West Side)	LT	1.36	204.0	F	LT	1.37	208.7	F +	LT	1.37	209.0	F ††
Westbound (West Side)	TR	0.83	23.7	C	TR	0.83	23.7	C	TR	0.83	23.7	C
Northbound (West Side)	LT	1.17	98.5	F	LT	1.25	133.5	F +	LT	1.20	111.5	F +
Eastbound (East Side)	T	1.16	91.0	F	T	1.17	95.7	F +	T	1.17	95.7	F +
Westbound (East Side)	T	0.86	55.8	E	T	0.86	55.6	E	T	0.86	55.6	E
	R	0.75	54.9	D	R	0.75	54.7	D	R	0.75	54.7	D
Northbound (East Side)	TR	1.09	66.0	E	TR	1.17	98.4	F +	TR	1.17	100.9	F ††
	R	1.11	75.5	E	R	1.16	97.1	F +	R	1.16	99.6	F ††

Table 19.11: PM Level of Service Analysis with and without Proposed Mitigation
(Continued)

Intersection & Approach (Signalized Intersections)	No-Action				With-Action				Mitigation			
	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS
3rd Avenue & East 59th Street												
Eastbound	LT	0.76	29.1	C	LT	0.77	29.7	C	LT	0.82	33.8	C
Northbound	T	0.56	5.8	A	T	0.59	5.8	A	T	0.57	4.8	A
	R	1.47	246.7	F	R	1.56	282.3	F +	R	1.43	225.5	F
Lexington Avenue & East 36th Street												
Eastbound	TR	1.20	146.7	F	TR	1.32	193.1	F +	TR	1.32	194.1	F ##
Southbound	LT	1.10	64.9	E	LT	1.14	83.3	F +	LT	1.14	82.8	F +
Lexington Avenue & East 38th Street												
Eastbound	T	0.74	41.8	D	T	0.79	45.6	D	T	0.77	46.0	D
	R	1.57	310.0	F	R	1.60	322.8	F +	R	1.49	275.5	F
Southbound	L	0.13	1.1	A	L	0.14	1.0	A	L	0.14	1.9	A
	T	0.55	1.7	A	T	0.57	1.7	A	T	0.59	2.5	A
Lexington Avenue & East 39th Street												
Westbound	L	0.77	35.3	D	L	0.84	39.1	D	L	0.84	40.5	D
	T	1.32	168.0	F	T	1.51	255.0	F +	T	1.51	255.8	F ##
Southbound	TR	1.02	60.1	E	TR	1.07	59.4	E	TR	1.07	59.4	E
Lexington Avenue & East 40th Street												
Eastbound	T	0.81	30.4	C	T	0.85	32.2	C	T	0.85	32.1	C
	R	1.21	140.4	F	R	1.26	160.5	F +	R	1.26	160.5	F +
Southbound	LT	0.87	17.7	B	LT	0.91	55.0	E +	LT	0.91	55.0	E +
Lexington Avenue & East 42nd Street												
Eastbound	T	1.19	117.5	F	T	1.20	121.5	F +	T	1.20	121.5	F +
	R	0.28	24.3	C	R	0.28	24.3	C	R	0.28	24.3	C
Westbound	LT	1.57	289.9	F	LT	1.66	327.2	F +	LT	1.66	328.1	F ##
	L	1.02	80.5	F	L	1.12	91.1	F +	L	1.12	91.0	F +
Southbound	T	1.00	69.7	E	T	1.05	71.4	E	T	1.05	71.3	E
	R	1.21	128.1	F	R	1.33	181.1	F +	R	1.33	181.0	F +
Lexington Avenue & East 44th Street												
Southbound	LT	1.17	96.7	F	LT	1.23	124.6	F +	LT	1.18	98.3	F
Lexington Avenue & East 45th Street												
Westbound	LT	1.06	80.6	F	LT	1.11	93.7	F +	LT	1.11	94.6	F ##
	T	1.04	60.5	E	T	1.09	62.9	E	T	1.09	63.4	E
Southbound	R	0.36	11.2	B	R	0.42	11.4	B	R	0.42	11.9	B
Lexington Avenue & East 46th Street												
Eastbound	T	1.18	111.7	F	T	1.33	178.5	F +	T	1.37	197.4	F ††
	R	0.30	28.0	C	R	0.30	28.0	C	R	0.32	28.6	C
Southbound	LT	1.11	62.3	E	LT	1.17	90.9	F +	LT	1.14	79.6	E +
Lexington Avenue & East 47th Street												
Westbound	L	1.12	103.5	F	L	1.18	127.7	F +	L	1.57	294.1	F ††
	T	1.17	108.2	F	T	1.29	160.4	F +	T	1.40	210.1	F ††
Southbound	T	1.12	73.8	E	T	1.18	101.0	F +	T	1.10	60.4	E
	R	0.93	31.8	C	R	1.24	135.8	F +	R	1.05	55.9	E +
Lexington Avenue & East 48th Street												
Eastbound	T	1.03	77.9	E	T	1.09	92.7	F +	T	1.09	92.7	F +
	R	1.11	126.1	F	R	1.18	147.7	F +	R	1.18	147.6	F +
Southbound	LT	1.06	67.2	E	LT	1.11	70.1	E	LT	1.11	69.7	E
Lexington Avenue & East 50th Street												
Eastbound	TR	0.37	24.6	C	TR	0.38	25.2	C	TR	0.42	27.7	C
Southbound	LT	1.15	87.9	F	LT	1.22	117.9	F +	LT	1.14	77.3	E
Lexington Avenue & East 51st Street												
Westbound	L	0.99	62.4	E	L	1.04	73.3	E +	L	0.95	51.7	D
	T	0.99	44.5	D	T	1.01	51.4	D +	T	0.99	43.1	D
Southbound	T	0.94	60.6	E	T	0.99	59.8	E	T	1.02	61.5	E
	R	0.53	13.2	B	R	0.59	14.2	B	R	0.61	16.4	B
Lexington Avenue & East 52nd Street												
Eastbound	T	0.60	25.2	C	T	0.65	26.3	C	T	0.65	26.3	C
	R	0.92	51.7	D	R	0.97	58.2	E +	R	0.97	58.2	E +
Southbound	LT	1.05	73.4	E	LT	1.11	74.4	E	LT	1.11	73.4	E
Lexington Avenue & East 53rd Street												
Westbound	L	0.19	16.6	B	L	0.19	16.6	B	L	0.19	14.9	B
	T	0.93	37.7	D	T	0.96	45.2	D +	T	0.94	37.6	D
Southbound	T	0.81	17.5	B	T	0.85	30.5	C	T	0.87	34.6	C
	R	0.46	17.2	B	R	0.52	20.4	C	R	0.55	25.3	C

Table 19.11: PM Level of Service Analysis with and without Proposed Mitigation
(Continued)

Intersection & Approach (Signalized Intersections)	No-Action				With-Action				Mitigation			
	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS
Lexington Avenue & East 54th Street												
Eastbound	TR	0.86	30.2	C	TR	0.93	32.9	C	TR	0.93	32.9	C
Southbound	LT	1.06	54.3	D	LT	1.11	69.1	E +	LT	1.11	69.1	E +
Lexington Avenue & East 55th Street												
Westbound	L	0.83	38.6	D	L	0.97	48.3	D +	L	0.97	47.1	D +
	T	0.77	21.1	C	T	0.91	26.2	C	T	0.91	25.0	C
Southbound	T	0.91	39.9	D	T	0.93	59.9	E +	T	0.93	59.9	E +
	R	0.52	12.1	B	R	0.56	12.4	B	R	0.56	12.4	B
Lexington Avenue & East 57th Street												
Eastbound	T	1.42	217.0	F	T	1.43	223.1	F +	T	1.39	204.9	F
	R	0.59	32.4	C	R	0.61	35.5	D	R	0.59	31.8	C
Westbound	LT	1.56dl	98.0	F	LT	1.56dl	96.0	F	LT	1.56dl	97.4	F
	LT	1.02	87.0	F	LT	1.05	85.9	F	LT	1.08	85.3	F
Southbound	R	0.37	20.3	C	R	0.37	20.6	C	R	0.38	21.5	C
Park Avenue & East 36th Street												
Eastbound (West Side)	TR	1.01	66.8	E	TR	1.03	83.9	F +	TR	0.97	60.7	E
Southbound (West Side)	LT	0.75	10.4	B	LT	0.81	11.7	B	LT	0.85	15.8	B
Eastbound (East Side)	LT	0.65	14.3	B	LT	0.70	29.9	C	LT	0.66	18.8	B
Northbound (East Side)	TR	0.59	18.1	B	TR	0.60	18.2	B	TR	0.63	20.1	C
Park Avenue & East 38th Street												
Eastbound (West Side)	TR	1.00	65.6	E	TR	1.05	78.8	E +	TR	0.98	60.3	E
Southbound (West Side)	LT	0.70	6.0	A	LT	0.74	6.2	A	LT	0.78	8.8	A
Eastbound (East Side)	L	0.23	7.9	A	L	0.23	8.1	A	L	0.22	7.5	A
Eastbound (East Side)	T	0.49	9.3	A	T	0.51	10.8	B	T	0.49	8.9	A
Northbound (East Side)	TR	0.91	51.1	D	TR	0.93	59.2	E +	T	0.72	14.4	B
Northbound (East Side)									R	0.46	11.7	B
Park Avenue & East 39th Street												
Westbound (East Side)	TR	1.26	142.7	F	TR	1.41	212.3	F +	TR	1.41	212.3	F +
Northbound (East Side)	LT	0.97	78.5	E	LT	0.97	79.2	E	LT	0.97	83.6	F #
Westbound (West Side)	LT	1.09	65.6	E	LT	1.23	126.3	F +	LT	1.23	126.2	F +
Southbound (West Side)	T	0.82	66.8	E	T	0.87	67.4	E	T	0.87	67.4	E
	R	1.16	103.7	F	R	1.30	162.4	F +	R	1.30	162.4	F +
Park Avenue & East 40th Street												
Eastbound (West Side)	TR	1.43	238.6	F	TR	1.47	255.4	F +	TR	1.47	255.4	F +
Southbound (West Side)	T	1.18	118.7	F	T	1.27	153.4	F +	T	1.27	153.4	F +
Eastbound (Tunnel Exit)	LT	1.66	318.6	F	LT	1.70	337.4	F +	LT	1.70	337.4	F +
Northbound (Tunnel Exit)	T	0.87	20.2	C	T	0.87	20.7	C	T	0.87	20.8	C
Eastbound (East Side)	LT	1.55	265.9	F	LT	1.60	287.5	F +	LT	1.60	287.5	F +
Northbound (East Side)	TR	1.07	71.6	E	TR	1.09	71.1	E	TR	1.09	71.1	E
Park Avenue & East 46th Street												
Eastbound (West Side)	T	1.16	109.3	F	T	1.25	143.4	F +	T	1.25	143.4	F +
	R	0.40	24.1	C	R	0.40	24.1	C	R	0.40	24.1	C
Southbound (West Side)	L	0.66	75.9	E	L	0.77	76.8	E	L	0.77	76.7	E
	T	1.12	72.6	E	T	1.22	118.0	F +	T	1.22	117.9	F +
Eastbound (East Side)	L	0.82	14.8	B	L	0.95	23.1	C	L	0.95	23.1	C
	T	1.20	109.2	F	T	1.34	172.3	F +	T	1.34	172.3	F +
Northbound (East Side)	T	0.90	45.2	D	T	0.90	48.5	D	T	0.90	48.5	D
Park Avenue & East 47th Street												
Westbound (East Side)	T	0.99	36.6	D	T	1.10	68.8	E +	T	1.10	67.9	E +
	R	0.74	17.5	B	R	0.79	18.7	B	R	0.79	17.7	B
Northbound (East Side)	L	0.27	95.7	F	L	0.27	98.8	F +	L	0.27	98.3	F
	T	1.05	66.3	E	T	1.07	65.8	E	T	1.07	65.7	E
Westbound (West Side)	LT	1.05	63.2	E	LT	1.14	91.1	F +	LT	1.14	91.1	F +
Southbound (West Side)	TR	1.04	68.8	E	TR	1.12	78.6	E +	TR	1.08	67.7	E
Park Avenue & East 48th Street												
Eastbound (West Side)	T	0.59	35.8	D	T	0.63	35.8	D	T	0.63	35.2	D
	R	0.32	30.4	C	R	0.45	32.7	C	R	0.45	32.2	C
Southbound (West Side)	L	0.22	50.4	D	L	0.22	65.2	E +	L	0.22	65.2	E +
	T	0.99	63.0	E	T	1.05	62.2	E	T	1.05	62.1	E
Eastbound (East Side)	LT	0.91	35.9	D	LT	0.96	44.3	D	LT	0.96	44.4	D
Northbound (East Side)	TR	1.02	61.6	E	TR	1.04	62.8	E	TR	1.04	62.7	E

Table 19.11: PM Level of Service Analysis with and without Proposed Mitigation
(Continued)

Intersection & Approach (Signalized Intersections)	No-Action				With-Action				Mitigation			
	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS
Park Avenue & East 49th Street												
Westbound (East Side)	T	0.89	34.2	C	T	0.99	70.9	E +	T	0.99	68.2	E +
	R	0.51	12.6	B	R	0.55	12.8	B	R	0.55	10.7	B
Northbound (East Side)	L	0.19	26.3	C	L	0.19	109.9	F +	L	0.19	109.9	F +
	T	1.07	58.8	E	T	1.10	60.1	E	T	1.10	60.1	E
Westbound (West Side)	LT	0.96	36.8	D	LT	1.06	59.9	E +	LT	1.06	59.9	E +
Southbound (West Side)	TR	0.94	52.5	D	TR	0.98	65.0	E +	TR	0.98	65.0	E +
Park Avenue & East 50th Street												
Eastbound (West Side)	T	0.87	37.3	D	T	0.91	42.6	D	T	0.91	42.6	D
	R	0.57	25.9	C	R	0.65	28.1	C	R	0.65	28.1	C
Southbound (West Side)	L	0.20	16.4	B	L	0.20	16.1	B	L	0.20	16.1	B
	T	1.06	67.5	E	T	1.10	67.6	E	T	1.10	67.6	E
Eastbound (East Side)	LT	1.15	109.0	F	LT	1.20	127.1	F +	LT	1.20	127.1	F +
Northbound (East Side)	TR	0.90	42.2	D	TR	0.93	52.9	D +	TR	0.93	52.8	D +
Park Avenue & East 52nd Street												
Eastbound (West Side)	TR	0.79	25.9	C	TR	0.80	26.2	C	TR	0.80	26.2	C
	L	0.16	54.7	D	L	0.18	86.3	F +	L	0.18	86.3	F +
Southbound (West Side)	T	1.02	50.0	D	T	1.06	65.2	E +	T	1.06	65.2	E +
	LT	1.06	67.8	E	LT	1.10	82.3	F +	LT	1.10	82.3	F +
Northbound (East Side)	TR	1.05	64.7	E	TR	1.08	62.9	E	TR	1.08	62.9	E
Park Avenue & East 53rd Street												
Westbound (East Side)	T	0.85	50.5	D	T	0.87	53.4	D	T	0.87	54.7	D
	R	0.50	32.7	C	R	0.53	33.1	C	R	0.53	33.7	C
Northbound (East Side)	L	0.16	18.7	B	L	0.16	18.6	B	L	0.16	18.6	B
	T	1.11	64.3	E	T	1.14	80.4	F +	T	1.14	80.4	F +
Westbound (West Side)	LT	1.03	52.3	D	LT	1.05	59.5	E +	LT	1.05	59.6	E ##
Southbound (West Side)	TR	0.86	22.0	C	TR	0.91	34.9	C	TR	0.91	34.9	C
Park Avenue & East 55th Street												
Westbound (East Side)	TR	1.08	112.8	F	TR	1.26	165.9	F +	TR	1.26	165.9	F +
	L	0.15	37.0	D	L	0.15	157.9	F +	L	0.15	157.9	F +
Northbound (East Side)	T	1.10	64.9	E	T	1.14	83.1	F +	T	1.14	83.1	F +
	LT	1.08	76.7	E	LT	1.18	102.2	F +	LT	1.18	102.2	F +
Southbound (West Side)	TR	1.14	81.9	F	TR	1.16	89.2	F +	TR	1.16	89.2	F +
Park Avenue & East 56th Street												
Eastbound (West Side)	TR	1.33	172.0	F	TR	1.34	175.9	F +	TR	1.34	175.9	F +
	L	0.17	16.5	B	L	0.17	16.9	B	L	0.17	16.9	B
Southbound (West Side)	T	1.04	71.4	E	T	1.05	71.0	E	T	1.05	71.0	E
	LT	1.14	82.6	F	LT	1.15	87.3	F +	LT	1.15	87.3	F +
Northbound (East Side)	TR	1.01	58.8	E	TR	1.08	62.4	E	TR	1.08	62.3	E
Park Avenue & East 57th Street												
Eastbound (West Side)	T	1.37	199.2	F	T	1.38	201.0	F	T	1.38	201.0	F
	R	0.43	29.3	C	R	0.43	29.2	C	R	0.43	29.2	C
Westbound (West Side)	T	0.75	12.7	B	T	0.76	13.4	B	T	0.76	13.3	B
Southbound (West Side)	LTR	0.76	72.2	E	LTR	0.77	72.5	E	LTR	0.77	72.5	E
Eastbound (East Side)	LT	1.03	31.8	C	LT	1.04	33.3	C	LT	1.04	33.3	C
	T	0.52	30.5	C	T	0.52	30.4	C	T	0.52	31.0	C
Westbound (East Side)	R	0.25	26.1	C	R	0.25	26.1	C	R	0.25	26.7	C
	L	0.16	10.1	B	L	0.17	10.1	B	L	0.17	10.1	B
Northbound (East Side)	T	1.09	58.4	E	T	1.13	75.3	E +	T	1.13	75.3	E +
	R	0.38	10.5	B	R	0.40	9.9	A	R	0.40	9.9	A
Madison Avenue & East 39th Street												
Westbound	T	1.32	164.3	F	T	1.53	257.9	F +	T	1.53	257.9	F +
	R	1.03	61.6	E	R	1.23	135.7	F +	R	1.23	135.7	F +
Northbound	LT	0.99	84.8	F	LT	1.02	85.3	F	LT	1.02	85.3	F
Madison Avenue & East 40th Street												
Eastbound	L	1.16	110.1	F	L	1.19	120.5	F +	L	1.19	120.5	F +
	T	0.82	14.2	B	T	0.83	14.7	B	T	0.83	14.7	B
Northbound	TR	1.09	63.7	E	TR	1.14	79.9	E +	TR	1.14	79.9	E +
Madison Avenue & East 41st Street												
Eastbound	L	0.53	50.4	D	L	0.53	51.0	D	L	0.53	51.0	D
	T	0.21	27.3	C	T	0.22	27.5	C	T	0.22	27.5	C
Northbound	TR	1.16	90.8	F	TR	1.20	111.4	F +	TR	1.20	111.4	F +

**Table 19.11: PM Level of Service Analysis with and without Proposed Mitigation
(Continued)**

Intersection & Approach (Signalized Intersections)	No-Action				With-Action				Mitigation			
	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS
Madison Avenue & East 42nd Street												
Eastbound	LT	1.17	103.8	F	LT	1.21	119.4	F +	LT	1.21	121.1	F ##
Westbound	T	1.21	133.0	F	T	1.27	157.3	F +	T	1.27	157.3	F +
	R	0.18	28.8	C	R	0.18	28.8	C	R	0.18	28.8	C
Northbound	LT	1.19	105.4	F	LT	1.23	123.7	F +	LT	1.23	123.7	F +
	R	0.39	13.6	B	R	0.43	13.8	B	R	0.43	13.8	B
Madison Avenue & East 43rd Street												
Westbound	T	0.53	28.5	C	T	0.56	29.3	C	T	0.56	29.3	C
	R	0.67	44.5	D	R	0.67	44.5	D	R	0.67	44.5	D
Northbound	L	1.21	121.4	F	L	1.74	354.3	F +	L	1.74	354.3	F +
	T	1.18	99.6	F	T	1.22	118.8	F +	T	1.22	118.8	F +
Madison Avenue & East 46th Street												
Eastbound	LT	1.04	88.5	F	LT	1.10	86.1	F	LT	1.10	86.1	F
Northbound	T	1.10	63.2	E	T	1.12	73.6	E +	T	1.12	73.6	E +
	R	0.71	152.9	F	R	0.88	173.9	F +	R	0.88	173.9	F +
Madison Avenue & East 48th Street												
Eastbound	L	0.69	29.3	C	L	0.74	26.4	C	L	0.80	29.0	C
	T	0.74	13.3	B	T	0.87	14.5	B	T	0.89	16.0	B
Northbound	T	1.17	95.4	F	T	1.20	108.7	F +	T	1.17	95.5	F
	R	0.74	29.4	C	R	0.78	32.1	C	R	0.72	27.2	C
Madison Avenue & East 49th Street												
Westbound	TR	1.01	77.3	E	TR	1.14	93.4	F +	TR	1.14	93.3	F +
Northbound	L	0.21	11.8	B	L	0.23	11.8	B	L	0.23	12.3	B
	T	1.06	59.7	E	T	1.09	61.1	E	T	1.09	61.7	E
Madison Avenue & East 53rd Street												
Westbound	TR	0.93	47.9	D	TR	0.95	48.9	D	TR	0.95	48.9	D
Northbound	L	0.58	12.9	B	L	0.58	13.0	B	L	0.58	13.0	B
	T	1.10	62.6	E	T	1.12	73.3	E +	T	1.12	73.3	E +
5th Avenue & 38th Street												
Eastbound	T	0.51	19.3	B	T	0.52	19.3	B	T	0.52	19.3	B
	R	1.04	120.8	F	R	1.04	120.8	F	R	1.04	120.8	F
Southbound	LT	1.24	119.5	F	LT	1.26	132.0	F +	LT	1.26	132.0	F +
5th Avenue & 39th Street												
Westbound	L	0.84	58.0	E	L	0.89	60.5	E	L	0.89	60.5	E
	T	0.77	38.0	D	T	0.90	40.9	D	T	0.90	40.9	D
Southbound	T	1.26	137.1	F	T	1.28	146.9	F +	T	1.28	146.9	F +
	R	1.15	92.2	F	R	1.15	92.2	F	R	1.15	92.2	F
5th Avenue & 40th Street												
Eastbound	TR	1.27	162.7	F	TR	1.28	170.0	F +	TR	1.28	170.0	F +
Southbound	LT	1.49	240.5	F	LT	1.52	253.8	F +	LT	1.52	253.8	F +
5th Avenue & 42nd Street												
Eastbound	T	0.69	27.4	C	T	0.69	27.4	C	T	0.66	25.0	C
	R	0.15	21.5	C	R	0.15	21.5	C	R	0.14	19.8	B
Westbound	LT	0.99	45.1	D	LT	1.04	57.8	E +	LT	0.98	41.7	D
Southbound	LT	1.48	231.2	F	LT	1.50	243.4	F +	LT	1.58	280.4	F ##
	R	0.03	2.0	A	R	0.03	2.2	A	R	0.03	6.8	A
5th Avenue & 43rd Street												
Westbound	L	0.67	37.6	D	L	0.73	32.0	C	L	0.89	41.3	D
	T	0.59	30.5	C	T	0.60	27.7	C	T	0.69	31.9	C
Southbound	T	1.35	173.5	F	T	1.37	182.3	F +	T	1.25	128.4	F
	R	1.61	297.5	F	R	2.12	526.1	F +	R	1.58	283.6	F
5th Avenue & 44th Street												
Eastbound	T	0.45	23.1	C	T	0.46	23.4	C	T	0.46	23.4	C
	R	1.23	164.6	F	R	1.36	217.7	F +	R	1.36	217.7	F +
Southbound	LT	1.52	252.1	F	LT	1.54	263.1	F +	LT	1.54	263.0	F +
5th Avenue & 47th Street												
Westbound	L	1.12	101.4	F	L	1.14	108.9	F +	L	1.14	108.9	F +
	T	1.03	50.4	D	T	1.09	73.3	E +	T	1.09	73.3	E +
Southbound	T	1.37	185.1	F	T	1.39	192.3	F +	T	1.39	192.3	F +
	R	0.95	30.4	C	R	1.16	97.0	F +	R	1.16	97.0	F +
5th Avenue & 48th Street												
Eastbound	T	1.02	52.9	D	T	1.20	128.1	F +	T	1.20	128.1	F +
	R	1.14	107.8	F	R	1.24	156.7	F +	R	1.24	156.7	F +
Southbound	LT	1.31	159.0	F	LT	1.33	164.6	F +	LT	1.33	164.6	F +

Table 19.11: PM Level of Service Analysis with and without Proposed Mitigation (Continued)

Intersection & Approach (Signalized Intersections)	No-Action				With-Action				Mitigation			
	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS
5th Avenue & 49th Street												
Westbound	LT	0.94	59.8	E	LT	1.10	91.4	F +	LT	1.10	91.4	F +
Southbound	T	1.40	193.3	F	T	1.41	199.8	F +	T	1.41	199.8	F +
	R	0.72	9.8	A	R	0.72	9.8	A	R	0.72	9.8	A
5th Avenue & 54th Street												
Eastbound	TR	0.91	48.9	D	TR	0.94	52.6	D	TR	0.94	52.6	D
Southbound	LT	1.45	219.1	F	LT	1.47	228.7	F +	LT	1.47	228.7	F +
5th Avenue & 57th Street												
Eastbound	T	1.41	217.8	F	T	1.41	219.6	F	T	1.41	219.6	F
	R	0.77	46.6	D	R	0.78	47.6	D	R	0.78	47.6	D
Westbound	LT	1.66dl	153.0	F	LT	1.66dl	159.1	F +	LT	1.66dl	159.1	F +
Southbound	LT	1.49	251.4	F	LT	1.52	263.7	F +	LT	1.52	263.7	F +
	R	0.66	32.7	C	R	0.66	32.7	C	R	0.66	32.7	C
6th Avenue & West 49th Street												
Westbound	T	0.87	51.2	D	T	1.03	74.2	E +	T	0.94	53.0	D
	R	0.82	48.7	D	R	0.92	55.6	E +	R	0.83	44.0	D
Northbound	LT	0.88	13.0	B	LT	0.89	13.2	B	LT	0.95	21.4	C
Notes: + Denotes a significant adverse traffic impact Unmitigated approach movements denoted by shading † No significant adverse impact for the With-Action condition. Significant adverse impact is due to changes in traffic signal timing as part of air quality mitigation measures †† Impact worsened by air quality mitigation signal timing changes ‡ No significant adverse impact for the With-Action condition. Significant adverse impact is due to changes in traffic signal timing as part of air quality mitigation measures ‡‡ Impact worsened by air quality mitigation signal timing changes # No significant adverse impact for the With-Action condition. Significant adverse impact is due to traffic mitigation measures at an adjacent intersection ## Impact worsened due to traffic mitigation measures at an adjacent intersection Proposed mitigation may be infeasible and will be reviewed as part of the traffic monitoring program. Significant Adverse impact is identified as a worst-case scenario. <u>This Table has been updated for the FEIS</u>												

Action-With-Improvements

All study area intersections were evaluated quantitatively to determine if the significant impacts identified in the Action-With-Improvements Condition could be mitigated. Table 19.12 presents a comparison of the number of approach movements and intersections that would have significant adverse impacts and unmitigated significant adverse impacts for the Action-With-Improvements and Action-Without-Improvements Conditions. Table 19.13 presents a summary of intersections that would have differences in significant adverse traffic impacts and differences in impacted intersections that would be fully mitigated for the Action-With-Improvements and Action-Without-Improvements Conditions. The results of these analyses are summarized below:

- For the weekday AM peak hour, 199 approach movements at 103 intersections would be impacted under the Action-With-Improvements condition (compared to 190 approach movements at 101 intersections under the Action-Without-Improvements condition). With respect to unmitigated intersections, 172 approach movements at 83 intersections would have unmitigated significant adverse impacts (compared to 159 approach movements at 82 intersections under the Action-Without-Improvements). Five intersections, including the intersections of Third Avenue with East 43rd, East 46th, East 50th, East 51st Streets, and Madison Avenue at East 46th Street, which would be either mitigated or have no significant adverse impacts under the Action-Without-Improvements condition, would be unmitigated under the Action-With-Improvements condition. Four intersections, including the

- intersections of Third Avenue at East 40th Street and Lexington Avenue with East 46th, East 52nd, and East 54th Streets, which would be unmitigated under the Action-Without-Improvements condition, would be either mitigated or have no significant adverse impacts under the Action-With-Improvements condition.
- For the weekday Midday peak hour, 179 approach movements at 98 intersections would be impacted under the Action-With-Improvements condition (compared to 179 approach movements at 101 intersections under the Action-Without-Improvements condition). With respect to unmitigated intersections, 139 approach movements at 64 intersections would have unmitigated significant adverse impacts (compared to 126 approach movements at 59 intersections under the Action-Without-Improvements). Eight intersections, including the intersections of Third Avenue with East 39th, East 51st, East 52nd, East 53rd, and East 56th Streets, Lexington Avenue at East 55th Street, Park Avenue at East 51st Street, and Madison Avenue at East 40th Street, which would be either mitigated or have no significant adverse impacts under the Action-Without-Improvements condition, would be unmitigated under the Action-With-Improvements condition. Three intersections, including Second Avenue at East 53rd Street, Third Avenue at East 40th Street, and Madison Avenue at East 48th Street, which would be unmitigated under the Action-Without-Improvements condition, would be either mitigated or have no significant adverse impacts under the Action-With-Improvements condition.
 - For the weekday PM peak hour, 210 approach movements at 107 intersections would be impacted under the Action-With-Improvements condition (compared to 201 approach movements at 106 intersections under the Action-Without-Improvements condition). With respect to unmitigated intersections, 168 approach movements at 83 intersections would have unmitigated significant adverse impacts (compared to 160 approach movements at 82 intersections under the Action-Without-Improvements). Seven intersections, including the intersections of Third Avenue with East 39th, East 46th, and East 48th Streets, Lexington Avenue with East 38th and East 50th Streets, and Park Avenue with East 51st and East 54th Streets, which would be either mitigated or have no significant adverse impacts under the Action-Without-Improvements condition, would be unmitigated under the Action-With-Improvements condition. Six intersections, including the intersections of Third Avenue with East 40th, East 49th, and East 50th Streets, and Lexington Avenue with East 45th, East 52nd and East 54th Streets, which would be unmitigated under the Action-Without-Improvements condition, would be either mitigated or have no significant adverse impacts under the Action-With-Improvements condition.

Appendix F.9 provides a summary of recommended mitigation measures for each of the intersections with significant impacts. Appendix F.10 provides a comparison of the v/c ratios, delays, and LOS at impacted intersections with implementation of these mitigation measures.

Table 19.12: Number of Intersections and Approaches with Significant Adverse Traffic Impacts – Comparison of Action-With-Improvements Condition and Action-Without-Improvements Condition

Peak Hour	Development Scenario	Movements/ Intersections Analyzed	Movements/ Intersections With No Significant Impacts	Movements/ Intersections With Significant Impacts	Mitigated Movements/ Intersections	Unmitigated Movements/ Intersections
AM	Action-With-Improvements	474/119	275/16	199/103	27/20	172/83
	Action-Without-Improvements	454/119	264/18	190/101	31/19	159/82
Midday	Action-With-Improvements	460/119	281/21	179/98	40/34	139/64
	Action-Without-Improvements	436/119	257/18	179/101	53/42	126/59
PM	Action-With-Improvements	466/119	256/12	210/107	42/24	168/83
	Action-Without-Improvements	442/119	241/13	201/106	41/24	160/82

Note:

The number of movements would increase from Action-Without-Improvements to Action-With-Improvements conditions due to changes in the roadway network and operational changes.

[This Table is new to the FEIS.](#)

Table 19.13: Summary of Locations with Different Significant Adverse Traffic Impacts – Comparison of Action-With-Improvements Condition and Action-Without-Improvements Condition

Intersection	AM Peak Hour				Midday Peak Hour				PM Peak Hour			
	Action-With-Improvements		Action-Without-Improvements		Action-With-Improvements		Action-Without-Improvements		Action-With-Improvements		Action-Without-Improvements	
	Impact(s)	Mitigation	Impact(s)	Mitigation	Impact(s)	Mitigation	Impact(s)	Mitigation	Impact(s)	Mitigation	Impact(s)	Mitigation
2nd Ave. @ E. 53rd St					Yes	Yes	Yes	No				
Tunnel Exit St. @ E. 40th St.	Yes	Yes					Yes	Yes				
3rd Ave. @ E. 38th St.									Yes	Yes		
3rd Ave. @ E. 39th St.					Yes	No	Yes	Yes	Yes	No	Yes	Yes
3rd Ave. @ E. 40th St.	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No
3rd Ave. @ E. 41st St.	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
3rd Ave. @ E. 42nd St.	Yes	No	Yes	No	Yes	No	Yes	No				
3rd Ave. @ E. 43rd St.	Yes	No	Yes	Yes	Yes	Yes			Yes	Yes		
3rd Ave. @ E. 45th St.	Yes	No	Yes	No			Yes	Yes	Yes	No	Yes	No
3rd Ave. @ E. 46th St.	Yes	No							Yes	No	Yes	Yes
3rd Ave. @ E. 47th St.	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
3rd Ave. @ E. 48th St.									Yes	No	Yes	Yes
3rd Ave. @ E. 49th St.	Yes	No	Yes	No			Yes	Yes			Yes	No
3rd Ave. @ E 50th St.	Yes	No	Yes	Yes					Yes	Yes	Yes	No
3rd Ave. @ E 51st St.	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	No
3rd Ave. @ E 52nd St.					Yes	No	Yes	Yes				
3rd Ave. @ E 53rd St.					Yes	No	Yes	Yes				
3rd Ave. @ E. 54th St.									Yes	No	Yes	No
3rd Ave. @ E. 55th St.	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
3rd Ave. @ E 56th St.					Yes	No	Yes	Yes				
Lexington Ave. @ E. 38th St.									Yes	No	Yes	Yes
Lexington Ave. @ E. 39th St.	Yes	No	Yes	No								
Lexington Ave. @ E. 40th St.	Yes	No	Yes	No			Yes	Yes	Yes	No	Yes	No
Lexington Ave. @ E. 45th St.	Yes	Yes									Yes	No
Lexington Ave. @ E. 46th St.			Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Lexington Ave. @ E. 48th St.	Yes	No	Yes	No								
Lexington Ave. @ E. 50th St.	Yes	No	Yes	No			Yes	Yes	Yes	No	Yes	Yes
Lexington Ave. @ E. 51st St.					Yes	No	Yes	No				
Lexington Ave. @ E. 52nd St.			Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Lexington Ave. @ E. 53rd St.	Yes	No	Yes	No								
Lexington Ave. @ E. 54th St.	Yes	Yes	Yes	No	Yes	No	Yes	No			Yes	No
Lexington Ave. @ E. 55th St.					Yes	No			Yes	No	Yes	No
Park Ave. @ East 40th St.	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Park Ave. @ E. 46th St.									Yes	No	Yes	No
Park Ave. @ E. 47th St.	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Park Ave. @ E. 48th St.	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Park Ave. @ E 49th St.	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Park Ave. @ E. 50th St.	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Park Ave. @ E. 51st St.	Yes	No	Yes	No	Yes	No	Yes	Yes	Yes	No		
Park Ave. @ E. 52nd St.	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Park Ave. @ E. 53rd St.	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Park Ave. @ E. 54th St.	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No		
Park Ave. @ E. 55th St.					Yes	No	Yes	No	Yes	No	Yes	No
Park Ave. @ E. 56th St.	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Park Ave. @ E. 57th St.	Yes	No	Yes	No	Yes	No	Yes	No				
Madison Ave. @ E. 40th St.	Yes	No	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes	No
Madison Ave. @ E. 41st St.	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Madison Ave. @ E. 43rd St.									Yes	No	Yes	No
Madison Ave. @ E. 46th St.	Yes	No			Yes	No	Yes	No	Yes	No	Yes	No
Madison Ave. @ E. 48th St.					Yes	Yes	Yes	No				
Madison Ave. @ E. 53rd St.									Yes	No	Yes	No
5th Ave. @ 40th St.					Yes	No	Yes	No				

Notes: NB = Northbound; SB = Southbound; EB = Eastbound; WB = Westbound; L = Left-Turn; T = Through; R = Right-Turn; Mitigation = Mitigation Provided; Intersections with unmitigable impacts are denoted by shading. This Table is new to the FEIS.

Proposed Mitigation Schedule for Traffic Mitigation Measures

Subject to the approvals of DOT, the mitigation measures described above would be implemented to mitigate the significant adverse traffic impacts resulting from full build-out of the Proposed Action in 2036. As the development of the Proposed Action would be expected to occur over an approximate 20-year period, it is possible that some of the significant adverse traffic impacts could occur prior to full build-out in 2036.

Based on the anticipated construction schedule shown in Chapter 18, "Construction," the first significant adverse traffic impacts resulting from the Proposed Action could potentially occur in the first quarter of 2023 following the completion of Projected Development Site 6, as the amount of incremental vehicle trips associated with traffic generated by this development site would exceed the *CEQR Technical Manual* analysis threshold of 50 peak hour vehicle trips. This level of development would result in a net increase of 248,274 gross square feet (gsf) of office space and 14,969 gsf of retail space and would generate more than 50 peak hour vehicle trip ends. At this earlier point in time, some or all of the mitigation measures developed for full build-out of the Proposed Action in 2036 could be implemented to address significant adverse traffic impacts.

Transit

As discussed in Chapter 12, "Transportation," the results of the analyses of transit conditions show that additional trips resulting from the Proposed Action would result in significant adverse impacts at three subway stations/station complexes in the weekday AM and PM commuter peak hours.

The *CEQR Technical Manual* identifies a significant impact for stairways and passageways in terms of the minimum width increment threshold (WIT) based on the minimum amount of additional capacity that would be required to restore conditions to either their No-Action v/c ratio or to a v/c ratio of 1.00 (LOS C/D), whichever is greater. Stairways that are substantially degraded in level of service or which experience the formation of extensive queues are classified as significantly impacted. For turnstiles, escalators, and high-wheel exit gates, the *CEQR Technical Manual* defines a significant impact as an increase from a No-Action v/c ratio of below 1.00 to a v/c ratio of 1.00 or greater. Where a facility is already at a v/c ratio of 1.00 or greater, a 0.01 change in v/c ratio is considered significant.

A significant transit impact is considered mitigated if measures implemented return the anticipated conditions to an acceptable level, following the same impact criteria used in determining impacts. Standard mitigation for projected significant adverse transit impacts can include stairway widening; providing additional vertical circulation capacity; passageway widening; providing additional fare control elements; and increasing escalator processing capacity.

Discussed below are recommended mitigation measures to address the Proposed Action's significant adverse transit impacts. In the absence of the application of mitigation measures, the impacts would remain unmitigated.

Subway Stations

Grand Central 42nd Street Subway Station

At the Grand Central 42nd Street subway station, there would be a significant adverse transit impact at one of the 38 analyzed stairs during the PM peak hour (free zone stair KC). Additionally, a significant adverse transit impact would occur at all eight analyzed escalators during the AM peak hour (E203, E204, E205, E206, E208, E210, E255, and E256) and at four of the eight analyzed escalators during the PM peak hour (E204, E206, E208, and E256). Some of the significant adverse impacts to escalators at this station could be mitigated by operating the escalators at a higher speed (100 feet per minute versus 90 feet per minute). Table 19.14 shows the weekday AM and PM peak hour conditions at all analyzed escalators based on replacement of existing escalators with higher speed models. As shown in Table 19.14, implementation of these measures would mitigate the significant adverse impacts at four escalators during the AM peak hour (E203, E204, E205 and E206) and two escalators during the PM peak hour (E208 and E256). Conditions at the other escalators would also improve in both the AM and PM peak hours as a result of the higher operating speeds, but the significant adverse impacts at four escalators during the AM peak hour (E208, E210, E255, and E256) and two escalators during the PM peak hour (E204 and E206) would remain unmitigated. Operating the escalators at a higher speed would also allow some of the passenger load from free zone stair KC to be shifted to the free zone escalators (E255 and E256). During the peak 15-minute period of the PM peak hour, up to 121 “up” moves and 77 “down” moves could be shifted from free zone stair KC to E255 and E256, respectively, with both escalators still maintaining their v/c ratio projected in the No-Action condition. With this shift in volumes, free zone stair KC would operate at a v/c ratio of 1.20, compared to a v/c ratio of 1.23 in the No-Action condition, which would mitigate the significant adverse impact to this stair. NYCT will perform a monitoring program to assess pedestrian operations and conditions at this subway station as developments are constructed and reevaluate the need for improvement measures.

42nd St-Bryant Park Subway Station

At the 42nd St-Bryant Park subway station, a significant stairway impact would occur at the street Stair MB20 (located at the northeast corner of Sixth Avenue and West 42nd Street). Street Stair MB20 is expected to continue to operate at LOS D with a v/c ratio of 1.20 in the PM peak hour as a result of the Proposed Action, compared to a v/c ratio of 1.12 in the No-Action condition. Mitigation measures to return stair MB20 to the No-Action condition are considered infeasible and this impact would remain unmitigated.

Lexington Avenue-53rd Street Subway Station

At the Lexington Avenue-53rd Street subway station, there would be a significant adverse transit impact at three of the six analyzed escalators during the AM peak hour (E243, E244, and E254X) and at three of the six analyzed escalators during the PM peak hour (E244, E246, and E269) as a result of the Proposed Action. Some of the significant adverse impacts to escalators at this station could be mitigated by operating the escalators at a higher speed (100 feet per minute versus 90 feet per minute). Table 19.15 shows the weekday AM and PM peak hour conditions at all analyzed escalators based on replacement of existing escalators with higher speed models. As shown in Table 19.15, implementation of these measures would mitigate the significant adverse impacts at two escalators during the AM peak hour (E244 and E254X) and one escalator during the PM peak hour (E246). Conditions at the other

escalators would also improve in both the AM and PM peak hours as a result of the higher operating speeds, but the significant adverse impacts at one escalator during the AM peak hour (E243) and two escalators during the PM peak hour (E244 and E269) would remain unmitigated. NYCT will perform a monitoring program to assess pedestrian operations and conditions at this subway station as developments are constructed and reevaluate the need for improvement measures.

Table 19.14: Mitigated With-Action With-Improvements Subway Escalator Analysis at the Grand Central-42nd Street (4, 5, 6, 7, S) Subway Station

Peak Period	Escalator	No-Action							With-Action							Mitigated With-Action						
		Width (in.)	Treads Per Minute	Guideline Capacity	15-Minute Pedestrian Volumes	Surging Factor	V/C Ratio	LOS	Width (in.)	Treads Per Minute	Guideline Capacity	15-Minute Pedestrian Volumes	Surging Factor	V/C Ratio	LOS	Width (in.)	Treads Per Minute	Guideline Capacity	15-Minute Pedestrian Volumes	Surging Factor	V/C Ratio	LOS
AM	E203	32	90	750	687	0.80	1.15	D	32	90	750	750	0.80	1.25	D	32	100	825	750	0.80	1.14	D
	E204	32	90	750	687	0.80	1.15	D	32	90	750	750	0.80	1.25	D	32	100	825	750	0.80	1.14	D
	E205	40	90	945	782	0.80	1.03	D	40	90	945	845	0.80	1.12	D	40	100	1050	845	0.80	1.01	D
	E206	40	90	945	782	0.80	1.03	D	40	90	945	845	0.80	1.12	D	40	100	1050	845	0.80	1.01	D
	E208	40	90	945	853	0.75	1.20	D	40	90	945	954	0.75	1.35	E	40	100	1050	954	0.75	1.21	D
	E210	40	90	945	853	0.75	1.20	D	40	90	945	954	0.75	1.35	E	40	100	1050	954	0.75	1.21	D
	E255	40	90	945	913	0.95	1.02	D	40	90	945	1079	0.95	1.20	D	40	100	1050	1079	0.95	1.08	D
E256	40	90	945	912	0.95	1.02	D	40	90	945	1080	0.95	1.20	D	40	100	1050	1080	0.95	1.08	D	
PM	E203	32	90	750	394	0.80	0.66	B	32	90	750	414	0.80	0.69	B	32	100	825	414	0.80	0.63	B
	E204	32	90	750	724	1.00	0.97	C	32	90	750	915	1.00	1.22	D	32	100	825	915	1.00	1.11	D
	E205	40	90	945	656	0.80	0.87	C	40	90	945	661	0.80	0.87	C	40	100	1050	661	0.80	0.79	C
	E206	40	90	945	1047	1.00	1.11	D	40	90	945	1188	1.00	1.26	D	40	100	1050	1188	1.00	1.13	D
	E208	40	90	945	731	0.75	1.03	D	40	90	945	737	0.75	1.04	D	40	100	1050	737	0.75	0.94	C
	E210	40	90	945	1337	1.00	1.41	E	40	90	945	1335	1.00	1.41	E	40	100	1050	1335	1.00	1.27	D
	E255	40	90	945	1071	0.95	1.19	D	40	90	945	1071	0.95	1.19	D	40	100	1050	1071	0.95	1.07	D
E256	40	90	945	1063	1.00	1.12	D	40	90	945	1104	1.00	1.17	D	40	100	1050	1104	1.00	1.05	D	

Notes:
Methodology based on CEQR Technical Manual guidelines.
This Table is new to the FEIS.

Table 19.15: Mitigated With-Action With-Improvements Subway Escalator Analysis at the Lexington Avenue-53rd Street (E, M) Subway Station

Peak Period	Escalator	No-Action							With-Action							Mitigated With-Action						
		Width (in.)	Treads Per Minute	Guideline Capacity	15-Minute Pedestrian Volumes	Surging Factor	V/C Ratio	LOS	Width (in.)	Treads Per Minute	Guideline Capacity	15-Minute Pedestrian Volumes	Surging Factor	V/C Ratio	LOS	Width (in.)	Treads Per Minute	Guideline Capacity	15-Minute Pedestrian Volumes	Surging Factor	V/C Ratio	LOS
AM	E243 (UP)	40	90	945	709	0.75	1.00	C	40	90	945	813	0.75	1.15	D	40	100	1050	813	0.75	1.03	D
	E244 (UP)	40	90	945	771	0.75	1.09	D	40	90	945	813	0.75	1.15	D	40	100	1050	813	0.75	1.03	D
	E269 (DOWN)	40	90	945	579	1.00	0.61	B	40	90	945	581	1.00	0.61	B	40	100	1050	581	1.00	0.55	B
	E254X (UP)	24	90	480	281	0.75	0.78	C	40	90	945	770	0.75	1.09	D	40	100	1050	770	0.75	0.98	C
	E245 (UP)	40	90	945	562	0.75	0.79	C	40	90	945	690	0.75	0.97	C	40	100	1050	690	0.75	0.88	C
	E246 (UP)	40	90	945	820	0.75	1.16	D	40	90	945	690	0.75	0.97	C	40	100	1050	690	0.75	0.88	C
PM	E243 (UP)	40	90	945	553	0.75	0.78	C	40	90	945	552	0.75	0.78	C	40	100	1050	552	0.75	0.70	C
	E244 (DOWN)	40	90	945	1036	1.00	1.10	D	40	90	945	1237	1.00	1.31	D	40	100	1050	1237	1.00	1.18	D
	E269 (DOWN)	40	90	945	925	1.00	0.98	C	40	90	945	1159	1.00	1.23	D	40	100	1050	1159	1.00	1.10	D
	E254X (UP)	24	90	480	439	0.75	1.22	D	40	90	945	531	0.75	0.75	C	40	100	1050	531	0.75	0.67	B
	E245 (UP)	40	90	945	879	0.75	1.24	D	40	90	945	793	0.75	1.12	D	40	100	1050	793	0.75	1.01	D
	E246 (DOWN)	40	90	945	870	1.00	0.92	C	40	90	945	970	1.00	1.03	D	40	100	1050	970	1.00	0.92	C

Notes:
Methodology based on CEQR Technical Manual guidelines.
This Table is new to the FEIS.

Pedestrians

As described in Chapter 12, “Project Description,” DOT has prepared a suite of conceptual options for above-grade public realm improvements that could be implemented within the Greater East Midtown area, which would be financed through the public realm improvement fund. The Concept Plan of improvements include pedestrian plazas, shared streets, widening of the Park Avenue median, bus bulbs, curb extensions and sidewalk widenings, pedestrian refuge islands, and turn bays. The pedestrian analysis is presented first as the future with the Proposed Action without above-grade public realm improvements described in the Concept Plan (Action-Without-Improvements) and then as the future with the Proposed Action with above-grade public realm improvements described in the Concept Plan (Action-With-Improvements).

Action-Without-Improvements

As discussed in Chapter 12, “Transportation”, the results of the analyses of pedestrian conditions show that demand from the Proposed Action would significantly adversely impact a total of ten sidewalks, 29 crosswalks and 23 corner areas during one or more peak hours under the With-Action Condition. A significant adverse pedestrian impact is considered mitigated if measures implemented return the anticipated conditions to an acceptable level, following the same impact criteria used in determining impacts. Standard mitigation for projected significant adverse pedestrian impacts can include providing additional signal green time or new signal phases; widening crosswalks; relocating or removing street furniture; providing curb extensions, neck-downs or lane reductions to reduce pedestrian crossing distance; sidewalk widening and providing direct pedestrian connections from adjacent transit stations.

Discussed below are recommended mitigation measures to address the Proposed Action’s significant adverse pedestrian impacts. The mitigation measures generally consist of crosswalk widening, street furniture removal, and minor signal timing changes. Implementation of these measures would be subject to review and approval by DOT, except for the removal of garbage bins, which are subject to review and approval by the Grand Central Partnership. If, prior to implementation, DOT determines that an identified mitigation measure is infeasible, an alternative and equivalent mitigation measure will be identified. In the absence of the application of mitigation measures, the impacts would remain unmitigated.

Sidewalks

Of the 69 sidewalks analyzed for the weekday peak hours, ten are expected to be significantly adversely impacted during one or more peak hours. However, the removal of street furniture and obstructions was not deemed a feasible mitigation measure as each of the sidewalk locations has multiple obstructions of similar widths. Therefore, the removal of any single obstruction would not increase the effective sidewalk widths as the location of the narrowest point would be moved to a different location on the block. As a result, no mitigation measures were recommended and unmitigated significant adverse sidewalk impacts would remain at nine locations (see Table 19.16).

Table 19.16 Action-With-Mitigation, Sidewalk Conditions

Intersection	Sidewalk	No-Action			With-Action			Action-With-Mitigation			
		Effective Width	SFP	LOS	Effective Width	SFP	LOS	Effective Width	SFP	LOS	Mitigation Measures
Weekday AM Peak Hour											
E 43rd Street between 5th Avenue and Madison Avenue	North	4	27.0	D	4	23.2	D	4	23.2	D	Unmitigated
E 43rd Street between Madison Avenue and Vanderbilt Avenue	North	3.5	33.7	D	3.5	25.3	D	3.5	25.3	D	Unmitigated
<u>Lexington Avenue between E 42nd Street and E 43rd Street</u>	<u>West</u>	<u>6.5</u>	<u>30.5</u>	<u>D</u>	<u>6.5</u>	<u>22.3</u>	<u>E</u>	<u>6.5</u>	<u>22.3</u>	<u>E</u>	<u>Unmitigated</u>
Lexington Avenue between E 44th Street and E 45th Street	East	4.5	23.5	D	4.5	20.6	E	4.5	20.6	E	Unmitigated
Lexington Avenue between E 44th Street and E 45th Street	West	5	24.9	D	5	21.2	E	5	21.2	E	Unmitigated
Lexington Avenue between E 45th Street and E 46th Street	East	6	35.6	D	6	31.8	D	6.0	31.8	D	Unmitigated
Lexington Avenue between E 48th Street and E 49th Street	East	3	26.5	D	3	18.8	E	3	18.8	E	Unmitigated
Lexington Avenue between E 51st Street and E 52nd Street	East	5	124.5	B	5	17.1	E	5	17.1	E	Unmitigated
Weekday Midday Peak Hour											
E 43rd Street between 5th Avenue and Madison Avenue	North	4	38.4	D	4	31.8	D	4	31.8	D	Unmitigated
E 46th Street between 5th Avenue and Madison Avenue	South	4	27.6	D	4	24.4	D	4	24.4	D	Unmitigated
Lexington Avenue between E 48th Street and E 49th Street	East	3	30.7	D	3	25.9	D	3	25.9	D	Unmitigated
Weekday PM Peak Hour											
E 43rd Street between 5th Avenue and Madison Avenue	North	4	19.9	E	4	16.8	E	4	16.8	E	Unmitigated
E 45th Street between 5th Avenue and Madison Avenue	North	4.5	34.8	D	4.5	31.4	D	4.5	31.4	D	Unmitigated
E 46th Street between 5th Avenue and Madison Avenue	South	4	13.2	E	4	10.6	F	4	37.2	D	Unmitigated
E 43rd Street between Madison Avenue and Vanderbilt Avenue	North	3.5	24.4	D	3.5	18.7	E	3.5	18.7	E	Unmitigated
<u>Lexington Avenue between E 42nd Street and E 43rd Street</u>	<u>West</u>	<u>6.5</u>	<u>23.0</u>	<u>E</u>	<u>6.5</u>	<u>16.4</u>	<u>E</u>	<u>6.5</u>	<u>16.4</u>	<u>E</u>	<u>Unmitigated</u>
Lexington Avenue between E 44th Street and E 45th Street	East	4.5	26.4	D	4.5	22.3	E	4.5	22.3	E	Unmitigated
Lexington Avenue between E 44th Street and E 45th Street	West	5	20.7	E	5	17.4	E	5.0	17.4	E	Unmitigated
Lexington Avenue between E 45th Street and E 46th Street	East	6	38.9	D	6	33.2	D	6.0	33.2	D	Unmitigated
Lexington Avenue between E 48th Street and E 49th Street	East	3	17.0	E	3	11.6	E	3	11.6	E	Unmitigated
Lexington Avenue between E 51st Street and E 52nd Street	East	5	23.3	D	5	20.1	E	5	20.1	E	Unmitigated

Crosswalks

Twenty-nine of the 48 crosswalks analyzed would be significantly adversely impacted by the Proposed Action during one or more peak hours. There would be 25 crosswalks with significant adverse impacts during the AM peak hour, 10 during the midday and 24 during the PM peak hour. Thirteen of these crosswalks would be located at intersections on Lexington Avenue, seven on Third Avenue, five on Madison Avenue, two on Fifth Avenue, and two on Park Avenue. Tables 19.13 through 19.15 show the mitigation measures recommended to address these crosswalk impacts and their effectiveness. The mitigation measures generally consist of crosswalk widening and minor traffic signal timing adjustments. At a number of crosswalks, air quality and traffic mitigation measures would increase or decrease the square feet per pedestrian within the crosswalk. In the PM peak hour, a signal timing change due to air quality mitigation measures would create a significant adverse impact at the south crosswalk of Third Avenue and East 43rd Street. As shown in Tables 19.17 through 19.19, a total of 23 crosswalks would continue to be significantly adversely impacted during one or more peak hours since no practicable mitigation measures could be implemented.

Fifth Avenue and 42nd Street

The Proposed Action's significant adverse impacts to the north crosswalk during the AM and PM peak hours would be fully mitigated by increasing the walk time for this crosswalk by one second during the AM peak hour and two seconds during the PM peak hour.

Fifth Avenue and 43rd Street

The Proposed Action's significant adverse impacts to the east crosswalk during the PM peak hour would be fully mitigated by increasing the walk time for this crosswalk by four seconds, a signal timing change proposed as traffic mitigation during the PM peak hour.

Madison Avenue and East 41st Street

The Proposed Action's significant adverse impacts to the west crosswalk during the PM peak hour would be fully mitigated by widening the crosswalk from 16 feet to 20 feet, an increase in width of four feet.

Lexington Avenue and East 46th Street

The Proposed Action's significant adverse impacts to the east crosswalk during the Midday and PM peak hours would be fully mitigated by increasing the walk time for this crosswalk by one second.

Lexington Avenue and East 47th Street

The Proposed Action's significant adverse impacts to the east crosswalk during all three peak hours would be fully mitigated by increasing the walk time for this crosswalk by one second during the AM

peak hour, two seconds as per the proposed traffic mitigation signal timing change during the Midday, and three seconds during the PM.

Lexington Avenue and East 48th Street

The Proposed Action's significant adverse impact to the west crosswalk during the AM peak hour would be fully mitigated by increasing the walk time for this crosswalk by three seconds.

Lexington Avenue and East 50th Street

The Proposed Action's significant adverse impact to the west crosswalk during the PM peak hour would be partially mitigated by increases in walk time associated with traffic mitigation measures.

Lexington Avenue and East 51st Street

The Proposed Action's significant adverse impact to the north crosswalk during the AM peak hour would worsen due to signal timing changes associated with traffic mitigation measures. The significant adverse impact during the PM peak hour would be partially mitigated by increases in walk time associated with traffic mitigation measures.

Third Avenue and East 43rd Street

The Proposed Action's significant adverse impact to the east crosswalk during the Midday peak hour would be fully mitigated by increasing the walk time for this crosswalk by two seconds. In the AM and PM peak hours, the significant adverse impacts to the east crosswalk are partially mitigated by increases in walk time as per the air quality and traffic mitigation measures.

The Proposed Action's significant adverse impact to the south crosswalk in the AM peak hour would worsen due to signal timing changes associated with traffic mitigation measures. During the PM peak hour, a significant adverse impact would not occur in the With-Action condition. However, a three-second decrease in walk time associated with air quality mitigation measures would create a new pedestrian significant adverse impact at the south crosswalk during the PM peak hour in the Action-with-Mitigation condition.

Third Avenue and East 44th Street

The Proposed Action's significant adverse impact to the east crosswalk during the Midday peak hour would be fully mitigated by increasing the walk time for this crosswalk by three seconds. The significant adverse impact during the AM and PM peak hours would be partially mitigated by increases in walk time associated with air quality mitigation measures.

Third Avenue and East 53rd Street

The Proposed Action's significant adverse impact to the west crosswalk during all time periods would be partially mitigated by increases in walk time associated with traffic and air quality mitigation measures.

Table 19.17: Action-With-Mitigation, AM Peak Hour Crosswalk Conditions

Intersection	Crosswalk	No-Action			With-Action			Action-With-Mitigation			
		Width	SFP	LOS	Width	SFP	LOS	Width	SFP	LOS	Mitigation Measures
Weekday AM Peak Hour											
5th Avenue and 42nd Street	North	25	19.2	D	25	17.3	D	25	18.1	D	Walk time increased by 1 second
Madison Avenue and E 43rd Street	North	13	11.1	E	13	8.6	E	13	8.6	E	Unmitigated
Madison Avenue and E 43rd Street	West	12	20.6	D	12	16.1	D	12	16.1	D	Unmitigated
Madison Avenue and E 45th Street	South	13	17.7	D	13	11.5	E	13	11.5	E	Unmitigated
Madison Avenue and E 53rd Street	North	15	20.6	D	15	15.1	D	15	15.1	D	Unmitigated
Park Avenue Southbound and E 46th Street	West	14	17.9	D	14	14.6	E	14	14.6	E	Unmitigated
Park Avenue Southbound and E 50th Street	West	14	13.9	E	14	11.9	E	14	11.9	E	Unmitigated
<u>Lexington Avenue and E 42nd Street</u>	<u>North</u>	<u>20</u>	<u>18.4</u>	<u>D</u>	<u>20</u>	<u>13.4</u>	<u>E</u>	<u>20</u>	<u>13.4</u>	<u>E</u>	<u>Unmitigated</u>
<u>Lexington Avenue and E 42nd Street</u>	<u>West</u>	<u>15</u>	<u>21.1</u>	<u>D</u>	<u>15</u>	<u>18.0</u>	<u>D</u>	<u>15</u>	<u>18.0</u>	<u>D</u>	<u>Unmitigated</u>
Lexington Avenue and E 43rd Street	South	13.5	22.9	D	13.5	14.0	E	13.5	14.0	E	Unmitigated
Lexington Avenue and E 45th Street	West	10.5	18.0	D	10.5	13.8	E	10.5	13.8	E	Unmitigated
Lexington Avenue and E 47th Street	East	10	24.7	C	10	19.2	D	10	19.7	D	Walk time increased by 1 second
Lexington Avenue and E 47th Street	South	14.5	25.0	C	14.5	15.4	D	14.5	15.4	D	Unmitigated
Lexington Avenue and E 48th Street	West	12	18.3	D	12	15.5	D	12	16.9	D	Walk time increased by 3 seconds
Lexington Avenue and E 49th Street	East	12	34.4	C	12	19.1	D	12	19.1	D	Unmitigated
Lexington Avenue and E 49th Street	West	10.5	31.6	C	10.5	13.6	E	10.5	13.6	E	Unmitigated
Lexington Avenue and E 50th Street	West	16	22.2	D	16	16.5	D	16	16.5	D	Unmitigated
Lexington Avenue and E 51st Street	North	14	14.4	E	14	12.7	E	14	12.2	E	Walk time decreased by 1 second as per traffic mitigation measures
3rd Avenue and E 42nd Street	North	20	17.3	D	20	7.2	F	20	7.2	F	Unmitigated
3rd Avenue and E 42nd Street	South	20	19.9	D	20	16.0	D	20	16.0	D	Unmitigated
3rd Avenue and E 42nd Street	West	15	28.7	C	15	18.7	D	15	18.7	D	Unmitigated
3rd Avenue and E 43rd Street	East	15	16.6	D	15	12.2	E	15	13.1	E	Partially mitigated by 2 second increase in walk time due to traffic mitigation measures
3rd Avenue and E 43rd Street	South	15.5	20.3	D	15.5	16.7	D	15.5	15.3	D	Walk time decreased by 2 seconds as per traffic mitigation measures
3rd Avenue and E 44th Street	East	15.5	14.7	E	15.5	8.6	E	15.5	9.7	E	Partially mitigated by 3 second increase in walk time as per air quality mitigation measures
3rd Avenue and E 53rd Street	West	13.5	21.7	D	13.5	16.5	D	13.5	18.6	D	Partially mitigated by 3 second increase in walk time as per air quality mitigation measures

Notes: Bold Text indicates Mitigated Significant Adverse Impact

Table 19.18: Action-With-Mitigation: Midday Peak Hour Crosswalk Conditions

Intersection	Crosswalk	No-Action			With-Action			Action-With-Mitigation			
		Width	SFP	LOS	Width	SFP	LOS	Width	SFP	LOS	Mitigation Measures
Weekday Midday Peak Hour											
Madison Avenue and E 43rd Street	North	13	19.5	D	13	16.6	D	13	16.6	D	Unmitigated
Madison Avenue and E 43rd Street	West	12	19.5	D	12	16.4	D	12	16.4	D	Unmitigated
Park Avenue Southbound and E 50th Street	West	14	20.5	D	14	18.3	D	14	18.3	D	Unmitigated
Lexington Avenue and E 46th Street	East	14	18.6	D	14	16.5	D	14	17.0	D	Walk time increased by 1 second
Lexington Avenue and E 47th Street	East	10	17.2	D	10	14.9	E	10	15.8	D	Walk time increased by 2 seconds as per traffic mitigation measures
Lexington Avenue and E 47th Street	South	14.5	14.1	E	14.5	11.3	E	14.5	11.3	E	Unmitigated
3rd Avenue and E 42nd Street	North	20	13.0	E	20	9.8	E	20	9.8	E	Unmitigated
3rd Avenue and E 43rd Street	East	15	18.2	D	15	16.1	D	15	17.1	D	Walk time increased by 2 seconds
3rd Avenue and E 44th Street	East	15.5	23.6	D	15.5	17.9	D	15.5	19.9	D	Walk time increased by 3 seconds
3rd Avenue and E 53rd Street	West	13.5	16.4	D	13.5	13.3	E	13.5	14.4	E	Partially mitigated by 2 second increase in walk time due to traffic mitigation measures
Notes: Bold Text indicates Mitigated Significant Adverse Impact											

Table 19.19: Action-With-Mitigation: PM Peak Hour Crosswalk Conditions

Intersection	Crosswalk	No-Action			With-Action			Action-With-Mitigation			
		Width	SFP	LOS	Width	SFP	LOS	Width	SFP	LOS	Mitigation Measures
Weekday PM Peak Hour											
5th Avenue and 42nd Street	North	25	23.3	D	25	18.2	D	25	19.8	D	Walk time increased by 2 seconds
5th Avenue and 43rd Street	East	20	16.1	D	20	14.4	E	20.0	16.2	D	Walk time increased by 4 seconds as per traffic mitigation measures
Madison Avenue and E 41st Street	West	16	22.4	D	16.0	19.4	D	20.0	25.3	C	Crosswalk widened to 20' (adjacent to building line of Projected Development Site 2)
Madison Avenue and E 43rd Street	North	13	10.8	E	13.0	8.3	E	13.0	8.3	E	Unmitigated
Madison Avenue and E 43rd Street	West	12	13.6	E	12	11.4	E	12	11.4	E	Unmitigated
Madison Avenue and E 45th Street	South	13	11.1	E	13	8.5	E	13	8.5	E	Unmitigated
Park Avenue Southbound and E 46th Street	West	14	16.9	D	14	13.5	E	14	13.5	E	Unmitigated
Park Avenue Southbound and E 50th Street	West	14	19.4	D	14	15.5	D	14	15.5	D	Unmitigated
<u>Lexington Avenue and E 42nd Street</u>	<u>North</u>	<u>20</u>	<u>17.0</u>	<u>D</u>	<u>20</u>	<u>12.2</u>	<u>E</u>	<u>20</u>	<u>12.2</u>	<u>E</u>	<u>Unmitigated</u>
<u>Lexington Avenue and E 42nd Street</u>	<u>West</u>	<u>15</u>	<u>21.5</u>	<u>D</u>	<u>15</u>	<u>18.8</u>	<u>D</u>	<u>15</u>	<u>18.8</u>	<u>D</u>	<u>Unmitigated</u>
Lexington Avenue and E 43rd Street	South	13.5	13.8	E	13.5	9.2	E	13.5	9.2	E	Unmitigated
Lexington Avenue and E 45th Street	West	10.5	19.0	D	10.5	13.8	E	10.5	13.8	E	Unmitigated
Lexington Avenue and E 46th Street	East	14	24.9	C	14	18.9	D	14	19.5	D	Walk time increased by 1 second
Lexington Avenue and E 47th Street	East	10	25.7	C	10	18.1	D	10	19.7	D	Walk time increased by 3 seconds
Lexington Avenue and E 47th Street	South	14.5	18.6	D	14.5	10.4	E	14.5	10.4	E	Unmitigated
Lexington Avenue and E 49th Street	East	12	30.6	C	12	16.5	D	12	16.5	D	Unmitigated
Lexington Avenue and E 49th Street	West	10.5	27.8	C	10.5	11.8	E	10.5	11.8	E	Unmitigated
Lexington Avenue and E 50th Street	West	16	27.7	C	16	16.7	D	16	18.2	D	Partially mitigated by 3 second increase in walk time
Lexington Avenue and E 51st Street	North	14	24.0	D	14	17.0	D	14	17.6	D	Partially mitigated by 1 second increase in walk time
3rd Avenue and E 42nd Street	North	20	16.5	D	20	7.1	F	20	7.1	F	Unmitigated
3rd Avenue and E 42nd Street	South	20	17.2	D	20	13.7	E	20	13.7	E	Unmitigated
3rd Avenue and E 43rd Street	East	15	20.6	D	15	13.9	E	15	15.3	D	Partially mitigated by 3 second increase in walk time as per air quality mitigation measures
3rd Avenue and E 43rd Street	South	15.5	28.6	C	15.5	20.7	D	15.5	18.1	D	Significant adverse impact due to 3 second decrease in walk time as per air quality mitigation measures
3rd Avenue and E 44th Street	East	15.5	22.2	D	15.5	11.7	E	15.5	13.1	E	Partially mitigated by 3 second increase in walk time as per air quality mitigation measures
3rd Avenue and E 53rd Street	West	13.5	22.2	D	13.5	16.6	D	13.5	18.6	D	Partially mitigated by 3 second increase in walk time as per air quality mitigation measures
Notes:											
Bold Text indicates Mitigated Significant Adverse Impact. Shading denotes new Significant Adverse Impact due to air quality mitigation measures											

Corner Areas

Twenty-three of the 121 analyzed corner areas would be significantly adversely impacted during one or more peak hours as a result of the Proposed Action. There would be 19 significantly impacted corner areas at a total of 12 intersections during the AM peak hour, seven impacted corner areas at five intersections during the Midday and 20 impacted corner areas at 11 intersections during the PM peak hour. Eleven of the corner areas with significant adverse impacts would be located along Lexington Avenue, six along Madison Avenue, four along Third Avenue, and one each on Park and Second Avenues.

The proposed mitigation measures consist of relocating sidewalk furniture out of the corner area. As shown in Tables 19.20 and 19.21, since no practicable mitigation was identified that would fully mitigate significant adverse impacts, impacts to 18 corner areas would remain unmitigated during the AM peak hour, seven during the Midday peak hour, and 19 during the PM peak hour.

Lexington Avenue and East 41st Street

The southwest corner at this intersection would be significantly adversely impacted during the AM and PM peak hours. Removing an existing garbage bin from the corner area would increase available pedestrian space. However, the improvement would not be large enough to eliminate the significant adverse impacts identified during both peak hours.

Second Avenue and East 42nd Street

The southwest corner at this intersection would be significantly adversely impacted during all three peak hours. Removing two existing garbage bins from the corner area would increase the available pedestrian space. This increase in pedestrian space would mitigate the significant adverse impact during the AM and PM peak hours. However, the improvement would not be large enough during the Midday peak hour to mitigate the significant adverse impact at this location.

Table 19.20: Action-With-Mitigation: AM Peak Hour Corner Conditions

Intersection	Corner	No-Action		With-Action		Action-With-Mitigation		
		SFP	LOS	SFP	LOS	SFP	LOS	Mitigation Measures
Weekday AM Peak Hour								
Madison Avenue and E 42nd Street	Northwest	15.0	E	13.3	E	13.3	E	Unmitigated
Madison Avenue and E 43rd Street	Northeast	7.4	F	4.4	F	4.4	F	Unmitigated
Madison Avenue and E 43rd Street	Southwest	22.0	D	18.6	D	18.6	D	Unmitigated
Madison Avenue and E 45th Street	Northeast	9.0	E	6.9	F	6.9	F	Unmitigated
Madison Avenue and E 45th Street	Southeast	20.8	D	12.8	E	12.8	E	Unmitigated
Park Avenue Southbound and E 49th Street	Northwest	16.6	D	14.4	E	14.4	E	Unmitigated
Lexington Avenue and E 41st Street	Southwest	7.4	F	5.9	F	6.7	F	Remove garbage bin
Lexington Avenue and E 42nd Street	Southwest	<u>19.3</u>	D	<u>17.0</u>	D	<u>17.0</u>	D	Unmitigated
Lexington Avenue and E 42nd Street	Northwest	16.6	D	<u>10.6</u>	E	<u>10.6</u>	E	Unmitigated
Lexington Avenue and E 45th Street	Southeast	18.8	D	15.0	D	15.0	D	Unmitigated
Lexington Avenue and E 45th Street	Southwest	13.9	E	10.4	E	10.4	E	Unmitigated
Lexington Avenue and E 46th Street	Southeast	22.9	D	18.8	D	18.8	D	Unmitigated
Lexington Avenue and E 50th Street	Southwest	17.9	D	10.4	E	10.4	E	Unmitigated
Lexington Avenue and E 50th Street	Northwest	18.6	D	12.7	E	12.7	E	Unmitigated
Lexington Avenue and E 51st Street	Northeast	13.0	E	10.8	E	10.7	E	Unmitigated
3rd Avenue and E 43rd Street	Southeast	19.2	D	13.7	E	14.1	E	Unmitigated
3rd Avenue and E 43rd Street	Southwest	11.6	E	8.2	E	8.2	E	Unmitigated
3rd Avenue and E 43rd Street	Northwest	11.7	E	9.2	E	9.1	E	Unmitigated
2nd Avenue and E 42nd Street	Southwest	7.9	F	6.0	F	8.8	E	Remove 2 garbage bins
Notes: Shading indicates Significant Adverse Impact remains but SFP is improved between With-Action and Action-with-Mitigation conditions Bold Text indicates Mitigated Significant Adverse Impact								

Table 19.21: Action-With-Mitigation: Midday and PM Peak Hour Corner Conditions

Intersection	Corner	No-Action		With-Action		Action-With-Mitigation		
		SFP	LOS	SFP	LOS	SFP	LOS	Mitigation Measures
Weekday Midday Peak Hour								
Madison Avenue and E 43rd Street	Northeast	14.6	E	13.2	E	13.2	E	Unmitigated
Madison Avenue and E 45th Street	Northeast	9.1	E	7.6	F	7.6	F	Unmitigated
Lexington Avenue and E 46th Street	Southeast	14.7	E	13.2	E	13.2	E	Unmitigated
3rd Avenue and E 43rd Street	Northeast	17.8	D	15.1	D	15.1	D	Unmitigated
3rd Avenue and E 43rd Street	Southwest	12.5	E	10.5	E	10.5	E	Unmitigated
3rd Avenue and E 43rd Street	Northwest	7.7	F	6.8	F	6.8	F	Unmitigated
2nd Avenue and E 42nd Street	Southwest	21.4	D	16.0	D	19.2	D	Remove 2 garbage bins
Weekday PM Peak Hour								
Madison Avenue and E 42nd Street	Northeast	15.7	D	14.3	E	14.3	E	Unmitigated
Madison Avenue and E 42nd Street	Northwest	13.0	E	11.0	E	11.0	E	Unmitigated
Madison Avenue and E 43rd Street	Northeast	10.7	E	9.8	E	9.8	E	Unmitigated
Madison Avenue and E 43rd Street	Southwest	18.0	D	16.3	D	16.3	D	Unmitigated
Madison Avenue and E 45th Street	Northeast	5.3	F	4.3	F	4.3	F	Unmitigated
Madison Avenue and E 45th Street	Southeast	12.2	E	10.8	E	10.8	E	Unmitigated
Lexington Avenue and E 41st Street	Southwest	30.8	C	14.3	E	15.5	D	Remove garbage bin
<u>Lexington Avenue and E 42nd Street</u>	<u>Northeast</u>	<u>22.6</u>	<u>D</u>	<u>14.5</u>	<u>E</u>	<u>14.5</u>	<u>E</u>	<u>Unmitigated</u>
<u>Lexington Avenue and E 42nd Street</u>	<u>Southwest</u>	<u>17.9</u>	<u>D</u>	<u>15.2</u>	<u>D</u>	<u>15.2</u>	<u>D</u>	<u>Unmitigated</u>
<u>Lexington Avenue and E 42nd Street</u>	<u>Northwest</u>	<u>23.6</u>	<u>D</u>	<u>18.6</u>	<u>D</u>	<u>18.6</u>	<u>D</u>	<u>Unmitigated</u>
Lexington Avenue and E 43rd Street	Southeast	20.1	D	12.4	E	12.4	E	Unmitigated
Lexington Avenue and E 45th Street	Southwest	19.1	D	16.2	D	16.2	D	Unmitigated
Lexington Avenue and E 50th Street	Southwest	24.9	C	8.4	E	8.8	E	Unmitigated
Lexington Avenue and E 50th Street	Northwest	25.3	C	18.1	D	18.4	D	Unmitigated
Lexington Avenue and E 51st Street	Northeast	22.0	D	14.4	E	14.4	E	Unmitigated
3rd Avenue and E 43rd Street	Northeast	21.9	D	11.7	E	11.7	E	Unmitigated
3rd Avenue and E 43rd Street	Southeast	24.2	C	15.6	D	15.6	D	Unmitigated
3rd Avenue and E 43rd Street	Southwest	19.0	D	16.3	D	16.3	D	Unmitigated
3rd Avenue and E 43rd Street	Northwest	8.1	E	6.7	F	6.7	F	Unmitigated
2nd Avenue and E 42nd Street	Southwest	16.4	D	14.3	E	16.4	D	Remove 2 garbage bins
Notes:								
Shading indicates Significant Adverse Impact remains but SFP is improved between With-Action and Action-with-Mitigation conditions								
Bold Text indicates Mitigated Significant Adverse Impact								
<u>This Table has been updated for the FEIS</u>								

Action-With-Improvements

All analyzed pedestrian elements where significant adverse impacts were identified in the Action-With-Improvements Condition were evaluated quantitatively to determine if the impacts could be mitigated. Feasible mitigation measures were identified for crosswalk and corner areas where significant adverse impacts were identified, including at locations that experienced new crosswalk impacts in the Action-With-Improvements condition due to the implementation of corner curb extensions. The shortening of crosswalks due to corner curb extensions resulted in a number of locations where crosswalk impacts mitigated in the Action-Without-Improvements Condition could not be mitigated in the Action-With-Improvements Condition. At the time of implementation of curb bulb outs, DOT will explore the potential for widening crosswalks at these locations. As in the Action-Without-Improvements Condition, no feasible mitigation measures were identified for sidewalks with significant adverse impacts.

Table 19.22 presents a comparison of the number of sidewalks, crosswalks, and corner areas that would have significant adverse impacts and unmitigated impacts for the Action-Without-Improvements Condition and the Action-With-Improvements Condition. As shown in Table 19.22, there would be no changes to the number of sidewalks with unmitigated significant adverse pedestrian impacts. With respect to crosswalks, the Action-With-Improvements Condition would have an increase in two, four, and one elements with unmitigated significant adverse pedestrian impacts during the AM, Midday, and PM peak hours, respectively. With respect to corner areas, the Action-With-Improvements Condition would have a decrease of twelve, five, and twelve elements with unmitigated significant adverse pedestrian impacts during the AM, Midday, and PM peak hours, respectively. The results of the pedestrian analysis are summarized in Appendix F.17.

Table 19.22: Number of Locations with Significant Adverse Pedestrian Impacts – Comparison of Action-With-Improvements Condition to Action-Without-Improvements Condition

Peak Hour	Significant Impacts		Unmitigated Significant Impacts ¹	
	Action-With-Improvements	Action-Without-Improvements	Action-With-Improvements	Action-Without-Improvements
Sidewalks				
AM	8	8	8	8
Midday	3	3	3	3
PM	10	10	10	10
Crosswalks				
AM	29	25	24	22
Midday	12	10	10	6
PM	25	24	21	20
Corner Areas				
AM	7	19	6	18
Midday	2	7	2	7
PM	8	20	7	19
Notes: ¹ Includes unmitigated significant impacts due to traffic or corner mitigation measures. <u>This Table is new to the FEIS.</u>				

19.6 Air Quality

As discussed in Chapter 13, “Air Quality,” traffic generated by the Proposed Action is predicted to result in annual incremental particulate matter (PM_{2.5}) concentrations that exceed the City’s *de minimis* criteria of 0.1 µg/m³ at the three intersections analyzed at Third Avenue and East 44th Street, Third Avenue and East 46th Street and Third Avenue and East 54th Street. Therefore, air quality mitigation is required at these locations.

Traffic mitigation measures were developed to reduce congestion and increase speeds along the Third Avenue corridor in the affected area. Table 19.23 presents the results of the mobile source analysis with the proposed traffic mitigation measures in place.

As shown in the table, the results of this modeling analysis (performed in accordance with methodologies described in Chapter 13, “Air Quality”) indicate that annual incremental concentrations of PM_{2.5} would not exceed the *de minimis* criteria for PM_{2.5} of 0.1 µg/m³. No unmitigated significant adverse air quality impacts would remain upon incorporation of the traffic mitigation measures.

Table 19.23: Maximum Predicted PM_{2.5} Concentrations (µg/m³) with Traffic Mitigation

Analysis Site	Location	Annual PM _{2.5} Concentration		<i>De Minimis</i>
		Increment	Increment (with Mitigation)	
3	Third Avenue & East 44th Street	0.52	0.04	0.1
4	Third Avenue & East 46th Street	0.64	0.03	
5	Third Avenue & East 54th Street	0.72	0.06	

Note:
¹ The PM_{2.5} *de minimis* criteria threshold for annual (neighborhood scale) is 0.1 µg/m³ without considering background concentration.

Additionally, as part of the Proposed Action, a public realm improvement fund would provide the ability to finance above-grade improvements as identified by DOT (see Section 1.4 of Chapter 1, “Project Description”). These improvements include pedestrian plazas, shared streets, widening of the Park Avenue median, bus bulbs, curb extensions and sidewalk widenings, and turn bays. As discussed in Chapter 13, “Air Quality,” it is anticipated that traffic generated by the Proposed Action with PRI could result in the 24-hour incremental PM_{2.5} concentration that exceeds the City’s *de minimis* criteria of 4.4 µg/m³ at the intersection of Third Avenue and East 41st Street. Additionally, traffic generated by the Proposed Action with PRI is predicted to result in the annual incremental PM_{2.5} concentrations that exceed the City’s *de minimis* criteria of 0.1 µg/m³ at four analyzed intersections, including Third Avenue and East 44th Street, Third Avenue and East 46th Street, Third Avenue and East 54th Street, and Third Avenue and East 41st Street. However, with the application of the same mitigation measures required by the Amended Application with PRI, as discussed in Section 25.5 of Chapter 25, “Amended Application Analysis,” it is expected that the Proposed Action with PRI would not result in any significant adverse impacts from air quality mobile source emissions. The traffic mitigation measures were developed to reduce congestion and increase speeds along Third Avenue corridor in the affected area, which would mitigate these impacts. No unmitigated significant adverse air quality impacts would remain upon incorporation of the mitigation measures.

19.7 Construction

Historic and Cultural Resources

As discussed in Chapter 18, “Construction,” development under the Proposed Action results in significant adverse construction impacts on 12 historic resources which are located within 90 feet of Projected and Potential Development Sites. The 12 non-designated but eligible resources include:

1. 50-52 East 41st Street (NYCL- and S/NR-eligible, #95)
2. 6 East 45th Street (NYCL-eligible, #99).
3. 45 East 45th Street (NYCL- and S/NR-eligible, #100).
4. 111 East 48th Street (S/NR-eligible, #103).
5. 39 East 51st Street (NYCL- and S/NR-eligible, #104).
6. 299 Madison Avenue (NYCL-eligible, #124).
7. 437 Madison Avenue (NYCL-eligible, #125).
8. 270 Park Avenue (NYCL-eligible, #130).
9. 830 Third Avenue (NYCL-eligible, #133).
10. 59 East 54th Street (S/NR-eligible, #139).
11. 295 Madison Avenue (S/NR-eligible, #140).
12. 280 Park Avenue, (S/NR-eligible, #143).

Development under the Proposed Action could potentially result in construction-related impacts to these 12 non-designated resources. The New York City Building Code, under section C26-112.4, provides some measures of protection for all properties against accidental damage from adjacent construction by requiring that all buildings, lots, and service facilities adjacent to foundation and earthwork areas be protected and supported. For designated NYC Landmarks and S/NR-listed historic buildings located within 90 feet of a proposed construction site, additional protective measures under DOB TPPN #10/88 supplement the procedures of C26-112.4 by requiring a monitoring program to reduce the likelihood of construction damage and to detect at an early stage the beginnings of damage so that construction procedures can be changed and indirect significant adverse impacts from construction would be avoided. For the 12 non-designated resources that are within 90 feet of one or more Projected and/or Potential Development Sites, development under the Proposed Action could potentially result in construction-related impacts to the resources, and the protective measures under TPPN #10/88 would only apply if the resources become designated.

In order to make TPPN #10/88 applicable to eligible historic resources in the absence of a site-specific approval, such as a Special Permit with an accompanying restrictive declaration, a mechanism would have to be developed to ensure implementation and compliance, since it is not known and cannot be assumed that owners of these properties would voluntarily implement this mitigation. DCP, as lead agency, explored the viability of this mitigation measure between the Draft EIS and Final EIS and found that it was not feasible nor practicable to establish as part of the Proposed Action.

Without the protective measures described above, significant adverse construction-related impacts would not be mitigated. Since none of these resources are designated NYC Landmarks, have been calendared for designation, or are S/NR-listed resources, any significant adverse construction-related impacts would be unmitigated, and would therefore constitute unavoidable significant adverse impacts as a result of the Proposed Action (refer to Chapter 22, “Unavoidable Adverse Impacts”).

Traffic

As described in Chapter 18, “Construction,” construction-related traffic would have significant adverse impacts to four intersections during the construction AM peak hour (6:00–7:00 a.m.) and 14 intersections during the construction PM peak hour (3:00–4:00 p.m.). Implementation of traffic engineering improvements such as signal timing changes or modifications to curbside parking regulations would provide mitigation for most of the anticipated traffic impacts. Tables 19.24 and 19.25 summarize the recommended mitigation measures for each of these intersections during the construction AM and PM peak hours, respectively, which are subject to review and approval by DOT.

Table 19.24: AM Proposed Traffic Mitigation Measures - Construction

Intersection	No-Action	Mitigated Condition	Proposed Mitigation
1st Ave. & E. 48th St. (West Side)			Impacts cannot be fully mitigated in this time period.
Tunnel Exit St. & E. 39th St.	WB: G=31 NB: G=49	WB: G=35 NB: G=45	Modify signal timing
Park Ave. & E. 39th St.	WB: G=35 NB/SB: G=44	WB: G=37 NB/SB: G=42	Modify signal timing
6th Ave. & W. 48th St.	EB: G=31 NB: G=49	EB: G=33 NB: G=47	Modify signal timing
Notes: EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound “G” indicates amount of green phase time, in seconds.			

Table 19.25: PM Proposed Traffic Mitigation Measures - Construction

Intersection	No-Action	Mitigated Condition	Proposed Mitigation
1st Ave. & E. 46th St.	EB: G=35 NB: G=45	EB: G=38 NB: G=42	Modify signal timing
2nd Ave. & E. 40th St.	EB: G=31 SB: G=49	EB: G=32 SB: G=48	Modify signal timing
2nd Ave. & E. 42nd St.			Impacts cannot be fully mitigated in this time period.
2nd Ave. & E. 48th St.			Impacts cannot be fully mitigated in this time period.
2nd Ave. & E. 49th St.	WB LT: G=25 WB T: G=7 SB: G=48	WB LT: G=26 WB T: G=7 SB: G=47	Modify signal timing
Lexington Ave. & E. 47th St.			Impacts cannot be fully mitigated in this time period.
Park Ave. & E. 39th St.	WB: G=36 NB/SB: G=43	WB: G=35 NB/SB: G=44	Modify signal timing
Park Ave. & E. 46th St.			Impacts cannot be fully mitigated in this time period.
Park Ave. & E. 47th St.			Impacts cannot be fully mitigated in this time period.
Park Ave. & E. 48th St.			Impacts cannot be fully mitigated in this time period.
Madison Ave. & E. 44th St.			Impacts cannot be fully mitigated in this time period.
5th Ave. & 43rd St.	WB: G=35 SB: G=45	WB: G=34 SB: G=46	Modify signal timing
5th Ave. & 48th St.			Impacts cannot be fully mitigated in this time period.
6th Ave. & W. 49th St.	WB: G=35 SB: G=45	WB: G=36 SB: G=44	Modify signal timing
Notes: EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound *G* indicates amount of green phase time, in seconds.			

Tables 19.26 and 19.27 provide a comparison of the v/c ratios, delays, and LOS at impacted intersections with implementation of these mitigation measures to No-Action and Construction conditions during the construction AM and PM peak hours, respectively. With the implementation of recommended mitigation measures, most significant adverse impacts would be mitigated, but unmitigated significant adverse impacts would remain at one intersection during the construction AM peak hour and eight intersections during the construction PM peak hour. Absent measures that could be implemented to mitigate impacts at the remaining impacted intersections, these construction-related traffic impacts would remain unmitigated (refer to Chapter 22, "Unavoidable Adverse Impacts").

Table 19.26: AM Level of Service Analysis with and without Proposed Mitigation - Construction

Intersection & Approach (Signalized Intersections)	No-Action				With-Action				Mitigation			
	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS
Tunnel Exit Street & East 39th Street												
Westbound	TR	0.91	80.7	F	TR	1.02	107.2	F +	TR	0.90	82.5	F
Northbound	LT	0.19	5.7	A	LT	0.20	5.7	A	LT	0.22	7.7	A
Park Avenue & East 39th Street												
Westbound (East Side)	TR	0.76	19.2	B	TR	0.82	21.7	C	TR	0.77	17.1	B
Northbound (East Side)	LT	0.44	23.3	C	LT	0.44	23.8	C	LT	0.46	23.9	C
Westbound (West Side)	LT	0.70	38.0	D	LT	0.75	58.5	E +	LT	0.71	37.2	D
Southbound (West Side)	T	0.49	17.1	B	T	0.49	17.1	B	T	0.52	19.8	B
	R	0.27	16.2	B	R	0.28	16.2	B	R	0.30	18.5	B
6th Avenue & West 48th Street												
Eastbound	L	0.20	22.3	C	L	0.20	22.3	C	L	0.19	20.8	C
	T	0.86	53.6	D	T	0.93	64.8	E +	T	0.87	52.5	D
Northbound	TR	0.56	14.8	B	TR	0.61	15.8	B	TR	0.64	17.5	B

Table 19.26: AM Level of Service Analysis with and without Proposed Mitigation - Construction (Continued)

Intersection & Approach (Unsignalized Intersections)	No-Action				With-Action				Mitigation			
	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS
1st Avenue & East 48th Street (West Side)												
Eastbound	L	0.88	42.1	E	L	0.92	48.8	E +	L	0.92	48.8	E +
Northbound	T	0.33	0.0	A	T	0.34	0.0	A	T	0.34	0.0	A
Notes: + Denotes a significant adverse traffic impact Unmitigated approach movements denoted by shading This Table has been updated for the FEIS												

Table 19.27: PM Level of Service Analysis with and without Proposed Mitigation - Construction

Intersection & Approach (Signalized Intersections)	No-Action				With-Action				Mitigation			
	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS	Movt.	V/C Ratio	Delay Sec/ Veh	LOS
1st Avenue & East 46th Street												
Eastbound	L	1.00	56.7	E	L	1.10	86.3	F +	L	1.01	53.9	D
Northbound	T	0.74	5.7	A	T	0.76	9.3	A	T	0.82	26.6	C
2nd Avenue & East 40th Street												
Eastbound	T	0.75	29.7	C	T	0.84	37.6	D	T	0.81	33.6	C
	R	0.86	38.4	D	R	0.92	46.3	D +	R	0.88	39.6	D
Southbound	LT	1.00	47.6	D	LT	1.01	48.0	D	LT	1.03	49.5	D
2nd Avenue & East 42nd Street												
Eastbound	TR	0.90	29.8	C	TR	0.90	29.6	C	TR	0.90	29.6	C
Westbound	LT	1.08dl	41.7	D	LT	1.08dl	43.1	D	LT	1.08dl	43.1	D
Southbound	LT	1.03	62.8	E	LTR	1.16	90.9	F +	LTR	1.16	90.9	F +
	R	0.67	16.6	B								
2nd Avenue & East 48th Street												
Eastbound	TR	1.00	72.3	E	TR	1.08	93.8	F +	TR	1.08	93.8	F +
Southbound	LT	0.97	28.9	C	LT	0.98	36.4	D	LT	0.98	35.6	D
2nd Avenue & East 49th Street												
Westbound	L	0.98	58.4	E	L	1.01	64.0	E +	L	0.96	52.8	D
	T	0.36	18.5	B	T	0.37	18.8	B	T	0.35	18.0	B
Southbound	T	0.82	4.0	A	T	0.83	4.8	A	T	0.85	7.3	A
	R	0.44	1.8	A	R	0.45	1.9	A	R	0.46	2.8	A
Lexington Avenue & East 47th Street												
Westbound	L	1.00	87.8	F	L	1.06	100.8	F +	L	1.06	100.8	F +
	T	1.04	71.3	E	T	1.06	77.2	E +	T	1.06	77.2	E +
Southbound	T	1.02	48.4	D	T	1.04	57.5	E +	T	1.04	57.5	E +
	R	0.74	23.5	C	R	0.67	20.4	C	R	0.67	20.4	C
Park Avenue & East 39th Street												
Westbound (East Side)	TR	1.06	73.8	E	TR	1.08	74.3	E	TR	1.10	77.6	E
Northbound (East Side)	LT	0.90	64.3	E	LT	0.90	70.7	E +	LT	0.88	65.9	E
Westbound (West Side)	LT	0.92	61.1	E	LT	0.93	61.4	E	LT	0.96	61.3	E
Southbound (West Side)	T	0.74	40.3	D	T	0.76	47.8	D +	T	0.74	40.1	D
	R	0.86	25.6	C	R	0.87	26.1	C	R	0.83	22.6	C
Park Avenue & East 46th Street												
Eastbound (West Side)	T	1.01	88.2	F	T	0.99	82.8	F	T	0.99	82.8	F
	R	0.36	23.4	C	R	0.36	23.5	C	R	0.36	23.5	C
Southbound (West Side)	L	0.59	37.5	D	L	0.67	78.2	E +	L	0.67	78.2	E +
	T	1.03	43.7	D	T	1.06	52.7	D +	T	1.06	52.7	D +
Eastbound (East Side)	L	0.67	13.5	B	L	0.68	14.8	B	L	0.68	14.8	B
	T	1.06	55.3	E	T	1.09	70.4	E +	T	1.09	70.4	E +
Northbound (East Side)	T	0.83	32.3	C	T	0.83	32.4	C	T	0.83	32.4	C
Park Avenue & East 47th Street												
Westbound (East Side)	T	0.88	30.5	C	T	0.85	25.3	C	T	0.85	25.3	C
	R	0.67	21.2	C	R	0.70	21.4	C	R	0.70	21.4	C
Northbound (East Side)	L	0.21	87.0	F	L	0.21	86.8	F	L	0.21	86.8	F
	T	0.97	50.2	D	T	0.97	51.8	D	T	0.97	51.8	D
Westbound (West Side)	LT	0.90	31.1	C	LT	0.87	29.1	C	LT	0.87	29.1	C
Southbound (West Side)	TR	0.93	33.3	C	TR	0.96	47.9	D +	TR	0.96	47.9	D +

Table 19.27: PM Level of Service Analysis with and without Proposed Mitigation -Construction
(Continued)

Intersection & Approach (Signalized Intersections)	No-Action				With-Action				Mitigation			
	Movt.	V/C Ratio	Delay Sec/Veh	LOS	Movt.	V/C Ratio	Delay Sec/Veh	LOS	Movt.	V/C Ratio	Delay Sec/Veh	LOS
Park Avenue & East 48th Street												
Eastbound (West Side)	T	0.53	35.5	D	T	0.56	35.3	D	T	0.56	35.3	D
	R	0.24	29.3	C	R	0.32	30.6	C	R	0.32	30.6	C
Southbound (West Side)	L	0.20	40.3	D	L	0.22	67.9	E +	L	0.22	67.9	E +
	T	0.91	19.8	B	T	0.92	25.1	C	T	0.92	25.1	C
Eastbound (East Side)	LT	0.83	28.1	C	LT	0.87	32.3	C	LT	0.87	32.3	C
Northbound (East Side)	TR	0.95	38.9	D	TR	0.95	39.9	D	TR	0.95	39.9	D
Madison Avenue & East 44th Street												
Eastbound	L	0.61	39.7	D								
	T	0.28	27.8	C	LT	0.77	53.9	D +	LT	0.77	53.9	D +
Northbound	T	0.91	43.7	D	T	0.90	37.8	D	T	0.90	37.8	D
	R	0.51	15.0	B	R	0.52	15.3	B	R	0.52	15.3	B
5th Avenue & 43rd Street												
Westbound	L	0.57	35.3	D	L	0.50	33.3	C	L	0.53	35.0	D
	T	0.46	29.4	C	T	0.44	29.2	C	T	0.45	30.3	C
Southbound	T	1.25	126.5	F	T	1.25	126.7	F	T	1.22	113.0	F
	R	1.01	36.3	D	R	1.04	47.6	D +	R	0.99	34.0	C
5th Avenue & 48th Street												
Eastbound	T	0.84	42.5	D	T	0.95	56.6	E +	T	0.95	56.6	E +
	R	1.03	93.5	F	R	1.09	113.3	F +	R	1.09	113.3	F +
Southbound	LT	1.21	113.2	F	LT	1.21	111.0	F	LT	1.21	111.0	F
6th Avenue & West 49th Street												
Westbound	T	0.81	46.4	D	T	0.89	52.5	D +	T	0.86	48.9	D
	R	0.74	43.5	D	R	0.85	50.7	D +	R	0.82	47.3	D
Northbound	LT	0.62	6.4	A	LT	0.62	6.6	A	LT	0.64	7.4	A
Notes: + Denotes a significant adverse traffic impact Unmitigated approach movements denoted by shading This Table has been updated for the FEIS												

Noise

As discussed in Chapter 18, “Construction,” construction activities associated with the Proposed Action would occur on multiple development sites within the same geographic area and, as a result, has the potential to increase interior noise levels of existing adjacent commercial and residential buildings. These increases would likely approach or marginally exceed the impact threshold for short periods of time. The same potential to exceed the noise limits exist during other construction quarters bordering the peak construction period.

The findings indicate that noise levels above the CEQR impact threshold are expected at several existing buildings adjacent to Projected Development Sites 4, 5 and 15. For Sites 4 and 5, the highest noise levels are projected to be at ground level and at elevated receptor locations adjacent to existing commercial and residential buildings on West 44th, 45th and 46th Streets between Madison and Fifth Avenues. Receivers along 44th and 46th Streets border Projected Development Sites 4 and 5, respectively. Receivers along 45th Street border both Projected Development Sites 4 and 5. For Projected Development Site 15, which would include impact pile driving during the foundation phase

of construction, the highest noise levels are projected to be at ground level and at elevated receptor locations adjacent to commercial and residential buildings on East 42nd and East 43rd Streets near Second and Third Avenues.

Although these locations are expected to experience exterior noise levels significantly above CEQR limits, for those buildings with double-paned glazed-glass windows and a closed ventilation system, it would keep interior noise levels for those buildings below or near the CEQR 50-dBA L₁₀ impact threshold for commercial buildings and the CEQR 45-dBA L₁₀ impact threshold for residential buildings. The interior noise levels of these adjacent buildings would likely approach or marginally exceed the CEQR L₁₀ impact thresholds for short periods of time. The same potential for noise impacts also exist for similar noise-level increases at these and/or other receptor locations in the immediate vicinity of Project Development Sites 4 and 5 during other construction quarters bordering this peak construction period (i.e., second quarter of 2029). If the peak construction scenario conservatively assumed for simultaneous construction on Projected Development Sites 4 and 5, and for Projected Development Site 15 including impact pile driving is realized, the Proposed Action would result in a significant adverse construction noise impact.

Partial mitigation for construction noise impacts could include, in addition to the requirements under the New York City Noise Control Code, noise barriers, use of low noise emission equipment, locating stationary equipment as far as feasible away from receptors, enclosing areas, limiting the duration of activities, specifying quiet equipment, scheduling of activities to minimize impacts (either time of day or seasonal considerations), and locating noisy equipment near natural or existing barriers that would shield sensitive receptors.

The proposed measures discussed above are considered partial mitigations only. Consequently, these impacts would not be completely eliminated and they would constitute an unmitigated significant adverse construction noise impact, as is discussed in Chapter 22, "Unavoidable Adverse Impacts."