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 will be refined and evaluated between the Draft and Final Environmental Impact Statement (EIS). Therefore, the Final EIS may include 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 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 4.45 percent for the non-residential population and 3.97 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 improvements to the open space network in the East Midtown Subdistrict are planned as part of the Proposed Action, through the passive open space components of the Concept Plan. Once these improvements are more fully defined between this Draft EIS and the Final EIS, the Department of City Planning (DCP) may direct the evaluation of the Proposed Action with those open space improvements included in the quantitative analysis. Based on preliminary calculations, by including just a portion of the Concept Plan - the Park Avenue Median Improvements and the planned Pedestrian

Plazas as currently envisioned - the percent decrease in the combined open space ratio would be reduced from 3.97 percent to 2.68 percent.[1]

The passive open space Public Realm Improvements described in the Concept Plan and the other standard mitigation measures listed above will be explored by DCP and NYC Parks between the Draft and Final EIS. If feasible mitigation is found, the impacts will be considered partially mitigated. Absent the implementation of such measures, the Proposed Action could have an unmitigated significant adverse impact on open space.

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.

Relocating the Proposed Action so that it does not cast an incremental shadow on this historic resource (e.g., by removing all or portion of the Projected Development Site 7 and Potential Development Sites C and D from the rezoning proposal) is not a practical solution from a zoning standpoint. Further, removal of the development sites from the proposal would be inconsistent with the overall purpose and need of the Proposed Action.

Between the Draft and Final EIS, DCP will explore whether there are feasible changes to the bulk 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.

Another potential mitigation measure would be to provide for indirectly mounted lighting that would serve as a substitute for the sunlight on these sun-sensitive features. In order to adopt this measure, 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, will explore the viability of this mitigation measure between the Draft EIS and Final EIS.

In the event that a plan for artificial lighting or reflection of natural light were developed and implemented pursuant to this provision, significant adverse shadows impacts would be partially mitigated. Absent measures that can be implemented to mitigate these impacts, the Proposed Action's significant adverse shadows impacts would remain unmitigated.

[1] Assuming 2.75 acres of open space.

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, will explore the viability of these mitigation measures between the Draft EIS and Final EIS.

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.

The above measures, if deemed feasible, would only be considered partial mitigation. Consequently, 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.

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 189 approach movements at 101 intersections during the AM peak hour, 179 approach movements at 101 intersections during the Midday peak hour, and 200 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 155 approach movements at 77 intersections during the AM peak hour, 123 approach movements at 56 intersections during the Midday peak hour, and 150 approach movements at 77 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	468/119	279/18	189/101	34/24	155/77
Midday	468/119	289/18	179/101	56/45	123/56
PM	468/119	268/13	200/106	50/29	150/77

Implementation of the recommended traffic engineering improvements is subject to review and approval by the New York City Department of Transportation (DOT). If, prior to implementation, DOT determines that an identified mitigation measure is infeasible, an alternative and equivalent mitigation measure will be identified. Between the Draft and Final EIS, other mitigation measures will be explored, where feasible, to further address the identified impacts. In the absence of the application of mitigation measures, the impacts would remain unmitigated.

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 density could contribute to existing vehicular and pedestrian congestion in the traffic and pedestrian networks. The City will also explore options for developing a comprehensive traffic management plan for Greater East Midtown that is consistent with the City's goals to provide a safe environment for all street users and to reduce auto use in highly dense areas where public transportation is readily available. Furthermore, between the Draft and Final EIS, DCP, in consultation with DOT, will develop a scope of work for 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.

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	Yes
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	Yes	SB-TR	Yes	SB-T	Yes
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-T	Yes	SB-T	Yes	EB-TR, SB-T	Yes
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	Yes	EB-TR, SB-T	Yes	EB-TR, SB-LT	Yes
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.	SB-T	Yes	SB-T	Yes	SB-LT	Yes
2nd Ave. & E. 51st St.	SB-T	No	SB-TR	Yes		
2nd Ave. & E. 52nd St.	SB-T	Yes	SB-T	Yes	SB-T	Yes
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-T, SB-T	No	EB-TR, SB-T	No	EB-T	No
2nd Ave. & E. 59th St.	EB-L, SB-LT	No	EB-L, EB-TR, 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
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	No	WB-T	No
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-T	No	EB-T, WB-R, NB-T	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

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
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
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.	EB-TR (West), SB-T, EB-LT (Center), EB-LT (East), NB-TR	No	EB-TR (West), SB-T, EB-LT (Center), EB-LT (East)	No	EB-TR (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	WB-T (East), NB-T, WB-LT (West), SB-TR	No	WB-T (East), NB-L, WB-LT (West), SB-TR	Partial
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.	WB-T (East), NB-T, WB-LT (West), SB-TR	No	NB-T, SB-TR	No	WB-T (East), NB-L, WB-LT (West), SB-TR	No
Park Ave. & E. 50th St.	SB-T, NB-TR	Partial	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	WB-TR (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-T (East), NB-L (East)	No	EB-T (West), EB-T (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

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
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

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. Measures to mitigate these impacts will be explored by New York City Transit (NYCT) between the Draft and Final EIS. 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 stairway during the PM peak hour. Additionally, a significant adverse transit impact would occur at eight escalators during the AM peak hour and at three escalators during the PM peak hour. Measures to mitigate these impacts will be explored by NYCT between the Draft and Final EIS.

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. Measures to mitigate these impacts will be explored by NYCT between the Draft and Final EIS. Potential mitigation may include operating these escalators at a higher speed. In the absence of the application of mitigation measures, the impacts would remain unmitigated.

Pedestrians

As described in Chapter 12, "Transportation," the Proposed Action would result in significant adverse pedestrian impacts at 57 of the 236 pedestrian elements analyzed during one or more peak hours. As summarized in Table 19.3, there would be a total of 49 elements with significant adverse impacts during the AM peak hour, 21 during the Midday, and 49 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: seven, three, and nine sidewalks during the AM, Midday, and PM peak hours, respectively; 20, 6, and 18 crosswalks during the AM, Midday, and PM peak hours, respectively; and 18, 8, and 17 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	67	60	7	7
Midday	67	64	3	3
PM	67	58	9	9
Crosswalks				
AM	48	25	23	20
Midday	48	38	10	6
PM	48	26	22	18
Corner Areas				
AM	121	102	19	18
Midday	121	113	8	8
PM	121	103	18	17

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 nine sidewalks, 26 crosswalks and 22 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. If, prior to implementation, DOT determines that an identified mitigation measure is infeasible, an alternative and equivalent mitigation measure will be identified. Between the Draft and Final EIS, other mitigation measures will be explored, where feasible, to further address the identified impacts. In the absence of the application of mitigation measures, the impacts would remain unmitigated.

Sidewalks

Nine of the 67 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-six 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 27 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 21 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-two 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 22 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
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	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	Southeast Corner	X		
	Northwest Corner	X		
Lexington Avenue and E 43rd Street	Southeast Corner			X
	South Crosswalk	X		X
Lexington Avenue and E 45th Street	Southeast Corner	X		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	

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.

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, will explore the viability of this mitigation measure between the Draft EIS and Final EIS.

Absent measures that can be implemented to mitigate these impacts, the Proposed Action's significant adverse construction-related impacts 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 4.45 percent for the non-residential population and 3.95 percent for the combined non-residential and residential population.

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 in 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, the Proposed Action would introduce new open space resources as part of the project which were not, conservatively, included in the quantitative analysis. These resources would be built as part of the public realm improvements described in the Concept Plan (see Chapter 1, "Project Description," Figure 1-3), and include new pedestrian plazas, shared streets and improvements to the Park Avenue median which would introduce new publicly available passive open space features such as seating and landscaping. While these new resources would reduce the demand on the existing open space resources substantially, they would not completely offset the potential significant adverse impact on open space.

In the event that the public realm passive open space improvements are more fully defined between this DEIS and the Final EIS, DCP may direct the evaluation of the Proposed Action with those public realm open space improvements included in the qualitative analysis.

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 improvements to the open space network in the East Midtown Subdistrict are planned as part of the Proposed Action, through the passive open space components of the Concept Plan. Once these improvements are more fully defined between this DEIS and the Final EIS, DCP may direct the evaluation of the Proposed Action with those open space improvements included in the quantitative analysis. Based on preliminary calculations, by including just a portion of the Concept Plan Improvements—the Park Avenue Median Improvements and the planned Pedestrian Plazas as currently envisioned—the percent decrease in the combined open space ratio would be reduced from

3.97 percent to 2.68 percent.[2] The passive open space Public Realm Improvements and the other standard mitigation measures listed above will be explored by DCP and NYC Parks between the Draft and Final EIS. If feasible mitigation is found, the impacts will be considered partially mitigated.

The passive open space Concept Plan improvements and the other standard mitigation measures listed above will be explored by DCP and NYC Parks between the Draft and Final EIS. If feasible mitigation is found, the impacts will be considered partially mitigated. Absent the implementation of such measures, the Proposed Action could have an unmitigated significant adverse impact on open space.

19.3 Shadows

As discussed in Chapter 5, "Shadows," the Proposed Action would result in significant adverse shadows impacts on one 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.

[2] Assuming approximately 2.75 acres of new open space.

The Proposed Action was assessed for possible mitigation measures in accordance with CEQR guidelines. Several ways in which shadow impacts on architectural resources can be mitigated were identified by DCP, including:

- Relocating the Proposed Action, (i.e. avoiding the incremental shadows cast on the sunlight-sensitive features altogether by moving the Proposed Action away from the features).
- Reducing or eliminating the incremental shadows cast on the sunlight-sensitive features by modifying building bulk regulations for Projected Development Site 7 and Potential Development Sites C and D.
- Providing indirectly mounted artificial lighting on St. Bartholomew's Church and Community House.

Relocating the Proposed Action so that there would be no incremental shadow cast by it on St. Bartholomew's Church and Community House (e.g., by removing Projected Development Site 7 and Potential Development Sites C and D from the Proposed Action) is not a practical solution and would be inconsistent with the overall purpose and need of the Proposed Action.

Between the Draft and Final EIS, the lead agency will explore whether there are feasible changes to the bulk regulations governing Projected Development Site 7 and Potential Development Sites C and D would reduce or eliminate the incremental shadow that causes the impact are feasible.

Another measure would be to provide for indirectly mounted lighting that would serve as a substitute for the sunlight on these sun-sensitive features. In order to adopt this measure 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 mitigation. DCP, as lead agency, will explore the viability of this mitigation measure between the Draft EIS and Final EIS.

Absent measures that can be implemented to mitigate these impacts, the Proposed Action's significant adverse shadows impacts would therefore remain unmitigated.

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, will explore the viability of these mitigation measures between the Draft EIS and Final EIS.

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.

The above measures, if deemed feasible, would only be considered partial mitigation. 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," 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 189 approach movements at 101 intersections during the AM peak hour, 179 approach movements at 101 intersections during the Midday peak hour, and 200 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 *2009 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 19.5 through Table 19.7 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. If, prior to implementation, DOT determines that an identified mitigation measure is infeasible, an alternative and equivalent mitigation measure will be identified. Between the Draft and Final EIS, other mitigation measures will be explored, where feasible, to further address the identified impacts. In the absence of the application of mitigation measures, the impacts would remain unmitigated.

Table 19.5: 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. (West Side)			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.	SB: 5T, 1R	SB: 6T, 1R	-Implement No Standing 7AM-10AM Mon-Fri on east side curb of SB approach to create a limited travel lane. This would result in the elimination of up to 8 commercial parking spaces.
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.	EB: 1 TR (10') EB: G=31 SB: G=49	EB: 1 T (12'), 1 R (13') EB: G=29 SB: G=51	-Implement No Standing Anytime for 100' along south curb on EB approach to create a right-turn lane. This would result in the elimination of up to 3 commercial parking spaces. -Restripe EB approach. -Modify signal timing.
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.	EB: 1 TR (16') EB: G=27 SB: G=53	EB: 1 T (11'), 1 R (11') EB: G=25 SB: G=55	-Implement No Standing Anytime for 100' along south curb on EB approach to create a right-turn lane. This would result in the elimination of up to 4 authorized vehicle (NYP) parking spaces. -Restripe EB approach. -Modify signal timing.
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.
2nd Ave. & E. 46th St.	EB: G=27 SB: G=53	EB: G=25 SB: G=55	
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.	EB: G=31 SB: G=49	EB: G=29 SB: G=51	Modify signal timing
2nd Ave. & E. 51st St.			Impacts cannot be fully mitigated in this time period
2nd Ave. & E. 52nd St.	EB: TR (14') EB: G=31 SB: G=49	EB: T (10'), R (10') EB: G=29 SB: G=51	-Implement No Standing Anytime for 100' along south curb on EB approach to create a right-turn lane. This would result in the elimination of up to 4 diplomat parking spaces. -Restripe EB approach. -Modify signal timing.
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
2nd Ave. & E. 55th St.			Impacts cannot be fully mitigated in this time period

Table 19.5: AM Proposed Traffic Mitigation Measures (Continued)

Intersection	No-Action	Mitigated Condition	Proposed Mitigation
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.			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 6 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 -Impacts cannot be fully mitigated in this time period
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

Table 19.5: AM Proposed Traffic Mitigation Measures (Continued)

Intersection	No-Action	Mitigated Condition	Proposed Mitigation
3rd Ave. & E. 57th St.	NB (West): 3 LT (10')	NB (West): 3 LT (10')	-Implement No Standing 7AM-7PM Mon-Fri 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	- Implement No Standing 7AM-10AM Mon-Fri 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
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

Table 19.5: AM Proposed Traffic Mitigation Measures (Continued)

Intersection	No-Action	Mitigated Condition	Proposed Mitigation
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.	WB: G=35 NB: G=45	WB: G=37 NB: G=43	Modify signal timing
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. & 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 TR: G=15 EB T: G=24 SB: G=41	EB TR: G=14 EB T: G=24 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

Table 19.6: 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.	EB: 1 TR (10') EB: G=31 SB: G=49	EB: 1 T (12'), 1 R (13') EB: G=29 SB: G=51	-Implement No Standing Anytime for 100' along south curb on EB approach to create a right-turn lane. This would result in the elimination of up to 3 commercial parking spaces. -Restripe EB approach. -Modify signal timing.
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.	EB: 1 TR (16') EB: G=27 SB: G=53	EB: 1 T (11'), 1 R (11') EB: G=25 SB: G=55	-Implement No Standing Anytime for 100' along south curb on EB approach to create a right-turn lane. This would result in the elimination of up to 4 diplomat parking spaces. -Restripe EB approach. -Modify signal timing.
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.
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.	EB: G=31 SB: G=49	EB: G=30 SB: G=50	Modify signal timing
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.	EB: TR (14') EB: G=31 SB: G=49	EB: T (10'), R (10') EB: G=30 SB: G=50	-Implement No Standing Anytime for 100' along south curb on EB approach to create a right-turn lane. This would result in the elimination of up to 4 diplomat parking spaces. -Restripe EB approach. -Modify signal timing.
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

Table 19.6: Midday Proposed Traffic Mitigation Measures (Continued)

Intersection	No-Action	Mitigated Condition	Proposed Mitigation
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.			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 6 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=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=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 -Impacts cannot be fully mitigated in this time period
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

Table 19.6: Midday Proposed Traffic Mitigation Measures (Continued)

Intersection	No-Action	Mitigated Condition	Proposed Mitigation
3rd Ave. & E. 57th St.	NB (West): 3 LT (10')	NB (West): 3 LT (10')	-Implement No Standing 7AM-7PM Mon-Fri 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 Ped: G=36	SB: G=51 Ped: G=34	Modify signal timing
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	Impacts cannot be fully mitigated in this time period
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

Table 19.6: Midday Proposed Traffic Mitigation Measures (Continued)

Intersection	No-Action	Mitigated Condition	Proposed Mitigation
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 Offset: 43	WB: G=32 SB: G=48 Offset: 40	Modify signal timing
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

Table 19.7: 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.	EB: 1 L (11)' EB: G=35 NB: G=45	EB: 2 L (11)' EB: G=34 NB: G=46	-Implement No Standing 4PM-7 PM Mon-Fri for 100' along the north curb of the EB approach to create a limited travel lane. This would result in the loss of up to 4 parking spaces. -Modify signal timing
1st Ave. & E. 47th St.			Impacts cannot be fully mitigated in this time period
1st Ave. & E. 48th St. (East Side)			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.	SB: 5T, 1R	SB: 6T, 1R	-Implement No Standing 4PM-7PM Mon-Fri on east side curb of SB approach to create a limited travel lane. This would result in the elimination of up to 8 commercial parking spaces.
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.	EB: 1 TR (10') EB: G=31 SB: G=49	EB: 1 T (12'), 1 R (13') EB: G=28 SB: G=52	-Implement No Standing Anytime for 100' along south curb on EB approach to create a right-turn lane. This would result in the elimination of up to 3 commercial parking spaces. -Restripe EB approach. -Modify signal timing.
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.	EB: 1 TR (16') EB: G=27 SB: G=53	EB: 1 T (11'), 1 R (11') EB: G=24 SB: G=56	-Implement No Standing Anytime for 100' along south curb on EB approach to create a right-turn lane. This would result in the elimination of up to 4 diplomat parking spaces. -Restripe EB approach. -Modify signal timing.
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.
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.	EB: G=31 SB: G=49 Offset=77*	EB: G=29 SB: G=51 Offset=76*	Modify signal timing *Offset changed to mitigate impact due to adjacent intersections.

Table 19.7: PM Proposed Traffic Mitigation Measures (Continued)

Intersection	No-Action	Mitigated Condition	Proposed Mitigation
2nd Ave. & E. 51st St.	WB: 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.	EB: TR (14') EB: G=31 SB: G=49	EB: T (10'), R (10') EB: G=29 SB: G=51	-Implement No Standing Anytime for 100' along south curb on EB approach to create a right-turn lane. This would result in the elimination of up to 4 diplomat parking spaces. -Restripe EB approach. -Modify signal timing.
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.			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=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 6 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
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

Table 19.7: PM Proposed Traffic Mitigation Measures (Continued)

Intersection	No-Action	Mitigated Condition	Proposed Mitigation
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 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 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. 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

Table 19.7: PM Proposed Traffic Mitigation Measures (Continued)

Intersection	No-Action	Mitigated Condition	Proposed Mitigation
Park Ave. & E. 38th St.	EB: G=35 NB/SB: G=45 NB: T (11'), TR (12')	EB: G=37 NB/SB: G=43 NB: T (11'), T (11'), R (12')	- 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 spaces and 1 commercial 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 EB LT: 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
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

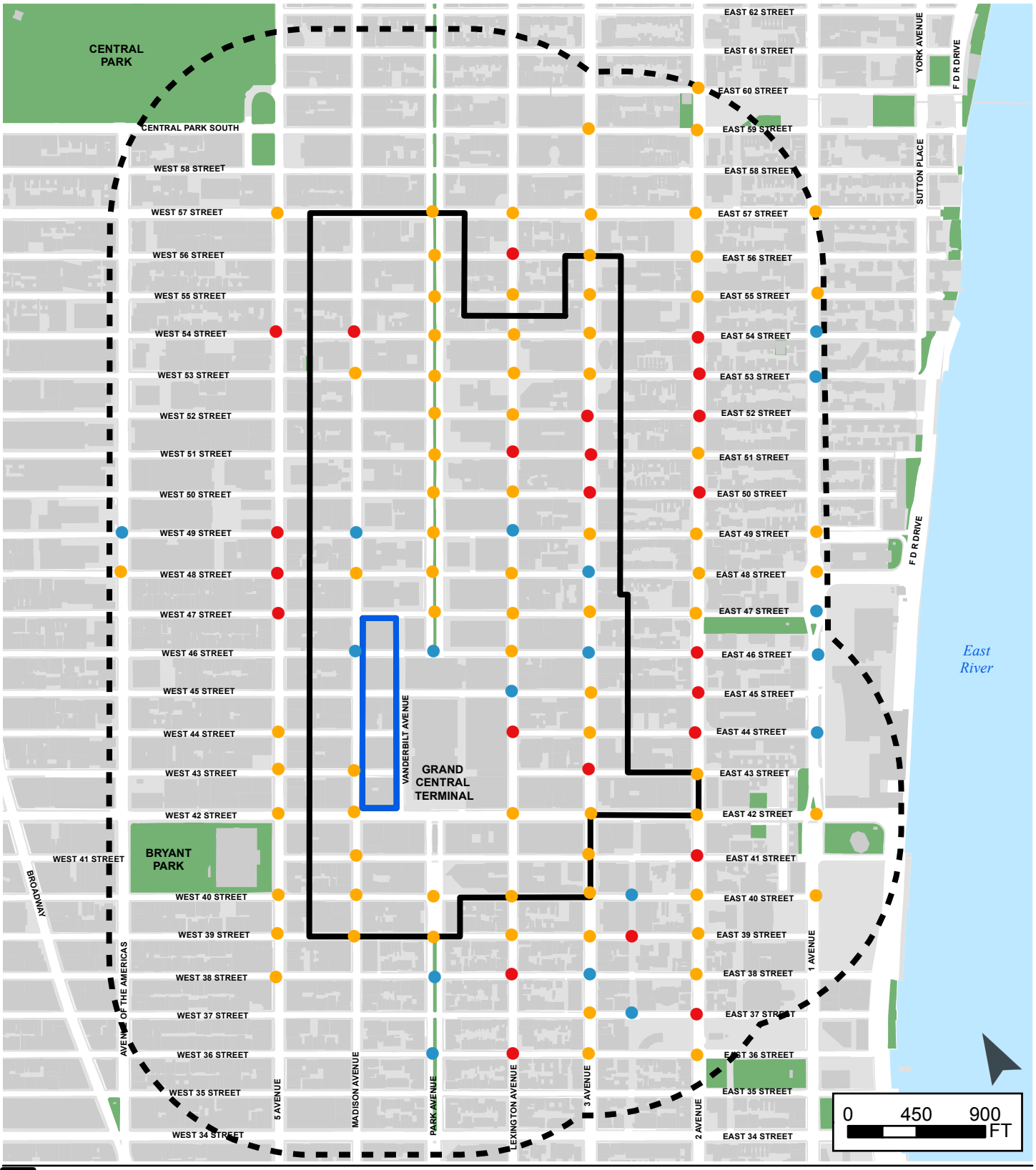
Notes:
EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound
"G" indicates amount of green phase time, in seconds

Tables 19.8 through Table 19.10 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 19.7 through 19.9 show that some of the significant adverse impacts would be fully mitigated, but unmitigated significant adverse impacts would remain at 155 approach movements at 77 intersections during the AM peak hour, 123 approach movements at 56 intersections during the Midday peak hour, and 150 approach movements at 77 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, but would not result in the potential for any additional significant adverse traffic impacts. Figures 19-1 through 19-3 show the location of intersections were 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 density could contribute to existing vehicular and pedestrian congestion in the traffic and pedestrian networks. Due to the existing congestion in the area, it is anticipated that small increases in project-generated vehicle and pedestrian trips could produce 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/impacts as they are identified. This technology 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 will also explore options for developing a comprehensive traffic management plan for Greater East Midtown that is consistent with the City's goals to provide a safe 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 under the rezoning proposal, 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

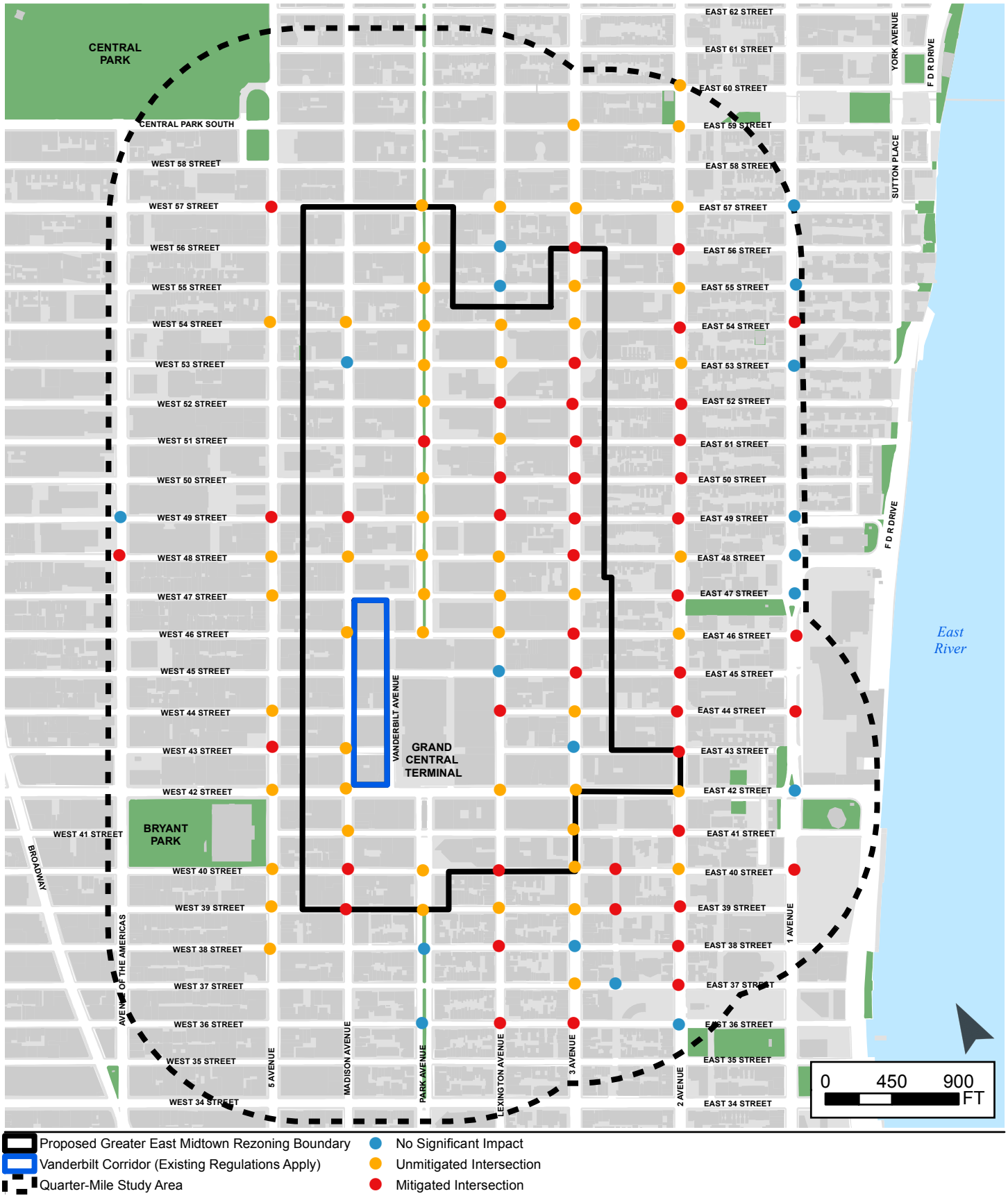


Greater East Midtown Rezoning
Manhattan, New York

With-Action Intersection Mitigation
Weekday AM Peak Hour

Figure 19-1

vhb

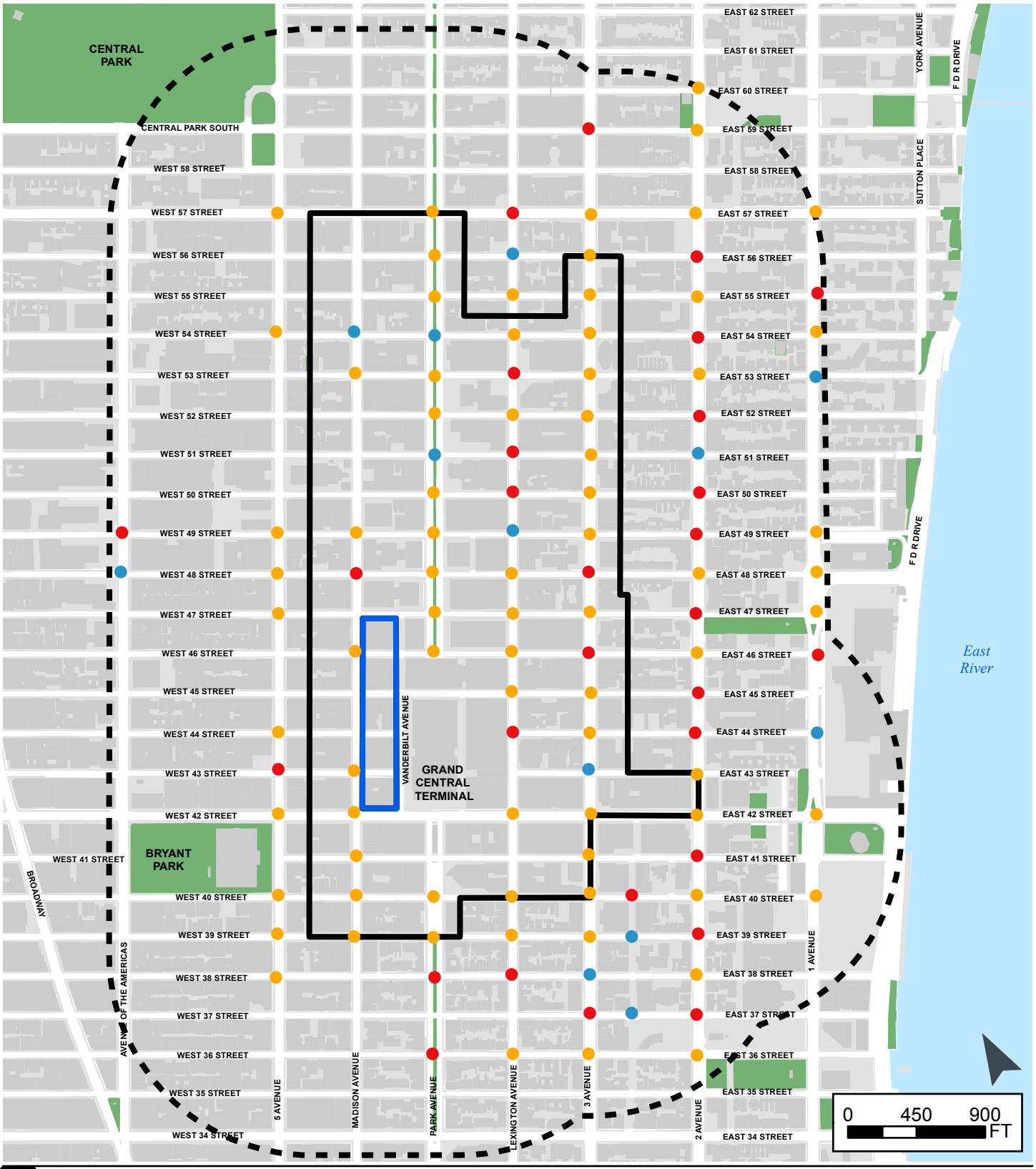


Greater East Midtown Rezoning
Manhattan, New York

With-Action Intersection Mitigation
Weekday Midday Peak Hour

Figure 19-2

vhb



Greater East Midtown Rezoning
Manhattan, New York

With-Action Intersection Mitigation
Weekday PM Peak Hour

Figure 19-3

vhb

traffic enforcement agents (TEAs) in coordination with NYPD, to better manage traffic operations at strategic locations and avoid spillback at intersections.

Furthermore, between the Draft and Final EIS, DCP, in consultation with DOT, will develop a scope of work for 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. In addition, between the Draft and Final EIS, DOT in consultation with DCP and NYPD, will explore placement of TEAs as mitigation measures specifically for the Proposed Action's significant adverse traffic impacts.

Table 19.8: 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	113.6	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
Northbound (West Side)	L	0.77	26.6	C	L	0.78	26.7	C	L	0.78	26.7	C
	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	57.9	E	LT	1.20dl	58.1	E	LT	1.20dl	58.1	E
Westbound	TR	0.39	30.2	C	TR	0.39	30.2	C	TR	0.39	30.2	C
Northbound	L	0.38	21.3	C	L	0.38	21.4	C	L	0.38	21.5	C
	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	348.0	F
	T	1.17	97.5	F	T	1.20	110.0	F +	T	1.20	111.9	F
Westbound (Tunnel Exit)	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	1.03	37.2	D
	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	155.2	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

Table 19.8: 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 41st Street												
Eastbound	TR	0.56	45.3	D	TR	0.58	46.1	D	T	0.15	34.3	C
									R	0.44	43.1	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	191.6	F	TR	1.38	199.1	F +	TR	1.38	199.1	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
2nd Avenue & East 43rd Street												
Westbound	LT	0.34	24.9	C	LT	0.34	25.5	C	LT	0.34	25.4	C
Southbound	T	1.12	74.1	E	T	1.16	89.6	F +	T	1.16	90.5	F
	R	1.01	39.1	D	R	1.18	104.7	F +	R	1.18	105.5	F
2nd Avenue & East 44th Street												
Eastbound	TR	0.95	58.1	E	TR	1.03	55.7	E	T	0.45	28.3	C
									R	0.99	53.2	D
Southbound	LT	1.17	93.0	F	LT	1.21	113.2	F +	LT	1.17	90.3	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	86.0	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	L	0.17	43.8	D	L	0.16	43.4	D	L	0.16	43.2	D
	T	0.63	54.9	D	T	0.66	55.3	E	T	0.66	55.3	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	11.7	B	L	0.57	11.7	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	145.5	F	T	1.34	172.4	F +	T	1.34	171.8	F
	R	0.97	31.5	C	R	1.02	44.3	D	R	1.02	45.4	D
2nd Avenue & East 50th Street												
Eastbound	TR	0.57	35.3	D	TR	0.59	36.0	D	TR	0.63	38.6	D
Southbound	L	0.07	8.0	A	L	0.07	8.0	A	L	0.07	6.3	A
	T	1.55	269.1	F	T	1.62	299.1	F +	T	1.55	267.7	F
2nd Avenue & East 51st Street												
Westbound	L	0.79	60.3	E	L	0.79	61.1	E	L	0.79	61.1	E
	T	0.61	37.8	D	T	0.61	38.0	D	T	0.61	38.0	D
Southbound	T	1.55	266.7	F	T	1.62	297.9	F +	T	1.62	298.3	F
	R	0.90	22.8	C	R	0.97	32.3	C	R	0.97	33.6	C
2nd Avenue & East 52nd Street												
Eastbound	TR	0.80	39.4	D	TR	0.84	40.1	D	T	0.37	25.0	C
									R	0.69	35.1	D
Southbound	L	0.15	7.1	A	L	0.15	7.2	A	L	0.14	6.5	A
	T	1.49	239.1	F	T	1.55	269.8	F +	T	1.49	240.2	F
2nd Avenue & East 53rd Street												
Westbound	LT	0.99	55.6	E	LT	1.08	80.0	F +	L	1.03	82.3	F
									T	0.70	28.1	C
Southbound	T	1.48	234.6	F	T	1.53	261.5	F +	T	1.47	231.6	F
	R	0.64	18.6	B	R	0.69	20.0	C	R	0.66	18.0	B

Table 19.8: 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 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
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
	0	1.13	103.6	F	LT	1.16	112.5	F	LT	1.16	112.5	F
Southbound	L	0.52	35.9	D	L	0.52	36.9	D	L	0.52	36.9	D
	T	1.19	116.3	F	T	1.25	144.7	F +	T	1.25	144.7	F
	R	1.10	110.9	F	R	1.10	112.6	F	R	1.10	112.6	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	19.3	B	TR	0.40	19.5	B	TR	0.40	19.5	B
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
Southbound	L	0.05	14.6	B	L	0.05	14.6	B	L	0.05	14.6	B
	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	73.1	E
Northbound	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
Northbound	TR	0.83	33.0	C	TR	0.88	51.8	D +	TR	0.88	51.8	D
	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	1.76	369.4	F
	R	1.17	132.1	F	R	1.31	182.1	F +	R	1.31	184.7	F
Northbound	LT	1.23	124.4	F	LT	1.35	178.7	F +	LT	1.35	178.7	F

Table 19.8: 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 40th Street												
Eastbound	LT	0.92	89.1	F	LT	1.03	87.0	F	LT	1.03	87.0	F
Northbound	T	1.16	89.9	F	T	1.26	139.6	F +	T	1.26	139.3	F
	R	0.71	101.5	F	R	0.76	102.0	F	R	0.76	102.0	F
3rd Avenue & East 41st Street [3]												
Eastbound	LT	0.70	61.5	E	LT	0.77	68.8	E +	LT	0.87	79.7	E
Westbound	R	1.05	108.7	F	R	1.07	116.7	F +	R	1.22	159.1	F
Northbound	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 [3]												
Eastbound	L	1.04	76.2	E	L	1.15	112.7	F +	L	1.15	112.7	F
	T	1.11	76.5	E	T	1.12	78.6	E	T	1.12	78.6	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	20.8	C
	R	0.56	22.2	C	R	0.66	21.0	C	R	0.71	23.2	C
Northbound	LT	1.03	59.0	E	LT	1.14	79.0	E +	LT	1.08	58.1	E
3rd Avenue & East 44th Street [3]												
Eastbound	LT	0.31	27.1	C	LT	0.35	27.6	C	LT	0.38	29.5	C
Northbound	T	0.99	65.3	E	T	1.07	64.5	E	T	1.00	58.7	E
	R	1.04	65.5	E	R	2.88	865.5	F +	R	2.36	630.1	F
3rd Avenue & East 45th Street [3]												
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 [4]												
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 [3]												
Westbound	T	1.22	137.1	F	T	1.34	183.1	F +	T	1.44	229.6	F
	R	0.57	19.1	B	R	0.58	18.8	B	R	0.64	23.5	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 [4]												
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 [3]												
Westbound	T	1.03	69.4	E	T	1.08	86.1	F +	T	1.16	117.6	F
	R	0.56	42.4	D	R	0.56	42.5	D	R	0.68	52.8	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	34.8	C	T	0.78	34.0	C	T	0.82	38.6	D
	R	0.38	21.0	C	R	0.39	20.4	C	R	0.41	22.2	C
Northbound	LT	1.16	92.5	F	LT	1.23	128.1	F +	LT	1.16	92.5	F

Table 19.8: 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 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 [3]												
Westbound	T	1.07	79.6	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	215.3	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 [3]												
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 [3]												
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	118.8	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 [3]												
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 [3]												
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	27.3	C	TR	0.97	27.4	C	TR	0.97	27.4	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	64.4	E	T	0.93	64.2	E	T	0.93	64.2	E
	R	0.76	20.7	C	R	0.77	20.7	C	R	0.77	20.7	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
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	68.3	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	130.8	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	77.2	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	109.0	F	LT	1.23	126.3	F +	LT	1.23	126.3	F
Lexington Avenue & East 42nd Street												
Eastbound	T	0.86	16.6	B	T	0.90	20.5	C	T	0.90	20.5	C
	R	0.29	11.0	B	R	0.29	10.5	B	R	0.29	10.5	B
Westbound	LT	1.02	44.4	D	LT	1.03	42.5	D	LT	1.03	42.7	D
Southbound	L	0.72	23.7	C	L	0.74	24.4	C	L	0.74	24.3	C
	T	1.17	104.1	F	T	1.21	119.1	F +	T	1.21	118.9	F
	R	1.26	147.6	F	R	1.37	193.7	F +	R	1.37	193.6	F

Table 19.8: 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 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 [1]												
Westbound	L	0.80	37.3	D	L	0.85	39.7	D	L	0.92	45.3	D
	T	0.77	16.7	B	T	0.86	19.4	B	T	0.89	20.7	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 [1]												
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	48.1	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
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	53.2	D	LT	0.97	53.7	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

Table 19.8: 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 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	55.3	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	25.3	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
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

Table 19.8: 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 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
Westbound (East Side)	T	0.75	44.0	D	T	0.76	44.0	D	T	0.76	44.0	D
	R	0.60	40.8	D	R	0.61	40.9	D	R	0.61	40.9	D
Northbound (East Side)	L	0.18	400.0	F	L	0.18	686.1	F +	L	0.18	686.1	F
	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
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

Table 19.8: 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 53rd Street												
Westbound	TR	1.10	75.6	E	TR	1.17	106.3	F +	TR	1.17	106.2	F
Northbound	L	0.51	11.5	B	L	0.53	11.8	B	L	0.53	11.8	B
	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
Northbound	T	1.03	66.9	E	T	1.04	63.2	E	T	0.98	58.1	E
	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	F
5th Avenue & 42nd Street [1]												
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	F
	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	F
	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	F
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 & West 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	0.89	32.0	C	TR	0.89	32.0	C

Table 19.8: AM Level of Service Analysis with and without Proposed Mitigation (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
1. Mitigation added for pedestrians – intersection was impacted in With-Action condition
2. Mitigation added for pedestrians – intersection was not impacted With-Action condition
3. Mitigation added for air quality – intersection was impacted in With-Action condition
4. Mitigation added for air quality – intersection was not impacted in With-Action condition

Table 19.9: 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	72.8	E	L	1.05	78.4	E +	L	1.02	69.1	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	86.6	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
	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
	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
									R	0.45	27.8	C
Southbound	LT	1.18	95.9	F	LT	1.22	113.8	F +	LT	1.17	89.5	F
	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	73.4	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
	T	1.11	75.4	E	T	1.15	93.4	F +	T	1.15	93.9	F
	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	218.0	F
2nd Avenue & East 44th Street												
Eastbound	TR	0.86	23.9	C	TR	1.01	48.7	D +	T	0.57	22.8	C
									R	0.71	25.0	C
Southbound	L	0.54	8.7	A	L	0.55	8.7	A	L	0.52	8.0	A
	T	1.16	90.4	F	T	1.20	105.0	F +	T	1.15	83.1	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	190.5	F

Table 19.9: 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 46th Street												
Eastbound	T	0.57	32.6	C	T	0.58	31.9	C	T	0.58	30.5	C
	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	10.5	B	L	0.56	11.4	B
	T	1.21	112.4	F	T	1.24	125.8	F +	T	1.24	126.5	F
2nd Avenue & East 47th Street												
Westbound	L	0.15	46.2	D	L	0.15	45.8	D	L	0.16	48.2	D
	T	0.37	50.0	D	T	0.39	50.2	D	T	0.42	52.9	D
Southbound	TR	1.49	238.1	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
	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	103.1	F
	T	0.22	19.8	B	T	0.23	19.8	B	T	0.23	20.5	C
Southbound	TR	1.17	92.5	F	TR	1.20	105.6	F +	TR	1.17	93.9	F
2nd Avenue & East 50th Street												
Eastbound	TR	0.61	37.2	D	TR	0.64	37.9	D	TR	0.66	39.4	D
Southbound	L	0.39	10.8	B	L	0.39	10.8	B	L	0.38	10.3	B
	T	1.33	171.0	F	T	1.37	184.8	F +	T	1.34	171.5	F
2nd Avenue & East 51st Street												
Westbound	LT	0.71	37.0	D	LT	0.71	37.0	D	LT	0.74	39.7	D
Southbound	TR	1.34	172.6	F	TR	1.38	187.5	F +	TR	1.35	174.5	F
2nd Avenue & East 52nd Street												
Eastbound	TR	0.89	45.5	D	TR	0.93	45.5	D	T	0.51	26.0	C
									R	0.61	29.7	C
Southbound	L	0.18	7.3	A	L	0.18	7.3	A	L	0.18	6.4	A
	T	1.33	167.8	F	T	1.36	181.6	F +	T	1.33	167.8	F
2nd Avenue & East 53rd Street												
Westbound	LT	1.10dl	80.6	F	LT	1.12dl	84.9	F +	LT	1.12dl	84.9	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	225.3	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
	T	1.06	73.3	E	T	1.08	77.2	E	T	1.08	77.1	E
Southbound	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	210.4	F	T	1.46	230.5	F +	T	1.40	202.8	F

Table 19.9: 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 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	20.2	C	L	0.22	20.2	C	L	0.22	20.2	C
	T	1.13	90.3	F	T	1.17	105.4	F +	T	1.17	104.4	F
	R	1.04	77.5	E	R	1.04	76.7	E	R	1.04	76.7	E
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	22.1	C	TR	0.51	85.0	F +	TR	0.51	85.0	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	71.7	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
	R	0.82	68.7	E	R	0.90	82.8	F +	R	0.90	82.9	F
Northbound	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	1.54	273.4	F
	R	0.84	43.9	D	R	0.87	44.5	D	R	0.87	45.6	D
Northbound	LT	1.17	100.3	F	LT	1.25	133.7	F +	LT	1.25	133.7	F
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	104.4	F
	R	0.93	50.7	D	R	0.96	64.7	E +	R	0.96	62.3	E
3rd Avenue & East 41st Street [3]												
Eastbound	L	1.05	125.8	F	L	1.12	137.6	F +	L	1.26	189.5	F
	T	0.31	39.6	D	T	0.33	40.5	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
Northbound	T	0.93	63.2	E	T	0.98	62.1	E	T	0.91	27.4	C
	R	0.30	14.0	B	R	0.31	14.1	B	R	0.27	10.4	B
3rd Avenue & East 42nd Street [1]												
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
									T	0.92	50.9	D
	R	0.78	39.2	D	R	0.86	36.4	D	R	0.86	44.3	D
3rd Avenue & East 43rd Street [2]												
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	61.0	E

Table 19.9: 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 44th Street [1]												
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 [3]												
Westbound	T	1.06	59.9	E	T	1.14	93.1	F +	T	1.23	132.1	F
	R	0.69	22.0	C	R	0.72	23.0	C	R	0.79	26.7	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	18.7	B
	R	0.43	39.6	D	R	0.44	39.8	D	R	0.49	43.3	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	25.3	C	T	0.85	28.3	C
	R	0.38	17.5	B	R	0.40	17.5	B	R	0.42	19.3	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	13.0	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
3rd Avenue & East 54th Street [3]												
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 [3]												
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

Table 19.9: 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 57th Street [3]												
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	30.6	C	TR	0.89	30.6	C	TR	0.89	30.6	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	33.6	C	T	0.77	33.6	C	T	0.77	33.6	C
	R	0.58	28.6	C	R	0.58	28.6	C	R	0.58	28.6	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	25.4	C
Lexington Avenue & East 39th Street												
Westbound	L	1.08	87.7	F	L	1.11	99.1	F +	L	1.11	99.1	F
	T	1.51	253.6	F	T	1.65	313.1	F +	T	1.65	313.1	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
Southbound	L	0.49	22.6	C	L	0.50	22.7	C	L	0.50	22.7	C
	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 [1]												
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 [1]												
Westbound	L	1.13	103.6	F	L	1.20	131.9	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
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	30.1	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

Table 19.9: 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 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	49.7	D	T	0.93	49.9	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	21.2	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	52.2	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 19.9: 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	34.8	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	69.3	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

Table 19.9: 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 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
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

Table 19.9: 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 & 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
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
Southbound	LT	1.49	243.8	F	LT	1.52	255.6	F +	LT	1.52	255.4	F
	R	0.11	14.1	B	R	0.11	14.1	B	R	0.11	13.5	B
5th Avenue & 43rd Street												
Westbound	L	0.79	18.8	B	L	0.88	29.4	C	L	1.00	37.8	D
	T	0.65	12.1	B	T	0.68	12.9	B	T	0.75	14.2	B
Southbound	T	1.18	105.8	F	T	1.19	110.2	F +	T	1.11	72.9	E
	R	1.76	365.2	F	R	1.88	418.8	F +	R	1.53	261.0	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
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
5th Avenue & 49th Street												
Westbound	LT	0.48	23.0	C	LT	0.50	23.2	C	LT	0.51	24.6	C
Southbound	T	1.47	235.1	F	T	1.49	240.5	F +	T	1.45	224.8	F
	R	0.37	11.7	B	R	0.37	11.7	B	R	0.36	10.3	B
5th Avenue & 54th Street												
Eastbound	TR	1.05	88.7	F	TR	1.08	97.0	F +	TR	1.08	97.0	F
Southbound	LT	1.39	197.6	F	LT	1.41	206.4	F +	LT	1.41	206.4	F
5th Avenue & 57th Street												
Eastbound	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
Westbound	LT	0.78	77.8	E	LT	0.79	89.4	F +	LT	0.76	61.7	E
Southbound	LT	1.04	84.9	F	LT	1.06	84.1	F	LT	1.08	83.7	F
	R	0.37	18.5	B	R	0.38	18.5	B	R	0.39	19.4	B
6th Avenue & West 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

Notes:
+ Denotes a significant adverse traffic impact
Unmitigated approach movements denoted by shading
1. Mitigation added for pedestrians – intersection was impacted in With-Action condition
2. Mitigation added for pedestrians – intersection was not impacted With-Action condition
3. Mitigation added for air quality – intersection was impacted in With-Action condition
4. Mitigation added for air quality – intersection was not impacted in With-Action condition

Table 19.10: 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
Northbound (West Side)	L	1.02	52.3	D	L	1.07	68.8	E +	L	1.07	68.8	E
	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	0.72	19.4	B
Northbound	T	0.89	56.4	E	T	0.96	60.9	E +	T	0.94	59.6	E
1st Avenue & East 47th Street												
Northbound (East Side)	T	1.06	67.4	E	T	1.23	124.1	F +	T	1.23	128.1	F
Northbound (West Side)	L	0.55	12.5	B	L	0.62	12.8	B	L	0.62	17.2	B
	T	0.70	15.4	B	T	0.71	13.0	B	T	0.71	16.9	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	33.1	C	LT	0.58	33.3	C	LT	0.58	33.3	C
Westbound	TR	0.87	48.2	D	TR	0.87	48.2	D	TR	0.87	48.2	D
Northbound	L	1.02	62.6	E	L	1.04	69.9	E +	L	1.04	69.9	E
	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	19.2	B
	T	1.11	66.5	E	T	1.12	73.1	E +	T	1.12	74.8	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	1.04	53.4	D
	R	0.34	4.5	A	R	0.35	4.5	A	R	0.35	4.5	A

Table 19.10: 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 38th Street												
Eastbound	TR	1.04	80.0	E	TR	1.14	111.1	F +	TR	1.14	111.1	F
Southbound	LT	1.24	122.1	F	LT	1.30	149.7	F +	LT	1.30	150.4	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
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	84.3	F +	T	0.15	19.7	B
									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
	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	F
Southbound	LT	1.13	77.6	E	LT	1.21	112.9	F +	LT	1.21	112.9	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
Southbound	T	1.10	58.4	E	T	1.17	93.7	F +	T	1.17	95.5	F
	R	1.06	53.4	D	R	1.24	129.2	F +	R	1.24	130.7	F
2nd Avenue & East 44th Street												
Eastbound	TR	0.92	27.0	C	TR	1.27	147.8	F +	T	0.53	24.2	C
									R	1.29	161.8	F
Southbound	LT	1.12	62.7	E	LT	1.17	88.2	F +	LT	1.11	56.8	E
2nd Avenue & East 45th Street												
Westbound	LT	1.09	86.4	F	LT	1.09	86.0	F	LT	0.59	12.7	B
Southbound	T	1.11	61.4	E	T	1.16	87.8	F +	T	1.10	55.1	E
	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	F
2nd Avenue & East 47th Street												
Westbound	L	0.06	19.7	B	L	0.11	20.7	C	L	0.12	21.9	C
	T	0.52	23.1	C	T	0.56	24.6	C	T	0.63	28.5	C
Southbound	T	1.12	63.2	E	T	1.19	95.3	F +	T	1.12	63.4	E
	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	E
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	47.7	D	T	0.95	48.6	D	T	1.01	52.3	D
	R	0.46	2.1	A	R	0.46	2.1	A	R	0.50	5.3	A

Table 19.10: 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 50th Street												
Eastbound	TR	0.53	18.0	B	TR	0.55	18.8	B	TR	0.59	21.7	C
Southbound	LT	1.11	60.5	E	LT	1.15	76.5	E +	LT	1.10	55.1	E
2nd Avenue & East 52nd Street												
Eastbound	TR	0.85	51.2	D	TR	0.92	51.8	D	T	0.41	36.9	D
									R	0.77	44.3	D
Southbound	L	0.21	2.0	A	L	0.21	1.9	A	L	0.20	1.9	A
	T	1.29	145.4	F	T	1.33	163.6	F +	T	1.28	138.3	F
2nd Avenue & East 53rd Street												
Westbound	LT	0.96	62.3	E	LT	0.96	63.3	E	LT	0.96	63.3	E
Southbound	T	1.38	191.5	F	T	1.43	213.3	F +	T	1.43	213.8	F
	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	A
	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
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
Southbound	L	0.60	17.6	B	L	0.60	17.5	B	L	0.60	17.5	B
	T	1.07	71.1	E	T	1.09	70.6	E	T	1.09	70.6	E
	R	0.82	30.5	C	R	0.82	30.2	C	R	0.82	30.2	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	85.2	F	TR	0.76	88.0	F	TR	0.76	86.7	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
Southbound	L	0.07	14.9	B	L	0.07	14.9	B	L	0.07	14.9	B
	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	142.4	F
Northbound	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
Northbound	TR	0.57	19.8	B	TR	0.58	20.0	B	TR	0.58	20.0	B
	R	1.13	141.2	F	R	1.16	149.7	F +	R	1.16	149.7	F

Table 19.10: 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 37th Street												
Westbound	TR	0.56	17.4	B	TR	0.57	17.6	B	TR	0.56	16.7	B
	R	1.03	113.9	F	R	1.07	125.4	F +	R	1.01	106.0	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	117.8	F	T	1.27	167.5	F +	T	1.27	167.5	F
	R	0.50	30.5	C	R	0.56	33.9	C	R	0.56	33.9	C
Northbound	LT	1.03	70.7	E	LT	1.09	69.5	E	LT	1.09	69.5	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
Northbound	T	1.14	87.1	F	T	1.19	106.2	F +	T	1.19	105.9	F
	R	1.04	77.4	E	R	1.09	78.6	E	R	1.09	78.7	E
3rd Avenue & East 41st Street [3]												
Eastbound	LT	1.10	96.5	F	LT	1.14	107.7	F +	LT	1.25	155.5	F
Westbound	R	0.80	53.6	D	R	0.88	67.8	E +	R	0.98	88.7	F
Northbound	T	1.09	65.7	E	T	1.13	81.2	F +	T	1.06	60.1	E
	R	0.28	13.8	B	R	0.30	14.1	B	R	0.26	10.3	B
3rd Avenue & East 42nd Street [3]												
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	38.2	D
	R	1.21	133.2	F	R	1.22	136.3	F +	R	1.22	136.3	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
	R	0.91	40.9	D	R	1.12	97.2	F +	R	1.12	97.5	F
3rd Avenue & East 43rd Street [4]												
Westbound	TR	0.71	20.2	C	TR	0.80	19.8	B	TR	0.88	24.3	C
Northbound	LT	1.03	61.6	E	LT	1.06	63.9	E	LT	0.98	60.4	E
3rd Avenue & East 44th Street [3]												
Eastbound	LT	0.30	27.2	C	LT	0.31	27.3	C	LT	0.34	29.3	C
Northbound	T	1.15	78.2	E	T	1.20	104.6	F +	T	1.11	64.5	E
	R	1.44	219.9	F	R	5.24	1923.9	F +	R	3.58	1182.2	F
3rd Avenue & East 45th Street [3]												
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 [3]												
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 [3]												
Westbound	T	1.00	59.9	E	T	1.09	84.2	F +	T	1.17	119.0	F
	R	0.64	26.4	C	R	0.71	29.3	C	R	0.79	36.9	D
Northbound	LT	1.13	81.6	F	LT	1.21	120.7	F +	LT	1.11	69.4	E
3rd Avenue & East 48th Street [3]												
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 [3]												
Westbound	T	0.61	23.0	C	T	0.63	23.7	C	T	0.68	28.0	C
	R	0.56	48.5	D	R	0.61	51.1	D	R	0.78	72.3	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 [3]												
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	98.5	F +	T	1.07	64.3	E
	R	0.61	21.1	C	R	0.66	22.4	C	R	0.57	17.1	B

Table 19.10: 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 51st Street [3]												
Westbound	T	1.11	100.0	F	T	1.14	110.5	F +	T	1.23	146.8	F
	R	0.66	28.3	C	R	0.71	31.7	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 [3]												
Eastbound	LT	0.90	45.2	D	LT	0.96	52.9	D +	LT	1.03	99.2	F
Northbound	T	1.12	76.3	E	T	1.19	105.0	F +	T	1.08	62.6	E
	R	0.93	43.1	D	R	1.17	116.0	F +	R	0.93	52.2	D
3rd Avenue & East 53rd Street [3]												
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 [3]												
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 [3]												
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 [3]												
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 [3]												
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	23.8	C	TR	0.83	23.8	C	TR	0.83	23.8	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
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	35.2	D	L	0.84	39.1	D	L	0.84	39.1	D
	T	1.32	168.0	F	T	1.51	255.0	F +	T	1.51	255.0	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

Table 19.10: 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 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
Southbound	L	1.02	80.5	F	L	1.12	91.1	F +	L	1.12	91.0	F
	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
Southbound	T	1.04	60.5	E	T	1.09	62.9	E	T	1.09	63.4	E
	R	0.36	11.2	B	R	0.42	11.4	B	R	0.42	11.9	B
Lexington Avenue & East 46th Street [1]												
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 [1]												
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	16.7	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
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

Table 19.10: 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 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	98.1	F	LT	1.56dl	96.0	F	LT	1.56dl	97.4	F
Southbound	LT	1.02	87.0	F	LT	1.05	85.9	F	LT	1.08	85.3	F
	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	126.3	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 19.10: 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
Southbound (West Side)	L	0.16	54.7	D	L	0.18	86.3	F +	L	0.18	86.3	F
	T	1.02	50.0	D	T	1.06	65.2	E +	T	1.06	65.2	E
Eastbound (East Side)	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
Northbound (East Side)	L	0.15	37.0	D	L	0.15	157.9	F +	L	0.15	157.9	F
	T	1.10	64.9	E	T	1.14	83.1	F +	T	1.14	83.1	F
Westbound (West Side)	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
Southbound (West Side)	L	0.17	16.5	B	L	0.17	16.9	B	L	0.17	16.9	B
	T	1.04	71.4	E	T	1.05	71.0	E	T	1.05	71.0	E
Eastbound (East Side)	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
Westbound (East Side)	T	0.52	30.5	C	T	0.52	30.4	C	T	0.52	31.0	C
	R	0.25	26.1	C	R	0.25	26.1	C	R	0.25	26.7	C
Northbound (East Side)	L	0.16	10.1	B	L	0.17	10.1	B	L	0.17	10.1	B
	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

Table 19.10: 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 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
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 [1]												
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

Table 19.10: 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 & 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
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
1. Mitigation added for pedestrians – intersection was impacted in With-Action condition
2. Mitigation added for pedestrians – intersection was not impacted With-Action condition
3. Mitigation added for air quality – intersection was impacted in With-Action condition
4. Mitigation added for air quality – intersection was not impacted in With-Action condition

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 potential 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. Between the Draft and Final EIS, mitigation measures will be explored, where feasible, to further address the identified 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 three of the eight analyzed escalators during the PM peak hour (E204, E206, and 208). Measures to mitigate these impacts will be explored by NYCT between the Draft and Final EIS.

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. Measures to mitigate these impacts will be explored by NYCT between the Draft and Final EIS. Potential mitigation may include operating these escalators at a higher speed (100 feet per minute versus 90 feet per minute). In the absence of the application of mitigation measures, the impacts would remain unmitigated.

Pedestrians

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 nine sidewalks, 26 crosswalks and 22 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. If, prior to implementation, DOT determines that an identified

mitigation measure is infeasible, an alternative and equivalent mitigation measure will be identified. Between the Draft and Final EIS, other mitigation measures will be explored, where feasible, to further address the identified impacts. In the absence of the application of mitigation measures, the impacts would remain unmitigated.

As discussed in Chapter 12, "Transportation," as part of the Proposed Action, a public realm improvement fund would provide the ability to finance above-grade improvements as identified by DOT. These contemplated improvements include pedestrian plazas, shared streets, widening of the Park Avenue median, bus bulbs, crosswalk widenings, curb extensions and sidewalk widenings, and pedestrian refuge islands. While the exact type and locations of above-grade improvements are not finalized, for purposes of analysis in this Draft EIS it is anticipated that some of these above-grade public realm improvements could result in improved pedestrian conditions at some locations. Assuming that the above-grade public realm improvements are finalized by DOT, a detailed pedestrian analysis of the Proposed Action with above-grade public realm improvements will be performed between the DEIS and FEIS.

Sidewalks

Of the 67 sidewalks analyzed for the weekday peak hours, nine 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 19.11).

Table 19.11 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
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
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-six of the 48 crosswalks analyzed would be significantly adversely impacted by the Proposed Action during one or more peak hours. There would be 23 crosswalks with significant adverse impacts during the AM peak hour, 10 during the midday and 22 during the PM peak hour. Ten 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 19.12 through 19.14 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 19.12 through 19.14, a total of 20 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 19.12: 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
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 19.13: 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 19.14: 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
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
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
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-two 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, eight impacted corner areas at five intersections during the Midday and 18 impacted corner areas at 10 intersections during the PM peak hour. Ten 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 19.15 and 19.16, 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, eight during the Midday peak hour, and 17 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 19.15: 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	Southeast	16.6	D	20.2	D	20.2	D	Unmitigated
Lexington Avenue and E 42nd Street	Northwest	16.6	D	23.8	D	23.8	D	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 19.16: 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 43rd Street	Southwest	27.3	C	23.5	D	23.5	D	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
Lexington Avenue and E 43rd Street	Southeast	20.1	D	12.4	E	12.4	E	Unmitigated
Lexington Avenue and E 45th Street	Southeast	23.7	D	20.2	D	20.2	D	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

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 $\mu g/m^3$ 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 19-17 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 PM2.5 would not exceed the *de minimis* criteria for $PM_{2.5}$ of 0.1 $\mu g/m^3$. No unmitigated significant adverse air quality impacts would remain upon incorporation of the traffic mitigation measures.

Table 19.17: Maximum Predicted $PM_{2.5}$ Concentrations ($\mu g/m^3$) with Traffic Mitigation

		Annual $PM_{2.5}$ Concentration	
Analysis Site	Location	Increment	Increment (with Mitigation)
3	Third Avenue & East 44th Street	0.52	0.04
4	Third Avenue & East 46th Street	0.64	0.03
5	Third Avenue & East 54th Street	0.72	0.06

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, will explore the viability of this mitigation measure between the Draft EIS and Final EIS.

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 19.18 and 19.19 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 19.18: 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 19.19: 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 19.20 and 19.21 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 19.20: AM Level of Service Analysis with and without Proposed Mitigation - Construction

Intersection & Approach (Signalized Intersections)	2032 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	17.2	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 19.20: AM Level of Service Analysis with and without Proposed Mitigation -Construction (Continued)

Intersection & Approach (Unsignalized Intersections)	2032 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

Table 19.21: 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	29.8	C	T	0.84	37.7	D	T	0.81	33.7	C
	R	0.86	38.5	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	B
Southbound	T	0.82	4.7	A	T	0.83	5.6	A	T	0.85	7.9	A
	R	0.44	2.8	A	R	0.45	2.9	A	R	0.46	3.9	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 19.21: 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	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	F
	R	1.01	36.3	D	R	1.04	47.6	D +	R	0.99	34	C
5th Avenue & 48th Street												
Eastbound	T	0.84	40.5	D	T	0.95	55.4	E +	T	0.95	55.4	E
	R	1.03	89.6	F	R	1.09	111.8	F +	R	1.09	111.8	F
Southbound	LT	1.21	113.2	F	LT	1.21	111.0	F	LT	1.21	111	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

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 adjacent buildings to Projected Development 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. 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 L_{10} impact threshold for commercial

buildings and the CEQR 45-dBA L_{10} impact threshold for residential buildings. The interior noise levels of these adjacent buildings would likely approach or marginally exceed the CEQR L_{10} 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). Therefore, if the peak construction scenario conservatively assumed for simultaneous construction on Projected Development Sites 4 and 5 for the purposes of this analysis 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."