3.22 MITIGATION

INTRODUCTION

The preceding chapters of this EIS discussed the potential for significant adverse impacts to occur in each of the technical areas. Where significant impacts have been identified, in accordance with the CEQR Technical Manual, mitigation measures are examined to minimize or eliminate these impacts. These mitigation measures are discussed below.

SOCIOECONOMIC CONDITIONS

As described in Chapter 3.2, "Socioeconomic Conditions," with regard to secondary or indirect residential displacement, the Population and Housing Study Area contains populations that could be vulnerable to displacement pressures. Potential secondary displacement as a result of the substantial increase in the non-residential development proposed, and the upgrading of three blocks in the East Harlem Triangle with new mixed-use development, would be offset to some degree by the proposed affordable housing that would include up to 650 units of low- and moderate-income housing. However, some negative effects may result as a result of rising land values and rents in areas surrounding the project site if low income households in unprotected buildings in the area are forced to move due to rising rents.

Mitigation measures described in the *CEQR Technical Manual* to address such adverse effects include actions such as providing appropriate, comparable space as part of development projects, either on-site or off-site but within a reasonable distance of the current location of the units that would be displaced; contributions to tenant advocacy groups; or enacting laws and regulations to prevent indirect displacement from occurring. In the case of the East 125th Street Development, a significant amount of affordable housing is proposed onsite. Further measures that could mitigate indirect residential displacement impacts caused by the proposed action could include HPD working with local Community Development Corporations to counsel displaced tenants and connect them to affordable housing resources. Another option for mitigation to address the potential for secondary displacement would be for HPD to continue to utilize publicly controlled properties in the community for the development of affordable housing, and to target a certain percentage of affordable units constructed on publicly-controlled property for local residents. Even with the implementation of such mitigation measures to address the potential for secondary displacement, some degree of potential indirect residential displacement resulting from the East 125th Street Development might remain unmitigated.

TRANSIT & PEDESTRIANS

Subway Service

The results of the analysis of the 125th Street IRT (4, 5, 6) subway station in the future with the proposed action indicate that new demand from the proposed project would result in significant adverse impacts in the AM and PM peak hours to stairway S4 located at the northeast corner of East 125th Street and Lexington Avenue. As shown in Table 3.16-17, under future conditions

with the project, this stair would deteriorate from LOS B (0.69 v/c ratio) to LOS D (1.24 v/c ratio) in the AM peak hour, with 11.8 inches of theoretical widening required to return this stair to an acceptable LOS (a v/c ratio of less than 1.00). In the PM peak hour, stair S4 would deteriorate from LOS B (0.57 v/c ratio) to LOS E (1.57 v/c ratio), with 27.3 inches of theoretical widening required to return this stair to an acceptable LOS. All other analyzed station elements, including stair S2 and the fare array and exit gates, would not be impacted based on *CEQR Technical Manual* impact criteria.

Mitigation measures to address subway station stairway impacts typically involve physically widening an affected stair to increase its capacity, or implementing measures that would decrease demand, typically by providing new and/or more convenient access points. As described above, a widening of stair S4 by more than two feet would be needed for this stair to accommodate projected 2012 demand under future conditions with the proposed action at an acceptable level of service, thereby fully mitigating the proposed project's significant adverse impacts in both the AM and PM peak hours. (In practice, NYC Transit would typically require that this stair be widened to a standard eight feet.) Between the Draft EIS and Final EIS, the feasibility of widening stair S4 and other potential mitigation measures will be evaluated in consultation with NYC Transit. If widening stair S4 and other potential mitigation measures should prove infeasible, the proposed project's significant adverse impacts to this stair in the AM and PM peak hours would remain unmitigated.

TRAFFIC & PARKING

Traffic and Parking

As discussed in Chapter 3.15, "Traffic and Parking" and shown in Table 3.15-8, demand from the Proposed Project would result in significant adverse impacts traffic impacts at nine signalized intersections in one or more peak periods by 2012. A traffic mitigation plan was therefore developed to address these impacts. The paragraphs below discuss the measures that would be included in the traffic mitigation plan, and the effects that these measures would have on each of the impacted intersections. Table 3.23-1 summarizes the measures contained in the mitigation plan.

According to the *CEQR Technical Manual,* a significant traffic impact is considered mitigated if measures return projected future conditions to what they would be if a proposed project were not in place, or to acceptable levels. For a future No-Build level of service (LOS) D, E or F, mitigating back to the No-Build condition is required; for No-Build LOS A, B, C, mitigating to mid-LOS D is required (45 seconds of delay for signalized intersections). Table 3.22-2 shows the effectiveness of the proposed traffic mitigation measures during the weekday AM, midday, PM, and Saturday midday peak periods based on these criteria.

West 129th Street and Lenox Avenue
To address the project's Saturday midday peak hour impact to the westbound West 129th Street approach, proposed mitigation measures would include the transfer of one second of green time from the northbound/southbound signal phase to West 129th Street phase in the Saturday midday.

As shown in Table 3.22-2, this measure would reduce delay on this approach to 66.1 seconds in the Saturday midday, below the 69.6 seconds of delay in the No-Build Condition, fully mitigating the impact from the proposed action at this location.

East 128th Street and Lexington Avenue
To address the project's PM peak hour impact to the eastbound East 128th Street approach, proposed mitigation measures would include the transfer of three seconds of green time from the southbound signal phase to East 128th Street phase in the PM peak hour. As shown in Table 3.22-2, this measure would reduce delay on this approach to 50.5 seconds in the PM, below the 55.7 seconds of delay in the No-Build Condition, fully mitigating the impact from the proposed action at this location.

West 126th Street and Lenox Avenue
To address the project's PM peak hour impact to the westbound West 126th Street through-right movement, proposed mitigation measures would include the transfer of one second of green time from the northbound only signal phase to the West 126th Street phase in the PM. As shown in Table 3.22-2, this measure would reduce delay at this movement to 44.3 seconds in the PM, below the CEQR mid-LOS D threshold of 45 seconds, fully mitigating the impact from the proposed action at this location.

East 126th Street and Park Avenue
Traffic generated by the proposed action would impact westbound East 126th Street in the midday and PM peak hours. To address these impacts to the westbound East 126th Street approach, proposed mitigation measures would include the transfer of three seconds and one second of green time from the northbound/southbound signal phase to the West 126th Street phase in the midday and PM peak hours, respectively. As shown in Table 3.22-2, these measures would reduce delay on this approach to 41.1 seconds in the midday and 43.6 seconds in the PM peak hour, both of which are below the CEQR mid-LOS D threshold of 45 seconds, fully mitigating the impacts from the proposed action at this location.

East 126th Street and Third Avenue
Traffic generated by the proposed action would impact westbound East 126th Street in the AM, PM and Saturday midday peak hours. To address the project's impacts to the westbound East 126th Street approach, proposed mitigation measures would include the transfer of two seconds from the northbound signal phase to the West 126th Street phase in both the AM and PM peak hours. For the Saturday midday impact, proposed mitigation measures would include the transfer of one second from the northbound signal phase to the West 126th Street phase. As shown in Table 3.22-2, these measures would reduce delay on this approach to 42.3 seconds in the AM, 43.3 seconds in the PM, and 43.4 seconds in the Saturday midday peak hour, all of which are below the CEQR mid-LOS D threshold of 45 seconds, fully mitigating the impacts from the proposed action at this location.

East 126th Street and Second Avenue
To address the project's AM peak hour impact to the northbound left turn movement at Second Avenue, proposed mitigation measures would include the transfer of one second of green time

from the southbound only signal phase to the northbound only phase in the AM. As shown in Table 3.22-2, this measure would reduce delay at this movement to 80.7 seconds in the AM, below the 86.6 seconds of delay in the No-Build Condition, fully mitigating the impact from the Proposed Project at this location.

East 125th Street and Lexington Avenue
Traffic generated by the Proposed Project would impact the eastbound East 125th Street approach in the midday and PM peak hours. To address the midday impact, proposed mitigation measures would include the transfer of one second from the southbound signal phase to the East 125th Street phase in the midday peak hour. For the PM impact, proposed mitigation measures would include the implementation of "No Standing, 4-7PM" for 100 feet along the south curb of the eastbound approach. As shown in Table 3.22-2, these measures would reduce delay on the eastbound approach to 44.3 seconds in the midday and 27.3 seconds in the PM, both of which are below the CEQR mid-LOS D threshold of 45 seconds, fully mitigating the impacts from the proposed action at this location.

East 125th Street and Second Avenue
To address the project's PM peak hour impact to the southbound left turn movement at Second Avenue, proposed mitigation measures would include the re-striping of the southbound approach to include an exclusive left turn lane, one left-through lane, three through lanes and one through-right turn lane. As shown in Table 3.22-2, this measure would reduce delay on this approach to 44.3 seconds in the PM, below the CEQR mid-LOS D threshold of 45 seconds, fully mitigating the impact from the proposed action at this location.

East 124th Street and Lexington Avenue
Traffic generated by the Proposed Project would impact the eastbound East 124th Street approach in the midday peak hour and the southbound Lexington Avenue approach in the Saturday midday peak hour. To address the midday impact, proposed mitigation measures would include the transfer of two seconds from the southbound signal phase to the East 124th Street phase in the midday peak hour. For the Saturday midday impact, proposed mitigation measures would include the implementation of "No Standing Anytime" for 100 feet along the east curb of the southbound approach. As shown in Table 3.22-2, the midday mitigation measure would reduce delay on the eastbound approach to 62.1 seconds, below the 68.9 seconds of delay in the No-Build Condition. Also shown in Table 3.22-X, the Saturday midday mitigation measure would reduce delay on the southbound approach to 21.1 seconds, below the CEQR mid-LOS D threshold of 45 seconds, fully mitigating the impacts from the proposed action at this location.

Table 3.22-1 Proposed Traffic Mitigation Measures

Intersection	Approach	No Build Signal Timing (Seconds) (1)	Proposed Mitigation	
			Mitigation Signal Timing (Seconds) (1)	Description of Mitigation
1. West 129th St (WB) @	WB	39 (all times)	39/39/39/40	Transfer 1 sec from NB/SB phase to WB in Sat. MD
Lenox Avenue (N-S)	NB/SB	51 (all times)	51/51/51/50	
3. East 128th St (EB) @	EB	36 (all times)	36/36/39/36	Transfer 3 sec from SB phase to EB in PM
Lexington Avenue	SB	54 (all times)	54/54/51/54	
9. West 126th St (WB) @	WB	40/42/44/42	40/42/45/42	Transfer 1 sec from NB only phase to WB phase in PM
Lenox Avenue (N-S)	NB	10/16/13/16	10/16/12/16	
	NB/SB	40/32/33/32	40/33/33/32	
11. East 126th St (WB) @	WB	35/32/35/32	35/35/36/32	Transfer 3 sec from NB/SB phase to WB in MD
Park Avenue (N-S)	NB/SB	55/58/55/58	55/55/54/58	Transfer 1 sec from NB/SB phase to WB in PM
13. East 126th St (WB) @	WB	36 (all times)	38/36/38/37	Transfer 2 sec from NB Phase to WB Phase in AM and PM
Third Avenue (NB)	NB	54 (all times)	52/54/52/53	Transfer 1 sec from NB Phase to WB Phase in Sat. MD
14. East 126th St (WB) @	WB	26 (all times)	26 (all times)	Transfer 1 sec from SB to NB Phase in AM
Second Avenue (SB)	NB	23 (all times)	24/23/23/23	
	SB	41 (all times)	40/41/41/41	
22. East 125th St (E-W) @	EB/WB	40/43/45/45	40/44/45/45	Transfer 1 sec from SB to EB/WB Phase in MD
Lexington Avenue (SB)	SB	50/47/45/45	50/46/45/45	Implement no standing, 4-7PM regulation for 100' along south curb of EB approach.
24. East 125th St (E-W) @	EB/WB	27/30/31/28	nc	Re-stripe SB approach from L+TR to L+LTR.
Second Avenue (SB1)	SB1	34/35/31/35	nc	
Triboro Off-Ramp (SB2)	SB2	29/25/28/27	nc	
26. East 124th St (EB) @	EB	36 (all times)	36/38/36/36	Transfer 2 sec from SB to EB Phase in MD
Lexington Avenue (SB)	SB	54 (all times)	54/52/54/54	Implement no standing anytime, regulation for 100' along east curb of SB approach.

Notes:

(1) Signal timings shown indicate green plus yellow (including all-red) for each phase. AM/MD/PM/Sat MD

n/c - no change.

Table 3.22-2 2012 Mitigation Condition Level of Service

	Intersection	Lane Group	Weekday AM Peak Hour									Weekday MD Peak Hour								
			2012 No-Build Condition			2012 Build Condition			2012 Mitigation Condition			2012 No-Build Condition			2012 Build Condition			2012 Mitigation Condition		
			V/C Ratio	Delay sec/veh	LOS	V/C Ratio	Delay sec/veh	LOS	V/C Ratio	Delay sec/veh	LOS	V/C Ratio	Delay sec/veh	LOS	V/C Ratio	Delay sec/veh	LOS	V/C Ratio	Delay sec/veh	LOS
11	E. 126th St (WB) @	WB-LTR	0.93	50.4	D	0.93	51.0	D	Not Applicable			0.83	43.0	D	0.95	61.9	E *	0.85	41.1	D
	Park Av (N-S)	NB-DefL	0.40	14.8	B	0.40	14.8	B												
		NB-T	0.35	12.2	B	0.35	12.2	B												
		NB-LT										0.26	9.5	A	0.26	9.5	A	0.28	11.1	B
		SB-TR	0.44	12.6	B	0.44	12.6	B				0.31	9.8	A	0.31	9.8	A	0.33	11.5	B
13	E. 126th St (WB) @	WB-TR	0.89	43.1	D	0.97	56.3	E *	0.91	42.3	D	0.84	43.6	D				Not Applicable		
	Third Ave (NB)	WB-T													0.86	45.0	D			
		WB-R													0.58	31.3	C			
		NB-LT	0.37	12.0	B	0.39	12.2	B	0.41	13.4	B	0.30	11.4	B	0.34	11.8	B			
14	E. 126th St (WB) @	WB-LTR	0.65	36.2	D	0.70	37.6	D	0.70	37.6	D	0.48	31.9	C	0.57	33.5	C	Not Applicable		
	Triboro Off-Ramp (NB)	NB-L	1.02	86.6	F	1.05	96.6	F *	1.00	80.7	F	0.44	36.1	D	0.51	38.2	D			
	Second Av (SB)	NB-T	0.93	57.4	E	0.93	57.4	E	0.88	49.4	D	0.91	53.3	D	0.91	53.3	D			
		SB-TR	0.73	24.9	C	0.81	27.1	C	0.83	28.7	C	0.36	19.4	B	0.45	20.4	C			
22	E. 125th St (E-W) @	EB-TR	0.85	34.7	C	0.95	45.0	D	Not Applicable			0.87	34.5	C	0.97	50.6	D *	0.95	44.3	D
	Lexington Av (SB)	WB-LT	0.56	23.7	C	0.56	23.8	C				0.48	20.5	C	0.48	20.6	C	0.47	19.8	B
		SB-LT	0.78	22.8	C	0.79	23.3	C				0.58	19.5	B	0.62	20.6	C	0.64	21.6	C
		SB-R	0.24	13.7	B	0.24	13.8	B				0.23	15.5	B	0.25	15.7	B	0.25	16.4	B
26	E. 124th St (EB) @	EB-TR	0.91	53.6	D	0.94	57.5	E	Not Applicable			0.98	68.9	E	1.03	80.8	F *	0.96	62.1	E
	Lexington Ave (SB)	SB-LT										0.70	18.5	B	0.77	20.7	C	0.80	23.6	C
		SB-L	0.32	12.5	B	0.38	13.5	B												
		SB-T	0.81	21.5	C	0.82	22.1	C												

Abbreviations

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound
L-Left, T-Through, R-Right, Dfl-Defacto Left
E-W: East-West Roadway, N-S: North-South Roadway

sec/veh - Seconds per Vehicle
LOS-Level Service, V/C Ratio-Volume to Capacity Ratio
* - Denotes Impacted Locations

Table 3.22-2 (continued) 2012 Mitigation Condition Level of Service

	Intersection	Lane Group	Weekday PM Peak Hour									Weekday Sat MD Peak Hour								
			2012 No-Build Condition			2012 Build Condition			2012 Mitigation Condition			2012 No-Build Condition			2012 Build Condition			2012 Mitigation Condition		
			V/C Ratio	Delay sec/veh	LOS	V/C Ratio	Delay sec/veh	LOS	V/C Ratio	Delay sec/veh	LOS	V/C Ratio	Delay sec/veh	LOS	V/C Ratio	Delay sec/veh	LOS	V/C Ratio	Delay sec/veh	LOS
1	W. 129th St (WB) @	WB-LTR	0.70	31.7	C	0.72	32.5	C	Not Applicable			1.01	69.6	E	1.03	74.7	E *	1.00	66.1	E
	Lenox Ave (N-S)	NB-L	0.20	13.5	B	0.20	13.6	B				0.14	12.6	B	0.15	12.7	B	0.15	13.3	B
		NB-T	0.40	14.3	B	0.41	14.5	B				0.50	15.6	B	0.52	16.0	B	0.53	16.8	B
		SB-TR	0.43	14.6	B	0.44	14.8	B				0.37	14.0	B	0.39	14.1	B	0.39	14.8	B
3	E. 128th St (EB) @	EB-TR	0.93	55.7	E	1.01	73.6	E *	0.92	50.5	D	0.69	33.8	C	0.79	39.4	D	Not Applicable		
	Lexington Ave (SB)	SB-LT	0.56	15.0	B	0.56	15.0	B	0.60	17.5	B	0.63	16.3	B	0.63	16.3	B			
9	W. 126th St (WB) @	WB-LTR																		
	Lenox Av (N-S)	WB-L	0.12	15.6	B	0.13	15.7	B	0.13	15.1	B	0.34	19.4	B	0.34	19.5	B	Not Applicable		
		WB-TR	0.86	35.6	D	0.97	51.6	D *	0.94	44.3	D	0.78	29.1	C	0.85	37.7	D			
		NB-L	0.70	36.4	D	0.70	36.4	D	0.73	40.4	D	0.63	28.7	C	0.63	28.7	C			
		NB-T	0.75	24.1	C	0.75	24.1	C	0.76	25.4	C	0.44	16.4	B	0.44	16.4	B			
		SB-TR	0.97	56.4	E	0.97	56.4	E	0.97	56.4	E	0.85	38.1	D	0.85	38.1	D			
11	E. 126th St (WB) @	WB-LTR	0.81	35.8	D	0.94	49.4	D *	0.91	43.6	D	0.69	34.5	C	0.85	43.8	D	Not Applicable		
	Park Av (N-S)	NB-LT	0.49	13.7	B	0.49	13.7	B	0.50	14.5	B	0.24	9.3	A	0.24	9.3	A			
		SB-TR	0.49	13.2	B	0.49	13.2	B	0.50	13.9	B	0.35	10.2	B	0.35	10.2	B			
13	E. 126th St (WB) @	WB-TR	0.77	36.7	D	Approach	53.0	E *	Approach	43.3	D	0.80	39.9	D	Approach	47.5	D *	Approach	43.4	D
	Third Ave (NB)	WB-T				0.94	54.8	D	0.88	44.2	D				0.86	44.6	D	0.84	41.0	D
		WB-R				0.84	49.4	D	0.78	41.6	D				0.85	52.6	D	0.82	47.6	D
		NB-LT	0.38	12.1	B	0.41	12.4	B	0.43	13.6	B	0.22	10.8	B	0.26	11.0	B	0.26	11.6	B
22	E. 125th St (E-W) @	EB-TR	0.90	35.5	D	1.04	64.6	E *	Approach	27.3	C	0.81	29.1	C	0.96	44.5	D	Not Applicable		
		EB-T							0.58	20.7	C									
		EB-R							0.84	43.4	D									
	Lexington Av (SB)	WB-LT	0.50	19.5	B	0.50	19.6	B	0.50	19.6	B	0.54	21.2	C	0.54	21.3	C			
		SB-LT	0.91	34.7	C	0.96	41.7	D	0.96	41.7	D	0.81	25.9	C	0.87	29.0	C			
		SB-R	0.15	15.5	B	0.17	15.7	B	0.17	15.7	B	0.15	14.3	B	0.16	14.4	B			
24	E. 125th St (E-W) @	EB-TR	0.80	33.8	C	0.82	34.6	C	0.82	34.6	C	0.78	34.9	C	0.81	35.9	D	Not Applicable		
	Second Av (SB1)	WB-LT	0.41	29.0	C	0.44	29.6	C	0.44	29.6	C	0.72	41.5	D	0.77	44.7	D			
	Triboro off-ramp (SB2)	SB1-LTR										0.50	24.7	C	0.56	25.6	C			
		SB1-L	0.95	63.4	E	1.19	136.9	F *	0.81	44.3	D									
		SB1-TR	0.73	31.4	C	0.77	32.2	C	0.85	35.2	D									
		SB2-TR	0.88	54.6	D	0.88	54.6	D	0.88	54.6	D	0.75	39.9	D	0.81	44.4	D			
26	E. 124th St (EB) @	EB-TR	0.37	22.9	C	0.38	23.0	C	Not Applicable			0.80	40.1	D	0.84	44.0	D	0.84	40.8	D
	Lexington Ave (SB)	SB-LT	0.88	26.4	C	0.94	33.5	C				1.06	62.4	E	1.15	97.1	F *	Approach	21.1	C
		SB-L																0.61	18.5	B
		SB-T																0.81	21.9	C

Abbreviations

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound
L-Left, T-Through, R-Right, Dfl-Defacto Left
E-W: East-West Roadway, N-S: North-South Roadway

sec/veh - Seconds per Vehicle
LOS-Level Service, V/C Ratio-Volume to Capacity Ratio
* - Denotes Impacted Locations