		AM PEAK HOUR Control						CAK HOUR Control	
INTERSECTION & APPROACH		Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS
SIGNALIZED INTERSECTIONS									
H1A) FIRST AVENUE at EAST 125th S	FREET								
First Avenue	NB	LTR	0.43	9.9	Α	LTR	. 0.46	10.1	В
T HSt / CVCHGO		R	0.31	9.7	A	R	-0.26	9.2	Α
East 125th Street	EB	LT	0.57	21.7	C	LT	0.63	22.8	С
o	verall Intersection	-	0.49	13.1	В	-	0.54	13.7	В
(H2) SECOND AVENUE at EAST 124th	STREET								
Second Avenue	SB	LT	0.74	10.2	В	LT	0.51	8.0	Α
East 124th Street	EB	TR	0.77	27.9	C	TR	0.92	34,8	C
Sast 12 Tai Succe	WB	L	0.43	23.8	C	L	0.60	28.5	Č
	****	R	0.15	9.5	A	R	0.25	10.4	В
0	verall Intersection	_	0.75	15.5	В	-	0.67	19.5	В
· ·	yeran intersection				-				
(H3) SECOND AVENUE at EAST 125th		r TD	0.74	20.7	C	I TD	0.67	19.6	В
Second Avenue	SB	LTR	0.74	20.7	C	LTR	0.67		
Triborough Bridge Ramp	SB	TR	0.94	53.6	D	TR	0.55	33.1	C
East 125th Street	EB	TR	0.92	46.4	D	TR	0.98	53.4	D
	WB	LT	0.84	47.0	D	LT	0.42	31.1	С
0	verall Intersection	-	0.84	33.7	C	-	0.72	29.9	С
(H4) SECOND AVENUE at EAST 126th	STREET								
Second Avenue	NB	L	0.60	36.0	D	L	0.49	36.0	D
		T	0.69	12.8	В	T	0.45	7.5	Α
	SB	TR	0.84	25.1	. C	TR	0.98	38.6	D
East 126th Street	WB	LTR	0.39	28.7	С	LTR	0.44	29.4	C
O	verall Intersection	-	0.65	24.1	С	-	0.67	29.7	С
H5A) SECOND AVENUE at EAST 127ti	STREET								
Second Avenue	NB	TR	0.46	8.0	Α	TR	0.57	8.7	Α
Second Avenue	SB	LT	1.01	46.6	D	LT	1.00	36.9	D
East 127th Street	EB	LTR	0.43	22.4	C	LTR	0.81	30.5	C
O	verall Intersection	-	0.78	34.4	С	_	0.92	27.7	С
(H7) THIRD AVENUE at EAST 124th	STREET NB	TR	0.50	7.9	Α	TR .	0.73	9.9	Α
Third Avenue		LT		21.5	C	LT	0.73	23.6	Ĉ
East 124th Street	ÉB	LI	0.37	21.3	C	LI	0.54	25.0	C
C	verall Intersection	-	0.45	10.7	В	-	0.65	12.9	В
(H8) THIRD AVENUE at EAST 125th	STREET								
Third Avenue	NB	LTR	0.30	9.0	Α	LTR	0.53	10.7	В
East 125th Street	EB	LT	0.92	39.0	D	LT	0.67	24.1	С
•	WB	TR	0.56	21.7	С	TR	0.38	19.1	В
_	verall Intersection		0.57	21.6	C	-	0.59	14.9	В

INTERSECTION & APPI SIGNALIZED INTERSEC (H9) THIRD AVENUE at EAS Third Avenue		Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control	
SIGNALIZED INTERSECTION SIGNALIZED INTERSECTION (H9) THIRD AVENUE at EAST Third Avenue				~~~	LOS	1.54.	Y/C	Delay	LOS
H9) THIRD AVENUE at EAS	CTIONS								
Third Avenue									
	ST 126th STREET								
n . 10(1 G	NB WB	LT TR	0.18 0.59	6.1 24.8	A C	LT TR	· 0.34 ·-0.27	6.9 20.4	A C
East 126th Street	aw	1 K	0.39	24.0	C	IIX	0.27	20.4	Č
	Overall Intersection	-	0.34	14.9	В	-	0.31	9.3	A
110) THIRD AVENUE at EAS								4.0	
Third Avenue	NB	LTR	0.18	6.2	Α	LTR	0.34	6.9	Α
	Overall Intersection	-	0.11	6.2	A	-	0.20	6.9	A
H12) LEXINGTON AVENUE :	at EAST 124th STREET								_
Lexington Avenue	SB	LT	0.78	12.0	В	LT TR	0.71 0.49	10.7 22.9	E
East 124th Street	EB	TR	0.36	21.4	С	IK	0.49	22.9	
	Overall Intersection	-	0.62	14.4	В	-	0.63	15.1	В
HI3) LEXINGTON AVENUE					_	. mn	0.72	12.0	-
Lexington Avenue	SB	LTR	0.82	16.4 27.9	B C	LTR TR	0.73 0.71	13.9 24.9	E
East 125th Street	EB WB	TR LT	0.80 1.00	52.1	Đ	LT	0.68	24.6	Ċ
	Overall Intersection	_	0.90	30.2	С	-	0.72	20.1	C
THE RESERVENCE OF A STEELING	. DACT 12/4 CTREET								
H14) LEXINGTON AVENUE Lexington Avenue	at EAST 126th STREET	TR	0.78	12.2	В	TR	0.71	10.7	E
East 126th Street	WB	LT	0.46	22.5	C	LT	0.36	21.3	(
	Overall Intersection	-	0.66	16.1	В	-	0.57	14.3	I
H15) LEXINGTON AVENUE	at EAST 127th STREET								
Lexington Avenue	SB	Т	0.97	36.2	Đ	T	0.66	9.9	A
East 127th Street	WB	L	0.17	19.9	В	L	0.15	19.7	E
	Overall Intersection	-	0.60	35.3	D	-	0.46	10.5	1
H16) LEXINGTON AVENUE	at EAST 128th STREET								
Lexington Avenue	SB	LT	1.00	42.8	D	LT	0.79	12.3	I
East 128th Street	EB	TR	0.17	20.0	В	TR	0.31	21.7	(
	Overall Intersection	-	0.61	41.7	D	-	0.60	13.3	1
H17) LEXINGTON AVENUE	at EAST 129th STREET								
Lexington Avenue	SB	TR	0.64	25.4	C	TR	0.56	24.0	•
East 129th Street	WB	L LT	0.99 0.98	73.2 65.4	E E	L LT	0.74 0.38	20.3 11.8	1
	Overall Intersection	· -	0.80	, 52.1	D	-	0.67	19.4]
H18) PARK AVENUE at EAS		700	0.10	0.5		TD	0.41	9.9	
Park Avenue	NB : SB	TR	0.19	8.5 10.9	A B	TR L	0.41	9.9 12.1	
	SB	L LT	0.22 1.00	40.3	D	LT	0.52	12.1	
- East 124th Street	EB	LTR	0.36	- 19.0	В	LTR	0.40	19.4	
•	Overall Intersection		0.71	28.1	С	_	0.51	13.5	

			AM PE	AK HOUR			PM PI	EAK HOUR	
				Control				Control	
INTERSECTION & APPROA	СН	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS
SIGNALIZED INTERSECTION	<u>DNS</u>								
(H19) PARK AVENUE at EAST 12	5th STREET								
Park Avenue	NB	TR	0.19	19.6	В	TR	0.34	19.5	В
	SB	TR	0.98	46.1	Ð	TR	0.53	25.2	С
East 125th Street	EB	LT	0.77	21.5	С	LTR	0.65	17.9	В
	WB	LTR	0.76	20.9	С	LTR	0.62	17.2	В
	Overall Intersection	-	0.85	30.5	С	-	0.60	19.9	В
(H20) PARK AVENUE at EAST 12	6th STREET								
Park Avenue	NB	LT	0.13	4.1	Α	LT	0.22	4.5	Α
	SB	TR	0.89	28.8	С	TR	0.33	4.9	Α
East 126th Street	WB	LTR	0.59	26.9	С	LTR	0.45	25.0	С
	Overall Intersection	-	0.76	25.5	С	-	0.37	12.4	В
(H21) MADISON AVENUE at EAS	T 125th STREET								
Madison Avenue	NB	LTR	0.42	13.3	В	LTR	0.55	14.4	В
	EB	LT	0.87	30.0	С	LT	0.80	25.6	С
East 125th Street	WB	TR	0.68	21.0	С	TR	0.50	17.7	В
	Overall Intersection	_	0.65	20.6	С	_	0.67	18.1	В

		A	M PEAK H	OUR	PM	PEAK HO	UR
INTERCECTION	e. ADDDOACH	Mvt.	Control Delay	LOS	Mvt.	Control Delay	LOS
INTERSECTION	& APPROACH	MVt.	Delay	LUS	MVI.	Delay	LUS
UNSIGNALIZED	INTERSECTIONS						
(H1B) SOUTHBOUND S	ERVICE ROAD just west of	FIRST AVE	NUE at EA	ST 125th STI	REET		
Service Road	•	SB R	9.5	Α	R	9.0	Α
	Overall Intersec	ction	9.5	A		9.0	A
	2						
(H5B) SECOND AVENU	E CHANNELIZED LEFT TU	URN RAMP	to HARLEM	1 RIVER DR	IVE at EAST	127th STRI	EET
Second Avenue Ran	np S	SB L	25.3	D	L	43.2	E
	Overall Intersec	etion	25.3	D		43.2	E
` '	E at EAST 128th STREET			_	_		_
Second Avenue	2	SB T	36.2	E	T	23.1	С
	Overall Intersec	ction	36.2	E		23.1	C
(Wita) THIDD AVENUE	BRIDGE RAMP at EAST 1	104L STDEET	r				
128th Street		zoni strace: EB T	16.7	С	Т	26.8	D
i Dom Shoot				_	•		-
	Overall Intersec	ction	16.7	C		26.8	D
(IIII) TIIDD AVENUE	A PACT 1204 CTDDTT						
(H11B) THIRD AVENUE Third Avenue		√B R	17.5	С	R	26.1	D
THE AVOIDE	ı	10 IC	17.5	Č	K	20.1	Ъ
	Overall Intersec	ction	17.5	C		26.1	D

Notes

^{(1):} Control delay is measured in seconds per vehicle.

^{(2):} Level of service (LOS) for signalized intersections is based upon average control delay per vehicle (sec/veh) for each lane group as listed in the 2000 Highway Capacity Manual -- TRB.

^{(3):} Level of service (LOS) for unsignalized intersections is based upon control delay per vehicle (sec/veh) for each minor-approach as listed in the 2000 Highway Capacity Manual -- TRB.

^{(4):} Overall intersection V/C ratio is the critical lane groups' V/C ratio, not the weighted average of all the movements.

^{(5): &}quot;MVT" references the specific intersection approach lane(s). TR is a combined through-right turn lane(s). TL is a combined through-left turn lane(s), R or L refers to exclusive right- or left- turn movement lane(s), and LTR is a mixed lane(s) that allows for all movement types.

INTERSECTION & APPI SIGNALIZED INTERSEC (H9) THIRD AVENUE at EAS Third Avenue		Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control	
SIGNALIZED INTERSECTION SIGNALIZED INTERSECTION (H9) THIRD AVENUE at EAST Third Avenue				~~~	LOS	1.54.	Y/C	Delay	LOS
H9) THIRD AVENUE at EAS	CTIONS								
Third Avenue									
	ST 126th STREET								
n . 10(1 G	NB WB	LT TR	0.18 0.59	6.1 24.8	A C	LT TR	· 0.34 ·-0.27	6.9 20.4	A C
East 126th Street	aw	1 K	0.39	24.0	C	IIX	0.27	20.4	Č
	Overall Intersection	-	0.34	14.9	В	-	0.31	9.3	A
110) THIRD AVENUE at EAS								4.0	
Third Avenue	NB	LTR	0.18	6.2	Α	LTR	0.34	6.9	Α
	Overall Intersection	-	0.11	6.2	A	-	0.20	6.9	A
H12) LEXINGTON AVENUE :	at EAST 124th STREET								_
Lexington Avenue	SB	LT	0.78	12.0	В	LT TR	0.71 0.49	10.7 22.9	E
East 124th Street	EB	TR	0.36	21.4	С	IK	0.49	22.9	
	Overall Intersection	-	0.62	14.4	В	-	0.63	15.1	В
HI3) LEXINGTON AVENUE					_	. mn	0.72	12.0	-
Lexington Avenue	SB	LTR	0.82	16.4 27.9	B C	LTR TR	0.73 0.71	13.9 24.9	E
East 125th Street	EB WB	TR LT	0.80 1.00	52.1	Đ	LT	0.68	24.6	Ċ
	Overall Intersection	_	0.90	30.2	С	-	0.72	20.1	C
THE RESERVENCE OF A STEELING	. DACT 12/4 CTREET								
H14) LEXINGTON AVENUE Lexington Avenue	at EAST 126th STREET	TR	0.78	12.2	В	TR	0.71	10.7	E
East 126th Street	WB	LT	0.46	22.5	C	LT	0.36	21.3	(
	Overall Intersection	-	0.66	16.1	В	-	0.57	14.3	I
H15) LEXINGTON AVENUE	at EAST 127th STREET								
Lexington Avenue	SB	Т	0.97	36.2	Đ	T	0.66	9.9	A
East 127th Street	WB	L	0.17	19.9	В	L	0.15	19.7	E
	Overall Intersection	-	0.60	35.3	D	-	0.46	10.5	1
H16) LEXINGTON AVENUE	at EAST 128th STREET								
Lexington Avenue	SB	LT	1.00	42.8	D	LT	0.79	12.3	I
East 128th Street	EB	TR	0.17	20.0	В	TR	0.31	21.7	(
	Overall Intersection	-	0.61	41.7	D	-	0.60	13.3	1
H17) LEXINGTON AVENUE	at EAST 129th STREET								
Lexington Avenue	SB	TR	0.64	25.4	C	TR	0.56	24.0	•
East 129th Street	WB	L LT	0.99 0.98	73.2 65.4	E E	L LT	0.74 0.38	20.3 11.8	1
	Overall Intersection	· -	0.80	, 52.1	D	-	0.67	19.4]
H18) PARK AVENUE at EAS		700	0.10	0.5		TD	0.41	9.9	
Park Avenue	NB : SB	TR	0.19	8.5 10.9	A B	TR L	0.41	9.9 12.1	
	SB	L LT	0.22 1.00	40.3	D	LT	0.52	12.1	
- East 124th Street	EB	LTR	0.36	- 19.0	В	LTR	0.40	19.4	
•	Overall Intersection		0.71	28.1	С	_	0.51	13.5	

			AM PE	AK HOUR			PM PI	EAK HOUR	
				Control				Control	
INTERSECTION & APPROA	СН	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS
SIGNALIZED INTERSECTION	<u>DNS</u>								
(H19) PARK AVENUE at EAST 12	5th STREET								
Park Avenue	NB	TR	0.19	19.6	В	TR	0.34	19.5	В
	SB	TR	0.98	46.1	Ð	TR	0.53	25.2	С
East 125th Street	EB	LT	0.77	21.5	С	LTR	0.65	17.9	В
	WB	LTR	0.76	20.9	С	LTR	0.62	17.2	В
	Overall Intersection	-	0.85	30.5	С	-	0.60	19.9	В
(H20) PARK AVENUE at EAST 12	6th STREET								
Park Avenue	NB	LT	0.13	4.1	Α	LT	0.22	4.5	Α
	SB	TR	0.89	28.8	С	TR	0.33	4.9	Α
East 126th Street	WB	LTR	0.59	26.9	С	LTR	0.45	25.0	С
	Overall Intersection	-	0.76	25.5	С	-	0.37	12.4	В
(H21) MADISON AVENUE at EAS	T 125th STREET								
Madison Avenue	NB	LTR	0.42	13.3	В	LTR	0.55	14.4	В
	EB	LT	0.87	30.0	С	LT	0.80	25.6	С
East 125th Street	WB	TR	0.68	21.0	С	TR	0.50	17.7	В
	Overall Intersection	_	0.65	20.6	С	_	0.67	18.1	В

TABLE D.3-5

125TH STREET STATION AREA

COMPARISON OF AM PEAK HOUR NO BUILD VS CONSTRUCTION PHASE VS MITIGATION TRAFFIC LEVELS OF SERVICE

		1	O BUIL	D CONDIT	ION	2	ONSTRU	CTION PH	ASE	M	IITIGATI	ED CONDIT	<u>rion</u>	MITIGATION MEASURES
INTERPORTURE A A PROCES	~	14	V/C	Control	LOS	Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS	
INTERSECTION & APPROA	LH	Mvt.	- V/C	Delay	LUS	MIVI.	V/C	Deiny		JANA	. V/C	Deiny		
SIGNALIZED INTERSECTION	<u>N</u> S													
HIA) FIRST AVENUE at EAST 125	5th STREET													- Miligation not required.
First Avenue	NB	LTR	0.47	10.2	В	LTR	0.48	10.3	В					
		R	0.33	9.9	Α	R	0.33	9.9	Α					
East 125th Street	EB	LT	0.59	22.2	С	LT	0.59	22.2	С					
	Overall Intersection	-	0.53	13.4	₿	-	0.53	13.4	В					
(H2) SECOND AVENUE at EAST	124th STREET													
Second Avenue	SB	LT	0.79	10.8	В	LT	1.08	59,4	E	LT	1.02	36.1	D	- Shift 3 seconds of green time from EB / WB
East 124th Street	EB	TR	0.81	29.1	С	TR	0.90	33.4	С	TR	0.99	47.8	D	phase to SB phase.
	WB	L	0.46	24.3	C	L	0.46	24.3	С	L	0.50	27.4	С	
		R	0.17	9.7	Α	R	0,21	10.1	В	R	0.20	8.6	Α	
	Overall Intersection		0.80	16.2	В		1.01	47.4	D		1.01	38.4	D	
			0.00	10.2	2		****		-					
(H3) SECOND AVENUE at EAST									_			00.0	r .	Option 1:
Second Avenue	SB	LTR	0.99	62.8	E	LTR	1.23	132.9	F	LTR	1.14	90.9	F	- Daylight the EB approach to create two 10-foot through
Triborough Bridge Ramp	SB	TR	0.78	21.3	C	TR	0.81	41.6	D	TR	0.90	50.9	D	lanes and one 10-foot exclusive right-turn lane.
East 125th Street	EB	TR	0.99	58,5	E	TR	1.17	121.4	F	TR	1.02	72.6	E D	 Shift 2 seconds of green lime from SB Triborough Ramp phase to NB / SB phase.
		•	•		-		•		-	R	0.50	35.7		
	WB	LT	0.91	55.8	E	DefL	1,16	170.4	F	LT	0.98	70.3	E	 Shift 1 second of green time from EB AVB phase to NB / SB phase.
						Т	0.75	41.9	D	•				[PARTIALLY MITIGATED]
	Overall Intersection	•	0.89	38.7	D	-	1.20	109.0	F	•	1.05	76.9	E	
	SB									LTR	0.92	26.8	С	Option 2;
1	SB									TR	0.81	41.6	D	 Daylight the EB approach to create two 10-foot through
	EB									TR	0.97	58.5	É	lanes and one 10-foot exclusive right-turn lane.
										R	0.48	34.0	С	 Create four 10-foot lanes in the SB approach.
	WB									LT	0.93	58.3	Ē	
	Overall Intersection									-	0.91	37.8	D	
(H4) SECOND AVENUE at EAST	1244 PERFE													
Second Avenue	NB	L	0,63	36.8	D	L	0,84	47.7	D	L	0.84	47.7	D	- Shift 4 seconds of green time from EB / WB
Second Avende	ND	Ť	0.72	13,8	В	Ť	0.82	18.4	В	T	0.77	13.4	B	phase to NB / SB phase.
	SB	TR	0.86	25.5	č	TR	1,15	96.8	F	TR	1.04	50.3	D	·
East 126th Street	WB	LTR	0.41	29.0	Ċ	LTR	0.41	29.0	. с	LTR	0.50	33,2	С	
	Overall Intersection		0.67	24.6	С		0.86	65.9	E		0.86	39.9	D	
					_									
H5A) SECOND AVENUE at EAST		TO	0.40			TR	0,54	8,7	A					- Mitigation not required.
Second Avenue	NB SB	TR	0.49	8.2	A	LT	0.34	8.7 21.3	C					- Willigation flot required.
Frank 127th Frank	SB EB	LT LTR	1.06 0.45	66.2 22.7	E C	LTR	0.89	21.3	c					•
East 127th Street														
	Overall Intersection	•	0.82	47.0	D	-	0.72	17.7	В					
(H7) THIRD AVENUE at EAST 12	4th STREET													
Third Avenue	NB	TR	0.52	8.1	Α	TR	0.53	1.8	Α					 Mitigation not required.
East 124th Street	EB	LT	0.39	21.7	С	LT	0.50	23.2	С					
	Overall Intersection	-	0.47	10.9	В	•	0.52	11.9	В					
(H8) THIRD AVENUE at EAST 12	25th STREET													
Third Avenue	NB	LTR	0,31	1.9	Α	LTR	0.32	9.2	Α	LTR	0.45	19.6	В	- Shift 13 seconds of green time from NB / SB
East 125th Street	EB	LT	1.01	58.4	E	LT	1.79	390.6	F	LT	0.96	39.7	D	phase to EB / WB phase.
	WB	TR	0.59	22,1	С	TR	0.72	26.8	С	TR	0.53	14.2	В	
	Overall Intersection	_	0.62	27.9	С	•	0,97	124.2	F	_	0.75	24.2	С	
	Overan Intersection	•	0.02	41.7		-	0.57	127.2		-	0.75	a-715	~	

Eng-Wong, Taub and Associates

TABLE D.3-5 CONTINUED 125TH STREET STATION AREA COMPARISON OF AM PEAK HOUR NO BUILD VS CONSTRUCTION PHASE VS MITIGATION TRAFFIC LEVELS OF SERVICE

		NO BUIL	D CONDIT	<u>ION</u>	Ω	ONSTRU	Control	<u>așe</u>	M	IITIGATI	ED CONDIT Control	LION	MITIGATION MEASURES
INTERSECTION & APPROACH	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	Myt.	V/C	Delay	LOS	
SIGNALIZED INTERSECTIONS													
(H9) THIRD AVENUE at EAST 126th STREET													- Mitigation not required.
Third Avenue N East 126th Street W		0.19 0.62	6.2 25.3	A C	LT TR	0.19 0.75	6.2 28.7	A C					- Miligation not required.
East 126th Street W	B IK	0.62	25.3	C	110	0.73	20.7	C					
Overall Intersect	ion -	0,35	15.1	В	-	0.41	17.8	В					
H10) THIRD AVENUE at EAST 127th STREET													
Third Avenue N	B LTR	0.19	6.2	Α	LTR	0.20	6.3	A					 Mitigation not required,
Overall Intersect	ion -	0.19	6.2	A	_	0.19	6.3	A					
H12) LEXINGTON AVENUE at EAST 124th STREET Lexington Avenue S		0.82	13.0	В	LT	0.96	21.4	С					- Mitigation not required.
East 124th Street E		0.82	21.6	E C	TR	0.49	23.0	c					
East 124th Sheet E	, IV	0.50			i K								
Overall Intersect	ion -	0.65	15.2	В	•	0,77	21.9	С					
H13) LEXINGTON AVENUE at EAST 125th STREET	7												Option 1:
Lexington Avenue S.		0,86	17,9	В	LTR	1.02	44.8	D	LTR	1.04	52.4	D	- Offset the center line 5 feet in the EB / WB approaches
East 125th Street E		0.85	30.7	Ċ	TR	1.17	114,0	F	Т	0.82	31.5	С	to provide one 10-foot through lane and one 10-foot exclusive
	-	-	-	-			•		R	0,55	23.0	С	right-turn lane in the EB approach; one 10-foot through lane
· w	B LT	1,09	80.6	F	LT	2.17	561.7	F	L	0.54	27.6	С	and one 10-foot exclusive left-turn lane in the WB approach.
									T	0.99	53.7	D	 Shift 1 second of green time from NB / SB phase to EB / WB phase.
Overall Intersect	ion -	0.96	39.9	D	-	1,53	191.1	F	-	1.02	45.7	D	
													Option 2:
S	В								LT	1.02	50.0	D	 Daylight the SB approach to create one 10-foot exclusive right
•									Ř	0.28	13.5	В	lane.
E									TR	1,00	50,5	D	- Provide one 10-foot through lane and one 10-foot exclusive
W	В								L	0.62	29.5	Ċ .	left-turn lane in the WB approach.
									Т	0.87	31.6	С	 Shift 6 seconds of green time from SB phase to EB / WB phase.
Overall Intersec	tion						•		-	1.01	43.7	D	,
(HI4) LEXINGTON AVENUE at EAST 126th STREET	r												
Lexington Avenue S		0.82	13.3	В	TR	0.97	23,6	С					 Mitigation not required.
East 126th Street W	B LT	0.49	22.7	С	LT	0.58	24,0	C					
			4.5	_		0.00	43.0	C					
Overall Intersec	tion -	0.69	16.9	В	•	0.82	23.8	С					
(H15) LEXINGTON AVENUE at EAST 127th STREE								_	_				PLUS By a series of a series from NAVD also
Lexington Avenue S		1.02	51.5	D	Т	1.21	127.6	F	T	1.03	47.9	D	- Shift 7 seconds of green time from WB phase
East 127th Street W	B L	0.18	20,0	В	L	0.18	20.0	В	Ĺ	0.24	25.9	С	to SB phase.
Overall Intersec	tion •	0.63	49.9	D		0.73	122.7	F	•	0.74	46.9	D	
(H16) LEXINGTON AVENUE at EAST 128th STREE	г		•										
Lexington Avenue S		1.05	60,2	E	LT	1.24	140,6	F	LT	1.05	56,0	Ê	- Shift 7 seconds of green time from EB phase
East 128th Street E		0.17	20,1	č	TR	0.19	20,4	c	TR	0.26	26.4	c	to SB phase.
					•••			F			54.7	D	
Overall Intersec	tion -	0.64	58.3	E	-	0.76	1,35.4	r	-	0.76	34.7	U	
H17) LEXINGTON AVENUE at EAST 129th STREE				_	-	0.75	261	•	TD.	0.00	41.0		Shift & seconds of arean time from CD phase
Lexington Avenue S		0.67	26. l	C	TR	0.67	26.1	C	TR	0.90	41.8	D	- Shift 8 seconds of green time from SB phase
East 129th Street W	B L	1.04	87.8 -	F	L	1.45	250.0	F	L	1.10	95.4	F	to WB phase.
	LT	1.03	78.8	E	LT	1.12	111.0	F	LT	0.87	39.7	D	
Overall Intersec	tion -	0.84	60.9	E	•	1.03	129.2	F	-	1.02	59.3	E	•

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TABLE D.3-5 CONTINUED 125TH STREET STATION AREA

COMPARISON OF AM PEAK HOUR NO BUILD VS CONSTRUCTION PHASE VS MITIGATION TRAFFIC LEVELS OF SERVICE

		N	O BUILE	CONDIT	ION	9	CONSTRU	CTION PH	ASE	<u>N</u>	11TIGATI	ED CONDI	<u>TION</u>	MITIGATION MEASURES
				Control				Control				Control		
INTERSECTION & APPROACH	. N	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	
SIGNALIZED INTERSECTIONS														
118) PARK AVENUE at EAST 124th STREET														
Park Avenue N	В :	TR	0.20	8.5	Α	TR	0.20	8.5	Α	TR	0.17	3.8	Α	 Shift 9 seconds of green time from EB phase
S		L	0.24	11.0	В	L	0.24	11.0	В	L	0.20	5.6	A	to NB / SB phase.
		LT	1.05	59.2	Ε	LT	1.28	154.4	F	LT	1.06	58.1	E	
East 124th Street E	B L	LTR	0.38	19.2	В	LTR	0.49	20.7	С	LTR	0.65	29.7	С	
Overall Intersect	tion	•	0.74	38.3	D	-	0.92	91.7	F	•	0.92	40.2	D	
119) PARK AVENUE at EAST 125th STREET														•
Park Avenue N	В :	TR	0.20	19.7	В	TR	0.20	19.7	В	TR	0.18	15.8	В	 Shift 6 seconds of green time from EB / WB phase
S	В :	TR	1.03	58.7	E	TR	1.23	137.5	F	TR	1.03	53.9	D	to NB / SB phase.
East 125th Street E		LTR	0.82	23.9	С	LTR	0.79	23.2	С	LTR	0.91	36.7	D	
w	B L	LTR	0.80	22.3	С	LTR	0.80	23.3	С	LTR	0.92	37.2	D	
Overall Intersect	tion	-	0.90	36.3	D		0.96	74.7	E		0.97	42.9	D	
120) PARK AVENUE at EAST 126th STREET														
Park Avenue N	В 1	LT	0,14	4.2	Α	LT	0.15	4.2	Α	LT	0.14	2.9	Α	 Shift 3 seconds of green time from WB phase
S	в :	TR	0.94	32.7	С	TR	1.12	88. I	F	TR	1,03	53.7	D	to NB / SB phase.
East 126th Street W	B L	LTR	0.62	27.4	С	LTR	0.72	29.5	С	LTR	0.81	34.3	С	
Overall Intersect	tion		0.80	27.7	С		0.94	58.4	E	-	0.94	41.7	D	
THE MANIEUM AND THE STATE OF TH											:			
121) MADISON AVENUE at EAST 125th STREET Madison Avenue N	1 0	LTR	0.45	13.5		LTR	0,45	13.5	В	LTR	0.54	19.8	В	- Shift 7 seconds of green time from NB phase
		LIK LT	0.45	13.5 40.1	B D	LT	1.43	224.9	D C	LIK	1.02	19.8 54.6	D D	to EB / WB phase,
East 125th Street W		TR	0.95	21.8	C	TR	0.89	32.5	r C	TR	0.76	20.2	C	to 207 yyo phase.
East 123th Street W	ь .	11	0,71	41.0	C	110	V.07	34,3	C	I K	0,70	20.2	C	
Overall Intersect	tion	•	0.70	24.0	С	-	0.94	78.2	E	. •	0.82	29.7	С	

Notes

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^{(1):} Control delay is measured in seconds per vehicle.

^{(2):} Level of service (LOS) for signalized intersections is based upon average control delay per vehicle (see/veh) for each lone group as listed in the 2000 Highway Copocity Manual ¹- TRB.

^{(3):} Level of service (LOS) for unsignalized intersections is based upon control delay per vehicle (see/veh) for each minor-approach as listed in the 2000 Highway Capacity Manual -- TRB.

^{(4):} Overall intersection V/C ratio is the critical lane groups' V/C ratio, not the weighted average of all the movements.

^{(5): &}quot;MVT" references the specific intersection approach lane(s). TR is a combined through-right turn lane(s). TL is a combined through-left turn lane(s), R or L refers to exclusive right- or left- turn movement lane(s), and LTR is a mixed lane(s) that allows for all movement types.

TABLE D.3-5 CONTINUED 125TH STREET STATION AREA

COMPARISON OF AM PEAK HOUR NO BUILD VS CONSTRUCTION PHASE VS MITIGATION TRAFFIC LEVELS OF SERVICE

		NO_B	UILD CON	DITION	CON	STRUCTION PH	ASE	MITI	GATED CONDI	TION	MITIGATION MEASURES
INTERSECTION & APPROACH		Mvt.	Control Delay	LOS	Mvt.	Control Delay	LOS	Mvt.	Control Delay	LOS	
UNSIGNALIZED INTERSECTIONS											
HIB) SOUTHBOUND SERVICE ROAD just wes				ST 125th S							
Service Road	SB	R	9.6	A	R	10.0	Α				 Mitigation not required.
Overall Inte	rsection		9.6	A		10.0	A				
H5B) SECOND AVENUE CHANNELIZED LEF		RAMP									
Second Avenue Ramp	SB	L	27.8	D	L	33.7	D				 Mitigation not required,
Overall Inte	rsection		27.8	D		33.7	D				
(H6) SECOND AVENUE at EAST 128th STRE. Second Avenue	ET SB	Т	47.2	Ē	т	21.9	С				- Mitigation not required.
Overall Inte	rsection		47.2	E		21.9	С				
HIIA) THIRD AVENUE BRIDGE RAMP at EAS					_		_				******
128th Street	EB	Т	17.7	С	T	14.8	В				 Mitigation not required.
Overall Inte	rsection		17.7	С		14.8	В				
HIIB) THIRD AVENUE at EAST 128th STREET											AND COLUMN TO SERVICE STATE OF THE SERVICE STATE OF
Third Avenue	NB	R	18.6	С	R	15.1	С				 Mitigation not required,
Overall Inte	ersection		18.6	С		15.1	C				

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^{(1):} Control delay is measured in seconds per vehicle.

^{(2):} Level of service (LOS) for signalized intersections is based upon average control delay per vehicle (see/veh) for each lane group as listed in the 2000 Highway Capacity Manual ~ TRB.

^{(3):} Level of service (LOS) for unsignalized intersections is based upon control delay per vehicle (sec/veh) for each minor-approach as listed in the 2000 Highway Cupacity Manual -- TRB.

^{(4):} Overall intersection V/C ratio is the critical lane groups' V/C ratio, not the weighted average of all the movements.

^{(5): &}quot;MVT" references the specific intersection approach lanc(s). TR is a combined through-right turn lanc(s). TL is a combined through-left turn lanc(s), R or L refers to exclusive right- or left- turn movement lanc(s), and LTR is a mixed Janc(s) that allows for all movement types.

TABLE D.3-6

125TH STREET STATION AREA

COMPARISON OF PM PEAK HOUR NO BUILD vs CONSTRUCTION PHASE vs MITIGATION TRAFFIC LEVELS OF SERVICE

		N	O BUILI	Control	<u>ION</u>	<u>C</u>	ONSTRU	CTION PHA	ASE	M	IITIGATI	ED CONDIT Control	<u>ION</u>	MITIGATION MEASURES
INTERSECTION & APPROAC	н	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	Myt.	V/C	Delay	LOS	
GLONAL IZED INZERDOROMON	•													
SIGNALIZED INTERSECTION	•													
A) FIRST AVENUE at EAST 125t First Avenue	h STREET NB	LTR	0.55	10.8	В	LTR	0.56	10.9	В					- Mitigation not required.
T HSC /TVCHBC	IND.	R	0.33	9.3	Ā	R	0.30	9.3	Ā					- Integration not required.
East 125th Street	EB	LT	0.66	23.4	c	ĻT	0.66	23.4	c					
	Overall Intersection	-	0.60	14.0	В.		0.61	14.1	В					
2) SECOND AVENUE at EAST 1	24th STREET													
Second Avenue	SB	LT	0.55	8.3	Α	LT	0.71	10.2	В	LT	0.74	12,0	В	Shift 2 seconds of green time from SB
East 124th Street	EB	TR	0.97	40.6	D	TR	1.04	59.8	E	TR	0.98	41.6	D	phase to EB / WB phase.
	WB	L	0.63	29.5	С	L	0.63	29.5	С	L	0.59	26.8	С	·
		R	0.27	10.5	В	R	0.35	11.4	В	R	0.36	12.6	В	
	Overall Intersection	-	0.71	21.7	С	-	0.84	33.1	С		0.84	25.9	c	
3) SECOND AVENUE at EAST 1:	Sth STREET													Option 1:
Second Avenue	SB	LTR	0.71	20.1	С	LTR	1.15	96.5	F	LTR	1.15	96.5	F	Daylight the EB approach to provide two 10-foot through
Triborough Bridge Ramp	SB	TR	0,58	33.7	Ċ	TR	0.40	30.7	c	TR	0.44	33.0	Ċ	lanes and one 10-foot exclusive right-turn lane.
East 125th Street	EB	TR	1.09	88. I	F	TR	1,19	129,4	F	TR	1.06	78,9	E	- Shift 2 seconds of green time from SB Triborough Ramp phase
·-	-	-	-	-	-	-	-	•		R	0.37	29.9	c	to EB / WB phase.
	WB	LT	0.48	32.2	С	LT	0.59	35.0	С	LT	0.51	31.4	C	[Partially Mitigated]
	Overall Intersection	-	0.77	39.2	D	-	0.96	94.8	F		0.95	79.7	E	
														Option 2:
	SB									LTR	0.86	23.8	С	 Daylight the EB approach to provide two 10-foot through
	SB									TR	0.44	33.0	С	lanes and one 10-foot exclusive right-turn lane.
	ЕB									TR	1.06	78,9	E	 Provide four 10-foot lanes in the SB approach.
										R	0.37	29.9	С	 Shift 2 seconds of green time from SB Triborough Ramp phase
	WB									LT	0.51	31.4	С	to EB / WB phase.
•	Overall Intersection										0.82	38.1	D	
4) SECOND AVENUE at EAST 1:	16th STREET													
Second Avenue	NB	L	0.52	36.8	D	L	0.88	61.5	Ε	L	0.76	45.2	D	 Shift 1 second of green time from WB phase to NB / SB
		T	0.47	7.7	Α	T	0.50	8.0	Α	T	0.47	6.0	Α	phase,
	SB	TR	1.03	53.5	D	TR	1.06	59.5	Ε	TR	1.03	49.2	D	- Shift 3 seconds of green time from WB phase to the
East 126th Street	WB	LTR	0.47	29.7	С	LTR	0.47	29.7	С	LTR	0.57	34.5	С	protected NB phase.
	Overall Intersection	-	0.71	39.0	D	-	0.85	41.9	D	-	0.85	35.1	D	
SA) SECOND AVENUE at EAST 1														
Second Avenue	NB	TR	0.59	9.0	A	TR	0.62	9.2	A					 Mitigation not required.
East 127th Street	SB EB	LT LTR	1.06 0.85	54.9 32.5	D C	LT LTR	0.89 0.87	23.9 34.0	C C					, ·
East 127th Street	ĘĐ	LIK	0.65	32.3	C	LIK	0.67	34,0						ŗ
·	Overall Intersection	-	0.97	37.6	D	•	0.88	21.4	С					
17) THIRD AVENUE Rt EAST 124														
Third Avenue	NB	TR	0.76	10.5	В	TR	0.77	10.6	В					Mitigation not required.
East 124th Street	EB	LT	0.57	24.0	С	LT	0.67	25.7	С					
	Overall Intersection	_	0.69	13.4	В	•	0.73	14.2	В					
					_				_					
8) THIRD AVENUE at EAST 125	th STREET NB	LTR	0,55	10.9	В	LTR	0.56	11.0	В	LTR	0.57	11.8	В	- Shift one second of green time from NB phase to
Third Avenue	EB NB	LIK	0,55	26.7	C B	LT	1.04	70.0	E	LT	0.57	54,7	D D	the EB / WB phase.
East 125th Cien-1	CB	i l												Mie ED / YYD phase.
East 125th Street		TP	0.40	10.3	R	TY				. 1.15	() AX		(:	
East 125th Street	WB	TR	0.40	19.3	В	TR	0.57	22.9	С	TR	0,48	20.4	С	

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TABLE D.3-6 CONTINUED 125TH STREET STATION AREA

COMPARISON OF PM PEAK HOUR NO BUILD VS CONSTRUCTION PHASE VS MITIGATION TRAFFIC LEVELS OF SERVICE

		ī	NO BUILI	CONDIT	ION	<u>C</u>	ONSTRU	CTION PH	ASE	<u>M</u>	<u>IIT]GAT</u>	ED CONDIT	<u>ION</u>	MITIGATION MEASURES
				Control				Control	LOS	Mvt.	V/C	Control Delay	LOS	
INTERSECTION & APPROACH		Myt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LUS	WIVI.	*/C_	Delay		
SIGNALIZED INTERSECTIONS			•											
H9) THIRD AVENUE at EAST 126th S	STREET													
Third Avenue	NB	LT	0.36	7.0	Α	LT	0.37	7.1	A					- Mitigation not required.
East 126th Street	WB	TR	0.28	20,5	С	TR	0,38	21.7	С					
, Ov	verall Intersection		0.33	9.4	Α	-	0.37	10.4	В					
H10) THIRD AVENUE at EAST 127th S	STREET													NW of a sector of
Third Avenue	NB	LTR	0.35	7.0	Α	LTR	0.36	7.1	Α					- Mitigation not required.
0	verall Intersection		0,12	7.0	A	•	0.21	7.1	A					
H12) LEXINGTON AVENUE at EAST I	124th STREET	. ~	0.75	11.3	В	LT	0,85	13.9	В					- Mitigation not required.
Lexington Avenue East 124th Street	SB EB	LT TR	0.75 0.52	11.3 23.3	C	TR	0.61	24.8	Ċ		٠			• · · · · · · · · · · · · · · · · · · ·
East 124th Street	EB	110	0,52	23,5	-	•••								
01	verall Intersection	-	0.66	15.6	В	-	0.76	18.0	В					
	ined omposition													Option 1:
H(3) LEXINGTON AVENUE at EAST 1 Lexington Avenue	125th STREET SB	LTR	0.77	14.7	В	LTR	0.89	18.9	В	LTR	0.89	18.8	В	 Offset the center line 5 feet in the EB / WB approaches
East 125th Street	EB	TR	0.77	27.4	č	TR	1.08	81.5	F	Т	0.77	29.2	C	to provide one 10-foot through lane and one 10-foot exclusive
			-	-	-	-	-		•	R	0.53	23.1	C	right-turn lane in the EB approach; one 10-foot through lane and one 10-foot exclusive left-turn lane in the WB approach
	WB	LT	0.76	27.0	С	LT	1.46	244.3	F	L T	0.44 0.72	24.0 27.0	C	and one 10-1001 exclusive lett-from tatte of the AAD abbroact
		-	-	•	•	•	•	-	•	,	0.12	21.0	C	·
01	verall Intersection		0.78	21.9	С	-	1.14	85,6	F	-	0.84	22.9	c	Option 2:
										LT	0.87	22.2	С	Option 2: - Daylight the SB approach to create one 10-foot exclusive rights.
	SB									R	0.24	12.3	В	lane.
	EB									TR	0.95	40.2	D	 Provide one 10-foot through lane and one 10-foot exclusive
	WB									L	0.50	24.1	C	left-turn lane in the WB approach.
										Т	0.64	21.1	С	 Shift 5 seconds of green time from SB phase to EB / WB phase.
0	verall Intersection									-	0.91	26.6	С	Support many one times,
H14) LEXINGTON AVENUE at EAST	126th STREET													
Lexington Avenue	SB	TR	0.75	11.3	В	TR	0,86	14.2	B					- Mitigation not required.
East 126th Street	WB	LT	0.38	21.5	С	LT	0.45	22,3	Ċ					
	verall Intersection	-	0.60	14.8	В		0.70	17.1	В					
I EVINCTON AVENUE OF FAST	117th STDEET													
(HI5) LEXINGTON AVENUE at EAST Lexington Avenue	SB	T	0.69	10.4	В	Т	0.81	12,6	В					 Mitigation not required.
East 127th Street	WB	Ĺ	0.16	19.8	В	L	0.16	19.8	В					•
	verall Intersection		0.48	10.9	В		0.55	13.0	В					
(H16) LEXINGTON AVENUE at EAST	128th STREET SB	LT	0.83	13.4	В	LT	0.95	20.0	В					- Mitigation not required.
Lexington Avenue East 128th Street	EB	TR	0.33	21.9	Č	TR	0.34	22.2	c					
	everall Intersection		0.63	14.3	В		0.71	20.2	C					
(H17) LEXINGTON AVENUE at EAST	129th STREET SB	TR	0.60	24.5	С	TR	0.60	24.5	С					- Miligation not required.
Lexington Avenue East 129th Street	WB	L	0.00	21.9	č	L	0.92	34.9	С					
Dat 12701 011061	2	LT	0.40	12,0	В	LT	0.46	12.9	В					
n	verall Intersection	ı -	0.70	20.3	С	_	0.79	25.9	С					
U	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	•	2		-									

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TABLE D.3-6 CONTINUED 125TH STREET STATION AREA

COMPARISON OF PM PEAK HOUR NO BUILD VS CONSTRUCTION PHASE VS MITIGATION TRAFFIC LEVELS OF SERVICE

	1	<u>NO BUIL</u>	D CONDIT	ION	Ω	ONSTRU	CTION PH	<u>ASE</u>	<u>N</u>	IITIGATI	ED CONDIT	LION	MITIGATION MEASURES
			Control				Control				Control		
INTERSECTION & APPROACH	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	Myt.	V/C	Delay	LOS	
SIGNALIZED INTERSECTIONS												•	
HIS) PARK AVENUE at EAST 124th STREET													
Park Avenue NB	TR	0.43	10.2	В	TR	0.43	10.2	В					- Mitigation not required.
SB	L	0.34	12.4	В	L	0.34	12.4	В					- '
	LT	0.62	12.6	В	LT	0.80	16.7	В					
East- 124th Street EB	LTR	0.42	19.6	В	LTR	0.52	21.0	С			•		
Overall Intersection	•	0.53	13.8	В	-	0.68	15.9	В					
H19) PARK AVENUE at EAST 125th STREET													
Park Avenue NB	TR	0.36	19.7	В	TR	0.36	19.7	В					- Mitigation not required.
SB	TR	0.56	25.6	С	TR	0.72	28.2	С					1
East 125th Street EB	LTR	0.73	20.1	С	LTR	0.66	18,4	В					
· WB	LTR	0,66	18.0	В	LTR	0.63	17.8	В					
Overall Intersection		0.66	20.8	c	-	0.68	21.8	С					
H20) PARK AVENUE at EAST 126th STREET													
Park Avenue NB	LT	0.23	4.5	Α	LT	0.24	4.6	Α					- Mitigation not required.
· SB	TR	0.35	5.0	Α	TR	0.44	5.5	Α					•
East 126th Street WB	LTR	0.47	25.2	С	LTR	0.56	26.3	С					
Overall Intersection	-	0.39	12.6	В		0.48	13.3	В					
121) MADISON AVENUE at EAST 125th STREET													
Madison Avenue NB	LTR	0.57	14.7	В	LTR	0.57	14.7	В	LTR	0.69	21.8	С	- Shift 7 seconds of green time from NB phase
EB	LT	0.91	33,5	C	LT	1,35	190.5	F	LT	0.98	45.2	Ď	to EB / WB phase.
East 125th Street WB	TR	0,53	18.1	В	TR	0.66	21.3	Ċ	TR	0.56	15.1	В	•
Overall Intersection	-	0.74	20.6	С	-	0.96	60.2	E	-	0.86	26.3	С	

Notes

- (i): Control delay is measured in seconds per vehicle.
- (2): Level of service (LOS) for signalized intersections is based upon average control delay per vehicle (see/veh) for each lane group as listed in the 2000 Highway Control Manual A-TER
- (3): Level of service (LOS) for unsignalized intersections is based upon control delay per vehicle (see/veh) for each minor-approach as listed in the 2000 Highway Capacity Manual -- TRB,
- (4): Overall intersection V/C ratio is the critical lane groups' V/C ratio, not the weighted average of all the movements.
- (5): "MVI" references the specific intersection approach lanc(s). TR is a combined through-right turn lanc(s). TL is a combined through-left turn lanc(s), R or L refers to exclusive right- or left- turn movement lanc(s), and LTR is a mixed lanc(s) that allows for all movement types.

TABLE D.3-6 CONTINUED 125TH STREET STATION AREA

COMPARISON OF PM PEAK HOUR NO BUILD VS CONSTRUCTION PHASE VS MITIGATION TRAFFIC LEVELS OF SERVICE

		NO.E	UILD CON	DITION	CON	STRUCTION PH	ASE	MITIGATED CONDITION	MITIGATION MEASURES
INTERSECTION & APPROAC	CH	_Mvt.	Control Delay	LOS	Mvt.	Control Delay	LOS	Mvt. Control Delay LOS	···
UNSIGNALIZED INTERSECT	<u>ion</u> s								
(H1B) SOUTHBOUND SERVICE RO									
Service Road	SB	R	9.1	Α	R	9.3	Α		 Mitigation not required,
(Overall Intersection		9.1	A		9.3	A		
(H5B) SECOND AVENUE CHANNEL									
Second Avenue Ramp	SB	L	55.7	F	L	54.9	F		 Mitigation not required.
•	Overall Intersection		55.7	F		54.9	F		
(H6) SECOND AVENUE at EAST 1 Second Avenue	28th STREET SB	Т	27.3	D	т	16.7	С		- Mitigation not required.
(Overall Intersection		27.3	D		16.7	С		
HIIA) THIRD AVENUE BRIDGE RA	MP at EAST 128th	STREE	T						
128th Street	EB	T	32.3	D	T	21.9	С		 Mitigation not required.
•	Overall Intersection		32.3	D		21.9	С		
HIIB) THIRD AVENUE at EAST 128									
Third Avenue	NB	R	30,8	D	R	21.8	С		- Mitigation not required.
•	Overall Intersection		30.8	D		21.8	C		

Notes

^{(1):} Control delay is measured in seconds per vehicle.

^{(2):} Level of service (LOS) for signalized intersections is based upon average control delay per vehicle (sec/veh) for each lane group as listed in the 2000 Highway Capacity Manual — TRB.

^{(3):} Level of service (LOS) for unsignalized intersections is based upon control delay per vehicle (see/veh) for each minor-approach as listed in the 2000 Highway Capacity Manual -- TRB.

^{(4):} Overall intersection V/C ratio is the critical lune groups' V/C ratio, not the weighted average of all the movements.

^{(5): &}quot;MVT" references the specific intersection approach lane(s). TR is a combined through-right turn lane(s). TL is a combined through-left turn lane(s), R or L refers to exclusive right- or left- turn movement lane(s), and LTR is a mixed lane(s) that allows for all movement types.

TABLE D.3-7 96TH STREET STATION AREA 2002 EXISTING TRAFFIC LEVELS OF SERVICE

				AM PEA	K HOUR			PM PEA	K HOUR Control	
	DITEDERATION & APPROA	CH	MvL	V/C	Control Delay	LOS	Mvt.	V/C	Delay	LO
	INTERSECTION & APPROA	icn	MAC	· · · ·					· · · · · · · · · · · · · · · · · · ·	
	SIGNALIZED INTERSECTION	<u>ons</u>								
(IE1)	FIRST AVENUE at EAST 90	Sth STREET								
,	First Avenue	NB	LTR	0.67	16.3	В	LT	0.83	18.8	В
			R	1.01	67.4	E	-	-	-	-
	East 96th Street	EB	L	0.27	16.2	В	L T	0.66	35.4 17.0	I
		1170	T	0.47	17.0 16.2	B B	T	0.47 0.41 .	10.4	Į
		WB	T R	0.39 0.30	15.7	В	R	0.23	14.9	1
		Overall Intersection	_	0.72	23.9	С		0.74	18.2	1
UE2)	FIRST AVENUE at EAST 9 First Avenue	7th STREET NB	LT	0.50	10.6	В	LT	0.79	14.1	1
	East 97th Street	EB	L	0.72	34.4	С	L	0.53	27.0	•
	2001,721,02001	WB	TR	0.38	19.2	В	TR	0.44	19.9	
		Overall Intersection	_	0.60	14.5	. в	-	0.68	15.6	
ura)	SECOND AVENUE at EAST	93rd STREET								
,,	Second Avenue	SB	TR	0.88	13.2	В	TR	0.87	13.0	
	East 93rd Street	WB	LT ·	0,52	25.1	С	LT	0.49	24.4	
		Overall Intersection	-	0.74	14.2	В	-	0.72	13.9	
HE4)	SECOND AVENUE at EAST	94th STREET								
·-·,	Second Avenue	SB	LT	0.85	12.4	В	LT	0.86	12.5	
	East 94th Street	EB	TR	0.93	49.8	D	TR	0.65	28.5	
		Overall Intersection	-	0.88	18.0	В	-	0.77	14.2	
IIEE\	SECOND AVENUE at EAST	r 95th STRFET								
OE3)	Second Avenue	SB	TR	0.84	12.2	В	TR	0.85	12.2	
	East 95th Street	WB	LT	0.46	24.1	С	LT	0.46	23.8	
		Overall Intersection	-	0.69	13.1	В	-	0.69	13.2	
TIF6\	SECOND AVENUE at EAS	T 96th STREET								
040,	Second Avenue	SB	LTR	1.01	43.2	D	LTR	1.01	51.5	
	East 96th Street	EB	TR	0.99	52.2	Ð	TR	1.03	76.8	
		WB	L	0.67	26.7	c	L	0.74	30.1	
		•	T	0.89	34.3	С	T	0.77	26.0	
		Overall Intersection	-	1.02	43.1	D	-	1.04	52.8	
(UE7)	SECOND AVENUE at EAS	T 97th STREET								
	Second Avenue	SB	LTR	0.97	20.5	C	LTR	0.99	23.3	
	East 97th Street	EB	TR	0.19	20.1	C	TR	0.16	19.7 27.5	
		WB	LT -	0.30	20.9	C -	DfL T	0.54 0.46	23.6	
		Overall Intersection	_	0.71	20.5	С	_	0.82	23.5	
			-	0,71	20.5	Ü				
(UE8)	THIRD AVENUE at EAST	96th STREET NB	LTR	0.61	11.5	В	LTR	0,58	11.2	
	Third Avenue East 96th Street	EB	LT	0.01	36.4	D	LT	1.00	54.6	
	EAST SOM SHEET	WB	TR	0.61	22.6	c	TR	0.56	21.7	
		Overall Intersection	-	0.74	19.1	В	-	0.77	23.2	
(UE91	THIRD AVENUE at EAST	97th STREET								
	Third Avenue	NΒ	LTR	0.74	10.6	В	LTR	0.75	10.6	
	East 97th Street	WB	TR	0.34	21.3	С	TR	0.42	22.2	
		Overall Intersection	-	0.58	12.4	В	•	0.62	12.8	
(UE10) LEXINGTON AVENUE at	EAST 96th STREET								
	Lexington Avenue	SB	LTR	0.85	24.1	С	LTR	0.71	20.7	
	East 96th Street	EB	TR	0.88	35.1	D	TR	0.89	35.3 17.9	
		WB	LT	0.82	24.9	С	LT	0.63	17.2	

			AM PE	AK HOUR			PM PEA	K HOUR	
				Control				Control	
INTERSECTION & APPRO	DACH	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS
SIGNALIZED INTERSECT	TIONS								
UE11) FIRST AVENUE at EAST	86th STREET								
First Avenue	. NB	LTR	0.61	11.6	В	LTR	0.66	12.2	В
East 86th Street	EB	LT	0.77	28,3	С	LT	0.62	23.4	′ c
	WB	TR	0.45	20.1	С	TR	0.30	18.3	В
	Overall Intersection	-	0.68	16.6	В	-	0.64	15.0	В
UE12) SECOND AVENUE at EAS	ST 86th STREET						_		
Second Avenue	SB	LTR	0.99	26.5	С	LTR	1.00	30.7	С
East 86th Street	EB	TR	0.65	23.7	С	TR	0.59	22.3	С
	WB	LT	0.56	22.0	С	. LT	0.49	20.9	С
	Overall Intersection	-	0.84	25.4	C	-	0.82	28.2	c
UE13) SECOND AVENUE at EAS	ST 92nd STREET								
Second Avenue	SB	LTR	0.92	15.4	В	LTR	0.88	13.4	В
East 92nd Street	ЕВ	TR	0.96	53,5	D	TR	0.84	38.2	D
	Overall Intersection	-	0.94	21.0	c	-	0.87	16.7	В
UE14) THIRD AVENUE at EAST	86th STREET								
Third Avenue	NB	LTR	0.60	11.4	В	LTR	0.65	11.9	В
East 86th Street	EB	LT	0,66	23.9	С	LT	0.76	28.1	С
	WB	TR	0.48	20.6	С	TR	0.48	20.5	C
7	Overall Intersection	_	0.63	15.4	В	_	0.70	16.1	В

Notes

^{(1):} Control delay is measured in seconds per vehicle.

^{(2):} Level of service (LOS) for signalized intersections is based upon average control delay per vehicle (see/veh) for each lane group as listed in the 2000 Highway Capacity Manual — TRB.

^{(3):} Level of service (LOS) for unsignalized intersections is based upon control delay per vehicle (sec/veh) for each minor-approach as listed in the 2000 Highway Capacity Manual — TRB.

^{(4):} Overall intersection V/C ratio is the critical lane groups' V/C ratio, not the weighted average of all the movements.

^{(5): &}quot;MVT" references the specific intersection approach lanc(s). TR is a combined through-right turn lanc(s). TL is a combined through-left turn lane(s), R or L refers to exclusive right- or left- turn movement lane(s), and LTR is a mixed lane(s) that allows for all movement types.

(UE2) FIRST AVENUE at EAST 97th First Avenue East 97th Street Ov. (UE3) SECOND AVENUE at EAST 93th Second Avenue East 93rd Street Ov.	STREET NB EB WB Verall Intersection STREET NB EB WB	Mvi. LTR R L T T R	0.73 1.06 0.35 0.50 0.42 0.35	17.1 82.6 17.7 17.3 16.5 16.3	B F B B B	Mvt. LTR R L T T	0.76 1.06 0.43	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS	
(UE1) FIRST AVENUE at EAST 96th First Avenue East 96th Street On (UE2) FIRST AVENUE at EAST 97th First Avenue East 97th Street On (UE3) SECOND AVENUE at EAST 93a Second Avenue East 93rd Street	NB EB WB Verall Intersection STREET NB EB WB	R L T T R	1.06 0.35 0.50 0.42 0.35	82.6 17.7 17.3 16.5 16.3	F B B	R L T	1.06 0.43	82.8						
(UE1) FIRST AVENUE at EAST 96th First Avenue East 96th Street On (UE2) FIRST AVENUE at EAST 97th First Avenue East 97th Street On (UE3) SECOND AVENUE at EAST 93a Second Avenue East 93rd Street On	NB EB WB Verall Intersection STREET NB EB WB	R L T T R	1.06 0.35 0.50 0.42 0.35	82.6 17.7 17.3 16.5 16.3	F B B	R L T	1.06 0.43	82.8						
First Avenue East 96th Street Over 1965 On 1	NB EB WB Verall Intersection STREET NB EB WB	R L T T R	1.06 0.35 0.50 0.42 0.35	82.6 17.7 17.3 16.5 16.3	F B B	R L T	1.06 0.43	82.8						
East 96th Street Ov. (UE2) FIRST AVENUE at EAST 97th First Avenue East 97th Street Ov. (UE3) SECOND AVENUE at EAST 93a Second Avenue East 93rd Street Ov.	EB WB Verall Intersection STREET NB EB WB Verall Intersection	R L T T R	1.06 0.35 0.50 0.42 0.35	82.6 17.7 17.3 16.5 16.3	F B B	R L T	1.06 0.43	82.8						
Over (UE2) FIRST AVENUE at EAST 97th First Avenue East 97th Street Over (UE3) SECOND AVENUE at EAST 93th Second Avenue East 93rd Street	WB verall Intersection STREET NB EB WB verall Intersection	L T T R	0.35 0.50 0.42 0.35	17.7 17.3 16.5 16.3	B B B	L T	0.43							 Mitigation not required.
Over (UE2) FIRST AVENUE at EAST 97th First Avenue East 97th Street Over (UE3) SECOND AVENUE at EAST 93th Second Avenue East 93rd Street	WB verall Intersection STREET NB EB WB verall Intersection	T T R -	0.50 0.42 0.35	17.3 16.5 16.3	B B	Т			F					
(UE2) FIRST AVENUE at EAST 97th First Avenue East 97th Street Ov (UE3) SECOND AVENUE at EAST 93t Second Avenue East 93rd Street Ov	verall Intersection STREET NB EB WB	T R - LT	0.42 0.35	16.5 16.3	В			19.9	В					
(UE2) FIRST AVENUE at EAST 97th First Avenue East 97th Street Ov (UE3) SECOND AVENUE at EAST 93t Second Avenue East 93rd Street Ov	verall Intersection STREET NB EB WB	R -	0.35	16.3			0.50 -	17.3	В					
(UE2) FIRST AVENUE at EAST 97th First Avenue East 97th Street Ov (UE3) SECOND AVENUE at EAST 93a Second Avenue East 93rd Street Ov	STREET NB EB WB	- LT				ı R	0.42 0.35	16,5 16,3	B B					
(UE2) FIRST AVENUE at EAST 97th First Avenue East 97th Street Ov. (UE3) SECOND AVENUE at EAST 93t Second Avenue East 93rd Street Ov.	STREET NB EB WB	LT .	0.76	26.4										
First Avenue East 97th Street On UE3) SECOND AVENUE at EAST 93t Second Avenue East 93rd Street On	NB EB WB verall Intersection				С	-	0.76	26.6	С					
East 97th Street On (UE3) SECOND AVENUE at EAST 931 Second Avenue East 93rd Street On	EB WB verall Intersection													
Ov (UE3) SECOND AVENUE at EAST 93s Second Avenue East 93rd Street	WB	L	0,56	11.0	В	LT	0.58	11.3	В					 Mitigation not required.
(UE3) SECOND AVENUE at EAST 93s Second Avenue East 93rd Street	verall Intersection		0.78	39,3	D	L	0.78	39.3	D					
(UE3) SECOND AVENUE at EAST 93s Second Avenue East 93rd Street		TR	0.40	19.4	В	TR	0.40	19.4	В					
Second Avenue East 93rd Street	rd STREET	-	0.66	15.2	В	-	0.67	15.3	В					
Second Avenue East 93rd Street Ov														
East 93rd Street	SB	TR	1.04	44.3	D	TŘ	1.20	110.5	F	TR	1.05	46.0	D	- Modify signal timing (shift 7 seconds green time from WB
Ov	WB	LT	0,55	25.7	c	LT	0.55	25,7	C	LT	0.70	35.8	D	phase to SB phase).
					_				_					
	verall Intersection	•	0.85	42.6	D	•	0.94	101.7	F	-	0.94	44.9	D	
(UE4) SECOND AVENUE at EAST 94t	th STREET													
Second Avenue	SB	LT	0.90	13.9	В	LT	0.99	25.1	С					- Mitigation not required.
East 94th Street	EB	TR	0.98	59.1	E	TR	0.98	59.1	E					
					_									
, Os	verall Intersection	-	0.93	20.6	С	-	0.99	30.9	С					
(UES) SECOND AVENUE at EAST 95t	th STREET													
Second Avenue	SB	TR	0.89	13.5	В	TR	1.02	38.0	D					 Mitigation not required.
East 95th Street	WB	LT	0.49	24.6	С	LT	0.49	24,6	С					
0.	verall Intersection	-	0.73	14.4	В	-	0.81	36.8	D					
WEG THEOLIE . WINNE . D. C.														- Restripe 96th Street WB approach from one 11 ft. left-turn
(UE6) SECOND AVENUE at EAST 961	IN SIREEI SB	LTR	1.06	63.0	E	LTR	1.16	105.0	F	LTR	1.08	69.1	E	lane and one 19 ft. thru lane to one 10 ft, left-turn lane and
Second Avenue East 96th Street	EB	TR	1.05	70.0	E	TR	1.06	72.9	E	T	0.92	41.4	Ď	two 10 ft. thru lanes.
East 90th Street	ED	-	1,05	70.0		-	-		-	R	0.39	28.2	č	- Provide an additional 96th Street EB travel lane through
	WB	L	0.70	28.6	С	L	0,73	29.9	С	L	0.85	43.1	D	daylighting and restripe EB approach from two 10 ft, shared
	2	Ť	0,95	42.1	D	т	0.95	42.1	D	T	0.52	20.3	С	through-right lanes to one 10 ft, right-turn and two 10 ft, thru
_			1.00	60.0	E	_	1,13	82.6	F	_	1.04	52.2	D	lanes Modify signal timing (shift 2 seconds green time from exclusion)
O.	verall Intersection	•	1.08	59.8	ř.	-	1,13	82.0	r	•	1.04	32.2	D	WB phase to SB phase).
(UE6). SECOND AVENUE at EAST 96													_	
Second Avenue	SB	LTR	1,06	63.0	E	LTR	1.16	105.0	F	LTR	0.87	19.7	В	- Provide an additional SB travel lane.
East 96th Street	EB	TR	1.05	70.0	Ē	TR	1.06	72.9	E	TR	1.06	72.9	E	
	WB	L	0.70	28.6	С	L T	0.73	29.9	C	L T	0,73 0.95	29.9 42.1	C D	
		Т	0.95	42.1	D	Т	0.95	42.1	D	1	0.93	42.1	υ	
0	verall Intersection	•	1.08	59.8	E	-	1.13 .	82.6	F	-	0.98	37.3	D	
(UE7) SECOND AVENUE at EAST 97	th STREET													
Second Avenue	SB	LTR	1.03	41.2	D	LTR	1.12	77.7	Ē	LTR	1.04	42.9	D	
East 97th Street	EB	TR	0.20	20,2	С	TR	0.22	20.4	С	TR	0.25	23.6	С	- Modify signal timing (shift 4 seconds green time from EB/W
•	WB	LT	0.31	- 21,0	С	ĹŢ	0.32	21.1	С	LT	0.37	24.4	С	phase to SB phase).
0														

Eng-Wong, Taub and Associates

		NO BUILD	CONDITIO	ON		COSTRUC	TION PHAS	SE.	M	ITIGATEI	CONDITIO	<u>ON</u>	MITIGATION MEASURES
			Control				Control				Control		
INTERSECTION & APPROACH	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	
(UE8) THIRD AVENUE at EAST 96th STREET								_					Mitigation not required.
Third Avenue NB	LTR	0.64	11.8	В	LTR	0.65	12.0	В					- Miligation not required.
East 96th Street EB	LT	0.97	45.3	D	LT	0.97	45.3	D					
WB	TR	0.65	23.5	С	TR	0.67	23.9	С					
Overall Intersectio	n -	0.79	21.4	С	•	0.79	21.6	С					
(UE9) THIRD AVENUE at EAST 97th STREET													- Mitigation not required.
Third Avenue NB	LTR	0.78	11.2	В	LTR	0.80	11.6	В					- Mitigation not required.
East 97th Street WB	TR	0.36	21.5	С	TR	0.36	21.5	С					
Overall Intersection	n -	0.61	13.0	В	-	0.63	13.2	В					
(UE10) LEXINGTON AVENUE at EAST 96th STREET													
Lexington Avenue SB	LTR	0.91	29.1	С	LTR	1.03	54.6	D					 Mitigation not required.
East 96th Street EB	TR	0.94	40.9	D	TR	0.94	40.9	D					
WB	LT	0,87	27.0	С	LT	0.87	27.0	С					
Overall Intersection	n -	0.94	32.4	С	-	1.00	42.2	D					
(UE11) FIRST AVENUE at EAST 86th STREET				_		0.66	12.1	В	LTR	0.70	15.0	В	- Modify signal timing (shift 3 seconds green time from NB
First Avenue NB	LTR	0.64	12.0	В	LTR DfL	0.90	55,1	E	DfL	0.80	39.4	D	phase to EB/WB phase).
East 86th Street EB	LT	0.82	31.1	С		0.90	26.7	C	T	0.64	23.0	č	F
	-		•	•	T		20.7	c	TR	0.43	18.0	В	
WB	TR	0.47	20.4	С	TR	0.47	20.4		IK	0.45	10.0	-	
Overall Intersection	n -	0.72	17.5	В	-	0.76	18.6	В	-	0.75	18.3	В	
(UE12) SECOND AVENUE at EAST 86th STREET													- Modify signal timing (shift 4 seconds green time from EB/WB
Second Avenue SB	LTR	1.05	48.9	D	LTR	1,14	90.1	F	LTR	1.05	50.1	D	
East 86th Street EB	TR	0.69	24.5	С	TR	0.69	24.5	С	TR	0.78	30.1	С	phase to SB phase).
WB	LT	0.60	22.9	С	LT	0.60	22,9	С	LT	0.70	28.0	С	
Overall Intersection	n -	0.89	41.0	D	•	0.94	67.0	E	-	0.94	42.8	D	
(UEI3) SECOND AVENUE at EAST 92nd STREET													
Second Avenue								_					- Mitigation not required.
East 92nd Street SB	LTR	0.98	20.5	С	LT	1,06	52.7	D					- withgation not required.
EB	TR	1.01	66.1	E	TR	1.01	66.1	E					
Overall Intersection	on -	0.99	27.1	C		1.04	55.0	D					
(UE14) THIRD AVENUE at EAST 86th STREET Third Avenue													
East 86th Street NB	LTR	0,63	11.7	В	LTR	0.64	11.8	В					 Mitigation not required.
East 86th Street EB	LT	0.71	25.2	c	LT	0.71	25,3	С					
WB		0.51	20.9	č	TR	0.52	21.1	С					
·-				_		0.67	16.0	В					7 *
Overall Intersecti)II -	0.66	15.9	В	-	0,67	10.0	В					

Notes

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^{(1):} Control delay is measured in seconds per vehicle.

^{(2):} Level of service (LOS) for signalized intersections is based upon average control delay per vehicle (sec/veh) for each lane group as listed in the 2000 Highway Capacity Manual -- TRB.

^{(3):} Level of service (LOS) for unsignalized intersections is based upon control delay per vehicle (see/veh) for each minor-approach as listed in the 2000 Highway Capacity Manual -- TRB.

^{(4):} Overall intersection V/C ratio is the critical lane groups' V/C ratio, not the weighted average of all the inovements.

^{(5): &}quot;MVT" references the specific intersection approach lane(s). TR is a combined through-right turn lane(s). TL is a combined through-light turn lane(s), R or L refers to exclusive right- or left- turn movement lane(s), and LTR is a mixed lane(s) that allows for all movement types.

TABLE D.3-9
96TH STREET STATION AREA
COMPARISON OF PM PEAK HOUR NO BUILD vs CONSTRUCTION PHASE vs MITIGATION TRAFFIC LEVELS OF SERVICE

,			NO BUILD	CONDITIO Control	ĪN		COSTRUC	TION PHAS Control	E	7	<u> IITIGATE</u>	D CONDITI	<u>ON</u>	MITIGATION MEASURES
INTERSECTION & APPROAC	Э	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	·
SIGNALIZED INTERSECTIONS									•					£ :-
														,
JE1) FIRST AVENUE at EAST 96th														
First Avenue	NB	LT	0.92	21.8	С	LT	0.93	22.9	C	LT	0.93	22.9	С	 Modify signal timing (shift 10 seconds green time from EB)
East 96th Street	EB	L	1.02	97.6	F	L	1.19	155.2	F	L	0.79	45.5	D	phase to new exclusive EB phase; allocate 5 seconds green
		T	0.50	17.3	В	T	0.50	17.3	В	T	0.50	17.3	В	for new exclusive EB phase).
	WB	T	0.45	16.9	В	T	0.45	16,9	В	T	0.59	25.2	C	·
		R	0.35	16.3	В	R	0,35	16.3	В	R	0.47	24.5	С	
(Overall Intersection	•	0.97	22.0	С	-	1.06	24.5	C	-	0.83	22.7	C	
E2) FIRST AVENUE at EAST 97th	STREET													
First Avenue	NB	LT	0.83	14.9	В	LT	0.85	15.4	В					- Mitigation not required.
East 97th Street	EB	L	0.58	29,3	С	L	0.58	29.3	С					
	WB	TR	0.47	20.2	С	TR	0.47	20.2	С					
	Overall Intersection	-	0.72	16.4	В		0.73	16.7	В					
E3) SECOND AVENUE at EAST 9	3rd STREET													
Second Avenue	SB	TR	0.93	15.5	В	TR	1,02	40,0	D					- Mitigation not required.
East 93rd Street	WB	LT	0.52	24.9	Č	LT	0.52	24.9	č					maganon not required.
	Overall Intersection		0.77	16.3	В	-	0.82	38.5	D					
					_				_					
E4) SECOND AVENUE at EAST 9			201				2.00							
Second Avenue	SB	LT	0.91	14.6	В	LT	0.98	21.9	C					- Mitigation not required.
East 94th Street	EB	TR	0.68	29.6	С	TR	0.68	29.6	С					
(Overall Intersection	-	0.82	16.2	В	-	0.86	22.8	C					
E5) SECOND AVENUE at EAST 9														
Second Avenue	SB	TR	0,90	14.1	В	TR	1.00	25.9	С					- Mitigation not required.
East 95th Street	WB	LT	0.48	24.2	С	LT	0.48	24,2	С					
	Overall Intersection	-	0.74	14.9	В	-	0.79	25.7	С					
E6) SECOND AVENUE at EAST 9	6th STREET													- Restripe 96th Street WB approach from one 11 ft, left-turn
Second Avenue	SB	LTR	1.08	77.9	E	LTR	1,19	126,0	F	LTR	1.10	86.9	F	lane and one 19 ft, thru lane to one 10 ft, left-turn lane and
East 96th Street	EB	TR	1.12	110.5	F	TR	1,13	112.6	F	T	0.98	57.4	E	two 10 ft, thru lanes.
· · · · · ·		•	-	•		-	•	-	-	R	0.41	28.5	Ċ	- Provide an additional 96th Street EB travel lane through
	WB	L	0.77	32.4	С	L	0.78	33.4	С	Ĺ	0.92	52.3	D	daylighting and restripe EB approach from two 10 ft. shared
		T	0.85	30.5	С	T	0.85	30.5	C	T	0.47	19.6	В	through-right lanes to one 10 ft. right-turn and two 10 ft. the
(Overall Intersection	-	1.11	76.8	E		1.17	103.6	F		1.07	66.8	E	lanes. - Modify signal timing (shift 2 seconds green time from exclu-
JEG) SECOND AVENUE at EAST 9	6th STREET (Ontio	n 2)												allocate to SB phase).
Second Avenue	SB	LTR	1.08	77.9	Е	LTR	1.19	126.0	F	LTR	0,89	21.4	С	- Provide an additional SB travel lane.
East 96th Street	EB	TR	1.12	110,5	F	TR	1.13	112.6	F	TR	1.13	112.6	F	
	WB	L	0.77	32.4	С	L	0.78	33.4	С	L	0.78	33.4	С	
		T	0.85	30,5	С	T	0.85	30.5	С	T	0.85	30.5	С	
(Overall Intersection	•	1.11	76.8	E	-	1.17	103.6	F	-	1.01	46.3	D	
E7) SECOND AVENUE at EAST 9	7th STREET													
Second Avenue	SB	LTR	1.06	51.6	D	LTR	1.19	108.7	F	LTR	1.08	60,0	E	
East 97th Street	EB	TR	0.17	19.8	В	TR	0.18	19.9	B	TR	0.21	23.8	č	- Modify signal timing (shift 5 seconds green time from EB/V
Lust 77th Street	WB	DfL	0.17	28.2	Č	DfL	0.59	28.7	Č	DfL	0.72	38.0	D	phase to SB phase).
	.,,,	Ť	0.48	24.0	Ċ	T	0.48	24.0	č	T	0.57	29,4	č	
		-	,		-	-			•	-			•	
	Overall Intersection	-	0.88	47.0	D		0.96	91.9	F	-	0.97	54.4	D	
Second Avenue Subway FEIS														Eng-Wong, Taub and Associates
SPROOF AVENUE SHOWEV FEIS														Eng-yyong Taup and Associates

Second Avenue Subway FEIS

TABLE D.3-9 CONTINUED 96TH STREET STATION AREA

COMPARISON OF PM PEAK HOUR NO BUILD VS CONSTRUCTION PHASE VS MITIGATION TRAFFIC LEVELS OF SERVICE

INTERSECTION & APPROACH (UE8) THIRD AVENUE at EAST 96th STREET Third Avenue East 96th Street Overall Interpretation of the Street Third Avenue East 97th Street Overall Interpretation (UE10) LEXINGTON AVENUE at EAST 96th ST Lexington Avenue East 96th Street Overall Interpretation of the Street East 86th Street East 86th Street Overall Interpretation of the Street East 86th Street	NB EB WB ersection NB WB	Mvt. LTR LT TR - LTR TR	0.61 1.10 0.62 0.82 0.78 0.44	Control Delay 11.5 86.9 22.7 31.6	B F C C	Mvt. LTR LT TR - LTR TR	V/C 0.61 1.10 0.63 0.83	Control Delay 11.5 86.9 22.9 31.6	B F C	Mvt.	V/C	Control Delay	LOS	- Mitigation not required.
(UE8) THIRD AVENUE at EAST 96th STREET Third Avenue East 96th Street Overall Int (UE9) THIRD AVENUE at EAST 97th STREET Third Avenue East 97th Street Overall Int (UE10) LEXINGTON AVENUE at EAST 96th ST Lexington Avenue East 96th Street Overall Int (UE11) FIRST AVENUE at EAST 86th STREET First Avenue East 86th Street Overall Int	NB EB WB ersection NB WB ersection REET SB	LTR LT TR	0.61 1.10 0.62 0.82	11.5 86.9 22.7 31.6	B F C C	LTR LT TR	0.61 1.10 0.63 0.83	11.5 86.9 22.9 31.6	B F C	Mvt.	V/C	Delay	LOS	- Mitigation not required.
Third Avenue East 96th Street (Overall Integrated Processing Control of the Con	NB EB WB ersection NB WB ersection REET SB	LT TR - LTR TR	0.62 0.82 0.78 0.44	86.9 22.7 31.6 11.2 22.4	F C C	LT TR - LTR	0.63 0.83 0.80	86.9 22.9 31.6	F C					- Mitigation not required.
East 96th Street (UE9) THIRD AVENUE at EAST 97th STREET Third Avenue East 97th Street Overall Int UE10) LEXINGTON AVENUE at EAST 96th ST Lexington Avenue East 96th Street Overall Int UE11) FIRST AVENUE at EAST 86th STREET First Avenue East 86th Street Overall Int	EB WB Proceedion NB WB Proceedion REET SB	LT TR - LTR TR	0.62 0.82 0.78 0.44	86.9 22.7 31.6 11.2 22.4	F C C	LT TR - LTR	0.63 0.83 0.80	86.9 22.9 31.6	F C					- Mitigation not required.
Overall Into (UE9) THIRD AVENUE at EAST 97th STREET Third Avenue East 97th Street Overall Into UE10) LEXINGTON AVENUE at EAST 96th ST Lexington Avenue East 96th Street Overall Into UE11) FIRST AVENUE at EAST 86th STREET First Avenue East 86th Street Overall Into	WB Proceedings NB WB Proceedings REET SB	TR - LTR TR	0.62 0.82 0.78 0.44	22.7 31.6 11.2 22.4	C C B	TR - LTR	0.63 0.83 0.80	22.9 31.6	c c					
Overall Interpretation (UE9) THIRD AVENUE at EAST 97th STREET Third Avenue East 97th Street Overall Interpretation (UE10) LEXINGTON AVENUE at EAST 96th ST Lexington Avenue East 96th Street Overall Interpretation (UE11) FIRST AVENUE at EAST 86th STREET First Avenue East 86th Street Overall Interpretation (UE11) Overall Interpretation (UE11) FIRST AVENUE at EAST 86th STREET First Avenue East 86th Street	NB WB ersection REET SB	LTR TR	0.82 0.78 0.44	31.6 11.2 22.4	C B	- LTR	0.83	31.6	С					
Overall Interpretation (UE9) THIRD AVENUE at EAST 97th STREET Third Avenue East 97th Street Overall Interpretation (UE10) LEXINGTON AVENUE at EAST 96th ST Lexington Avenue East 96th Street Overall Interpretation (UE11) FIRST AVENUE at EAST 86th STREET First Avenue East 86th Street Overall Interpretation (UE11) Overall Interpretation (UE11) FIRST AVENUE at EAST 86th STREET First Avenue East 86th Street	NB WB ersection REET SB	LTR TR	0.78 0.44	11.2 22.4	В	LTR	0.80							
(UE9) THIRD AVENUE at EAST 97th STREET Third Avenue East 97th Street Overall Int (UE10) LEXINGTON AVENUE at EAST 96th ST Lexington Avenue East 96th Street Overall Int (UE11) FIRST AVENUE at EAST 86th STREET First Avenue East 86th Street Overall Int	NB WB ersection REET SB	LTR TR	0.78 0.44	11.2 22.4	В	LTR	0.80							
Third Avenue East 97th Street Overall Int (UE10) LEXINGTON AVENUE at EAST 96th ST Lexington Avenue East 96th Street Overall Int (UE11) FIRST AVENUE at EAST 86th STREET First Avenue East 86th Street Overall Int	NB WB ersection REET SB	TR	0.44	22.4				11.6						· ·
East 97th Street Overall Intercept (UE10) LEXINGTON AVENUE at EAST 96th ST Lexington Avenue East 96th Street Overall Intercept (UE11) FIRST AVENUE at EAST 86th STREET First Avenue East 86th Street Overall Intercept Overall Intercept Overall Inte	WB ersection REET SB	TR	0.44	22.4					_					
Overall Int UE10) LEXINGTON AVENUE at EAST 96th ST Lexington Avenue East 96th Street Overall Int UE11) FIRST AVENUE at EAST 86th STREET First Avenue East 86th Street Overall Int	ersection REET SB				С	TR		11,5	В					 Mitigation not required.
UE10) LEXINGTON AVENUE at EAST 96th ST Lexington Avenue East 96th Street Overall Interest Avenue East 86th Street Overall Interest Avenue	REET SB		0.65	12.4			0.44	22.4	С					
Lexington Avenue East 96th Street Overall Integrated First Avenue East 86th Street Overall Integrated Street	SB			13,4	В	-	0.66	13,5	В					
Lexington Avenue East 96th Street Overall Intel UE11) FIRST AVENUE at EAST 86th STREET First Avenue East 86th Street Overall Inte	SB													
East 96th Street Overall Int. (UE11) FIRST AVENUE at EAST 86th STREET First Avenue East 86th Street Overall Int.	EB	LTR	0.74	21.4	С	LTR	0.85	25.0	С					- Mitigation not required.
(UE11) FIRST AVENUE at EAST 86th STREET First Avenue East 86th Street Overall Inte		TR	0.97	45,4	D	TR	0.97	45.4	D					•
(UE11) FIRST AVENUE at EAST 86th STREET First Avenue East 86th Street Overall Inte	WB	LT	0.71	19.8	В	LT	0.71	19.8	В					
First Avenue East 86th Street Overall Inte	rsection	-	0.81	30.4	С		0.86	31.2	С					
First Avenue East 86th Street Overall Inte														
East 86th Street Overall Inte	NB	LTR	0.70	12,6	В	LTR	0.70	12.6	В					- Mitigation not required.
Overall Into	EB	LT	0.66	24.4	ć	LT	0.70	25.8	č					, , , , , , , , , , , , , , , , , , ,
	WB	TR	0.32	18.5	В	TR	0.32	18.5	. В					
UE12) SECOND AVENUE at EAST 86th STREE	rsection		0.68	15.5	В	_	0.70	15.8	В					
(UEIZ) SECOND AVENUE II EAST 86IN STREI	ım.													
Second Avenue	SB	LTR	1.07	56.8	E	LTR	1.13	83.1	F	LTR	1.08	62.4	E	- Modify signal timing (shift 2 seconds green time from EB/W
East 86th Street	EB	TR	0.62	22.9	C	TR	0.62	22.9	Ċ	TR	0.66	25.0	č	phase to SB phase).
East outil Street	WB	LT	0.53	21.6	c	LT	0.52	21.6	č	LT	0.57	23.6	č	prize to an prize;
Overall Int	ersection		0.87	47.2	D	_	0.90	64.2	E	_	0.90	50.6	D	
					-				_					
UE13) SECOND AVENUE at EAST 92nd STRE					_				_		•			National Control
Second Avenue	SB	LTR	0.94	16.5	В	LT	0.99	25.3	С					- Mitigation not required.
East 92nd Street	EB	TR	0.89	42.3	D	TR	0.89	42.3	D					
(Overall Into	ersection	-	0.92	20.0	В	•	0.95	27.9	С					
UE14) THIRD AVENUE at EAST 86th STREET														
Third Avenue	NB	LTR	0.69	12.3	В	LTR	0.69	12.4	В					 Mitigation not required.
East 86th Street	EB	LT	0.82	30.9	С	LT	0.82	31.1	С					
	WB	TR	0.50	20.9	С	TR	0,51	21.0	С					
Overall Int	reaction		0,74	16.9	В		0,75	17.0	В					<i>y</i> *
Overall Inc		-	0,,,	10.7	~	-	0.70	****	-					

Notes

(1): Control delay is measured in seconds per vehicle.

- (2): Level of service (LOS) for signalized intersections is based upon average control delay per vehicle (sec/veh) for each lane group as listed in the 2000 Highway Caesarity Manual at TEB
- (1): Level of service (LOS) for unsignalized intersections is based upon control delay per vehicle (see/veh) for each minor-approach as listed in the 2000 Highway Capacity Manual -- TRB.
- (4): Overall intersection V/C ratio is the critical lane groups' V/C ratio, not the weighted average of all the movements.
- (5): "MVT" references the specific intersection approach lane(s). TR is a combined through-right turn lane(s). TL is a combined through-left turn lane(s), R or L refers to exclusive right- or left- turn movement lane(s), and LTR is a mixed lane(s) that allows for all movement types.

TABLE D.3-10 66TH STREET SHAFT AREA 2003 EXISTING TRAFFIC LEVELS OF SERVICE

			<u>AM</u>	PEAK HO	UR (8AM - 9	<u>9AM)</u>	<u>PM</u>	PEAK HO	UR (5PM - 6	<u>PM)</u>
					Control				Control	
	INTERSECTION & APPRO	DACH	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS
	SIGNALIZED INTERSECT	TIONS								
l	SECOND AVENUE & 68th	CTDEET								
•	Second Avenue	SB	LT	0.68	11.0	В	LT	0.69	11.0	В
	68th Street	EB	TR	0.54	16.2	C	TR	0.66.	18.6	C
		Overall Intersection	_	0,62	11.6	В	_	·- 0.68	12.0	В
			_	0.02	14.0	, ,		0.00	12.0	·
!	PARK AVENUE & 67th S		D.4	0.00	0.4		200	0.40	0.7	_
	Park Avenue	NB	DfL T	0.39	9.4	B B	DfL T	0.40	9.7	B C
		SB	TR	0.82 0.69	13.9 10.7	в В	TR	0.89 0.54	16.6 9.1	В
	67th Street	WB	LTR	0.03	21.0	C	LTR	0.71	20,4	Č
		Overall Intersection		0.78	13.1	В	_	0.81	13.7	В
			•	0.75	15.1	В	_	0.01	13.7	
ŀ	LEXINGTON AVENUE &		-	0.45		_				_
	Lexington Avenue	SB	TR	0.69	10.4	В	TR	0.75	11.4	В
	67th Street	WB	LT	1.03	64.7	F	LT	1.03	66.1	F
		Overall Intersection	-	0.83	20.6	C	-	0.86	22.3	С
ı	THIRD AVENUE & 67th	STREET								
	Third Avenue	NB	LT	0.71	10.4	В	LT	0.77	11.4	В
	67th Street	WB	TR	0.78	22.0	С	TR	0.84	26.5	D
		Overall Intersection	-	0.74	12.8	В	-	0.80	14.0	В
i	SECOND AVENUE & 67th	STREET								
	Second Avenue	SB	TR	0.97	24.4	С	TR	0.77	13.3	В
	67th Street	WB	LT	0.62	16.9	С	LT	0.41	13.7	В
		Overall Intersection	-	0.81	23.5	C	-	0.61	13.3	В
5	PARK AVENUE & 66th S	TREET								
	Park Avenue	NB	L	0.87	37.7	D	L	0.92	41.9	Е
			Т	0.75	12.1	В	T	0.83	14.3	В
		SB	TR	0.73	11.3	B	TR	0.64	10.1	В
	66th Street	WB	LTR	0.93	34.2	D	LTR	1.02	56.6	Е
		Overall Intersection	-	0.90	16.1	c	-	0.96	19.9	C
,	LEXINGTON AVENUE &	66th STREET								
	Lexington Avenue	SB	TR	0.72	10.8	В	TR	0.71	10.8	В
	66th Street	WB	LT	0.88	25.9	D	LT	0.71	19.2	С
		Overall Intersection	-	0.79	15.9	C	~	0.71	13.5	В
	THIRD AVENUE & 66th 5	STREET					*.			
	Third Avenue	NB	LTR	0.78	13.1	В	LTR	0.98	24.7	С
	66th Street	WB	TR	1.03	61.8	F	TR	0.88	33.3	D
		Overall Intersection	-	0.82	19.8	c	-	0.88	25.8	D
)	SECOND AVENUE & 66th	STREET								
	Second Avenue	SB	TR	0.85	15.7	С	TR	1.02	35.2	D
	66th Street	EB	R	0.04	11.2	В	R	0.04	11.2	В
		WB	LT	0.72	18.4	С	LT	0.85	24.8	C

			AM I	PEAK HO	UR (8AM - 9	PAM)	<u>PM</u>	PEAK HO	UR (5PM - 6	<u>PM)</u>
					Control				Control	• • •
	INTERSECTION & APPRO	DACH	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS
10	FIRST AVENUE & 66th S	TREET								
10	First Avenue	NB	LT	0.95	18,1	С	LT	1.03	26.2	D
	66th Street	WB	TR	0.30	14.5	В	TR	0.27	14.3	В
	ooui succi	2		-,		_				
		Overall Intersection	-	0.69	17.8	С	-	0.73	25.4	Đ
11	YORK AVENUE & 66th S	TREET						•		
	York Avenue	NB	LTR	0.88	19.7	С	LTR	0.72	12.7	В
		SB	LTR	0.53	9.1	В	LTR	0.61	10.0	В
	66th Street	WB	LTR	0.01	19.8	С	LTR	0.13	20.7	C
		Overall Intersection	_	0.58	14.8	В	-	0.51	11.3	В
12	PARK AVENUE & 65th S		TR	0.52	8.9	В	TR	0.67	10.4	В
	Park Avenue	NB SB	DfL	0.32	45,5	Ē	DfL	0.65	20.9	C
		28	DIL T	0.84	16.4	C	T	0.03	12.5	В
	65th Street	EB	LTR	0.88	15.4	c	LTR	0.43	15.0	В
	ogui succi	. 22								_
		Overall Intersection	-	0.74	13.9	В	-	0.63	12.1	В
13	LEXINGTON AVENUE &	65th STREET								_
	Lexington Avenue	SB	LT	0.82	12.8	В	LT	0.67	10.0	В
	65th Street	EB	TR	0.60	17.4	С	TR	0.59	17.2	C
		Overall Intersection	-	0.73	14.0	В	-	0.64	12.1	В
14	THIRD AVENUE & 65th	STREET								
	Third Avenue	NB	TR	0.68	10.4	В	TR	0.65	10.0	В
	65th Street	EB .	LT	0.69	18.3	С	LT	0.65	17.7	С
		Overall Intersection	_	0.68	12.0	В	_	0.65	11.5	В
15	SECOND AVENUE & 65t		LT	0.69	11.9	В	LT	0.58	9.5	Е
	Second Avenue 65th Street	SB EB	T	0.09	12.6	В	T	0.29	21.9	Č
	over pricer	LB	R	0.51	15.1	Č	R	0.89	46.0	E
		Overall Intersection	_	0.61	12.2	В	_	0.69	14.7	f
			-	0.01		2				
16	PARK AVENUE & 64th S	STREET NB	TR	0.63	10.0	В	TR	0,72	11.1	F
	Park Avenue	NB SB	DfL	0.63	26.8	Đ	DfL	0.66	21.9	Č
		38	DIL T	0.71	24.3	C	T	0.81	13.6	Ē
	64th Street	EB	LTR	0.71	20.8	c	LTR	0.75	23.3	C
		Overall Intersection	-	0.86	17.8	c	-	0.79	13.1	E
	. DVW/OMO-1	CALL CORPORATO								
17	LEXINGTON AVENUE &	: 64th STREET SB	LT	0.80	12.3	В	LT	0.63	9.6	I
	Lexington Avenue 64th Street	EB	TR	0.66	19.5	C	TR	0.74	22.0	(
		Overall Intersection	_	0.74	13.4	В	_	0.67	12.0	I
			-	V.17	2017	-			-	
18	THIRD AVENUE & 64th					_	70	0.70	0.3	
	Third Avenue	NB	TR	0.66	9.7	B	TR	0.62	9.3	1
	64th Street	EB	LT	0.91	37.9	D	LT	0.95	42.9	F

		<u>AM</u>	PEAK HO	UR (8AM -	9 <u>AM)</u>	PM	PEAK HO	UR (5PM - 6	PM)
•				Control				Control	
INTERSECTION & APPR	ROACH	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LO
9 SECOND AVENUE & 64	th STREET	٠							
Second Avenue	SB	LT	0.81	14.1	В	LT	1.03	38.9	D
64th Street	EB	TR	0.92	37.1	D	TR	1.00	54.9	E
·	LD	110	0.52	37.1	D	IK	1.00	34.7	E
	Overall Intersection	-	0.86	17.7	C	-	1.02	41.2	E
9 YORK AVENUE & 64th	STREET						•-		
York Avenue	NB	TR	0.30	9.2	В	TR	0.17	8.5	В
	SB	LT	0.47	10.7	В	LT	0.46	10.6	В
64th Street	EB	LTR	0.90	40.8	E	LTR	1.04	76.9	_
04th Sheet									F
	WB	LR	0.02	17.0	С	LR	0.01	16.9	C
	Overall Intersection	-	0.64	15.9	C	-	0.69	22.5	C
LEXINGTON AVENUE &	EAST 59th STREET								
Lexington Avenue	SB	LT	0.60	8.0	В	LT	0.54	11.0	Е
East 59th Street	EB	TR	0.51	13.9	В	TR	0.62	14.8	E
	Overall Intersection	-	0.56	9.7	В	-	0.58	12.2	I
2 THIRD AVENUE & EAS	T 50th STDEFT								
Third Avenue	NB	Т	0.56	12.5	В	Ť	0.67	13.8	В
Third Avenue	NB	R	0.30	30.3	D	R	1.00	51.7	E
East 59th Street	EB	L	0.87	30.3 9.8	B	L L	0.29		E
Last JAM Street	CD	T	0.18	12.1	В	T	0.29	10.5 12.9	E
	Overall Intersection	_	0.53	15.7	С		0.63	20.0	(
			0.00	1011	Č		0.05	20.0	
3 SECOND AVENUE & EA									
Second Avenue	SB	LT	1.05	43.4	E	LT	1.04	42.9	E
East 59th Street	EB	TR	1.04	53.8	E	TR	1.02	47.6	Е
	Overall Intersection	-	1.01	46.6	E	-	0.90	44.5	E
4 FIRST AVENUE & EAST	59th STREET								
First Avenue	NB	L	1.02	48.8	E	L	0.22	7.9	Е
		LTR	0.71	11.1	В	LTR	0.63	10.3	Е
East 59th Street	£В	DfL	0.22	11.8	В	DfL	0.46	14.6	В
		T	0.12	11.1	В	T	0.13	11,1	В
	WB	TR	0.40	12.9	В	TR	0.58	14.7	Ē
	Overall Intersection	-	0.72	16.2	C	-	0.61	11.4	E
5 YORK AVE/SUTTON PL &	& EAST 59th STREET								
York/Sutton Avenue	NB	LTR	0.52	11.3	В	LTR	0.51	11.3	Е
	SB	LTR	0.43	10.3	В	LTR	0.58	11.9	В
East 59th Street	EB	LTR	0,36	19.9	c	LTR	0.46	21.2	Č
	WB	LTR	0.03	17.1	c	LTR	0.01	16.9	Ċ
	11.0								

TABLE D.3-11
66TH STREET SHAFT AREA
COMPARISON OF AM PEAK HOUR NO BUILD VS CONSTRUCTION PHASE VS MITIGATION TRAFFIC LEVELS OF SERVICE

		N	BUILD PEA	K HOUR (8AM-	9AM)		CONSTRUC	TION PHASE		Mľ	<u> </u>	CONDIT	<u>10N</u>	MITIGATION MEASURES
				Control				Control				Control		
	INTERSECTION & APPROACH	Myt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	
	SIGNALIZED INTERSECTIONS													
1	SECOND AVENUE & 68th STREET													
•	Second Avenue SB	LT	0.78	12.5	В	LT	0.82	13.7	В					- Mitigation not required.
	GRth Street EB	TR	0.70	19.7	С	TR	0.80	24.3	С					
	Overall Intersection		0.75	13.5	В	_	0,81	15.4	с					
	Overall Intersection	-	11.75	15.5	ь	-	10,01	1,04						
2	PARK AVENUE & 67th STREET													
	Park Avenue NB	DIL	0.43	10.3	В	DIL	0.43	10,3	В					 Miligation not required,
		Ť	0.89	17.2	С	T	0,89	17.2	C					
	SB	TR	0.75	11.7	В	TR	0.79	12.5	В .					
	67th Street WB	LTR	0.79	23.8	С	LTR	0.79	23.8	С					
	Overall Intersection	•	0.85	15.1	С	-	0.85	15.5	С					
3	LEXINGTON AVENUE & 67th STREET													
	Lexington Avenue SB	TR	0.77	11.7	В	TR	0,84	13.3	В					- Mitigation not required.
	67th Street WB	LT	1.13	104.0	F	LT	1.13	104.0	F				•	
	Overall Intersection	_	0.91	28.8	D		0.95	29.0	D					
4	THIRD AVENUE & 67th STREET		A 22	11.4	В	LT	0,79	11.7	В					- Miligation not required.
	Third Avenue NB 67th Street WB	LT TR	0.77 0.85	11.4 25.5	D B	TR	0.85	25,5	D					- Mingation not required.
	67th Street WB	IK	(1,85	23.3	IJ	110	11.03	23,3	D					
	Overall Intersection	-	0.80	14.3	В	•	0.81	14.5	В					
5	SECOND AVENUE & 67th STREET													
	Second Avenue SB	TR	1.10	65.7	F	TR	0.91	18,4	С					 Mitigation not required,
	67th Street WB	LT	0.68	18.3	С	LT	0,68	18,3	С					
	Overall Intersection		0.91	60.2	F	-	0,81	18.4	С					
		_							_					
6	PARK AVENUE & 66th STREET				_				-					- Mitigation not required.
	Park Avenue NB	L	0.95	53.4	E	L	0.95	53.4	E B					Minganon not required.
		T	0.82	13.8	В	T	0.82	13,8 13,6	В					
	SB	TR	0.79	12.5	В	TR	0.83		E					
	66th Street WB	LTR	1.01	1.1	E	LTR	1.01	51.1						
	Overall Intersection		0.97	20.4	С	•	0.97	20.8	С					
7	LEXINGTON AVENUE & 66th STREET													
	Lexington Avenue SB	TR	0.80	12.4	В	TR	0.87	14.7	В					 Mitigation not required.
	66th Street WB	LT	0,96	34.0	D	LT	0,96	34.0	. D					
	Overall Intersection		0.87	19.6	С		0.91	20.7	С					
8	THIRD AVENUE & 66th STREET													
.,	Third Avenue NB	LTR	0.85	14.8	В	LTR	0.85	14.8	В	LTR	0.93	19.8	С	. Shift 4 seconds of green time from NB phase to WB phase.
	66th Street WB	TR	1.12	96.5	F	TR	1.23			TR	1.11	91.6	F	
													ь	
	Overall Intersection	٠ -	0.89	26.0	D	-	0.94	38.4	D	-	0.94	30,3	D	

TABLE D.3-11 CONTINUED 66TH STREET SHAFT AREA

COMPARISON OF AM PEAK HOUR NO BUILD VS CONSTRUCTION PHASE VS MITIGATION TRAFFIC LEVELS OF SERVICE

		4	O BUILD PEA	K HOUR (8AM- Control	<u>-9AM)</u>		CONSTRU	CONTROL	E	<u>Mi'</u>	TIGATE	D CONDIT	<u>rion</u>	MITIGATION MEASURES
	INTERSECTION & APPROACH	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	
u)	CDCOALD ALIENAND A COLL ADDRESS													
9	SECOND AVENUE & 66th STREET				_				_					
		B TR	0.98	25.8	D	TR	0.82	14.8	В					 Mitigation not required.
		B R	0.05	11.2	В				•					
	V	B LT	0.78	20.5	С	LT	0.80	21.1	С					
	Overall Intersect	on -	0.89	24.5	С	-	0.81	16.3	С					
10	FIRST AVENUE & 66th STREET													
	First Avenue	B LT	1.05	41.8	Е	LT	1.06	43.3	E					Mitigation not required.
	66th Street V	B TR	0,33	14.7	В	TR	0.33	14.7	В					
	Overall Intersect	on -	0.76	39.5	D		0.77	40.9	E					
11	YORK AVENUE & 66th STREET													
• •	York Avenue & 66th STREET	B LTR	1.05	52,2	E	LTR	SED-TISM	79.2	F.	LTR	1.07	58.0	E	- Shift 4 seconds of green time from WB phase to NB phase.
	S		0,58	9.7	B	LTR	0,64	10.6	B	LTR	0.62	9.1	В	Property of Paragraph and Paragraph and Paragraph
	66th Street V		0.01	19.8	Č	LTR	0.01	19.8	Č	LTR	0.01	21.4	C	
						LIK				LIK	0.01	21.4	C	
	Overall Intersect	on -	0,69	32.4	D	•	0.73	45.3	E	•	0.73	33.9	D	
12	PARK AVENUE & 65th STREET													
	Park Avenue		0.57	9.3	В	TR	0.57	9.3	В					- Mitigation not required.
	·		0.91	63.1	F	DſL	0.91	63.1	F					
		T	0.96	23.5	C	Т	1.01	33.9	D					
	65th Street	B LTR	0,52	15.8	С	LTR	0.52	15.8	С					
	Overall Intersect	on -	0.80	17,3	С		0.81	21.8	С					
13	LEXINGTON AVENUE & 65th STREET													
	Lexington Avenue S	з цт	0,90	16.4	С	LT	0.97	23,3	С					- Mitigation not required.
	65th Street E		0.65	18.2	c	TR	0.65	18.2	c					- maganon not required.
	550 5000		17,03	10.2	C	110	11.03	10.4	C					
	Overall Intersect	on -	0.80	16.8	С	-	0.85	22.1	С					
14	THIRD AVENUE & 65th STREET													
	Third Avenue	B TR	0.74	11.2	В	TR	0.74	11.2	В					 Mitigation not required.
	65th Street E		0.75	19.7	С	LT	0.75	19.7	С					•
	Overall Intersect	on -	0,74	13,0	В		0.74	13.0	В					
		on -	0,74	13,0	D	•	U. /4	13.0	В					
15	SECOND AVENUE & 65th STREET		***						_					No.
	Second Avenue		0.79	13.5	В	LT	0.82	14.6	В					 Mitigation not required.
	64th Street E		0.32	12.8	В	T	0.32	12.8	В					
		R	0.56	15.9	С	R	0,56	15.9	С					
	Overall Intersect	on -	0.69	13.6	В	-	0.70	14.4	В					
16	PARK AVENUE & 64th STREET													
	Park Avenue N	B TR	0.69	10,7	В	TR	0.69	10.7	В	TR	0,65	9.0	В	- Shift I second of green time from EB phase to NB/SB phase
	S		0.78	34.8	D	DſL,	0.78	34.8	D	DIL	0.78	33.6	D	,
	~	T	1,05	44,8	E	Ť		68,0	F	T	1.05	42.2	E	!
	64th Street		0.77	23,4	č	LTR	0.77	23.4	C	LTR	0.84	30.0	Ď	
	Overall Intersect	on -	0,93	28.0	D		0.97	39.4	D		0.97	26.9	D	
				***				**						
	LEXINGTON AVENUE & 64th STREET			16.2			p. 0.c	20.6	•					Material and secured
17	Lexington Avenue S		0.89	15.3	С	LT	0.96	20.6	С					 Mitigation not required.
17	441.6													
17	64th Street	3 TR	0.72	21.1	С	TR	0.72	21,1	С					

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TABLE D.3-11 CONTINUED 66TH STREET SHAFT AREA

COMPARISON OF AM PEAK HOUR NO BUILD VS CONSTRUCTION PHASE VS MITIGATION TRAFFIC LEVELS OF SERVICE

		NO	BUILD PEAK	HOUR (8AM-	9AM)		CONSTRUC	TION PHAS	Ē	<u>M1</u>	TIGATE	D CONDIT	<u> 10N</u>	MITIGATION MEASURES
				Control				Control				Control		
INTER	RECTION & APPROACH	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	
18 THIRD	D AVENUE & 64th STREET													
Third A		TR	0.72	10.4	В	TR	0.72	10,5	В					- Mitigation not required.
64th Str		LT	1.00	54.3	E	LT	1.00	54.3	Ē					maganon norrequies.
	Overall Intersection	•	0.83	15.6	С	•	0.83	15.7	С					
19 SECON	ND AVENUE & 64th STREET													
	Avenue SB	LT	0,92	18,7	c	LT	1.03	38.2	D	LT	1.01	32.4	D	- Shift I second of green time from EB phase to SB phase.
64th Str	reet EB	TR	1.00	54.4	Ε	TR	1,00	54.5	Е	TR	1.03	62.8	F	Pro
							цикцирацию туп	angener gravoer ar propries	evenostoteantonary.					
	Overall Intersection	-	0.96	24.1	С	-). (1.02)	41.0	E	•	1.02	37.8	D	
0 YORK	AVENUE & 64th STREET													
York A		TR	0.32	9.4	В	TR	0.32	9.4	В					- Mitigation not required.
	SB	· LT	0.51	11.1	В	LT	0.57	11.7	В					-
64th Str		LTR	0.98	54.8	E	LTR	0,98	54.8	E					
	WB	LR	0.03	17.0	С	LR	0.03	17.0	С					
	Overall Intersection	_	0.70	18.9	С		0.73	18.8	С					
	GTON AVENUE & EAST 59th STREET ton Avenue SB	LT	0.81	10.5	В	LT	0.07	110	ь					Marie and a second and
East 59t		TR	0,56	10.5	В	TR	0,87 0,56	11.9 14.4	B B					- Mitigation not required,
203, 371		IX	0.0	14.4	D	110	11.30	14.4	ь					
	Overall Intersection	•	0.70	11.5	В	•	0.73	12.6	В					
22 THIRD	AVENUE & EAST 59th STREET													
Third A		Τ	0.64	13.4	В	т	0.64	13.4	В					- Mitigation not required.
-1	1	Ř	0.95	39,4	Ď	Ř	0.95	39,4	Ď					ganon norroquiou.
East 591	th Street EB	L	0,29	10.5	В	L	0.29	10.5	B					
		Т	0.55	12.6	В	Т	0,55	12.6	В					
	Overall Intersection		0.60	17.8	c		0.60	17.8	С					
23 SECON	ND AVENUE & EAST 59th STREET													
Second		LT	1.25	152,2	F	LT	1.78	876.7	F	LT	1.07	49.6	F	- Provide five 10-feet SB lanes.
East 59t		TR	1.13	91.4	F	TR	1.13	91,4	F	TR	1.13	91.4	F	
	Overall Intersection		1.16	134.2	F				Semble selections					•
	Overall intersection	•	1.10	134.2	r	•	1:48	2014./-302	F. F.	-	1.05	63.1	F	
	AVENUE & EAST 59th STREET				_				_					
First Av	venuc NB	L	1,20	130.2	F	L	1.20	130.2	F					Mitigation not required.
Enst 59t	th Street EB	LTR	0.80	12.4	B B	LTR	0.80	12.4	В					
Enst 391	in street EB	DIL. T	0.26 0.13	12.0 11.2	B	DſL T	0.26	12.0 11.2	B B					
	WB	TR	0.43	13.2	В	TR	0.13	13.2	В					
	Overall Intersection		0.83	28.0	D	_	0.83	28.0	D					
		•	0.05	40.0	U	•	11.03	40.17	υ					
	AVE/SUTTON PL & EAST 59th STREET				_				_					
York/Sr	utton Avenue NB	LTR	0.61	12.5	В	LTR	0.65	13.3	В					- Mitigation not required
	th Street EB	LTR LTR	0.47 0.39	10,7 20,3	B	LTR	0.50	11.0	В					
				20.3	С	LTR	0.39	20.3	С					
East 59t					Ċ									
	th Street EB	LTR	0.03	17.1	C	LTR	0,03	17.1	Ċ	-				

TABLE D.3-12
66TH STREET SHAFT AREA
COMPARISON OF PM PEAK HOUR NO BUILD VS CONSTRUCTION PHASE VS MITIGATION TRAFFIC LEVELS OF SERVICE

			NOI	BUILDPEAK	HOUR (5PM	- 6PM)		CONSTRUC	CTION PHAS	E	<u>Mľ</u>	TIGATED	CONDIT	ION	MITIGATION MEASURES
					Control				Control				Control		
	INTERSECTION & APPROACH		Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	Myt.	V/C	Delay	LOS	
	SIGNALIZED INTERSECTIONS														
1	SECOND AVENUE & 68th STREET	0.5		. 40	12.1	В	LT	0.80	13.1	В					- Mitigation not required.
	Second Avenue	SB	LT	0.78	12.4	Č	TR	0.78	23.6	C					- Innagation for requirem
	68th Street	EB	TR	0.71	20.3	C C	IK	17, 78	23.0						
	Overali I	ntersection	-	0.75	13,4	В	•	0.79	14.7	В				•	
2	PARK AVENUE & 67th STREET														
-	Park Avenue	NB	DIL	0.45	10.9	В	DUL	0,45	10.9	В					Mitigation not required.
	Tink Avenue	1.0	T	0.96	23.7	ċ	T	0,96	23.7	С					
		SB	TR	0.59	9.5	В	TR	0,63	10,0	В					
	67th Street	WB	LTR	0.77	22.9	Č	LTR	0.77	22,9	Č					
	OAH SHEEL	ΨÞ	LIK	U.71	22,7		LIK	w. , , ,	22,7	•					
	Overall I	ntersection	•	0.88	17.6	С	-	0.88	17.5	С					
3	LEXINGTON AVENUE & 67th STRE	ET									1				
-	Lexington Avenue	SB	TR	0.83	13.5	В	TR	0.92	18.0	С					Mitigation not required.
	67th Street	WB	LT	1.12	103.1	F	LT	1.12	103,1	F					
	57th 6000	***				•									
	Overall I	ntersection	-	0.95	31.1	D	-	1.00	33.3	D					
4	THIRD AVENUE & 67th STREET														
	Third Avenue	NB	LT	0,84	13.1	В	LT	0.81	12.2	В					- Mitigation not required.
	67th Street	WB	TR	0.92	33.7	D	TR	0.92	33.7	D					
	With Street	""	1.00												
	Overall I	ntersection	-	0.87	16.7	С	•	0.85	16.1	С					
5	SECOND AVENUE & 67th STREET														
5		SB	TR	0.87	15.9	С	TR	0.61	10.9	В					Mitigation not required.
	Second Avenue	WB	LT	0.45	14.1	В	LT	0.45	14.1	В					······································
	67th Street	WB	LI	17.43	. 14.1		٠.								
	Overall I	ntersection	-	0.68	15.8	С	•	0.54	11.2	В					
6	PARK AVENUE & 66th STREET														
	Park Avenue	NB	L	1.00	62.6	F	L	1.00	62.6	F					Mitigation not required.
			T	0.91	18.0	С	. т	1.00	24.4	С					
		SB	TR	0.70	10.9	В	TR	0.70	10.9	В					
	66th Street	WB	LTR	1.11	89.8	F	LTR	1.11	89.8	F					
	Overuti 1	ntersection		1.05	27.4	Đ	_	1.05	29.8	D					
_						-		•							
7	LEXINGTON AVENUE & 66th STRE	ET SB	TR	0,79	12.3	В	TR	0,79	12,3	В					- Mitigution not required.
	Lexington Avenue					Č	LT	0.77	20.8	Č					
	66th Street	WB	LT	0,77	20,8	·	LI	U.11	20.0						
	Overali I	ntersection	-	0.78	15.0	В	-	0.78	15.0	В					
8	THIRD AVENUE & 66th STREET														
••	Third Avenue	NB	LTR	1.08	52.8	E	LTR	1.08	52.8	E	LTR	1.08	52.8	Ε	 Shift 2 seconds of green time from pedestrian phase to WB phase.
	66th Street	wa	TR	0.95	44.4	Ē	TR	105	69.5	Ser Francis	TR	0,99	50.4	Е	
			•••												
	Overait !	Intersection	-	0.95	51.8	E	-	0.99	55,0	E	•	0.99	52.5	E	, A

TABLE D.3-12 CONTINUED 66TH STREET SHAFT AREA

COMPARISON OF PM PEAK HOUR NO BUILD VS CONSTRUCTION PHASE VS MITIGATION TRAFFIC LEVELS OF SERVICE

			NO.	BUILD PEAK	HOUR (5P	M - 6PM)		CONSTRU	CTION PHASI	Ę	M	ITIGATE	D CONDIT	rion	MITIGATION MEASURES
	INTERSECTION & APPROACH		Mvt.	V/C_	Control Delay	LOS	MvL	V/C	Delay	LOS	Mvi.	V/C	Delay	Los	
9	SECOND AVENUE & 66th STRE	PTP													
y	Second Avenue	SB	TR	1.15	90,4	F	TR	1,26	166.3		TR	1.17	99.4	F	 Eliminate parking along the north curb on westbound approach.
	66th Street	EB	R	0.05	11.2	В			and the second s	-	•	•	-	•	
		WB	LT	0.92	32.2	D	LT	1.00	477	E E	LT	0.95	37.5	Đ	 Shift 4 seconds of green time from WB phase to SB phase.
	Overs	il Intersection		1.05	77.8	F	-	1014	137.8	F		1.08	84.5	F	
10	FIRST AVENUE & 66th STREET					•			•						
744	First Avenue	'NB	LT	1,15	85.9	F	LT	1.15	86.5	F					- Mitigation not required.
	66th Street	WB	TR	0.29	14.5	в	TR	0.29	14.5	В					
	Overs	ill Intersection	_	0.81	81.7	F		0.81	81.7	F					
					• • • • • • • • • • • • • • • • • • • •	•									
11	YORK AVENUE & 66th STREET	NB	LTR	0,80	15.6	С	DſL	1.66	748.0	F	LTR	0,60	10.1	В	- Shift 7 seconds of green time from NB/SB phase to provide a lead NB phase with 4 seconds
	York Avenue	ND	LIK	u, au	15.6	C	TR	0.71	12,8	В	-	-	-		green time and 3s yellow time.
		SB	LTR	0.66	10.9	В	LTR	0.71	12,2	В	LTR	0.81	17.5	c	
	66th Street	WB	LTR	0.14	20.8	č	LTR	0.14	20.8	ć	LTR	0.14	20.8	č	
	Over	il Intersection		0.57	12.9	В	-	f.13	61.1	1 (2 P . 200	_	0.44	14.8	В	
						=			and the second second second	and the state of t					
12	PARK AVENUE & 65th STREET Park Avenue ,	NB	TR	0,73	11,2	В	TR	0.73	11.2	В					- Mitigation not required.
	Faik Aveille	SB	DIL.	0.70	25,5	Ď	DIL	0.70	25.5	Đ					I I I I I I I I I I I I I I I I I I I
		JD	T	0.84	14.4	В	T	0.90	17.5	Č					·
	65th Street	EB	LTR	0.47	15.3	ć	LTR	0,47	15.3	Ċ					
	Over	dl Intersection	_	0.69	13.3	В	_	0,72	14.4	В					
			_	0.402	10.5	-				-					
13	LEXINGTON AVENUE & 65th 5			• .				0.91	12.7	В					- Mitigation not required.
	Lexington Avenue	SB	LŤ	0.74	11.1	B C	LT TR	0,81 0,64	12,7 17.9	C					- Whitgation not required.
	65th Street	EB	TR	0.64	17.9	C	IK	0.04	17.9	C					
	Overs	all Intersection	-	0.70	13.1	В	-	0.74	14.1	В					
14	THIRD AVENUE & 65th STREET	r													
	Third Avenue	NB	TR	0.71	10.7	В	TR	0.71	10.7	В					Miligation not required,
	65th Street	EB	LT	0.71	8,81	С	LT	0.71	18.8	c					
	Overs	all Intersection		0.71	12.3	В		0.71	12.3	В					
15	SECOND AVENUE & 65th STRE	ET													
	Second Avenue	SB	LT	0.65	10,4	В	LT	0.68	10.9	В					- Mitigation not required.
	64th Street	EB	T	0,31	22.2	С	Т	0.31	22.2	С					
			R	0,96	59.8	Ε	R	0.96	59.8	E					
	Over	all Intersection	-	0.76	16.6	С	-	0.78	18.1	С					
16	PARK AVENUE & 64th STREET									_					
	Park Avenue	NB	TR	0,78	12.2	В	TR	0.78	12.2	В					Mitigation not required.
		SB	DLL	0.71	26.8	D	DſL	0.71	26,8	D					
	Citali Stanet	ЕВ	T LTR	0.88 0.82	16,5 27,7	C D	T LTR	0.94 0.82	21.5 27.7	C D					
	64th Street		LIK												<i>;</i> •
	Over	all Intersection	-	0.86	15.3	С	-	0,89	17.3	С					
17	LEXINGTON AVENUE & 64th S					_	. –	===		_					h #fel
	Lexington Avenue	SB	LT	0.70	10.4	В	LT	0,77	11.7	В					Mitigation not required.
	64th Street	EB	TR	0.81	25,3	D	TR	0.81	25.3	D					
	Over	all Intersection		0.74	13.3	В	-	0.79	14.1	В					•

......

TABLE D.3-12 CONTINUED 66TH STREET SHAFT AREA

COMPARISON OF PM PEAK HOUR NO BUILD VS CONSTRUCTION PHASE VS MITIGATION TRAFFIC LEVELS OF SERVICE

			NO	BUILD PEAK	HOUR (5PM	1 - 6PM)		CONSTRUC	TION PHAS Control	E	MI	TIGATEI	Control	NOL	MITIGATION MEASURES
	INTERSECTION & APPR	OACH	Mvt.	· V/C	Detay	LOS	Mvt.	V/C	Deluy	LOS	Mvt.	V/C	Delay	LOS	
18	THIRD AVENUE & 64th Third Avenue	STREET NB	TR	0.69	10.0	В	TR	0,69	10,0	В					- Mitigation not required.
	64th Street	EB	LT	1.03	63,1	F	LT	1.03	63.1	F					- Mangaron not required.
	04th Street	EB	L1	1.05	03,1	г	LI	1.03	03.1						
		Overall Intersection	-	0.82	16.5	С		0.82	16.5	c					
19	SECOND AVENUE & 64t	L STREET													
.,	Second Avenue	SB	LT	1.16	98.0	F	LT	1,29	53.1	Е					Mitigation not required.
	64th Street	EB	TR	1,09	84.9	F	TR	1.09	84.9	F					, and the second
	om accer														
		Overall Intersection	-	1.13	96.1	F	•	1.20	58.2	E					
20	York Avenue														
	First Avenue	NB	TR	0.18	8.5	В	TR	0.18	8.5	В					- Mitigation not required.
		SB	LT	0.50	11.0	В	LT	0.55	11.4	В					
	64th Street	. EB	LTR	1.14	116.4	F	LTR	1.14	116.4	F					
		. WB	LR	0.01	16.9	С	LR	0.01	16.9	С					
		Overall Intersection		0.75	30.2	D.		0.78	29,5	D					
			-							-					
21	LEXINGTON AVENUE &					_				_					and a control
	Lexington Avenue	SB	LT	0.72	13.1	В	LT	0.78	14.2	В					- Mitigation not required.
	East 59th Street	EB	TR	0.67	15.6	С	TR	0,67	15.6	С					
		Overall Intersection	-	0.70	13,9	В		0.73	14.6	В					
22	THIRD AVENUE & EAS		_				т	0.76	15.1	С					- Mitigation not required.
	Third Avenue	NB	T R	0,76 1,08	15.1 79.8	C F	I R	1,08	15.1 79.8	F					Mitigation not required,
	East 59th Street	EB	k L	0.62	19.8	B	L L	0,62	14.7	r B					
	East Sata Street	ED	Ť	0.63	13,6	8	Ť	0,63	13.6	В					
							,								
		Overall Intersection	•	0.70	25.3	D	•	0,70	25.3	D					
23	SECOND AVENUE & EA							.come arrentor acito:	. onenentwiteenenki.	and section of the se					
	Second Avenue	SB	LT	1.18	111.6	F	LT	1.67		SPECIFICAL STATE	LT	1.00	31.6	D	Provide five 10-feet SB lanes.
	East 59th Street	EB	TR	1.11	81.4	F	TR	1.11	81.4	F	TR	1,11	80,9	F	
		Overall Intersection		1.00	101.6	F		1.25	456,6	SA PERSON		0.91	49.5	E	
24	FIRST AVENUE & EAST	SHIL STREET NB	L	0,26	8,1	В	L	0.26	8.1	В					- Mitigation not required.
	First Avenue	NB	LTR	0.76	8.1 11.7	В	LTR	0.76	11,7	В					- miguton not required,
	Cont field Class	EB	DUT	0,76	15.5	C	DLL	0.70	15,5	Č					
	East 59th Street	EB	T	0.14	11,2	В	T	0.14	11.2	В					
	East 59th Street	WB	TR	9,63	15.4	Č	TR	0,63	15.4	ç					
		Overall Intersection	•	0,70	12.4	В	•	0.70	12.4	В					•
25	YORK AVE/SUTTON PL &														
	York/Sutton Avenue	NB	DIL	0.35	10.9	В	DUL	0.36	11.2	В					Mitigation not required.
			TR	0.88	24.4	С	TR	0.88	24.4	С					
		SB	LTR	0.64	12.6	8	LTR	0,68	13.2	В					
	East 59th Street	EB	LTR	0.50	21.8	С	LTR	0,50	21,8	C					
		WB	LTR	0.01	16.9	С	LTR	0.01	16.9	С					, •
		Overall Intersection	-	0.73	16.8	С	-	0.73	17.0	С					

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ing a paragraphy of the second of the second

				11112 2 211	K HOUR			4 104 4 101	K HOUR	
	DITEDESCRION S ADDOLON		N.fa	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LO
	INTERSECTION & APPROACH		Mvt.	V/C	Delay	LUS	WIVE.	V/C	Delay	
	SIGNALIZED INTERSECTIONS									
E31)	SUTTON PLACE at EAST 57th STREET									
	Sutton Place	NB	LTR	0.35	11.1	В	LTR	0.48	12,6	В
		SB	LTR	0.41	11.7	В	LTR	0.66	15.6	E
	E. 57th Street	EB	DfL	0.81	50.9	D	DfL	0.42	34.7	(
		um.	TR	0.24	31.2	C	TR	0.15	29.6	(
		WB	LTR	0.01	27.5	С	LTR	0.01	27.4	C
	Overall Inter	rsection	-	0.54	19.2	В	-	0.58	16.0	E
E32)	FIRST AVENUE at EAST 57th STREET									
	First Avenue	NB	L	0.61	27.5	С	L	1.03	77.1	E
			TR	1.00	42.8	D	TR	1.04	66.9	F
	East 57th Street	EB	DfL	0.73	34.1	С	DfL	0.55	29.6	C
			T	0.46	24.2	С	T	0.24	20.6	
		WB	TR	0.31	21.3	С	TR	0.64	25.9	C
	Overall Inte	rsection	-	0.86	38.1	D	-	0.85	59.6	F
E33)	FIRST AVENUE at EAST 59th STREET									
	First Avenue	NB	L	0.96	45.6	D	L	0.59	15.5	E
			LTR	1.01	50.7	D	LTR	0.81	16.6	E
	East 59th Street	EB WB	LT TR	0.40	18.7 17.5	.B B	LT TR	0.32 0.45	17.4 18.2	E
		wB	IK	0.40	17.5	В	ik	0.43	16.2	
	Overall Inte	rsection	-	0.70	43.3	D	-	0.64	16.8	I
E34)	SECOND AVENUE at EAST 53rd STREET									
	Second Avenue	SB	TR	1.03	46.5	D	TR	0.74	10.2	I
	East 53rd Street	WB	LT	0.74	28.2	С	LT	0.86	33.5	(
	Overail Inte	rsection	-	0.92	43.4	D	-	0.79	15.5	1
E35)	SECOND AVENUE at EAST 54th STREET	•								
•	Second Avenue	SB	LT	1.03	45.0	D	LT	0.81	11.2	E
	East 54th Street	EB	TR	0.54	24.2	С	TR	0.54	24.0	(
	Overall Inte	rsection		0.84	42.5	D	-	0.71	13.1	I
E36)	SECOND AVENUE at EAST 55th STREET	•								
230,	Second Avenue	SB	TR	1.03	43.8	D	TR	0.77	10.6	I
	East 55th Street	WB	LT	0.54	24.0	c	LT	0.81	34.5	(
						_				
	Overall Inte	rsection	-	0.84	41.3	D	-	0.79	13.8	1
E37)	SECOND AVENUE at EAST 56th STREET				40.0	_		0.70	0.0	
	Second Avenue	SB EB	LT TR	1.02 0.61	42.9 25.3	D C	LT TR	0.72 1.00	9.9 59.6	1
	East 56th Street	LD	110	10.0	د.د2	C	110	1,00	37.0	
	Overail Inte	rsection	-	0.86	40.6	D	-	0.83	18.0	J
E38)	SECOND AVENUE at EAST 57th STREET	•								
	Second Avenue	SB	LTR	1.03	68.2	E	LTR	0.86	23.3	. (
	East 57th Street	EB	TR	0,61	29.4	С	TR	1.02	71.8	J
		WB	L LT	1.03 0.69	80.9 18.4	F B	LT -	0.20	14.3 -	3
			P.	0.09			-			
	Overall Inte	rsection	-	1.05	56.0	E	-	0.88	37.1	1
E39)			. ~	1.00		-	•	1.02	03.5	
	Second Avenue	SB	LT -	1.03	55.8	E	L LT	1.03 0.81	92.8 20.1	
	East 58th Street	EB	TR	0.28	18.1	В	TR	1.03	84.6	Ì
	Outside Y-4-	reaction	_	n 64	52.4	D	_	1.03	43.5	1
	Overall Inte		-	0.66	34.4	U	-	1.03	43.3	
	SECOND AVENUE at EAST 59th STREET	SB	L	1,00	61.7	F		1.02	78,6	
	Second Avenue			UU.1	61.3	Е	L	1.03	70.0	
	Second Avenue	30			62.0	E	т	1.02		
			T	1.03	62.0 101.5	E F	T TR	1.02	60.3	1
(E40)	Second Avenue East 59th Street	EB			62.0 101.5	E F	T TR	1.02 1.03		1

this is negligible to be be

			AM PEA	K HOUR			PM PEA	K HOUR	
				Control				Control	
INTERSECTION &	APPROACH	Mvt.	V/C	Delay	LOS	Mvt.	V/C_	Delay	LOS
(E41) THIRD AVENUE at	EAST 57th STREET								
Third Avenue	NB	LT	0.75	21.3	С	LT	1.03	55.2	E
		R	0.36	17.1	В	R	0.56	22.3	С
East 57th Street	EB	LT	0.60	18.9	В	LT	1.02	55,3	E
	WB	TR	0.92	40.6	D	TR	0.45	25.8	С
	Overall Intersection	-	0.87	25.2	C	-	1.02	, 48.1	D
(E42) THIRD AVENUE at	EAST 59th STREET							•-	
Third Avenue	NB	T	0.81	18.9	В	T	0.80	21.9	С
		R	0.95	46.5	D	R	0.67	31.7	C
East 59th Street	EB	L	0.38	25.9	С	LT	1.02	63.6	Е
		T	1.03	80.4	F	-	-	-	-
	Overall Intersection	-	0.89	41.1	D	-	0.89	35.6	D
(E43) LEXINGTON AVEN	TUE at EAST 57th STREET								
Lexington Avenue	SB	LTR	0.84	19.2	В	LTR	0.56	12.5	В
East 57th Street	EB	TR	0.91	31.9	c	TR	0.99	45.0	D
	WB	LT	0.67	20.8	С	LT	0.49	19.5	В
	Overall Intersection	-	0.88	22.6	c	-	0.76	24.7	C
(E44) LEXINGTON AVEN	IUE at EAST 59th STREET								
Lexington Avenue	SB	LT	1.03	55.4	E	LT	0,76	15.1	В
East 59th Street	EB	TR	0.72	21.6	С	TR	0.89	31.4	С
	Overall Intersection	_	0.88	46.2	Ð	_	0.82	20.5	С

Notes

^{(1):} Control delay is measured in seconds per vehicle.

^{(2):} Level of service (LOS) for signalized intersections is based upon average control delay per vehicle (sec/veh) for each lane group as listed in the 2000 Highway Capacity Manual – TRB.

^{(3):} Level of service (LOS) for unsignalized intersections is based upon control delay per vehicle (sec/veh) for each minor-approach as listed in the 2000 Highway Capacity Manual -- TRB.

^{(4):} Overall intersection V/C ratio is the critical lane groups' V/C ratio, not the weighted average of all the movements.

^{(5): &}quot;MVT" references the specific intersection approach lane(s). TR is a combined through-right turn lane(s), TL is a combined through-left turn lane(s), R or L refers to exclusive right- or left-turn movement lane(s), and LTR is a mixed lane(s) that allows for all movement types.

TABLE D.3-14

55TH STREET STATION AREA

COMPARISON OF AM PEAK HOUR NO BUILD VS CONSTRUCTION PHASE VS MITIGATION TRAFFIC LEVELS OF SERVICE

Control NTERSECTION & APPROACH Mvt. V/C Delay LOS Mvt. V/C Delay LOS Mvt. V/C Delay LOS Mvt. V/C Delay LOS Delay LOS LOS	
E31 SUTTON PLACE at EAST 57th STREET Sutton Place	
Sutton Place	
Sutton Place NB LTR 0.37 11.4 B LTR 0.38 11.4 B STREET First Avenue NB LTR 0.49 12.7 B LTR 0.49 12.7 B LTR 0.49 12.7 B STREET First Avenue NB TR 0.33 21.5 C TR 0.49 12.7 B LTR 0.49 12.7 B STREET First Avenue NB TR 0.33 21.5 C TR 0.33 21.5 C TR 0.49 12.7 B TR 0.49 12.8 B TR 0.49 12.7 B TR 0.49 12.8 B TR 0.49 12.7 B TR 0.49 12.8 B TR 0.49 12.7 B TR 0.	
East 57th Street SB LTR 0.43 12.0 B LTR 0.49 12.7 B - No mitigation rec EB DTL 0.85 55.1 E DTL 0.85 55.1 E DTL 0.85 55.1 E TR 0.26 31.5 C TR 0.26 31.5 C WB LTR 0.01 27.5 C LTR 0.01 27.5 C Overall Intersection - 0.57 20.1 C - 0.61 19.9 B E32) FIRST AVENUE at EAST 57th STREET First Avenue NB L 0.61 27.5 C L 0.62 27.8 C East 57th Street EB DTL 0.77 37.1 D DTL 0.77 37.1 D - No mitigation rec T 0.49 24.7 C T 0.49 24.7 C T 0.49 24.7 C Overall Intersection - 0.93 67.6 E - 0.93 67.6 E E33) FIRST AVENUE at EAST 59th STREET First Avenue NB L 1.15 192.8 F L 1.35 192.8 F L 1.35 192.8 F East 59th Street EB LT 0.43 19.4 B LT 0.43	*
East 57th Street EB DfL 0.85 55.1 E DfL 0.85 57th Street E32) FIRST AVENUE at EAST 57th STREET First Avenue NB L 0.61 27.5 C L 0.62 27.8 C E DfL 0.77 37.1 D DfL 0.78 57.1 D DfL 0.88 57.1	
TR 0.26 31.5 C TR 0.26 31.5 C TR 0.26 31.5 C C TR 0.01 27.5 C C C C C C C C C	игеа.
WB	
Overall Intersection - 0.57 20.1 C - 0.61 19.9 B	
E32) FIRST AVENUE at EAST 57th STREET First Avenue	
First Avenue	
First Avenue NB L 0.61 27.5 C L 0.62 27.8 C TR 1.11 83.2 F TR 1.11 83.2 F East 57th Street EB DfL 0.77 37.1 D DfL 0.77 37.1 D Overall Intersection 0.93 67.6 E - 0.93 67.6 E E33) FIRST AVENUE at EAST 59th STREET First Avenue NB L 1.35 192.8 F L 1.35 192.8 F East 59th Street EB LT 0.43 19.4 B LT 0.43 19.4 B C Overall Intersection - 0.88 77.3 E - 0.88 77.3 E Overall Intersection - 0.88 77.3 E - 0.88 77.3 E	
East 57th Street EB DfL 0.77 37.1 D DfL 0.77 37.1 D T 0.49 24.7 C T 0.49 24.7 C WB TR 0.33 21.5 C TR 0.33 21.5 C Overall Intersection - 0.93 67.6 E - 0.93 67.6 E E33) FIRST AVENUE at EAST 59th STREET First Avenue NB L 1.35 192.8 F L 1.35 192.8 F LTR 1.06 68.4 E LTR 1.06 68.4 E East 59th Street EB LT 0.43 19.4 B LT 0.43 19.4 B WB TR 0.42 17.7 B TR 0.42 17.7 B Overall Intersection - 0.88 77.3 E Overall Intersection - 0.88 77.3 E Overall Intersection - 0.88 77.3 E	
East 57th Street EB Df.L 0.77 37.1 D Df.L 0.77 37.1 D - No mitigation rec T 0.49 24.7 C T 0.49 24.7 C WB TR 0.33 21.5 C TR 0.33 21.5 C Overall Intersection - 0.93 67.6 E - 0.93 67.6 E E33) FIRST AVENUE at EAST 59th STREET First Avenue	
T 0.49 24.7 C T 0.49 24.7 C WB TR 0.33 21.5 C TR 0.33 21.5 C Overall Intersection - 0.93 67.6 E - 0.93 67.6 E E33) FIRST AVENUE at EAST 59th STREET First Avenue	iired.
WB TR 0.33 21.5 C TR 0.33 21.5 C Overall Intersection - 0.93 67.6 E - 0.93 67.6 E E33) FIRST AVENUE at EAST 59th STREET First Avenue	,
Overall Intersection - 0.93 67.6 E - 0.93 67.6 E E33) FIRST AVENUE at EAST 59th STREET First Avenue	
E33) FIRST AVENUE at EAST 59th STREET First Avenue	
First Avenue NB L 1.35 192.8 F L 1.35 192.8 F LTR 1.06 68.4 E LTR 1.06 68.4 E East 59th Street EB LT 0.43 19.4 B LT 0.43 19.4 B WB TR 0.42 17.7 B TR 0.42 17.7 B Overall Intersection - 0.88 77.3 E - 0.88 77.3 E	
First Avenue NB L 1.35 192.8 F L 1.35 192.8 F LTR 1.06 68.4 E LTR 1.06 68.4 E East 59th Street EB LT 0.43 19.4 B LT 0.43 19.4 B WB TR 0.42 17.7 B TR 0.42 17.7 B Overall Intersection - 0.88 77.3 E - 0.88 77.3 E	•
LTR 1.06 68.4 E LTR 1.06 68.4 E East 59th Street EB LT 0.43 19.4 B LT 0.43 19.4 B WB TR 0.42 17.7 B TR 0.42 17.7 B Overall Intersection - 0.88 77.3 E - 0.88 77.3 E	
East 59th Street EB LT 0.43 19.4 B LT 0.43 19.4 B - No mitigation rec WB TR 0.42 17.7 B TR 0.42 17.7 B Overall Intersection - 0.88 77.3 E - 0.88 77.3 E	
WB TR 0.42 17.7 B TR 0.42 17.7 B Overall Intersection - 0.88 77.3 E - 0.88 77.3 E	uired.
Overall Intersection - 0.88 77.3 E - 0.88 77.3 E	
Overall Intersection - 0.88 77.3 & - 0.88 77.3 &	
234) SECOND AVENUE at EAST 53rd STREET	
Second Avenue SB TR 1.16 103.1 F TR 1.56 288.3 F TR 1.16 99.5 F - Shift 11 sec. of y	en time from the WB
East 53rd Street WB LT 0.78 29.5 C LT 0.88 34.7 C LT 0.87 39.8 D SB approach.	
	king to gain an additio
Overall Intersection - 1.01 91.4 F - 1.29 237.5 F - 1.08 87.5 F lane.	
E35) SECOND AVENUE at EAST 54th STREET	
	en time from the EB to
Second venture SB E1 1.10 10.11 1 21.12 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
East 34th Sheet EB 1K 0.31 24.0 C 1K 0.31 24.0 C 1K 0.31 24.0 C 1K 0.17 31.0 C	
Overall Intersection - 0.93 94.3 F - 1.14 238.5 F - 1.06 97.7 F	
E36) SECOND AVENUE at EAST 55th STREET	
	een time from the WB
East 55th Street WB LT 0.57 24.5 C LT 0.57 24.5 C LT 0.83 39.6 D SB approach.	
Date Julii Officer (1970) 10 10 10 10 10 10 10 10 10 10 10 10 10	
Overall Intersection - 0.92 91.1 F - 1.16 248.1 F 1.08 96.9 F	

TABLE D.3-14 CONTINUED

55TH STREET STATION AREA

COMPARISON OF AM PEAK HOUR NO BUILD VS CONSTRUCTION PHASE VS MITIGATION TRAFFIC LEVELS OF SERVICE

		1	NO BUILD	CONDITIO	<u>N</u>	9	CONSTRUC	TION PHAS	<u>SE</u>	<u>M17</u>	IGATED	CONDIT	<u>ION</u>	MITIGATION MEASURES
				Control				Control				Control		
INTERSECTION & APPRO	ACH	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	
(E37) SECOND AVENUE at EAST	r see street													
Second Avenue	SB	LT	1.15	100,7	F	LT	1.53	278.7	F	LT	1.16	104.4	F	- Shift 10 sec. of green time from the EB to
East 56th Street	EB	TR	0.64	26.0	C	TR	0.64	26.0	С	TR	0.93	50.1	D	SB approach.
1		•••			•	•••								
•	Overall Intersection	-	0.95	91.4	F	-	1.18	242.3	F		1.10	96.6	F	
(E38) SECOND AVENUE at EAST	r 57th STREET													
Second Avenue	SB	LTR	1.17	134.7	F	L	0.07	16.1	В	LTR	1.17	142.0	F	- Provide four 10 ft. SB lanes.
			-	-	-	TR	1.49	293.1	F	-		-	-	
East 57th Street	EB	TR	0.64	30.0	С	TR	0.65	30.1	С	TR	0.65	30.1	С	
	WB	L	1.11	112.9	F	L	1.11	114.6	F	L	1,11	114,6	F	
	,,,,	LT	0.73	19.4	В	LT	0.73	19.4	В	LT	0.73	19.4	В	
		_	1.19	101.4	F	-	1.34	186.5	F	•	1.20	101.4	F	
	Overall Intersection													
(E39) SECOND AVENUE at EAST	Γ 58th STREET													
Second Avenue	SB	LT	1.18	121.9	F	LT	0.91	27.1	С					 No mitigation required.
East 58th Street	EB	TR	0.30	18.3	В	TR	0.30	18,3	В					
	Overall Intersection	•	0.74	113.2	F	-	0.61	26.2	c					
(E40) SECOND AVENUE at EAST	Γ 59th STREET													
Second Avenue	SB	L	1.05	80.6	F	L	1.05	80.6	F					 No mitigation required.
		T	1.18	130.5	F	T	0.93	25.4	С					
East 59th Street	EB	TR	80.1	121.5	F	TR	1.09	123.9	F					
	Overall Intersection		1.14	118.5	F	-	1.06	64.2	E					
(E41) THIRD AVENUE at EAST	57th STREET													
Third Avenue	NB	LTR	0.79	22.1	С	LT	0.80	22.1	С					- No mitigation required.
	,,,,	R	0.38	17.3	В	R	0.39	17.5	В					- ·
East 57th Street	EB	LT	0.63	19.4	В	LT	0.63	19.4	В					
Sast Still Direct	WB	TR	0.96	46.8	D	TR	0.96	46.8	D					
1	Overall Intersection		0.91	27.2	С	-	0.91	27.2	С					
•					-									
E42) THIRD AVENUE at EAST		_	0.00	00.0		•	0.00	20.3	_					No missosion re-vis-d
Third Avenue	NB	T	0.85	20,3	C	T	0.85	20.3	С					- No mitigation required.
		R	1.00	56.4	E	R	1.02	64.4	E					
East 59th Street	EB	L	0.40	26.1	C	L	0.40	26.1	С					
		T	1.08	104.3	۴	Τ	1.08	104,3	F					

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TABLE D.3-14 CONTINUED 55TH STREET STATION AREA

COMPARISON OF AM PEAK HOUR NO BUILD VS CONSTRUCTION PHASE VS MITIGATION TRAFFIC LEVELS OF SERVICE

		1	NO BUILD	CONDITIO	<u>N</u>	<u>C</u>	ONSTRUC	TION PHAS	<u>SE</u>	MI	<u> </u>	CONDIT	<u>10N</u>	MITIGATION MEASURE
				Control				Control				Control		
INTERSECTION & API	PROACH	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	
(E43) LEXINGTON AVENUE	at EAST 57th STREET													
Lexington Avenue	SB	LTR	0.89	20.7	С	LTR	0.97	26.4	С					- No mitigation required.
East 57th Street	EB	TR	0.95	37.6	D	TR	0.95	37.6	D					• .
	WB	LT	0.71	21.6	С	LT	0.71	21.6	С					
1	Overall Intersection	-	0.92	24.9	С	•	0.96	28.0	c					
E44) LEXINGTON AVENUE	at EAST 59th STREET													
Lexington Avenue	SB	LT	1.09	76.3	E	LT	1.16	108.2	F	LT	1.11	82,7	F	- Shift 2 sec, of green time from the EB
East 59th Street	EB	TR	0.75	22.6	С	TR	0.75	22,6	С	TR	0.79	25.1	С	to the SB approach.
	Overall Intersection		0.92	61.7	E		0.96	86.1	F	-	0.96	67,9	E	

Notes

^{(1):} Control delay is measured in seconds per vehicle.

^{(2):} Level of service (LOS) for signalized intersections is based upon average control delay per vehicle (sec/veh) for each lane group as listed in the 2000 Highway Capacity Manual -- TRB.

^{(3):} Level of service (LOS) for unsignalized intersections is based upon control delay per vehicle (sec/veh) for each minor-approach as listed in the 2000 Highway Capacity Manual -- TRB.

^{(4):} Overall intersection V/C ratio is the critical lane groups' V/C ratio, not the weighted average of all the movements.

^{(5): &}quot;MVT" references the specific intersection approach lane(s). TR is a combined through-right turn lane(s). TL is a combined through-left turn lane(s), R or L refers to exclusive right- or left- turn movement lane(s), and LTR is a mixed lane(s) that allows for all movement types.

TABLE D.3-15

55TH STREET STATION AREA

COMPARISON OF PM PEAK HOUR NO BUILD VS CONSTRUCTION PHASE VS MITIGATION TRAFFIC LEVELS OF SERVICE

			NO BUILD	CONDITIO	<u>N</u>	<u>C</u>	ONSTRUC	TION PHAS	E	MIT	GATED	CONDIT	ION	MITIGATION MEASURE
				Control				Control				Control		
INTERSECTION & APPROACH	ł	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	
(E31) SUTTON PLACE at EAST 57th	STREET													
Sutton Place	NB	LTR	0.51	13.0	В	LTR	0,51	13.1	В					- No mitigation required.
	SB	LTR	0.70	16.4	В	LTR	0.73	17.3	B					110 miligation required.
E. 57th Street	EB	DfL	0.44	35.3	Ď	DfL	0,44	35.3	D					
		TR	0.16	29.8	Ċ	TR	0.16	29.8	č					
	WB	LTR	0.01	27.4	Ċ	LTR	0.01	27.4	Ċ					
C	Overall Intersection	-	0.61	16.6	В	-	0.63	17.1	В					
(E32) FIRST AVENUE at EAST 57th	STREET													
First Avenue	NB	L	1.09	95.7	F	L	1.09	96.2	F					- No mitigation required.
	.10	TR	1.20	133,4	F	TR	1.20	133.4	F					- 1.0 minganon required,
East 57th Street	EB	DfL	0.61	32.6	C	DfL	0.61	32.6	C					
	LD	T	0.25	20.7	c	T	0.01	20.7	C					
	wв	TR	0.23	26,6	c	TR	0.23	26.6	c					
	*** D	11/	0.07	20,0	C	IK	0.07	20.0	C					
O	Overall Intersection	•	0.94	104.3	F	-	0.94	104.4	F					
E33) FIRST AVENUE at EAST 59th	STREET								Α					
First Avenue	NB	L	1,07	73.7	Е	L	1.07	73.7	E					- No mitigation required.
		LTR	0,85	17.6	В	LTR	0.85	17.6	В					
East 59th Street	EB	LT	0.35	17.9	В	LT	0.35	17.9	В					
Zant Pytti Qti bot	WB	TR	0.47	18.5	В	TR	0.47	18.5	В					
			0.47	10.5		110	0.47	10.5	b					
O	Overall Intersection	-	0.79	. 26.3	С	-	0.79	26.3	С					
E34) SECOND AVENUE at EAST 536	rd STREET													
Second Avenue	SB	TR	0.81	11.2	В	TR	1.06	51.0	D					 No mitigation required,
East 53rd Street	WB	LT	0.90	36.8	D	LT	0.99	49.4	D					
O	Overall Intersection	•	0.85	16.9	В	-	1.06	50.6	Ð					
E35) SECOND AVENUE at EAST 54	th STREET													
Second Avenue	SB	LT	0.89	13,1	В	LT	1.15	89.6	F	LT	1.03	36.6	D	- Shift 6 sec. of green time from the EB to
East 54th Street	EB	TR	0.57	24.5	С	TR	0.57	24.5	С	TR	0,70	31,5	C	SB approach.
. 0	Overall Intersection	-	0.77	14.7	В	-	0.92	79.1	E		0.92	35.8	D	
E36) SECOND AVENUE at EAST 55	th STREET													
Second Avenue	SB	TR	0.85	11.9	В	TR	1.11	74.0	Е	TR	1.05	46,0	D	. Shift 3 sec. of green time from the WB
East 55th Street	WB	LT	0.86	37.7	D	LT	0.86	37.7	D	LT	0.95	51.9	D	to the SB approach.
				460					_			44.5		•
C	Overall Intersection	•	0.85	15.3	В	-	1.01	68.5	E	-	1.01	46.9	D	

TABLE D.3-15 CONTINUED 55TH STREET STATION AREA COMPARISON OF PM PEAK HOUR NO BUILD VS CONSTRUCTION PHASE VS MITIGATION TRAFFIC LEVELS OF SERVICE

				Control				Control				Control		
INTERSECTION & APP	ROACH	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	
E37) SECOND AVENUE at EA	AST 56th STREET													
Second Avenue	SB	LT	0.79	10.9	В	LT	1.01	35.1	D					- No mitigation required.
East 56th Street	EB	TR		73.6	E	TR		73.6	E					- 140 minigation required.
East Join Street	D.D	IK	1.04	13.0	E	IK	1.04	73.0	E					
	Overall Intersection	-	0.89	20.7	C	-	1.02	42.2	D					
38) SECOND AVENUE at EA	AST 57th STREET													Option 1:
Second Avenue	SB	LTR	0.95	27,4	С	L	0.08	13.4	В	LTR	80.1	64.9	E	- Shift 4 sec. of green time from the WB
Second Avenue	35		0.55	27,4		TR	1.16	99.4	F	LT	01.0	11.5	B	exclusive phase to the SB approach.
F4 674 - F4	F.D.								-					exclusive phase to the 3B approach.
East 57th Street	EB	TR	1.08	89.8	F	TR	1.08	90.8	F	TR	1.08	90.8	F	
	WB	LT	0.21	14.4	В	LT	0.21	14.4	В	LT	0.24	17.0	В	
	Overall Intersection	-	0.94	44.5	D	-	1.06	89.4	F	•	1.07	69.2	Ē	
1	4-										0.02	24.4		
	SB									LTR	0.93	26.6	С	Option 2;
	_											•	-	- See AM mitigation.
	EB									TR	80.1	90.8	F	
	WB									LT	0.21	14.4	В	
	Overall Intersection									•	0.94	46.5	D	
220) PECOND AVENUE P	er son errer													
39) SECOND AVENUE at EA Second Avenue	SB SERVER	L	1.09	111.8	F	L	1.05	97.0	F					
Second Avenue	35	LT	0,89	22,4	Ċ	LT	0.71		В					Nt- militaritarian anni la d
	-							18,0						 No mitigation required,
East 58th Street	ЕВ	TR	1.08	102.9	F	TR	1.08	102.9	F					
	Overall Intersection	-	1.08	50.6	D	•	1.06	49.3	D					
40) SECOND AVENUE at EA	AST 59th STREET													
Second Avenue	SB	L	1.09	99,0	F	L	1.09	99,0	F					
Second Affende	3D	T	1.12	99.4	F	T	0.96	32.7	Ċ					- No mitigation required.
F 504- S	ED.				F				F					- No mitigation required.
East 59th Street	ЕВ	TR	1.08	103.0	r	TR	1.08	103,0	r					
	Overall Intersection		1.10	100.2	F	-	1.08	66.7	E					
(41) THIRD AVENUE at EAS	T 57th STREET													
Third Avenue	NB	LTR	1.08	74.7	E	LT	1.08	75.5	E					
· · · · · · · · · · · · · · · · · · ·		R	0,59	22.8	Č	R	0.59	22.8	č					- No mitigation required.
East 57th Street	EB	LT	1.07	73.3	E	LT	1.07	73.3	E					, o ymoganon rodaneo.
East 3/th Street	WB	TR		75.5 26.1	Č	TR		73.3 26.1	Ē C					
	₩В	IK	0.48	26.1	C	IK	0.48	∠6.1	C					
	Overall Intersection	-	1.08	62.9	E	•	1.08	63.3	E					
42) THIRD AVENUE at EAS	T 59th STREET													
Third Avenue	NB	T	0.84	23.0	С	Т	0.84	23.0	С					
1		R	0.70	32.5	č	R	0.72	32.9	Ċ					- No mitigation required.
East 59th Street	EB	LT	1.07	80.4	F	LT	1.07	80,4	F					
East 57th Officer	LD			00.1	•			••••	•					

TABLE D.3-15 CONTINUED 55TH STREET STATION AREA

COMPARISON OF PM PEAK HOUR NO BUILD VS CONSTRUCTION PHASE VS MITIGATION TRAFFIC LEVELS OF SERVICE

	<u>N</u>	O BUILD	CONDITION	<u>N</u>	ÇŒ	NSTRUCT	ION PHASI	<u>C</u>	MITIGATED CONDITION Control	MITIGATION MEASURES
INTERSECTION & APPROACH	Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Delay	LOS	Mvt. V/C Delay LOS	
(E43) LEXINGTON AVENUE at EAST 57th STREET Lexington Avenue SB East 57th Street EB WB	LTR TŔ LT	0.59 1.04 0.51	12.8 59.2 19.9	B E B	LTR TR LT	0.65 1.04 0.51	13.4 59.2 19.9	B E B		- No mitigation required.
Overall Intersection	-	0.80	29.8	С	-	0.83	29.4	С		
(E44) LEXINGTON AVENUE at EAST 59th STREET Lexington Avenue SB East 59th Street EB Overall Intersection	LT TR	0.80 0.94 0.87	15.8 36.0 22. 6	B D C	LT TR	0.85 0.94 0.89	17.0 36.0 23.1	B D C		- No mitigation required.

Notes

- (1): Control delay is measured in seconds per vehicle. (2): Level of service (LOS) for signalized intersections is based upon average control delay per vehicle (see/veh) for each lane group as listed in the 2000 Highway
- (3): Level of service (LOS) for unsignalized intersections is based upon control delay per vehicle (see/veh) for each minor-approach as listed in the 2000 Highway Capacity Manual -- TRB.
- (4): Overall intersection V/C ratio is the critical lane groups V/C ratio, not the weighted average of all the movements.
- (5): "MVT" references the specific intersection approach lane(s). TR is a combined through-right turn lane(s). TL is a combined through-left turn lane(s), R or L refers to exclusive right- or left- turn movement lane(s), and LTR is a mixed lane(s) that allows for all movement types.

TABLE D.3-16 34TH STREET STATION AREA 2002 EXISTING TRAFFIC LEVELS OF SERVICE

	•		AM PE	AK HOUR Control			PM PE	AK HOUR Control	
	INTERSECTION & APPROACH	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS
	MIERSECTION & ATTROACE	MIVE	V/C	Delay	LOS	WIVE	47C	Delay	
	SIGNALIZED INTERSECTIONS		•						
(E1)	FIRST AVENUE at EAST 30th STREET							-	
` '	First Avenue NB	TR	0.86	15.7	В	TR	0.74	17.6	В
	East 30th Street EB	LT	0.57	25.3	С	LT	0.68	27.2	С
	Overall Intersection	-	0.74	18.1	В	-	0.72	20.6	c
(E2)	FIRST AVENUE at EAST 34th STREET								
` '	First Avenue NB	LTR	0.81	22.0	С	LTR	0.82	18.4	В
	East 34th Street EB	LT	0.98	41.6	D	LT	1.00	48.4	D
	WB	TR	0.50	25.0	С	TR	0.67	27.7	С
	Overall Intersection	-	0.89	27.5	C	-	0.91	26.6	С
(E3)	FIRST AVENUE at EAST 37th STREET								
-	First Avenue NB	LT	0.60	8.7	Α	LT	0.54	8.1	Α
	East 37th Street WB	TR	0.15	19.3	В	TR	0.30	20.8	C
	Overall Intersection	-	0.42	9.3	A	-	0.44	9.3	A
(E4)	TUNNEL APPROACH STREET at EAST 35th ST	REET							
(2.,	Tunnel Approach Street NB	LT	0.15	10.2	В	LT	0.92	60.7	Е
•	East 35th Street WB	TR	0.54	22.8	C	TR	0.93	57.3	E
	Overall Intersection	-	0.31	18.0	В	-	0.93	59.0	E
(E5)	SECOND AVENUE at EAST 30th STREET								
• •	Second Avenue SB	LT	0.81	11.1	В	LT	0.52	8.0	Α
	East 30th Street EB	TR	0.47	22.8	С	TR	0.51	23.4	C
	Overall Intersection	-	0.68	12.6	В	-	0.52	11.0	В
(E6)	SECOND AVENUE at EAST 31st STREET								
. ,	Second Avenue SB	TR	0.89	14.7	В	TR	0.58	8.5	Α
	Overall Intersection	-	0.89	14.7	В	-	0.58	8.5	A
(E7)	SECOND AVENUE at EAST 32nd STREET								
•	Second Avenue SB	T	0.80	11.7	В	T	0.49	7.8	Α
	East 32nd Street EB	R	0.36	22.5	С	R	0.48	24.7	С
	Overall Intersection	-	0.62	12.1	В	-	0.49	9.1	A
(E8)	SECOND AVENUE at EAST 33rd STREET								
•	Second Avenue SB	T	0.85	11.8	В	T	0.57	8.4	Α
		R	0.31	7.5	Α	R	0.23	6.9	Α
	East 33rd Street WB	LT	0.19	19.6	В	LT	0.17	19.4	В
	Overall Intersection	-	0.59	12.2	В	-	0.41	9.4	A
(E9)	SECOND AVENUE at EAST 34th STREET								
	Second Avenue SB	LTR	1.02	52.4	D	LTR	0.69	18.3	В
	East 34th Street EB	TR	0.88	37.0	D	TR	0.95	45.9	D
	WB	LT	0.33	16.6	В	LT	0.33	16.7	В

TABLE D.3-16 CONTINUED 34TH STREET STATION AREA 2002 EXISTING TRAFFIC LEVELS OF SERVICE

				AM PEA	AK HOUR			PM PEA	K HOUR	
					Control				Control	
	INTERSECTION & APPROACH		Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS
(E10)	SECOND AVENUE at EAST 35th STREET									
` ,	Second Avenue	SB	TR	0.94	19.0	В	TR	0.52	10.6	В
			R	0.73	20.1	С	R	0.33	10.5	В
	East 35th Street	EB	R	0.91	47.4	D	R	0.56	22.1	С
		WB	LT	0.44	28.6	С	LT	0.22	17.5	В
	Overall Inters	section	-	0.93	23.2	c	-	0.54	13.3	В
(E11)	SECOND AVENUE at East 36th STREET									
(~,,	Second Avenue	SB	LT	1.05	56.6	E	L	0.91	37.1	D
		-					T	0.50	10.6	В
	East 36th Street	EB	TR	0.97	57.1	Е	TR	0.98	43.0	D
		WB	L	1.02	70.6	E	-	-	-	-
	Overall Inters	section	-	1.02	59.5	E	-	0.68	27.9	C
(E12)	SECOND AVENUE at EAST 37th STREET									
,	Second Avenue	SB	TR	0.83	20.1	С	TR	0.65	9.1	Α
	East 37th Street	WB	LT	0.63	25.8	С	LT	0.29	20.8	C
	Overall Inter-	section	-	0.74	21.0	c	-	0.51	10.0	В
(E13)	THIRD AVENUE at EAST 31st STREET									
	Third Avenue	NB	LT	0.51	8.0	A	LT	0.58	8.5	Α
	East 31st Street	WB	TR	0.82	35.7	Ø	TR	0.55	25.5	С
	Overall Inter-	section	-	0.63	13.1	В	-	0.57	10.4	В
(E14)	THIRD AVENUE at EAST 36th STREET									
	Third Avenue	NB	TR	0.49	10.4	В	TR	0.62	11.6	В
			R	0.81	24.4	c	R	1.02	72.1	E
	East 36th Street	ЕВ	LT	0.60	26.3	С	LT	0.93	40.3	D
	Overali Inter	section	-	0.73	15.7	В	-	0.98	26.6	c
(E15)	LEXINGTON AVENUE at EAST 34th STRI	EET								
	Lexington Avenue	SB	LTR	0.56	14.9	В	LTR	0.51	14.3	В
	East 34th Street	EB	TR	0.63	23.0	С	TR	0.84	29.5	С
		WB	LT	0.93	39.5	D	LT	0.82	29.9	С
	Overall Inter	section	-	0.72	23.2	C	-	0.65	22.5	c

^{(1):} Control delay is measured in seconds per vehicle.

^{(2):} Level of service (LOS) for signalized intersections is based upon average control delay per vehicle (sec/veh) for each lane group as listed in the 2000 Highway Capacity Manual — TRB.

^{(3):} Level of service (LOS) for unsignalized intersections is based upon control delay per vehicle (sec/veh) for each minor-approach as listed in the 2000 Highway Capacity Manual -- TRB.

^{(4):} Overall intersection V/C ratio is the critical lane groups' V/C ratio, not the weighted average of all the movements.

^{(5): &}quot;MVT" references the specific intersection approach lane(s). TR is a combined through-right turn lane(s), TL is a combined through-left turn lane(s), R or L refers to exclusive right- or left-turn movement lane(s), and LTR is a mixed lane(s) that allows for all movement types.

TABLE D.3-17

34TH STREET STATION AREA

COMPARISON OF AM PEAK HOUR NO BUILD VS CONSTRUCTION PHASE VS MITIGATION TRAFFIC LEVELS OF SERVICE

		NO BUILI	CONDITIO	NC.	9	CONSTRUC	TION PHA	<u>s</u> e	<u>M</u>	ITIGATED	CONDITION	<u>D</u> N	MITIGATION MEASURES
			Control				Control				Control		
INTERSECTION & APPROACH	Mvt.	V/C	Delay	LOS	Myt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	
SIGNALIZED INTERSECTIONS													
(E1) FIRST AVENUE at EAST 30th STREET													
First Avenue NE	TR	0.92	18.4	В	TR	0.93	18.6	В					- Mitigation not required.
East 30th Street EB	LT	0.60	25.8	С	LT	0,63	26.3	. C					
Overall Intersecti	on -	0.80	20.3	С		0.81	20.6	С					
E2) FIRST AVENUE at EAST 34th STREET													
First Avenue NE	LTR	0.88	24.0	С	LTR	0.90	24.7	С					- Mitigation not required.
East 34th Street EB	LT	1.27	152,6	F	LT	1.27	152.6	F					
East 34th Street Wi		0.83	32.4	Ċ	TR	0.83	32.4	Ċ					
Overall Intersecti	on -	1.10	57.1	E		1.11	57.3	E					
E3) FIRST AVENUE at EAST 37th STREET													
· ,	LT	0.74	10,1	В	LT	0.74	10.1	В					- Mitigation not required,
					TR		19.4	В					
East 37th Street Wi	TR	0.16	19.4	В	IK	0.16	19,4	D					
Overall Intersecti	on -	0.51	10,6	В	-	0.51	10.6	В					
E4) TUNNEL APPROACH STREET at EAST 35th													
Tunnel Approach Street NI		0.15	10.3	В	LT	0.15	10,3	В					- Miligation not required.
East 35th Street Wi	TR	0.62	24.2	С	TR	0.68	25.6	С					
Overall Intersecti	on -	0.35	19.2	В	-	0.37	20.2	С					
(E5) SECOND AVENUE at EAST 30th STREET													
Second Avenue SE	LT	0.86	12.2	В	LT	0.76	10.3	В					 Mitigation not required.
East 30th Street EE	TR	0.49	23.2	С	TR	0.49	23.2	С					
						0.45							
Overall Intersecti	on -	0.72	13.5	В	•	0.65	12.0	В					
(E6) SECOND AVENUE at EAST 31st STREET Second Avenue SE	TR	0.95	18.6	В	TR	1,61	297.5	F	TR	1.06	49.9	D	- Provide four 11 ft. Second Avenue SB travel lanes.
Second Avenue SE	11				110			-	•••				- Modify signal timing (shift 7 seconds of green time from
Overall Intersecti	on -	0.95	18.6	В	•	1.61	297.5	F	•	1.06	49.9	D	pedestrian phase to SB phase).
(E7) SECOND AVENUE at EAST 32nd STREET								_	_		40.0		Device County O. County Assessed County Co.
Second Avenue SE		0.85	12.9	В	T	1.44	221.2	F	T	1.02	40.0	D	- Provide four II ft. Second Avenue SB travel lanes.
East 32nd Street EF	R	0.38	22.8	С	R	0.38	22.8	С	R	0.42	25.8	С	 Modify signal timing (shift 3 seconds of green time from EB phase to SB phase).
Overall Intersect	on -	0.66	13.3	В	-	1.02	212.5	F	-	18.0	39.4	D	
(E8) SECOND AVENUE at EAST 33rd STREET													
Second Avenue SI	т	0.90	13.3	В	TR	1.37	186.1	F	TR	1.03	38.1	D	 Provide four II ft. Second Avenue SB travel lanes.
	R	0.32	7.6	Α	-	_		-	-		-	-	
East 33rd Street W		0.20	19.7	В	LT	0.20	19.7	В	LT	0.20	19.7	В	
Overall Intersect	on -	0.63	13.5	В		0.91	172.5	F	-	0.70	36.6	D	
Total unersect				=									

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TABLE D.3-17 CONTINUED 34TH STREET STATION AREA

COMPARISON OF AM PEAK HOUR NO BUILD VS CONSTRUCTION PHASE VS MITIGATION TRAFFIC LEVELS OF SERVICE

			NO BUILD	CONDITIO	ĪN	2	CONSTRUC	TION PHA	<u>S</u> E	<u>M</u>	ITIGATEI	CONDITIO	<u>NO</u>	MITIGATION MEASURES
INTERSECTION & A	PRPOACU	84	V/C	Control	LOS	34		Control	1.00			Control		
ATTERSECTION & A	FFROMUN	Mvt.	V/C	Delny	LUS	Mvt.	V/C_	Delay	LOS	Mvt.	V/C	Delay	LOS	
(E9) SECOND AVENUE at	EAST 34th STREET													
Second Avenue	SB	LTR	1.09	83.5	F	LTR	1.91	463.8	F	LTR	1.43	181.9	F	- Provide four 11 ft, Second Avenue SB travel lancs.
East 34th Street	EB	TR	0,98	48.7	D	TR	0.99	51.8	D	TR	0.99	51.8	D	[PARTIALLY MITIGATED]
	WB	LT	0.35	16.9	В	LT	0.35	16.9	В	LT	0.35	16.9	В	
	Overall Intersection		0.92	70.7	£	•	1.37	333.8	F	•	1.11	138.5	F	
	00	1 mn							_				_	SCENARIO WITH MORE AGGRESSIVE DIVERSION PLAN
	SB EB	LTR TR				LTR	1.58	316.7	F	LTR	1.08	83.7	F	 Needs aggressive diversion plan so that 32% of traffic from Second Aven
	WB					TR	0.99	51.8	D	TR	0.99	51.8	D	will be diverted onto Lexington and Park Avenues and the F.D.R. Drive.
	aw	LT				LT	0.35	16.9	В	LT	0,35	16.9	В	- Provide four II ft. Second Avenue SB travel lanes.
	Overall Intersection	•				-	1.19	220.1	F	-	0.92	68.7	E	
EIO) SECOND AVENUE at	EAST 35th STREET													
Second Avenue	SB	TR	1.01	36.3	D	TR	1.59	288.9	F	TR	1.09	64.1	E	Provide four 11 ft. Second Avenue SB travel lanes.
		R	0.77	21.8	С	-	-	-	•	•	•	-	-	(PARTIALLY MITIGATED)
East 35th Street	EB	R	0.97	56,9	E	R	0.97	56.9	E	R	0.97	56,9	E	
	WB	LT	0.49	29.4	С	LT	0.49	29.4	С	LT	0.49	29.4	С	
	Overall Intersection	-	1.00	37.4	D	•	1.38	235.4	F	•	1.05	60,0	E	
Second Avenue	SB	TR				TR	1,29	153.6	F	TR	0.88	16.1	В	SCENARIO WITH MORE AGGRESSIVE DIVERSION PLAN
	EB	R				R	0.97	56.9	E	R	0.97	56.9	E	Needs aggressive diversion plan so that 32% of traffic from Second Aven
	WB	LT				LT	0.49	29.4	č	LT	0.49	29.4	Č	will be diverted onto Lexington and Park Avenues and the F.D.R. Drive.
ſ														Provide four 11 ft. Second Avenue SB travel lanes.
	Overall Intersection	•				-	1.18	125.6	F	•	0.91	23.8	С	
E11) SECOND AVENUE at	East 36th STREET													
Second Avenue	SB	LT	1.15	0,101	F	L	1.03	67.2	ε	L	1.03	67.2	E	- Restripe the 36th Street WB (tunnel exit) approach from two
		-	-	-	-	T	1.53	270.4	F	т	1.53	270.4	F	11 ft, lanes to two 12 ft, lanes.
East 36th Street	EB	TR	1.03	73.0	E	TR	1.03	73.0	Е	TR	1.03	73,0	E	
	WB	L	1.09	91.5	F	L	1,14	111.3	F	L	1.10	96.6	F	
	Overall Intersection	-	1.10	95.0	F	-	1.27	181.0	F	•	1.26	177.7	F	•
	SB	LT				L	1.03	67.2	E		1,03	67.2	Е	SCENARIO WITH MORE AGGRESSIVE DIVERSION PLAN
	-~					T	1.08	72,8	Ē		1.08	72.8	E	(SEE LOCATION E-9)
	ЕB	TR				TR	1.03	73.0	Ē		1.03	73.0	Ē	- Restripe the 36th Street WB (tunnel exit) approach from two
	WB	L				L	1.14	111.3	F		1.10	96.6	F	11 ft. lanes to two 12 ft. lanes.
	Overall Intersection	-				-	1.09	82.1	F		1.08	78.3	E	
E12) SECOND AVENUE at Second Avenue	EAST 37th STREET SB	TR	0.91	22.7	С	TR	0.72	17.9	В					Altituding an armind
East 37th Street	WB	LT	0.68	27.1	C	LT	0.72	27.1	C					- Mitigation not required.
East 5 / in Street		LI				LI								
	Overall Intersection	•	0.81	23.4	С	-	0.70	19.7	В					
E13) THIRD AVENUE at E														
Third Avenue	NB	LT	0.54	8.2	A	LT	0.54	8.2	Α					- Mitigation not required.
	NB WB	LT TR	0.54 0.86	8.2 38.8	A D	LT TR	0.54	40.7	A D					- Mitigation not required.

A 1 C 2 5 5

TABLE D.3-17 CONTINUED 34TH STREET STATION AREA

COMPARISON OF AM PEAK HOUR NO BUILD VS CONSTRUCTION PHASE VS MITIGATION TRAFFIC LEVELS OF SERVICE

		1	NO BUILD	CONDITIO	N	2	ONSTRUC	TION PHA	<u>S</u> E	M	ITIÇATEI	CONDITI	<u>ON</u>	MITIGATION MEASURES
				Control				Control				Control		
INTERSECTION & APPROA	ACH	Myt.	V/C	Delay	LOS	Mvt.	V/C_	Delay	LOS	Mvt.	V/C_	Delay	LOS	
(E14) THIRD AVENUE at EAST 3	36th STREET													
Third Avenue	NB	TR	0.52	10.6	В	TR	0.52	10.6	В					 Mitigation not required.
		R	0.87	29.0	С	R	0.87	29.0	C					
East 36th Street	EB	LT	0.63	26.9	С	LT	0.63	26,9	C					
	Overall Intersection	-	0.77	16.4	В	-	0.77	16.4	В					
EIS) LEXINGTON AVENUE at E	EAST 34th STREET													
Lexington Avenue	SB	LTR	0.58	15.3	В	LTR	0.64	16.1	В					- Mitigation not required.
East 34th Street	EB	TR	0.71	24.8	С	TR	0.72	25,1	С					
	WB	LT	1.08	80.2	F	LT	1.10	86.9	F					
	Overall Intersection	-	0.80	34.7	С	•	0.85	36.0	D					
	SB	LTR				LTR	0.74	17.7	В.					SCENARIO WITH MORE AGGRESSIVE DIVERSION PLAN
	EB	TR				TR	0.72	25. l	С					(SEE LOCATION E-9)
	WB	LT				LT	1.10	86.9	F					- Mitigation not required.
	Overall Intersection						0,90	35.4	D					

Notes

- (I): Control delay is measured in seconds per vehicle.
- (2): Level of service (LOS) for signalized intersections is based upon average control delay per vehicle (see/veh) for each lane group as listed in the 2000 Highway Cupacity Manaul -- TRB.
- (3): Level of service (LOS) for unsignalized intersections is based upon control delay per vehicle (sec/veh) for each minor-approach as fisted in the 2000 Highway Capacity Manual -- TRB.
- (4): Overall intersection V/C ratio is the critical lane groups' V/C ratio, not the weighted average of all the movements.
- (5): "MVT" references the specific intersection approach lane(s). TR is a combined through-right turn lane(s), TL is a combined through-left turn lane(s), R or L refers to exclusive right- or left-turn movement lane(s), and LTR is a mixed lane(s) that allows for all movement types.

Eng-Wong, Taub and Associates

TABLE D.3-18

34TH STREET STATION AREA

COMPARISON OF PM PEAK HOUR NO BUILD vs CONSTRUCTION PHASE vs MITIGATION TRAFFIC LEVELS OF SERVICE

			NO BUILD	CONDITIO	N	9	CONSTRUC	TION PHAS	<u>E</u>	<u>M</u>	IITIGATEI	CONDITIO	<u> N</u>	MITIGATION MEASURES
				Control				Control				Control		
INTERSECTION & APPROACH		Mvt.	V/C	Delay	LOS	Myt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	
SIGNALIZED INTERSECTIONS														
E1) FIRST AVENUE at EAST 30th ST	FREET										,			
First Avenue	NB	TR	0.79	18.7	В	TR	0.79	18.8	В					- Mitigation not required.
East 30th Street	EB	LT	0.72	28,0	С	LT	0.74	28,6	С					
Ove	erall Intersection		0.76	21.6	C	-	0.77 .	21.8	C					
E2) FIRST AVENUE at EAST 34th ST	TREET													
First Avenue	NB	LTR	0.89	20.1	С	LTR	0.90	20.7	С					- Mitigation not required.
East 34th Street	EB	LT	1.15	100.4	F	LT	1.15	100.4	F					
	WB	TR	0.88	34.7	С	TR	0.88	34.7	С					
Ove	erall Intersection	-	1.03	40.2	D		1.04	40.5	D					
E3) FIRST AVENUE at EAST 37th ST	TREET													
First Avenue	NB	LT	0,59	8.5	Α	LT	0.60	8.6	Α					- Miligation not required.
East 37th Street	WB	TR	0.31	20.9	c	TR	0.31	20.9	C					•
Ove	erall Intersection	•	0.48	9.6	A	•	0.49	9.6	A					
E4) TUNNEL APPROACH STREET at					-		0.07	(0.4	r.					- Mitigation not required.
Tunnel Approach Street	NB	LT	0.97	68.6	Е	LT	0.97	68,6	E F					- Mittgation not required.
East 35th Street	WB	TR	1.36	211.1	F	TŘ	1.36	211.1	r					
Ove	erall Intersection	•	1.23	150.8	F	-	1.23	150.8	F					
E5) SECOND AVENUE at EAST 30th														Mark and a construction of
Second Avenue	SB	LT	0.56	8.3	A	LT	0.49	7.8	A					- Mitigation not required.
East 30th Street	EB	TR	0.53	23.8	С	TR	0.53	23.8	С					
Ove	erall Intersection	-	0.55	11.2	В	•	0.50	11.1	В					
E6) SECOND AVENUE at EAST 31st														
Second Avenue	SB	TR	0.62	8.8	A	TR	1,05	48.5	D					- Mitigation not required.
Ove	erall Intersection	-	0.62	8.8	A	•	1.05	48.5	D					
E7) SECOND AVENUE at EAST 32nd														
Second Avenue	SB	T	0.53	8.0	Α	T	0.90	14.4	В					 Mitigation not required.
East 32nd Street	EB	R	0.51	25.3	С	R	0.51	25.3	С					
Δ	erall Intersection		0.52	9.4	A		0.75	15.3	В					
(-	0.02	7.7					-					, ·
E8) SECOND AVENUE at EAST 33rd									_	*				
Second Avenue	SB	T	0.61	8.7	Α	TR	0,92	15.6	В					- Mitigation not required.
		R	0.25	7.0	A		•		•					
East 33rd Street	WB	LT	0.18	19.5	В	LT	0.18	19.5	В					
Ove	erall Intersection	-	0.44	9.7	Α	-	0,63	16.0	В					

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TABLE D.3-18 CONTINUED 34TH STREET STATION AREA

COMPARISON OF PM PEAK HOUR NO BUILD VS CONSTRUCTION PHASE VS MITIGATION TRAFFIC LEVELS OF SERVICE

Control Cont			į	NO BUILD	CONDITIO	<u> </u>	9	CONSTRUC	TION PHA	<u>SE</u>	<u>M</u>	IITIGATEI	CONDITIO	<u> N</u>	MITIGATION MEASURES
SECOND AVENUE at EAST 34th STREET Second Avenue at EAST 34th STREET Second Avenue Seco					Control				Control				Control		
Second Avenue SB LTR 0.75 19.4 B LTR 1.29 157.3 F LTR 0.57 70.7 E Pervise four II il. Second Avenue SB or rel lose East Jack Sives East T 1.05 64.8 E T 1.05 10.5 70.7 E Pervise four II il. Second Avenue SB or rel lose East Jack Sives East Jac	INTERSECTION & APPROACH		Myt.	V/C	Delay	LOS	Mvt.	V/Ç	Delay	LOS	Mvt.	V/C	Delay	LOS	
Second Avenue SB LTR 0.75 19.4 B LTR 1.29 157.7 F LTR 0.97 30.2 C Provide fowr II fi. Second Avenue SB or rel laser	(E9) SECOND AVENUE at EAST 34th	STREET													
East 14th Storest EB	. ,		LTR	0.75	19.4	В	I.TR	1.29	1573	F	I.TR	0.97	30.2	C	Provide Cour LLO Second Avenue SR travel lanes
Carrier Carr															- 170 ride total 11 ft. becold Aveilage 3D davet lailes
Company Company Intersection Company	Sect 34th Street														•
SECOND AVENUE at EAST 36th STREET Second Avenue Second A		***	<i>L</i> 1	0.55	10.9	ь	LI	0.33	10.9	ь	Li	0.55	10.9	D	
Second Avenue		erall Intersection	•	0.76	31.1	С	-	1.05	115.5	F	•	0.88	38.9	D	
East 35th Street EB R 0.93 10.7 B R 0.64 23.7 C WB LT 0.25 17.7 B LT 0.25 17.7 B Coverall Intersection - 0.58 13.7 B LT 0.25 17.7 B ESCOND AVENUE at East 36th STREET Second Avenue EB R 0.99 19.8 B TR 0.97 19.8 B TR 0.66 18.8 B TR 0.97 A 1.7 C East 36th Street SB TR 0.99 19.8 B TR 0.99 19.8 B TR 0.99 19.8 B TR 0.66 18.8 B TR 0.99 A 1.7 C East 36th Street SB TR 0.99 19.8 B TR 0.99 19.8 B TR 0.99 A 1.7 C Overall Intersection - 0.72 19.8 B TR 0.99 19.8 B TR 0.99 A 1.7 C East 36th Street SB TR 0.99 19.8 B TR 0.99 19.8 B TR 0.99 A 1.7 C East 36th Street SB TR 0.99 19.8 B TR 0.99 19.8 B TR 0.99 A 1.7 C Overall Intersection - 0.72 19.8 B TR 0.59 21.1 C Overall Intersection - 0.72 19.8 B TR 0.59 21.1 C Overall Intersection - 0.72 19.8 B TR 0.59 21.1 C Overall Intersection - 0.72 19.8 TR 0.59 19.8 B TR 0.59 21.1 C Overall Intersection - 0.60 10.7 B TR 0.58 26.3 C THIRD AVENUE at EAST 31st STREET Third Avenue A 1.7 C 1.	E10) SECOND AVENUE at EAST 35th	STREET													
Earl 35th Street	Second Avenue	SB	TR	0.56	11.0	В	TR	0.84	15.4	В					- Mitigation not required
East 34th Street EB															ganon norroquireo.
No.	Fast 35th Street	EP													
Company Comp	Limit John Grider														
SECOND AVENUE at East 36th STREET Second Avenue SB L 0.97 44.1 D L 0.97 44.7 D D L 0.97 44.7 D D L 0.97 44.7 D D D D D D D D D		WD	LI	0.23	17.7	ø	LI	U.23	17.7	В					
Second Avenue	Ove	erall Intersection	•	0.58	13.7	В	-	0.75	17.3	В					
East 36th Street	EII) SECOND AVENUE at East 36th S	TREET													
East 36th Street	Second Avenue	SB	L	0.97	44,1	D	L	0.97	44.7	D					- Milikation not required.
East 36th Street BB TR 1.03 57.8 E TR 1.03 57.8 E TR 1.03 57.8 E			T												9
Note	East 36th Street	EB													
EL1) SECOND AVENUE at EAST 37th STREET Second Avenue East 37th Street NB LT Overall Intersection NB LT Office Avenue East 31st STREET Third Avenue East 31st Street NB TR Office Avenue NB LT Overall Intersection NB LT Office Avenue East 31st STREET Third Avenue NB LT Overall Intersection NB LT Office Avenue NB TR Overall Intersection NB TR Office Avenue NB TR Overall Intersection NB TR Office Avenue NB TR Office Avenue NB TR Office Avenue NB TR Office Avenue NB TR Overall Intersection NB TR Office Avenue TR Office Avenue NB TR Office Avenue TR Office Avenue TR Office Avenue						-	•••		31.0						
SECOND AVENUE at EAST 37th STREET Second Avenue SB TR 0.99 19.8 B TR 0.61 8.7 A	∩س	erall Intersection		0.73	34.4	C	_	0.76	36.7	n					
Second Avenue			-	0.75	37.7		-	0.70	30.7	b					
East 37th Street WB LT 0.32 21.1 C LT 0.32 21.1 C LT 0.32 21.1 C C LT 0.32 21.1 C C Overall Intersection - 0.72 19.8 B - 0.49 9.7 A E13) THIRD AVENUE at EAST 31st STREET Third Avenue NB LT 0.61 8.8 A LT 0.61 8.8 A LT 0.61 8.8 A LT 0.61 8.8 B E14) THIRD AVENUE at EAST 36th STREET Third Avenue NB TR 0.66 12.0 B TR 0.66 12.0 B TR 0.66 12.0 B A TR 0.66 12.0 B															- Mitigation not required.
Company Intersection Company				0.99	19.8		TR	0.61	8.7	Α					
E13) THIRD AVENUE at EAST 31st STREET Third Avenue	East 37th Street	WB	LT	0,32	- 21.1	С	LT	0.32	21.1	С					
Third Avenue NB LT 0.61 8.8 A LT 0.61 8.8 A LT 0.61 8.8 A C C TR 0.58 26.3 C Overall Intersection - 0.60 10.7 B - 0.60 10.8 B E14) THIRD AVENUE at EAST 36th STREET Third Avenue NB TR 0.66 12.0 B TR 0	Ove	erall Intersection		0.72	19.8	В	-	0.49	9.7	A					
Third Avenue	P13) THIRD AVENUE of PAST 21-4 ST	rorer													
East 31st Street WB TR 0.58 26.2 C TR 0.58 26.3 C Overall Intersection - 0.60 10.7 B - 0.60 10.8 B E14) THIRD AVENUE at EAST 36th STREET Third Avenue NB TR 0.66 12.0 B TR 0.66 12.0 B R 1.28 178.3 F R 1.28 178.3 F East 36th Street EB LT 0.98 47.7 D LT 0.98 47.7 D Overall Intersection - 1.16 41.7 D - 1.16 41.7 D E15) LEXINGTON AVENUE at EAST 34th STREET Lexington Avenue SB LTR 0.53 14.6 B LTR 0.58 15.2 B East 34th Street EB TR 0.92 35.1 D TR 0.92 35.3 D WB LT 0.97 45.5 D LT 0.97 46.3 D			1.	0.61		٨	17	0.61	0.0						Mistorian and accordand
Company Comp															- Mitigation not required.
THIRD AVENUE at EAST 36th STREET Third Avenue NB TR 0.66 12.0 B TR 1.28 178.3 F R 1.28 178.3 F R 1.28 178.3 F East 36th Street EB LT 0.98 47.7 D LT 0.98 47.7 D Overall Intersection - 1.16 41.7 D LEXINGTON AVENUE at EAST 34th STREET Lexington Avenue EB TR 0.53 14.6 B LTR 0.53 14.6 B LTR 0.58 15.2 B - Mitigation not required. MB TR 0.58 15.2 B - Mitigation not required.	ERST 31St Street	wB	IK	U.38	20.2	C	IK	U.38	20.3	Ü					
Third Avenue NB TR 0.66 12.0 B TR 0.66 12.0 B - Mitigation not required. R 1.28 178.3 F R 1.28 178.3 F East 36th Street EB LT 0.98 47.7 D LT 0.98 47.7 D Overall Intersection - 1.16 41.7 D LEXINGTON AVENUE at EAST 34th STREET Lexington Avenue SB LTR 0.53 14.6 B LTR 0.58 15.2 B East 34th Street EB TR 0.92 35.1 D TR 0.92 35.3 D WB LT 0.97 45.5 D LT 0.97 46.3 D	Ove	rall Intersection	-	0.60	10.7	В	-	0.60	10.8	В					
Third Avenue NB TR 0.66 12.0 B TR 0.66 12.0 B - Mitigation not required. R 1.28 178.3 F R 1.28 178.3 F East 36th Street EB LT 0.98 47.7 D LT 0.98 47.7 D Overall Intersection - 1.16 41.7 D LEXINGTON AVENUE at EAST 34th STREET Lexington Avenue SB LTR 0.53 14.6 B LTR 0.58 15.2 B East 34th Street EB TR 0.92 35.1 D TR 0.92 35.3 D WB LT 0.97 45.5 D LT 0.97 46.3 D	E14) THIRD AVENUE at EAST 36th ST	FREET													
East 36th Street EB LT 0.98 47.7 D LT 0.98 47.7 D Overall Intersection - 1.16 41.7 D - 1.16 41.7 D LEXINCTON AVENUE at EAST 34th STREET Lexington Avenue SB LTR 0.53 14.6 B LTR 0.58 15.2 B East 34th Street EB TR 0.92 35.1 D TR 0.92 35.3 D WB LT 0.97 45.5 D LT 0.97 46.3 D	•		TR	0.66	12.0	В	TR	0,66	12.0	В					- Mitigation not required,
East 36th Street EB LT 0.98 47.7 D LT 0.98 47.7 D Overall Intersection - 1.16 41.7 D - 1.16 41.7 D E15) LEXINGTON AVENUE at EAST 34th STREET Lexington Avenue SB LTR 0.53 14.6 B LTR 0.58 15.2 B East 34th Street EB TR 0.92 35.1 D TR 0.92 35.3 D WB LT 0.97 45.5 D LT 0.97 46.3 D															
EIS) LEXINGTON AVENUE nt EAST 34th STREET Lexington Avenue SB LTR 0.53 14.6 B LTR 0.58 15.2 B - Mitigation not required. East 34th Street EB TR 0.92 35.1 D TR 0.92 35.3 D WB LT 0.97 45.5 D LT 0.97 46.3 D	East 36th Street	EB													
EIS) LEXINGTON AVENUE nt EAST 34th STREET Lexington Avenue SB LTR 0.53 14.6 B LTR 0.58 15.2 B - Mitigation not required. East 34th Street EB TR 0.92 35.1 D TR 0.92 35.3 D WB LT 0.97 45.5 D LT 0.97 46.3 D	0	wall Internaction		1 16	417	n	_	1 14	41.7	D					
EIS) LEXINGTON AVENUE at EAST 34th STREET Lexington Avenue SB LTR 0.53 14.6 B LTR 0.58 15.2 B - Mitigation not required. East 34th Street EB TR 0.92 35.1 D TR 0.92 35.3 D WB LT 0.97 45.5 D LT 0.97 46.3 D		TAIL INTERSECTION	•	1.10	41./	U	•	1.10	41.7	ט					
Lexington Avenue SB LTR 0.53 14.6 B LTR 0.58 15.2 B - Mitigation not required. East 34th Street EB TR 0.92 35.1 D TR 0.92 35.3 D WB LT 0.97 45.5 D LT 0.97 46.3 D		34th STREET													
East 34th Street EB TR 0.92 35.1 D TR 0.92 35.3 D			LTR	0.53	14.6	В	LTR	0.58	15.2	В					- Mitivation not required
WB LT 0.97 45.5 D LT 0.97 46.3 D															- •
	Last Stat Street														t i
Overall Intersection - 0.72 28.1 C - 0.75 28.2 C		WB	U.	0.71	U.U.	U	Li	0.71	-U.J	J					
	Ove	rall Intersection	-	0.72	28.1	С	-	0.75	28,2	С					

Notes

(1): Control delay is measured in seconds per vehicle.

(E13)

Cupacity Manual -- TRB.

^{(1):} Level of service (LOS) for unsignalized intersections is based upon control delay per vehicle (sec/veh) for each minor-approach as listed in the 2000 Highway Cupacity Manual -- TRB.

^{(4):} Overall intersection V/C ratio is the critical lane groups' V/C ratio, not the weighted average of all the movements.

^{(5): &}quot;MVT" references the specific intersection approach lane(s). TR is a combined through-right turn lane(s), TL is a combined through-left turn lane(s), R or L

TABLE D.3-19 HOUSTON STREET STATION AREA 2002 EXISTING TRAFFIC LEVELS OF SERVICE

				AM PE	AK HOUR			PM PE	AK HOUR	
	INTERSECTION & APPRO	OACH	Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS
į	SIGNALIZED INTERSECT	IONS								
•	FORSYTH STREET at EA			0.13	22.7	C		0.10	22.6	
	Forsyth Street	NB	L	0.12	22.7 22.9	C C	L R	0.19	23.5 22.3	C C
	T . T . O	PD.	R	0.14	23.2	c	K T	- 1.02	66.8	E
	East Houston Street	EB WB	T T	0.76 0.62	20.3	c	T	0.59	21.6	C
		Overall Intersection	_	0.51	21.9	C	- -	0.66	48.9	D
						Č		0.00	40.7	D
	SECOND AVENUE / CHRY				Γ 45.3	D	ī	0.82	43.3	D
	Chrystie Street	NB	L	0.87		D	L	0.82	43.3 42.4	D D
		on	LR	0.88	48.1	D	LR			F
	Second Avenue	SB	L	0.64	34.7	С	L	1.01	80.8	_
			LT	0.64	32.1	C	LT	0.91	42.9	D
			R	0.87	41.9	D	R	0.87	42.9	D
	East Houston Street	EB	TR	0.77	27.5	С	TR	1.02	80.6	F
		WB	L	0.43	28.6	C .	L	0.38	29.5	C
			T	0.71	26.1	С	Т	0.66	25.3	С
		Overall Intersection	-	0.83	32.9	C	-	0.95	51.8	Đ
LE3)	SECOND AVENUE at 1st	STREET								
	Second Avenue	SB	TR	0.81	25.6	С	TR	0.85	26.7	C
	1st Street	WB	LT	0.21	10.5	В	LT	0.22	10.6	В
		Overall Intersection	_	0.45	23.6	c	-	0.48	24,6	C
		· company								
	SECOND AVENUE at 2nd		TT	0.76	21.0	C	īТ	0.78	22.2	_
	Second Avenue	SB	LT	0.75	21.8	С	LT			C
	2nd Street	ÉB	TR	0.10	11.0	В	TR	0.21	12.0	В
		Overall Intersection	-	0.39	21.2	С	-	0.46	21.1	C
LE5)	SECOND AVENUE at 3rd	STREET								
	Second Avenue	SB	TR	0.82	21.8	C	TR	0.85	22.5	C
	3rd Street	WB	LT	0.31	14.1	В	ŁT	0.33	14.3	В
		Overall Intersection	-	0.55	20.6	· C	•	0.57	21.3	C
r res	SECOND AVENUE at 4th	CTDFFT								
	Second Avenue	SB	LT	0.75	18.3	В	LT	0.78	18.8	В
	4th Street	EB	TR	0.73	14.9	В	TR	0.40	16.3	В
	4III Succi		A IX				110			
		Overall Intersection	-	0.51	17.9	В .	-	0.58	18.4	В
-	EAST HOUSTON STREET									
	Bowery	NB	L	0.36	21.4	С	L	0.50	28.6	C
			TR	0.59	24.9	С	TR	0.58	24.6	C
		SB	L	0.26	18.5	В	L	0.49	24.1	C
			TR	0.66	26.4	С	TR	0.83	31.7	C
	East Houston Street	EB	LTR	0.90	31.3	С	LTR	1.03	89.0	F
		WB	L	0.76	50.3	D	L	0.76	50.5	Đ
			TR	0.99	41.6	D	TR	0.96	35.6	Γ
		Overall Intersection	-	0.76	33.6	C	-	0.90	46.4	D
ገሮያነ	DELANCEY STREET at A	ALLEN STORET								
•	Allen Street	NB	LT	0.70	34.9	С	LT	0.65	33.3	C
	Tilled Bucci	ND				В	R	0.54	23.1	Ċ
		~~	R	0.24	10.1					
		SB	L	0.53	34.7	C	L	0.56	34.9	C
	:		TR	0.33	28.6	C	TR	0.34	28.7	C
	Delancey Street	EB	LTR	0.72	25.2	£	LTR	0.75	13.7	E
		WB	LTR	0.99	18.4	В	LTR	1.00	24.7	C
		Overall Intersection	-	0.91	23.8	C	-	0.91	22.2	C

TABLE D.3-19 CONTINUED HOUSTON STREET STATION AREA 2002 EXISTING TRAFFIC LEVELS OF SERVICE

			AM PE	AK HOUR			PM PE	K HOUR	
				Control				Control	
INTERSECT	ION & APPROACH	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	Los
LE9) DELANCEY	STREET at CHRYSTIE STREET	Γ							
Chrystie Stree		NB L	0.93	55.2	E	L	0.89	48.4	D
		TR	0.45	28.2	С	TR	0.41	27.6	С
		SB LTR	0.91	40.1	D	LTR	0.99	56.0	E
Delancey Stre	et	EB LTR	0.46	15.6	В	LTR	0.51	16.2	В
•	•	WB LTR	0.46	15.6	В	LTR	0.48	15.8	В
	Overall Interse	ction -	0.71	27.4	C	-	0.71	29.4	C
LE10) EAST HOUS	STON STREET at ALLEN STRE	ET/FIRST A	VENUE						
Allen Street		NB LTR	0.80	30.3	С	LTR	0.76	28.8	С
East Houston	Street	EB L	0.79	38.0	D	L	1.03	80.5	F
		TR	0.97	45.6	D	TR	1.01	65.1	Е
	,	WB L	0.33	24.4	С	L	0.41	29.0	С
		TR	0.63	25.7	С	TR	0.59	24.8	С
	Overall Interse	ction -	0.88	34.5	С	_	1.00	44.8	D

- (1): Control delay is measured in seconds per vehicle.
- (2): Level of service (LOS) for signalized intersections is based upon average control delay per vehicle (sec/veh) for each lane group as listed in the 2000 Highway Capacity Manual -- TRB.
- (3): Level of service (LOS) for unsignalized intersections is based upon control delay per vehicle (sec/veh) for each minor-approach as listed in the 2000 Highway Capacity Manual TRB.
- (4): Overall intersection V/C ratio is the critical lane groups' V/C ratio, not the weighted average of all the movements.
- (5): "MVT" references the specific intersection approach lane(s). TR is a combined through-right turn lane(s). TL is a combined through-left turn lane(s), R or L refers to exclusive right- or left- turn movement lane(s), and LTR is a mixed lane(s) that allows for all movement types.

TABLE D.3-20
HOUSTON STREET STATION AREA
COMPARISON OF AM PEAK HOUR NO BUILD V3 CONSTRUCTION PHASE V5 MITIGATION TRAFFIC LEVELS OF SERVICE

			NO BUILD	CONDITIO)N		CONSTRUC	TION PHA	SE	V	<u> 11TIGATEI</u>	CONDITION	<u>ON</u>	MITIGATION MEASURES
				Control		-		Control				Control		
INTERSECTION & APPROACH		Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	
SIGNALIZED INTERSECTIONS														
LEI) FORSYTH STREET at EAST HO					_			00.0	•					- Mitigation not required.
Forsyth Street	NB	L	0.13	22.8	С	L	0.13	22.8	C C					- Miligation not required.
		R	0.15	23.0	C	R	0.15	23.0	C					
East Houston Street	EB	Ţ	0.80	24.2	С	T	0.78	23.8	C					
	WB	Τ	0.65	20.8	С	Т	0,65	20.8	C					
Ove	erall Intersection		0,53	22.7	С		0.52	22.5	С					
LE2) SECOND AVENUE / CHRYSTIE S	STREET at EAS	T HOUST	TON STRE	ET [Option	# 1									
Chrystie Street	NB	L	0,92	50.5	D	L	0,95	57.2	E	L	0.95	57.2	E	 Prohibit parking along the south side of Houston Street
,		LR	0.93	54.6	D	LR	0.90	49.9	D	LR	0.90	49.9	D	through daylighting and provide an additional EB right-turn
Second Avenue	SB	L	0,67	35.7	D	L	0.89	49.3	D	L	0.61	24.5	С	lane,
222110 11.01100		LT	0,67	32.7	С	LT	0.93	53.6	D	T	0.65	25.2	С	 Modify signal timing (shift 10 seconds green time from EB/
		R	0.91	46.1	D	R	1.44	242.6	F	R	0.99	54.4	D	phase to SB phase).
East Houston Street	EB	TR	0.81	28.7	c	TR	0.82	28.8	С	T	0.83	35,6	D	
East Houston Street	22	-	•		-			-	_	R	0.60	35.6	D	
	WB	L	0.50	32.4	С	L	0.50	32.4	С	L	0.52	40.7	D	
	""	Ť	0.75	26.9	č	Ť	0.75	26.9	Ċ	T	0.98	49.1	D	
Ov	erall Intersection		0.88	35.1	Ď	-	1.04	59.4	E	_	0.97	42.5	D	
011	ermi intersection	-	0.00	55.1										
SECOND AVENUE / CHRYSTIE :									_				-	D. II. Construction of Construction of Assessing CD (additional
Chrystie Street	NB	L	0.92	50.5	D	L	0.95	57.2	Е	L	0.95	57.2	E	- Provide four travel lanes for Second Avenue SB (additional
		LR	0.93	54.6	Ð	LR	0.90	49.9	D	R	0.90	49,9	D	SB right-turn lane).
Second Avenue	SB	L	0.67	35.7	D	L	0.89	49,3	D'	L	0.89	49.3	D	
•		LT	0.67	32.7	С	LT	0.93	53.6	D	LT	0.93	53.6	D	
		R	0.91	46.1	D	R	1.44	242.6	F	R	0.82	39.0	D .	
East Houston Street	EB	TR	0.81	28.7	С	TR	0.82	28.8	С	TR	0.78	27.7	C	
	WB	L	0.50	32.4	С	L	0.50	32.4	С	L	0.50	32.4	c	
		T	0.75	26.9	С	T	0.75	26.9	С	T	0.75	26.9	С	
Ov	erali Intersection		0.88	35.1	D	-	1.04	59.4	E	-	0.88	37.0	D	
LE3) SECOND AVENUE at 1st STREE	ort.													
Second Avenue	SB	TR	0,85	27.0	С	TR	0.75	24.3	С					 Mitigation not required,
Ist Street	WB	LT	0.23	10.6	В	LT	0.23	10,6	В					
1st Street	₩.Б	ъ,	0.23	10.0		٠.	0.25							
Ov	erall Intersection	•	0.48	24.8	С	•	0.44	22.3	С					
(LE4) SECOND AVENUE at 2nd STRE	ET													
Second Avenue	SB	LT	0.79	22.7	С	LT	0.71	21.0	С					- Mitigation not required.
2nd Street	EB	TR	0.10	11.0	В	TR	0.10	11.0	В					<i>6</i> •
	erall Intersection		0.41	22.0	С		0.37	20.4	С					
		-	3.74		•									
LE5) SECOND AVENUE at 3rd STRE		ma	0.86	22.0	С	TR	0,76	20.3	С					- Mitigation not required.
Second Avenue	SB	TR	0,86	23.2			0.76	14,3	В					0
3rd Street	WB	LT	0,33	14.3	В	LT	0.33	14,3	B					
0	erall Intersection		0,57	21.9	С		0.53	19.3	В					
OV	eran intersection	•	0.57	-1.7					_					4

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TABLE D.3-20 CONTINUED HOUSTON STREET STATION AREA

COMPARISON OF AM PEAK HOUR NO BUILD VS CONSTRUCTION PHASE VS MITIGATION TRAFFIC LEVELS OF SERVICE

			NO BL	ILD CO	ONDITIO	Ņ	Ω	ONSTRUC	TION PHA	SE	M	ITIGATEI	CONDITIO	<u>N</u>	MITIGATION MEASURES
				(Control				Control				Control		
	INTERSECTION & APPROACH	Mv	ı. V/	<u> </u>	Delay	LOS	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	ros	
(LEA)	SECOND AVENUE at 4th STREET														
(LEU)	Second Avenue SB	LT	0.7	8	19.1	В	LT	0.73	17.9	В					- Mitigation not required.
	4th Street EB				15.1	В	TR	0.29	15.1	В					· · · · · · · · · · · · · · · · · · ·
	411 Street 22	• • • • • • • • • • • • • • • • • • • •													
	Overall Intersecti	on -	0.5	3	18.6	В	-	0.50	17.5	В					
(LE7)	EAST HOUSTON STREET at BOWERY	_		_		-		0.43	26.7	С					- Mitigation not required.
	Bowery NE				22.7	C	L	0.43 0.62	26.7 25,5	C					- midgaton not required.
	20	TR			25,5	C	TR	0,62	25,5 19,4	В					
	SB				19.4	B C	L TR	0.29	31.9	Č					
		TR			27.2	D	LTR	0.96	38.6	D					
	East Houston Street EB				35.8	E	LIK	0.80	55,4	E					
	WI				55.4	E	TR	1.01	45.4	D					
		TR	1.0	14	55.5	E	1 K	1.01	43.4	D					
	Overall Intersect	on -	0.8	1	40.6	D	•	0.86	37.9	D					
(LE8)	DELANCEY STREET at ALLEN STREET														
` '	Allen Street NE	L1	0.7	4	35.9	D	LT	0.74	35.9	D					 Mitigation not required.
		R	0.2	.5	10.1	В	R	0.25	10.1	В					
	SE	L	0.5	5	35.3	D	Dfl	0.55	35.3	D					
		TF	0.3	14	28.8	C	TR	0.34	28.8	С					
	Delancey Street EF			15	25.9	c	LTR	0.77	26.3	С		•			
	wi	3 LT	R 1.0)4	41.1	D	LTR	1.06	48.3	D					
	Overall Intersect	ion -	0.9	06	33.5	С	•	0.97	36.6	D				-	
(LE9)	DELANCEY STREET at CHRYSTIE STREET														
(22)	Chrystie Street NE	L	0.9	8	64.2	E	L	0.98	64.8	E					- Mitigation not required.
	Silly silve silves	TF			28.5	С	TR	0.47	28.5	С					
	SE	LT	R 0.9	96	48.0	D	LTR	0.90	39.4	D					
	Delancey-Street EB			18	15.9	В	LTR	0.48	15.9	В					
	wi		R 0.4	19	15.9	В	LTR	0.49	15.9	В					
	Overall Intersect	ion -	0.7	74	30.4	С	-	0.74	28.5	С					
/ E10) EAST HOUSTON STREET at ALLEN STREE	T / FIDS"	r AVENIII	r											
(TE10	Allen Street NI	LT	R 0.1	34	31.8	С	LTR	0.86	32.9	С					- Mitigation not required.
	East Houston Street El				43.3	D	L	0.86	45.8	Ď					
	East trousion offeet	T			57.7	E	TR	1,00	52.1	D					
	, w				26.0	č	L	0.35	25,4	C					
	1	TI			26.3	c	TR	0.67	26.3	č					
		• • •			3	-									
	Overall Intersect	ion -	0.9	95	39.5	D	-	0.93	38.0	D					
															, •

Notes

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^{(1):} Control delay is measured in seconds per vehicle.

^{(2):} Level of service (LOS) for signalized intersections is based upon average control delay per vehicle (see/veh) for each lane group as listed in the 2000 Highway Capacity Manual -- TRB.

^{(3):} Level of service (LOS) for unsignalized intersections is based upon control delay per vehicle (sec/veh) for each uninor-approach as listed in the 2000 Highway Capacity Manual -- TRB.

^{(4):} Overall intersection V/C ratio is the critical lane groups' V/C ratio, not the weighted average of all the movements.

^{(5): &}quot;MVT" references the specific intersection approach lane(s). TR is a combined through-right turn lane(s). TL is a combined through-left turn lane(s), R or L refers to exclusive right- or left- turn movement lane(s), and LTR is a mixed lane(s) that allows for all movement types.

TABLE D.3-21
HOUSTON STREET STATION AREA
COMPARISON OF PM PEAK HOUR NO BUILD vs CONSTRUCTION PHASE vs MITIGATION TRAFFIC LEVELS OF SERVICE

			NO_BUILD	CONDITION	<u>NC</u>		CONSTRUC	CTION PHA	SE	<u>M</u>	<u>IITIGATEI</u>	CONDITIO	<u>NC</u>	MITIGATION MEASURES	
				Control				Control				Control			
INTERSECTION & APPROACH		Mvt.	V/C	Delay	LOS	Mvt	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS		
SIGNALIZED INTERSECTIONS															
LEI) FORSYTH STREET at EAST HO	NUCTON CTREET	r													
Forsyth Street	NB	L	0.20	23.6	С	L	0.20	23.6	С					- Mitigation not required.	
roisyth Street	140	R	0.10	22.4	Č	R	0,10	22.4	Č					,	
East Houston Street	ĒВ	T	1.07	85.2	F	T	1.05	77.3	Ē						
East Houston Street	WB	T	0.62	22.1	Ċ	Ť	0.62	22.1	Č						
_															
Ovi	erall Intersection	-	0.69	60.2	E	-	0.68	55.2	E						
LE2) SECOND AVENUE / CHRYSTIE					‡1] D		0.01	53.2	D	L	0.91	53.2	D	- Prohibit parking along the south side of Houston Street	
Chrystie Street	NB	L	0.85	46.0	_	L	0.91		D D	LR	0.80	43.4	D	through daylighting and provide an additional EB right-tu	
		LR	0,82	45.3	D	LR	0.80	43.4	F				E	lane.	
Second Avenue	SB	L	1.01	82.6	F	L	1.34	204.5	-	ŗ	1.00	67.1			
•		LT	0.98	53.0	D	LT	1.40	221.9	F	T	1.11	95.5	F	- Modify signal timing (shift 6 seconds green time from EB	
		R	0.89	44.8	Ð	R	1.34	200,8	F	R	1.00	64.5	E	phase to SB phase).	
East Houston Street	EB	TR	1.08	99.3	F	TR	1.09	106.9	F	Τ	1.04	92.5	F	[PARTIALLY MITIGATED]	
		-		-	-	-	-	-	-	R	0.73	41.6	D		
	WB	L	0.39	30,1	С	L	0.39	30.1	С	L	0.39	34.0	С		
		T	0.69	25.9	С	τ	0.69	25.9	С	Т	0.77	31.5	С		
Ove	erall Intersection	-	0.98	59.6	E	-	1.13	109.6	F	-	1.02	64.2	E		
COCOND AVENUE / CHRYSTIE	CTDEET FACT	ר שמוופי	TON STOP	ET (Option	# 21										
SECOND AVENUE/CHRYSTIE		L ROUS	0.85	46,0	# 2] D	L	0.91	53.2	D	L	0.91	53.2	D	- Provide four travel lanes for Second Avenue SB (addition	
Chrystie Street	NB	LR	0.82	45.3	D	LR	0.80	43,4	D	LR	0.80	43.4	Ď	SB right-turn lane).	
					F		1.34	204.5	F	L	1.00	67.1	E	[PARTIALLY MITIGATED]	
Second Avenue	SB	L	1.01	82.6	-	L			F	r	1.11	95.5	F	[FARTIALLE MITTOATED]	
		LT	0.98	53.0	D	LT	1.40	221.9	•	-			C		
		R	0,89	44.8	D	Ř	1.34	200.8	F	R	0.57	26.5	F		
	EB	TR	1.08	99.3	F	TR	1.09	106.9	F	T	1.04	92.5	_		
East Houston Street		-	-	-	-	-	-	•	•	R	0.73	41.6	D		
	WB	L	0.39	30.1	С	L	0.39	30.1	С	L	0.39	34.0	С		
		T	0.69	25.9	С	T	0.69	25.9	С	T	0.77	31.5	С		
Ov	erall Intersection	-	0.98	59.6	E	-	1.13	109.6	F	-	1.02	61.1	E		
TO SECOND AND A LA STREET	nw.						٠								
(LE3) SECOND AVENUE at 1st STREE		TP	0.00	28.6	С	TR	0.77	24.6	С					- Mitigation not required.	
Second Avenue	SB	TR	0.89			LT		10.7	В					mingaron not radanas.	
1st Street	WB	LT	0.24	10.7	В	LI	0.24	10.7	В						
Ov	erall Intersection	-	0.50	26.3	С	-	0.45	22.6	С						
(LE4) SECOND AVENUE at 2nd STRE	EET													. •	
Second Avenue	SB	LT	0.82	23.2	С	LT	0.72	20.9	С					- Mitigation not required.	
2nd Street	EB	TR	0.22	12,1	В	TR	0,22	12.1	В						
	erall Intersection		0,48	22.0	С	-	0,44	19.9	В						
		-	0,43		·				-						
LES) SECOND AVENUE at 3rd STRE					_	me								Midwellen ook somined	
Second Avenue	SB	TR	0.89	24.2	С	TR	0.79	20.7	С					 Mitigation not required. 	
3rd Street	WB	LT	0.35	14.5	В	LT	0.35	14.5	В						
_			2.66	22.8			0.55	19.7	В						
Ov	erall Intersection	-	0.60	22.8	С	-	0.55	19.7	B						

TABLE D.3-21 CONTINUED HOUSTON STREET STATION AREA

COMPARISON OF PM PEAK HOUR NO BUILD VS CONSTRUCTION PHASE VS MITIGATION TRAFFIC LEVELS OF SERVICE

	1	NO BUILD	CONDITIO	<u>N</u>	!	CONSTRUC	CTION PHA	<u>s</u> e	<u>M</u>	ITIGATE	CONDITIO	<u>DN</u>	MITIGATION MEASURES	
				Control				Control				Control		
INTERSECTION & APPROACH		Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	
LE6) SECOND AVENUE at 4th STREET														
Second Avenue	SB	LT	0.82	19.8	В	LT	0.74	18.1	В					- Mitigation not required,
4th Street	EB	TR	0.42	16.5	В	TR	0.42	16.5	В					initigation not required,
THE SHOOT			0,42	10.5			0.42	10.5	5					
Overall	Intersection	-	0.61	19.2	В	-	0.58	17.8	В					
LE7) EAST HOUSTON STREET at BOWEI	RY													
Bowery	NB	L	0.54	30.9	С	Ĺ	0,60	36.0	D	L	0.64	37.6	D	- Modify signal timing (shift 2 seconds of green time from the
•		TR	0,61	25.1	Ċ	TR	0.61	25.1	С	TR	0.58	23.2	С	exclusive NB/SB left-turn phase to the NB/SB phase).
	SB	L	0.53	25.9	c	L	0.53	25.9	Ċ	L	0.55	25.9	C	, , , , , , , , , , , , , , , , , , , ,
		TR	0.87	34.1	Ċ	TR	1,01	55.4	E	TR	0.95	41.0	D	
East Houston Street	EB	LTR	1.09	109.1	F	LTR	1.10	115.6	F	LTR	1.10	115.6	F	
	WB	L	0.89	74.9	E	L	0.90	77.3	E	L	0.90	77.3	Ē	
		TR	1.01	45.8	D	TR	0.97	37.1	D	TR	0.97	37.1	D	
Overall	Intersection	-	0.93	56.2	E	-	0.98	58.9	E	-	0.99	55.9	E	
LE8) DELANCEY STREET at ALLEN STR														
Allen Street	NB	LT	0.69	34.2	С	LT	0.69	34.2	С					- Mitigation not required.
		R	0.56	23.7	С	R	0.56	23.7	С					
	SB	L	0.59	35.7	D	Dfl	0.59	35.7	D					
		TR	0.36	28.9	С	TR	0.36	28.9	С					
Delancey Street	EB	LTR	0.79	14.4	В	LTR	0.81	14.7	В					
·	WB	LTR	1.05	44.8	D	LTR	1.06	50.1	D					
Overall	Intersection	-	0.96	29.9	C	-	0.97	31.9	С					
LE9) DELANCEY STREET at CHRYSTIE :	TOFFT													
Chrystie Street	NB	L	0.93	54,5	D	L	0.94	54.9	D					- Mitigation not required.
Citi ystie Street	140	TR	0.43	27.9	C	TR	0.43	27.9	C			V.,		- Miligation not required.
	SB	LTR		73.3	É	LTR			D					
D-I C			1.05		B		0.98	53.1						
Delancey Street	EB WB	LTR LTR	0.54	16.6	В	LTR LTR	0.54	16.6	B					
	WB	LIK	0.50	16.1	В	LIK	0.50	16.1	В					
Overall	Intersection	-	0.75	34.0	C	-	0,72	29.4	С					
EIO) EAST HOUSTON STREET at ALLEN	STREET /	FIRST AV	ENUE											
Allen Street	NB	LTR	0.80	29.8	С	LTR	0.80	30.1	С					- Mitigation not required.
East Houston Street	EB	L	1.07	95.3	F	L	1.08	96,5	F					- ·
		TR	1.06	82.1	F	TR	1.04	74.7	E					
	WB	L	0.43	29.7	Ċ	L	0.43	29.6	ċ					
		TR	0.62	25.3	Ċ	TR	0.62	25.3	Ċ					
	Intersection		1.02	52.4	D		1.04	49.7	D					

⁽I): Control delay is measured in seconds per vehicle.

^{(2):} Level of service (LOS) for signalized intersections is based upon average control delay per vehicle (sec/veh) for each lane group as listed in the 2000 Highway Capacity Manual -- TRB.

^{(1):} Level of service (LOS) for unsignalized intersections is based upon control delay per vehicle (sec/veh) for each minor-approach as listed in the 2000 Highway Capacity Manual -- TRB.

^{(4):} Overall intersection V/C ratio is the critical lane groups' V/C ratio, not the weighted average of all the movements.

^{(5): &}quot;MVT" references the specific intersection approach lane(s). TR is a combined through-right turn lane(s). TL is a combined through-left turn lane(s), R or L refers to exclusive right- or left- turn movement lane(s), and LTR is a mixed lane(s) that allows for all movement types.

TABLE D.3-22 HANOVER SQUARE/WATER STREET STATION AREA 2002 EXISTING TRAFFIC LEVELS OF SERVICE

				AM P	eak Hour		PM Peak Hour					
	INTERSECTION & APPR	ОАСН	Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LO		
	SIGNALIZED INTERSECT											
LM1)	OLD SLIP at SOUTH STI		TD	0.21	0.0		TR	0.46	12.4	В		
	South Street	SB EB	TR R	0.21 0.27	9.9 20.8	A C	R	0.40	25.7	C		
	Old Slip	WB	L L	0.27	20.8	c	L	0.07	18.7	В		
		WB	TR	0.63	27.0	c	TR	0.54	25.1	C		
			IK	0.03	27.0	C	110	0.34	25.1	_		
		Overall Intersection	-	0.38	20.5	С	-	0.50	19.8	В		
LM3)	WALL STREET at SOUT	H STREET										
	South Street	NB	LT	0.35	11.3	В	LT	0.27	10.4	E		
		SB	TR	0.13	9.3	Α	TR	0.48	12.8	£		
	Wall Street	EB	LR	0.43	23.2	С	LR	0.55	25.7	C		
		Overall Intersection	_	0.38	14.9	В	-	0.51	15.7	E		
	MUNTENIALI CTREET -A	WATER STREET										
LIVI4)	WHITEHALL STREET at	WATER STREET NB	LT	0.31	16.2	В	LT	0.21	15.3	ŗ		
	Water Street	SB	T	0.35	16.2	В	T	0.27	15.9	I		
	Whitehall Street	EB	L	0.80	46.7	D	L	0.72	39.9	Į.		
	apenan guect	LB	R	0.06	24.3	C	R	0.12	24.9	í		
		WB	Ĺ	0.29	26.7	Č	L	0.22	25.9			
			TR	0.28	27.0	Ċ	TR	0.28	27.1			
		Overall Intersection		0.41	24.0	С	-	0.34	23.4			
		Overall Intersection	-	0.71	24.0			0.54	25.4			
LM5)	BROAD STREET at WAT								04.3			
	Water Street	NB '	LTR	0.95	42.8	D	LTR	0.72	26.7	•		
		SB	LTR	1.03	73.2	E	LTR	0.74	29.1			
	Broad Street	EB	LTR	0.52	13.9	В	LTR	0.36	11.1 23.5			
		WB	LT R	0.57 0.56	14.0 15.2	B B	LTR	0.81	23.3			
			K	0,50	13.2							
		Overall Intersection	-	0.75	37.1	D	-	0.78	24.0			
LM6)	OLD SLIP at WATER ST											
	Water Street	NB	LTR	0.79	15,2	В	LTR	0.51	9.9			
		SB	LTR	0.69	12.5	В	LTR	0.58	10.8			
	Old Slip	EB	LTR	0.15	18.3	В	LTR	0.22	19.1			
		Overall Intersection	-	0.53	14.1	В	-	0.43	11.2			
LM8)	WALL STREET at WAT	ER STREET										
	Water Street	NB	TR	0.73	18.4	В	TR	0.61	16.1			
		SB	LT	0.93	31.0	С	LT	0.70	18.3			
	Wall Street	EB	LTR	0.59	21.0	С	LTR	0.54	19.7			
		WB	LR	0.45	18.6	В	LR	0.39	17.5			
		Overall Intersection	-	0.76	23.4	С	-	0.62	17.6			
MO	PINE STREET at WATE	R STREET										
	Water Street	NB NB	LT	0.79	12.8	В	LT	0.63	9.9			
		SB	TR	0.58	9.2	A	TR	0.47	8.2			
	v	Overall Intersection		0.48	11.3	В	_	0.39	9.1			
			•	0.40	11.5		_	0.57	,. <u>.</u>			
M10) MAIDEN LANE 21 WAT					_						
	Water Street	NB	LTR	0.89	17.4	В	LTR	0.68	10.7			
		SB	LTR	0.69	11.0	В	LTR	0.56	9.3			
	Maiden Lane	EB	DfL	0.63	31.4	C	LTR	0.38	21.9			
		WB	TR LTR	0.51 0.37	25.5 22.8	c c	- LTR	0.33	22.1			
		Overall Intersection	-	0.79	17.7	В	-	0.56	13.1			
.M13) MAIDEN LANE at PEAR											
	Pearl Street	SB	LTR	0.64	29.1	С	LTR	0.49	25.4			
	Maiden Lane	EB	TR	0.92	48.3	D	TR	0.76	33.9			
						~						
		WB	LT	0.33	22.6	С	LT	0.37	23,1			

- (1): Control delay is measured in seconds per vehicle.
- (2): Level of service (LOS) for signalized intersections is based upon average control delay per vehicle (sec/veh) for each lane group as listed in the 2000 Highway Capacity Manual -- TRB.
- (3): Level of service (LOS) for unsignalized intersections is based upon control delay per vehicle (sec/veh) for each minor-approach as listed in the 2000 Highway Capacity Manual -- TRB.
- (4): Overall intersection V/C ratio is the critical lane groups' V/C ratio, not the weighted average of all the movements.
- (5): "MVT" references the specific intersection approach lane(s). TR is a combined through-right turn lane(s). TL is a combined through-left turn lane(s), R or L refers to exclusive right- or left- turn movement lane(s), and LTR is a mixed lane(s) that allows for all movement types.

TABLE D.3-22 CONTINUED HANOVER SQUARE / WATER STREET STATION AREA 2002 EXISTING TRAFFIC LEVELS OF SERVICE

		AM	PEAK HO	UR	PM PEAK HOUR				
			Control		Control				
INTERSECTION & APPROACH		Mvt.	Delay	LOS	Mvt.	Delay	LOS		
UNSIGNALIZED INTERSECTIONS									
(LM2) SOUTH STREET at GOUVERNEUR LAN	NE								
Gouverneur Lane	EB	LR	10.7	В	LR	12.1	В		
Overal	Il Intersection		10.7	В		12.1	В		
(LM11) WALL STREET at PEARL STREET									
Pearl Street	SB	LT	13.2	В	LT	13.6	В		
Overal	ll Intersection		13.2	В		13.6	В		
(LM12) PINE STREET at PEARL STREET									
Pearl Street	SB	TR	9.1	Α	TR	8.9	Α		
Pine Street	WB	LT	8.5	Α	LT	8.1	Α		
Overal	I Intersection		9.0	A		8.8	A		

^{(1):} Control delay is measured in seconds per vehicle.

^{(2):} Level of service (LOS) for signalized intersections is based upon average control delay per vehicle (sec/veh) for each lane group as listed in the 2000 Highway Capacity Manual -- TRB.

^{(3):} Level of service (LOS) for unsignalized intersections is based upon control delay per vehicle (sec/veh) for each minor-approach as listed in the 2000 Highway Capacity Manual -- TRB.

^{(4):} Overall intersection V/C ratio is the critical lane groups' V/C ratio, not the weighted average of all the movements.

^{(5): &}quot;MVT" references the specific intersection approach lane(s). TR is a combined through-right turn lane(s). TL is a combined through-left turn lane(s), R or L refers to exclusive right- or left- turn movement lane(s), and LTR is a mixed lane(s) that allows for all movement types.

TABLE D.3-23 HANOVER SQUARE/WATER STREET STATION AREA COMPARISON OF 2010 AM PEAK HOUR NO BUILD vs CONSTRUCTION PHASE vs MITIGATED BUILD TRAFFIC LEVELS OF SERVICE

		NC	BUILI	Control	<u>rion</u>	COI	NSTRUC	CTION PE Control	<u>iase</u>	<u>M</u>	IITIGAT	ED COND Control	TTION	MITIGATION MEASURES
INTERSECTION & APPROACH	<u> </u>	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	
SIGNALIZED INTERSECTIONS														
LM1) OLD SLIP at SOUTH STREET														
South Street	SB	TR	0.23	10.1	В	TR	0,36	11.3	В					
Old Slip	EB	R	0.30	21.2	С	R	0.30	21.2	С					
	WB	L	0.32	21.3	С	L	0.32	21.3	C					 Mitigation not required.
		TR	0.67	28.1	С	TR	0.92	44.3	D					
O	verall Intersection	-	0.41	21.2	С	-	0.58	27.8	C					
LM3) WALL STREET at SOUTH STE	REET													
South Street	NB	LT	0.37	11.6	В	LT	0.49	13.2	В					
	SB	TR	0.15	9.4	Α	TŘ	0.24	10,2	В					 Mitigation not required.
Wall Street	EB	LR	0.45	23.7	С	LR	0.45	23.7	С					
O	verall Intersection	-	0,40	15.1	В	-	0.48	15.2	В					
.M4) WHITEHALL STREET at WAT	ER STREET							,						
Water Street	NB	LT	0.33	16.4	В	LT	0,48	18.7	В	LT	0.52	21.9	С	- Shift 3 seconds of green time from NB / SB
	SB	T	0.37	16.8	В	Т	0.64	22.0	С	T	0.70	26.2	С	phase to EB / WB phase.
Whitehall Street	EB	L	0.84	50.4	D	L	1.06	104.5	F	L	0.89	55.8	E	
		R	0.06	24.3	С	R	0.06	24.3	С	R	0,06	22.0	С	
	WB	L	0.31	26.9	С	L	0.31	26.9	С	L	0.25	24.0	С	
		TR	0.29	27.2	C	TR	0.38	29,4	С	TR	0.31	25.6	С	
o	verall Intersection	-	0.62	24.8	C	-	0.51	39.2	D	-	0.60	30.7	C	
.M5) BROAD STREET at WATER ST	FREET													
Water Street	NB	LTR	1.01	57.0	E	LTR	1.42	227.9	F	LTR	1.11	33.3	С	Option 1:
	SB	LTR	1.08	90.7	F	LTR	1.61	324.0	F	LTR	0,95	96.0	F	 Remove Parking from the EB & WB approache
Broad Street	EB	LTR	0.57	15.0	В	LTR	0.59	15.6	В	L	0.62	30.7	С	 Widen the WB lanes from 9 to 11 feet.
										TR	0.30	18.1	В	 Widen the EB approach from one 13-foot lane
	WB	LT	0.60	14.7	В	LT	0.61	14.8	В	LT	0.76	28.0	С	to two 10-foot lanes.
		R	0.65	, 17.7	В.	R	0.85	31.8	-	R	0.61	24.1	С	 Shift 14 seconds of green time from EB / WB phase to NB / SB phase.
0	verall Intersection	-	0.81	45.7	D	-	1.14	146,2	F	-	0.95	44.1	D	prized to No 7 ob prized.
	NB									L	0.15	12,5	В	Option 2;
										TR	1.04	66.0	E	 Provide one 10-foot left turn lane for the NB and
	SB									L	0.80	36.6	D	approaches.
										TR	0.98	53.5	D	- Shift 9 seconds of green time from EB / WB
	EB									LTR	0.76	28.9	С	phase to NB / SB phase.
•	WB									LT	0.72	23.5	С	
										R	0.65	22.7	С	
0	verall Intersection									-	0.90	40.5	D	
.M6) OLD SLIP at WATER STREET														
Water Street	NB	LTR	0.88	19.3	В	LTR	1.15	96.8	F	LTR	1.01	46.2	D	- Shift 6 seconds of green time from EB / WB
	SB	LTR	0.79	15.1	B	LTR	1.11	84.0	F	LTR	0.99	31.7	С	phase to NB / SB phase.
Old Slip	EB	LTR	0.16	18.4	В	LTR	0.16	18.4	В	LTR	0.20	22.8	С	•
. ,	erall Intersection	_	0.58	17.3	В	-	0.74	86.3	F		0.73	38.2	D	
M8) WALL STREET at WATER ST														
Water Street	NB	TR	0.77	19.7	В	TR	1.06	67.7	Е	TR	0.87	18.1	В	- Shift 9 seconds of green time from EB / WB
Water Direct	SB	LT	1.01	52.3	D	LT	1.35	207.0	F	LT	1.00	59.1	E	phase to NB / SB phase.
Wall Street	EB	LTR	0.62	21.8	C	LTR	0,67	24.0	Ċ	LTR	0.92	51.4	D	p
Wall Officer	WB	LR	0.48	19.1	В	LR	0.53	20.7	c	LR	0.73	36.0	D	
				32.0	С	•	1.01	105.7	F	_	0.97	40.7	D	
•	Overall Intersection	-	0.81	32,0	C	•	1,01	105.7	ı,	-	V.7/	40.7	D	
Second Avenue Subway FEIS														Eng-Wong, Taub an

Eng-Wong, Taub and Associated

TABLE D.3-23 CONTINUED

HANOVER SQUARE / WATER STREET STATION AREA

COMPARISON OF 2010 AM PEAK HOUR NO BUILD VS CONSTRUCTION PHASE VS MITIGATED BUILD TRAFFIC LEVELS OF SERVICE

	· · · · · · · · · · · · · · · · · · ·	NO	BUILE	CONDIT	ION	CON	STRUC	TION PI	<u>IASE</u>	M	ITIGAT	ED COND	ITION	MITIGATION MEASURES
				Control			****	Control	. 00	3.44	V/C	Control Delay	LOS	
INTERSECTION & APPROACH		Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	
(LM9) PINE STREET at WATER STRE	ET													
Water Street	NB	LT	0.84	14.4	В	LT	1.25	136.6	F	LT	1.02	42.2	D	 Shift 11 seconds of green time from all red
	SB	TR	0.62	9.7	Α	TR	0.96	28.3	C	TR	0.78	6.5	Α	phase to NB / SB phase.
Ov	erall Intersection	-	0.76	12.4	В	-	0.61	89.9	F	-	0.76	26.8	С	
(LM10) MAIDEN LANE at WATER STR	EET													Option 1:
Water Street	NB	LTR	0.95	23.3	С	LTR	1.26	. 141.9	F	LTR	1.05	51.6	D	 Remove parking from the WB approach
	SB	LTR	0.75	12.3	В	LTR	0.97	31.4	С	LTR	0.80	7.9	Α	to create two 9-foot lanes.
Maiden Lane	EB	DfL	0.67	33.2	С	DfL	0.71	35.3	D	L	0.82	51.7	D	 Restripe EB approach from existing two 9-foot(thru and
		TR	0,54	26.3	С	TR	0.56	26.8	С	TR	0.82	50.2	D	shared right) lanes to one 9-foot exclusive left-turn land
	WB	LTR	0.39	23.2	С	LTR	0.40	23.4	С	LTR	0.49	38.8	D	and one 9-foot shared thru and right lane Provide an EB lead green phase of 9 seconds.
Ov	erall Intersection	-	0.84	20.9	С	-	1.05	78.3	E	-	1,04	36.8	D	 Shift 10 seconds of green time from EB / WB phase to NB / SB phase.
	NB									LTR	0.70	9.5	Α	Option 2:
	SB									LTR	1.01	45.7	D	 Provide two 10-foot lanes for the NB approach and
	EB									DefL	0.73	37.8	D	one 10-foot lane in the SB approach.
1										TR	0.60	29.5	С	 Shift 2 seconds of green time from EB / WB
	WB									LTR	0.42	25.2	С	phase to NB / SB phase.
Ov	erall Intersection									-	0.91	26,5	C	
(LM13) MAIDEN LANE at PEARL STRE	EET													
Pearl Street	SB	LTR	0.68	30.2	С	LTR	0.68	30.2	С					 Mitigation not required.
Maiden Lane	EB	TR	0.98	58.2	Е	TR	0.98	58.2	Ε					
	WB	LT	0.35	22.9	С	LT	0.35	22.9	С					
Ov	erall Intersection	-	0.66	42.8	D	-	0.53	42.8	D					

- (1): Control delay is measured in seconds per vehicle.
- (2): Level of service (LOS) for signalized intersections is based upon average control delay per vehicle (sec/veh) for each lane group as listed in the 2000 Highway Capacity Manual -- TRB.
- (3): Level of service (LOS) for unsignalized intersections is based upon control delay per vehicle (sec/veh) for each minor-approach as listed in the 2000 Highway Capacity Manual -- TRB.
- (4): Overall intersection V/C ratio is the critical lane groups' V/C ratio, not the weighted average of all the movements.
- (5): "MVT" references the specific intersection approach lane(s). TR is a combined through-right turn lane(s). TL is a combined through-left turn lane(s), R or L refers to exclusive right- or left- turn movement lane(s), and LTR is a mixed lane(s) that allows for all movement types.

TABLE D.3-24

HANOVER SQUARE/WATER STREET STATION AREA

COMPARISON OF 2010 PM PEAK HOUR NO BUILD vs CONSTRUCTION PHASE vs MITIGATED BUILD TRAFFIC LEVELS OF SERVICE

	NO	BUILD	CONDI	rion	<u>CO1</u>	STRUC	TION PH	IASE	M	ITIGAT	ED COND	ITION	MITIGATION MEASURES	
			Control			140	Control	LOS	Mvt.	V/C	Control Delay	LOS		
INTERSECTION & APPROACH	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LUS	WIVE.	VIC	Delay	LOS		
SIGNALIZED INTERSECTIONS														
LM1) OLD SLIP at SOUTH STREET														
South Street SB	TR	0.48	12.8	В	TR	0.59	14.4	В						
Old Slip EB	R	0.75	30.9	С	R	0,75	30.9	С					and the second second	
WB	L	80.0	18.7	В	L	0.08	18.7	В					 Mitigation not required. 	
	TR	0,57	25.8	C	TR	0.78	32.9	С						
Overall Intersection	-	0.59	22,3	c	-	0,66	24.6	С						
M3) WALL STREET at SOUTH STREET														
South Street NB	LT	0.28	10.6	. В	LT	0.37	11.5	В						
\$B	TR	0.51	13.1	В	TR	0.57	14.3	В					 Mitigation not required, 	
Wall Street EB	LR	0.58	26.4	С	LR	0.57	26.4	С						
Overall Intersection	-	0.54	16.1	В	-	0.58	16.4	В						
M4) WHITEHALL STREET at WATER STREET														
Water Street NB	LT	0.22	15.4	В	LT	0.33	16.6	В	LT	0.36	19.4	В	 Shift 3 seconds of green time from NB / SB 	
SB	T	0.29	16.0	В	т	0.46	18.6	В	T	0.50	21.8	С	phase to EB / WB phase.	
Whitehall Street EB	L	0.76	42.0	D	L	0.96	. 73.2	E	L	0,80	44.4	ם		
	R	0.12	25.0	С	R	0.12	25,0	С	R	0.10	22,6	С		
WB	L	0.23	26.0	С	L	0.23	26.0	C	L	0.19	23.3	С		
	TR	0.29	27.2	С	TR	0.38	29.7	С	TR	0.31	25.7	С		
Overall Intersection	-	0.62	23.9	С	-	0.51	33.8	С	-	0.70	27.4	С		
.M5) BROAD STREET at WATER STREET													•	
Water Street NB	LTR	0.76	27.8	С	LTR	1.14	105.6	F	LTR	0.93	37.7	D	Option 1:	
SB	LTR	0.79	31.4	С	LTR	1.10	97.2	F	LTR	0.88	35.1	D	 Remove Parking from the EB & WB approaches. 	
Broad Street EB	LTR	0.38	11.4	В	LTR	0.40	11.7	В	L	0.24	13.6	В	 Widen the WB lanes from 9 to 11 feet. 	
									TR	0.24	12.8	В	 Widen the EB approach from one 13-foot lane 	
WB	LTR	0.87	28.3	С	LTR	0.96	42.0	D	LT	0.38	14.4	В	to two 10-foot lanes.	
									R	0.67	23.6	С	 Shift 6 seconds of green time from EB / WB phase to NB / SB phase. 	
Overall Intersection	-	0.84	26.3	С	-	1.02	69.4	E	•	0.79	27.4	С	F	
NB									L	0.16	16.9	В	Option 2:	
IND									TR	0.97	48.2	D	Provide one 10-foot left turn lane for the NB and SB	
SB									L	0.56	29,6	Ċ	approach.	
35									TR	0.71	26.8	Ċ	- Add new parking regulation: No standing from 4 - 6	
EB									LTR	0.42	13.6	В	to utilize the additional lane space similar to the Af	
WB									LTR	0.90	34.2	С	- Shift 3 seconds of green time from EB / WB	
1													phase to NB / SB phase.	
Overall Intersection									-	0.93	33.1	С		
LM6) OLD SLIP at WATER STREET														
.M6) OLD SLIP at WATER STREET Water Street NB	LTR	0.55	10.2	В	LTR	0.75	14.9	В					New Arternation 1	
SB	LTR	0.62	11.4	В	LTR	0.90	23.7	С					- Mitigation not required.	
Water Street NB													- Mitigation not required.	

TABLE D.3-24 CONTINUED

HANOVER SQUARE / WATER STREET STATION AREA

COMPARISON OF 2010 PM PEAK NO BUILD VS CONSTRUCTION PHASE VS MITIGATED BUILD TRAFFIC LEVELS OF SERVICE

	NO	BUIL	CONDI'	<u> </u>	CO	NSTRUC	CTION PI	<u>IASE</u>	M	ITIGAT	ED COND	<u>ITION</u>	MITIGATION MEASURES	
INTERPORCEMENT A LENGTH OF		****	Control				Control			1110	Control	1.00		
INTERSECTION & APPROACH	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS	Mvt.	V/C	Delay	LOS		
(LM8) WALL STREET at WATER STREET														
Water Street NE	3 TR	0.65	16.8	В	TR	0.93	32.1	С	TR	0.90	28.5	С	- Shift 1 second of green time from EB / WB	
SE	3 LT	0.75	19.6	В	LT	10,1	55.5	Ε	LT	0.96	39.1	D	phase to NB / SB phase.	
Wall Street EE	3 LTR	0.57	20.3	C	LTR	16.0	21.6	С	LTR	0.63	22.8	С		
WI	B LR	0.42	17.9	В	LR	0.46	18.9	В	LR	0.48	19.9	В		
Overall Intersecti	on -	0.65	18.5	В	-	0.81	36.2	D	-	0.80	29.9	C		
(LM9) PINE STREET at WATER STREET														
Water Street NE	B LT	0.68	10.5	В	LT	1.00	36.8	D						
SE	TR.	0.50	8.4	Α	TR	0.77	13.9	В					 Mitigation not required. 	
Overall Intersecti	on -	0.76	9,6	A	-	0.61	27.2	С						
LM10) MAIDEN LANE at WATER STREET														
Water Street NE	LTR	0.73	11.6	В	LTR	0.99	34.6	C	LTR	0.99	35.5	D	Option 1:	
SB	LTR	0.60	9.8	Α	LTR	0.82	16.5	В	LTR	0.82	16.0	В	 Remove parking from the WB approach 	
Maiden Lane EB	DfL	0.40	22.1	С	LTR	0.41	22.3	С	L	0.45	24.8	С	to create two 9-foot lanes.	
	-	-	-	-	-	-	-	•	TR	0.47	24,6	С	 Restripe EB approach from existing two 9-foot(thru 	
WE	3 LTR	0.35	22.4	С	LTR	0.36	22.5	С	LTR	0.19	19.8	В	shared right) lanes to one 9-foot exclusive left-turn la and one 9-foot shared thru and right lane.	
Overall Intersecti	on -	0.60	13.7	В	-	0.76	25.7	С	•	0.79	26.1	C		
NE	3								LTR	0.57	9,1	Α	Option 2:	
SB									LTR	0.89	21.2	C	- Provide two 10-foot lanes in the NB approach and	
EB	3								LTR	0.37	21.8	С	one 10-foot lane in the SB approach per AM mitigat	
WE									LTR	0.35	22.5	С	requirement.	
Overall Intersecti	on								-	0.70	16.3	В		
LM13) MAIDEN LANE at PEARL STREET														
Pearl Street SB	LTR	0.52	26.0	С	LTR	0.52	. 26,0	С					- Mitigation not required.	
Maiden Lane EB		0.80	36.5	Ď	TR	0.80	36.5	D					,	
WE		0.40	23.6	c	LT	0.40	23.6	C						
Overall Intersecti	on -	0.66	30.3	С	-	0.53	30.3	C						

- (1): Control delay is measured in seconds per vehicle.
- (2): Level of service (LOS) for signalized intersections is based upon average control delay per vehicle (sec/veh) for each lane group as listed in the 2000 Highway Capacity Manual -- TRB.
- (3): Level of service (LOS) for unsignalized intersections is based upon control delay per vehicle (sec/veh) for each minor-approach as listed in the 2000 Highway Capacity Manual -- TRB.
- (4): Overall intersection V/C ratio is the critical lane groups' V/C ratio, not the weighted average of all the movements.
- (5): "MVT" references the specific intersection approach lane(s). TR is a combined through-right turn lane(s). TL is a combined through-left turn lane(s), R or L refers to exclusive right- or left- turn movement lane(s), and LTR is a mixed lane(s) that allows for all movement types.