

Traffic Analysis HCS Outputs

Build Conditions

CHAPTER 5: WATER MAIN CONNECTIONS

First Avenue Route Base Scenario – Segment 1

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E. 56th ST@1st AVE
 Agency: PHA Area Type: CBD or Similar
 Date: 1/17/2005 Jurisd:
 Period: B-AM SEG 1 Year : 2008 Build SEG 1
 Project ID: Shaft 33B E56th St @ 1st Ave 2008 B - AM Segment 1
 E/W St: East 56th STREET N/S St: 1st AVENUE

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	0	0	0	0	0	4	1	0	0	0
LGConfig	LT						T R					
Volume	246	187					2053 93					
Lane Width	16.0						10.0 12.0					
RTOR Vol							0					

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left		P			NB Left			
Thru		P			Thru	P		
Right					Right	P		
Peds	X				Peds	X		
WB Left					SB Left			
Thru					Thru			
Right					Right			
Peds	X				Peds	X		
NB Right					EB Right			
SB Right					WB Right			
Green	35.0				45.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			
Cycle Length: 90.0 secs								

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
LT	473	1216	0.96	0.39	60.2	E	60.2	E
Westbound								
Northbound								
T	2507	5014	0.86	0.50	19.4	B	19.3	B
R	284	568	0.35	0.50	16.9	B		
Southbound								

Intersection Delay = 26.1 (sec/veh) Intersection LOS = C

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E. 56th Street @ 1st Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 7/22/05 Jurisd:
 Period: BD-MD WMC SEG 1 Year : 2008 WMC Build Segment 1
 Project ID: 0411C 2008 Build WMC MD Segment 1-add 1veh to NB R
 E/W St: East 56th Street N/S St: 1st Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	0	0	0	0	0	3	1	0	0	0
LGConfig	LT						T R					
Volume	97	159					1943	62				
Lane Width	16.0						10.0	10.0				
RTOR Vol							0					

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left		P			NB Left			
Thru		P			Thru	P		
Right					Right	P		
Peds	X				Peds	X		
WB Left					SB Left			
Thru					Thru			
Right					Right			
Peds	X				Peds	X		
NB Right					EB Right			
SB Right					WB Right			
Green	31.0				49.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			
Cycle Length: 90.0 secs								

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay	LOS	Delay LOS
Eastbound							
LT	421	1223	0.64	0.34	32.0	C	32.0 C
Westbound							
Northbound							
T	1990	3655	1.03	0.54	41.8	D	40.9 D
R	301	552	0.22	0.54	12.2	B	
Southbound							

Intersection Delay = 39.9 (sec/veh) Intersection LOS = D

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E. 56th Street@1st Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 7/22/05 Jurisd:
 Period: BD-PM Segment 1 Year : 2008 WMC Build Segment 1
 Project ID: 0411C 2008 Build WMC PM Segment 1
 E/W St: East 56th Street N/S St: 1st Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	0	0	0	0	0	5	1	0	0	0
LGConfig	LT						T R					
Volume	134	151					2596 82					
Lane Width	16.0						10.0 10.0					
RTOR Vol							0					

Duration	0.25	Area Type:	CBD or Similar							
Signal Operations										
Phase Combination	1	2	3	4	5	6	7	8		
EB Left	P				NB Left					
Thru	P				Thru	P				
Right					Right	P				
Peds	X				Peds	X				
WB Left					SB Left					
Thru					Thru					
Right					Right					
Peds	X				Peds	X				
NB Right					EB Right					
SB Right					WB Right					
Green	35.0				45.0					
Yellow	3.0				3.0					
All Red	2.0				2.0					
Cycle Length: 90.0 secs										

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay	LOS	Delay
					LOS		LOS
Eastbound							
LT	473	1216	0.63	0.39	28.7	C	28.7 C
Westbound							
Northbound							
T	3418	6836	0.80	0.50	16.4	B	16.3 B
R	320	640	0.27	0.50	12.0	B	
Southbound							

Intersection Delay = 17.5 (sec/veh) Intersection LOS = B

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E. 57th ST@1st AVE
 Agency: PHA Area Type: CBD or Similar
 Date: 1/22/2005 Jurisd:
 Period: B-AM SEG 1 Year : 2008 Build Segment 1
 Project ID: Shaft 33B E57th St @ 1st Ave 2008 NB - AM Segment 1
 E/W St: East 57th STREET N/S St: 1st AVENUE

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	2	0	0	2	0	0	4	0	0	0	0
LGConfig	DefL	T			TR			LTR				
Volume	183	158			153	71	237	1970	92			
Lane Width	10.0	10.0			10.0			10.0				
RTOR Vol						0			0			

Duration	0.25	Area Type:	CBD or Similar									
Signal Operations												
Phase Combination	1	2	3	4	5	6	7	8				
EB Left		P			NB Left	P						
Thru		P			Thru	P						
Right					Right	P						
Peds	X	X			Peds	X	X					
WB Left					SB Left							
Thru		P			Thru							
Right		P			Right							
Peds	X	X			Peds	X	X					
NB Right					EB Right							
SB Right					WB Right							
Green		32.0	6.0			36.0	6.0					
Yellow		3.0				3.0						
All Red		2.0	0.0			2.0	0.0					
Cycle Length: 90.0 secs												

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach		
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
DefL	214	603	0.90	0.36	67.9	E		
T	427	1201	0.39	0.36	24.3	C	47.8	D
Westbound								
TR	726	2043	0.33	0.36	22.3	C	22.3	C
Northbound								
LTR	1874	4685	1.29	0.40	159.4	F	159.4	F
Southbound								

Intersection Delay = 135.4 (sec/veh) Intersection LOS = F

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E. 57th Street @ 1st Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 7/22/05 Jurisd:
 Period: BD-MD Segment 1 Year : 2008 WMC Build Segment 1
 Project ID: 0411C 2008 Build WMC MD Segment 1
 E/W St: East 57th Street N/S St: 1st Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	2	0	0	2	0	0	3	0	0	0	0
LGConfig	DefL	T			TR			LTR				
Volume	89	136		458	71		276	1728	36			
Lane Width	10.0	10.0		10.0			10.0					
RTOR Vol					0			0				

Duration	0.25	Area Type:	CBD or Similar									
Signal Operations												
Phase Combination	1	2	3	4	5	6	7	8				
EB Left		P			NB Left	P						
Thru		P			Thru	P						
Right					Right	P						
Peds	X	X			Peds	X	X					
WB Left					SB Left							
Thru		P			Thru							
Right		P			Right							
Peds	X	X			Peds	X	X					
NB Right					EB Right							
SB Right					WB Right							
Green	32.0	6.0			36.0	6.0						
Yellow	3.0				3.0							
All Red	2.0	0.0			2.0	0.0						
Cycle Length: 90.0 secs												

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach		
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
DefL	148	415	0.64	0.36	43.1	D		
T	423	1190	0.34	0.36	23.4	C	31.2	C
Westbound								
TR	907	2552	0.61	0.36	27.0	C	27.0	C
Northbound								
LTR	1362	3406	1.58	0.40	287.4	F	287.4	F
Southbound								

Intersection Delay = 217.5 (sec/veh) Intersection LOS = F

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E. 57th Street @ 1st Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 7/22/05 Jurisd: NB-FPB=0.68
 Period: BD-PM WMC Segment 1 Year : 2008 WMC Build Seg 1
 Project ID: 0411C 2008 Build WMC PM Segment 1
 E/W St: East 57th Street N/S St: 1st Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	2	0	0	2	0	1	4	0	0	0	0
LGConfig	DefL	T			TR		L	LTR				
Volume	90	94			505	54	676	2036	18			
Lane Width	10.0	10.0			10.0		10.0	10.0				
RTOR Vol						0			0			

Duration	0.25	Area Type:	CBD or Similar									
Signal Operations												
Phase Combination	1	2	3	4	5	6	7	8				
EB Left		P			NB Left	P						
Thru		P			Thru	P						
Right					Right	P						
Peds	X	X			Peds	X	X					
WB Left					SB Left							
Thru		P			Thru							
Right		P			Right							
Peds	X	X			Peds	X	X					
NB Right					EB Right							
SB Right					WB Right							
Green		32.0	6.0			36.0	6.0					
Yellow		3.0				3.0						
All Red		2.0	0.0			2.0	0.0					
Cycle Length: 90.0 secs												

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach		
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
DefL	137	386	0.69	0.36	49.9	D		
T	507	1425	0.20	0.36	20.9	C	35.1	D
Westbound								
TR	902	2536	0.65	0.36	28.0	C	28.0	C
Northbound								
L	389	973	0.97	0.40	62.2	E		
LTR	1938	4845	1.29	0.40	158.0	F	145.4	F
Southbound								

Intersection Delay = 120.6 (sec/veh) Intersection LOS = F

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E.58th STREET@1st AVENUE
 Agency: PHA Area Type: CBD or Similar
 Date: 1/12/2005 Jurisd: EB-L Sat=2000, FLT=0.96
 Period: B-AM SEG 1 Year : 2008 Build SEG 1
 Project ID: Shaft 33B E58th St @ 1st Ave 2008 B - AM Segment 1
 E/W St: E. 58th STREET N/S St: 1st AVENUE

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	0	0	0	0	0	4	1	0	0	0
LGConfig	L	T						T	R			
Volume	514	212						2173	51			
Lane Width	11.0	11.0						10.0	10.0			
RTOR Vol									0			

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left		P			NB Left			
Thru		P			Thru	P		
Right					Right	P		
Peds	X				Peds	X		
WB Left					SB Left			
Thru					Thru			
Right					Right			
Peds	X				Peds	X		
NB Right					EB Right			
SB Right					WB Right			
Green		35.0				45.0		
Yellow		3.0				3.0		
All Red		2.0				2.0		

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
L	520	1336	1.04	0.39	77.9	E		
T	637	1637	0.35	0.39	21.0	C	61.3	E
Westbound								
Northbound								
T	2560	5119	0.89	0.50	20.9	C	20.7	C
R	476	952	0.11	0.50	12.4	B		
Southbound								

Intersection Delay = 30.7 (sec/veh) Intersection LOS = C

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E.58th Street @ 1st Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 7/22/05 Jurisd:
 Period: BD-MD WMC Seg 1 Year : 2008 WMC Build Segment 1
 Project ID: 0411C 2008 Build WMC MD Segment 1
 E/W St: E. 58th Street N/S St: 1st Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	0	0	0	0	0	3	1	0	0	0
LGConfig	LT						T R					
Volume	77	55					1842 46					
Lane Width	16.0						10.0 10.0					
RTOR Vol							0					

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left			
Thru	P				Thru	P		
Right					Right	P		
Peds	X				Peds	X		
WB Left					SB Left			
Thru					Thru			
Right					Right			
Peds	X				Peds	X		
NB Right					EB Right			
SB Right					WB Right			
Green	35.0				45.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			
Cycle Length: 90.0 secs								

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach		
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
LT	554	1425	0.25	0.39	19.7	B	19.7	B
Westbound								
Northbound								
T	1765	3530	1.10	0.50	71.0	E	69.6	E
R	444	887	0.11	0.50	12.4	B		
Southbound								

Intersection Delay = 66.3 (sec/veh) Intersection LOS = E

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E.58th Street @1st Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 7/22/05 Jurisd:
 Period: BD-PM WMC Seg 1 Year : 2008 WMC Build Seg 1
 Project ID: 0411C 2008 Build WMC PM Segment 1
 E/W St: E. 58th Street N/S St: 1st Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	0	0	0	0	0	5	1	0	0	0
LGConfig	LT						T R					
Volume	48	49					2126 54					
Lane Width	16.0						10.0 10.0					
RTOR Vol							0					

Duration 0.25 Area Type: CBD or Similar
 Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left		P			NB Left			
Thru		P			Thru P			
Right					Right P			
Peds		X			Peds X			
WB Left					SB Left			
Thru					Thru			
Right					Right			
Peds		X			Peds X			
NB Right					EB Right			
SB Right					WB Right			
Green	35.0				45.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay	LOS	Delay
					LOS		LOS
Eastbound							
LT	555	1427	0.19	0.39	18.9	B	18.9 B
Westbound							
Northbound							
T	3386	6772	0.66	0.50	13.9	B	13.8 B
R	499	998	0.11	0.50	9.6	A	
Southbound							

Intersection Delay = 14.0 (sec/veh) Intersection LOS = B

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E.59th STREET@1st AVENUE
 Agency: PHA Area Type: CBD or Similar
 Date: 12/7/2004 Jurisd: NP
 Period: B-AM SEG 1 Year : 2008 Build Segment 1
 Project ID: Shaft 33B E59th St @ 1st Ave 2008 B - AM Segment 1
 E/W St: E. 59th STREET N/S St: 1st AVENUE

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	0	0	2	0	0	4	0	0	0	0
LGConfig	LT			TR			LTR					
Volume	58	48		536	63		617	2049	21			
Lane Width	14.0			9.0			10.0					
RTOR Vol				0			0					

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left		P			NB Left	P		
Thru		P			Thru	P		
Right					Right	P		
Peds	X				Peds	X		
WB Left					SB Left			
Thru		P			Thru			
Right		P			Right			
Peds	X				Peds	X		
NB Right					EB Right			
SB Right					WB Right			
Green	38.0				42.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay LOS		Delay LOS
Eastbound							
LT	361	855	0.31	0.42	19.5 B	19.5	B
Westbound							
TR	1197	2834	0.53	0.42	21.0 C	21.0	C
Northbound							
LTR	2322	4976	1.22	0.47	121.8 F	121.8	F
Southbound							

Intersection Delay = 100.8 (sec/veh) Intersection LOS = F

HCS2000: Signalized Intersections Release 4.1e

Analyst: MWR Inter.: E.59th Street @1st Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 7/22/05 Jurisd:
 Period: BD-MD Segment 1 Year : 2008 WMC Build Segment 1
 Project ID: 0411C 2008 Build WMC MD Segment 1
 E/W St: E. 59th Street N/S St: 1st Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	0	0	2	0	0	3	0	0	0	0
LGConfig	LT			TR			LTR					
Volume	84	55		369	54		259	1617	43			
Lane Width	14.0			9.0			10.0					
RTOR Vol				0			0					

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left		P			NB Left	P		
Thru		P			Thru	P		
Right					Right	P		
Peds	X				Peds	X		
WB Left					SB Left			
Thru		P			Thru			
Right		P			Right			
Peds	X				Peds	X		
NB Right					EB Right			
SB Right					WB Right			
Green	38.0				42.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay	LOS	Delay LOS
Eastbound							
LT	312	738	0.47	0.42	23.7	C	23.7 C
Westbound							
TR	1157	2740	0.38	0.42	18.9	B	18.9 B
Northbound							
LTR	1658	3552	1.22	0.47	123.5	F	123.5 F
Southbound							

Intersection Delay = 100.1 (sec/veh) Intersection LOS = F

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E.59th Street @1st Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 7/22/05 Jurisd:
 Period: BD-PM WMC SEG 1 Year : 2008 WMC Build SEG 1
 Project ID: 0411C 2008 build WMC PM SEG 1
 E/W St: E. 59th Street N/S St: 1st Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	0	0	2	0	1	4	0	0	0	0
LGConfig	LT			TR			L	LTR				
Volume	113	94		585	62		404	1749	21			
Lane Width	14.0			9.0			10.0	10.0				
RTOR Vol				0			0					

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left		P			NB Left	P		
Thru		P			Thru	P		
Right					Right	P		
Peds	X				Peds	X		
WB Left					SB Left			
Thru		P			Thru			
Right		P			Right			
Peds	X				Peds	X		
NB Right					EB Right			
SB Right					WB Right			
Green	38.0				42.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay	LOS	Delay
					LOS		LOS
Eastbound							
LT	269	637	0.81	0.42	45.4	D	45.4 D
Westbound							
TR	1187	2811	0.57	0.42	21.8	C	21.8 C
Northbound							
L	453	971	0.85	0.47	34.6	C	
LTR	2512	5382	0.76	0.47	18.3	B	21.1 C
Southbound							

Intersection Delay = 22.9 (sec/veh) Intersection LOS = C

Traffic Analysis HCS Outputs

Build Conditions

CHAPTER 5: WATER MAIN CONNECTIONS

First Avenue Route Base Scenario – Segment 3

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: East 55th Street @ 1st Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 7/25/05 Jurisd:
 Period: AM WMC BD SEG 3 Year : 2008 Build Segment 3
 Project ID: 0411C 2008 WMC AM BUILD Segment 3
 E/W St: East 55th Street N/S St: 1st Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	0	0	0	1	1	0	4	0	0	0	0
LGConfig					T	R		LT				
Volume					272	62	241	2084				
Lane Width					10.0	12.0		10.0				
RTOR Vol						0						

Duration	0.25	Area Type:	CBD or Similar					
Signal Operations								
Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left	P		
Thru					Thru	P		
Right					Right			
Peds	X				Peds	X		
WB Left					SB Left			
Thru	P				Thru			
Right	P				Right			
Peds	X				Peds	X		
NB Right					EB Right			
SB Right					WB Right			
Green	31.0				49.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			
				Cycle Length: 90.0				secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay	LOS	Delay
					LOS		LOS

Eastbound

Westbound

T	387	1124	0.74	0.34	37.9	D	35.1	D
R	301	873	0.22	0.34	22.5	C		

Northbound

LT	2570	4720	0.95	0.54	23.1	C	23.1	C
----	------	------	------	------	------	---	------	---

Southbound

Intersection Delay = 24.6 (sec/veh) Intersection LOS = C

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E. 55th Street @1st Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 7/25/05 Jurisd:
 Period: MD Seg 3 Year : 2008 Build Segment 3
 Project ID: 0411C 2008 Build WMC MD Segment 3
 E/W St: East 55th Street N/S St: 1st Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	0	0	0	1	1	0	3	0	0	0	0
LGConfig					T	R		LT				
Volume					247	68	183	1937				
Lane Width					10.0	12.0		10.0				
RTOR Vol						0						

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left	P		
Thru					Thru	P		
Right					Right			
Peds	X				Peds	X		
WB Left					SB Left			
Thru	P				Thru			
Right	P				Right			
Peds	X				Peds	X		
NB Right					EB Right			
SB Right					WB Right			
Green	31.0				49.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay	LOS	Delay LOS

Eastbound

Westbound

T	407	1182	0.64	0.34	32.3	C	30.3	C
R	301	873	0.24	0.34	22.9	C		

Northbound

LT	1869	3433	1.19	0.54	107.2	F	107.2	F
----	------	------	------	------	-------	---	-------	---

Southbound

Intersection Delay = 97.2 (sec/veh) Intersection LOS = F

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E. 55th Street @ 1st Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 7/25/05 Jurisd:
 Period: PM WMC BD SEG 3 Year : 2008 Build Segment 3
 Project ID: 0411C 2008 WMC PM BUILD Segment 3
 E/W St: East 55th Street N/S St: 1st Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	0	0	0	1	1	1	4	0	0	0	0
LGConfig					T	R	L	LT				
Volume					288	68	155	2610				
Lane Width					10.0	12.0	10.0	10.0				
RTOR Vol						0						

Duration	0.25	Area Type:	CBD or Similar					
Signal Operations								
Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left	P		
Thru					Thru	P		
Right					Right			
Peds	X				Peds	X		
WB Left					SB Left			
Thru	P				Thru			
Right	P				Right			
Peds	X				Peds	X		
NB Right					EB Right			
SB Right					WB Right			
Green	31.0				49.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			
				Cycle Length: 90.0				secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay	LOS	Delay
					LOS		LOS

Eastbound

Westbound

T	394	1143	0.77	0.34	39.8	D	36.5	D
R	301	873	0.24	0.34	22.9	C		
Northbound								
L	355	652	0.37	0.54	11.0	B		
LT	2867	5266	0.97	0.54	24.8	C	24.1	C

Southbound

Intersection Delay = 25.6 (sec/veh) Intersection LOS = C

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E. 56th Street @ 1st Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 7/25/05 Jurisd:
 Period: AM WMC BD SEG 3 Year : 2008 Build Segment 3
 Project ID: 0411C 2008 WMC AM BUILD Segment 3
 E/W St: East 56th Street N/S St: 1st Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	0	0	0	0	0	4	0	0	0	0
LGConfig	LT						TR					
Volume	246	187					2053 93					
Lane Width	16.0						10.0					
RTOR Vol							0					

Duration	0.25	Area Type:	CBD or Similar					
Signal Operations								
Phase Combination	1	2	3	4	5	6	7	8
EB Left		P			NB Left			
Thru		P			Thru	P		
Right					Right	P		
Peds		X			Peds	X		
WB Left					SB Left			
Thru					Thru			
Right					Right			
Peds		X			Peds	X		
NB Right					EB Right			
SB Right					WB Right			
Green		35.0				45.0		
Yellow		3.0				3.0		
All Red		2.0				2.0		
				Cycle Length: 90.0				secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach		
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
LT	473	1216	0.96	0.39	60.2	E	60.2	E
Westbound								
Northbound								
TR	2437	4873	0.93	0.50	23.7	C	23.7	C
Southbound								

Intersection Delay = 29.8 (sec/veh) Intersection LOS = C

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E. 56th Street @1st Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 7/25/05 Jurisd:
 Period: MD WMC BD SEG 3 Year : 2008 Build Segment 3
 Project ID: 0411C 2008 WMC MD BUILD Segment 3 - add 1 veh to NB R
 E/W St: East 56th Street N/S St: 1st Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	0	0	0	0	0	3	0	0	0	0
LGConfig	LT						TR					
Volume	97	159					1943	62				
Lane Width	16.0						10.0					
RTOR Vol							0					

Duration 0.25 Area Type: CBD or Similar
 Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left			
Thru	P				Thru	P		
Right					Right	P		
Peds	X				Peds	X		
WB Left					SB Left			
Thru					Thru			
Right					Right			
Peds	X				Peds	X		
NB Right					EB Right			
SB Right					WB Right			
Green	31.0				49.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay	LOS	Delay
							LOS

Eastbound

LT 421 1223 0.64 0.34 32.0 C 32.0 C

Westbound

Northbound

TR 1953 3587 1.08 0.54 60.1 E 60.1 E

Southbound

Intersection Delay = 56.9 (sec/veh) Intersection LOS = E

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E. 56th Street @ 1st Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 7/25/05 Jurisd:
 Period: PM Seg 3 Year : 2008 Build Segment 3
 Project ID: 0411C 2008 Build WMC PM Segment 3
 E/W St: East 56th Street N/S St: 1st Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	0	0	0	0	0	5	0	0	0	0
LGConfig	LT						TR					
Volume	134	151					2596 82					
Lane Width	16.0						10.0					
RTOR Vol							0					

Duration	0.25	Area Type:	CBD or Similar							
Signal Operations										
Phase Combination	1	2	3	4	5	6	7	8		
EB Left		P			NB Left					
Thru		P			Thru	P				
Right					Right	P				
Peds		X			Peds	X				
WB Left					SB Left					
Thru					Thru					
Right					Right					
Peds		X			Peds	X				
NB Right					EB Right					
SB Right					WB Right					
Green		35.0				45.0				
Yellow		3.0				3.0				
All Red		2.0				2.0				
Cycle Length: 90.0 secs										

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach		
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
LT	473	1216	0.63	0.39	28.7	C	28.7	C
Westbound								
Northbound								
TR	3351	6701	0.84	0.50	17.6	B	17.6	B
Southbound								

Intersection Delay = 18.7 (sec/veh) Intersection LOS = B

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E. 57th Street @1st Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 7/25/05 Jurisd:
 Period: AM WMC BD SEG3 Year : 2008 Build Segment 3
 Project ID: 0411C 2008 WMC AM BD Segment 3
 E/W St: East 57th Street N/S St: 1st Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	2	0	0	2	0	0	4	1	0	0	0
LGConfig	DefL	T			TR			LT	R			
Volume	183	158			153	71	237	1970	92			
Lane Width	10.0	10.0			10.0			10.0	10.0			
RTOR Vol						0			0			

Duration	0.25	Area Type:	CBD or Similar									
Signal Operations												
Phase Combination	1	2	3	4	5	6	7	8				
EB Left		P			NB Left	P						
Thru		P			Thru	P						
Right					Right	P						
Peds	X	X			Peds	X	X					
WB Left					SB Left							
Thru		P			Thru							
Right		P			Right							
Peds	X	X			Peds	X	X					
NB Right					EB Right							
SB Right					WB Right							
Green		32.0	6.0			36.0	6.0					
Yellow		3.0				3.0						
All Red		2.0	0.0			2.0	0.0					
Cycle Length: 90.0 secs												

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
DefL	214	603	0.90	0.36	67.9	E		
T	427	1201	0.39	0.36	24.3	C	47.8	D
Westbound								
TR	726	2043	0.33	0.36	22.3	C	22.3	C
Northbound								
LT	1912	4779	1.21	0.40	125.9	F	121.8	F
R	259	647	0.37	0.40	23.2	C		
Southbound								

Intersection Delay = 105.2 (sec/veh) Intersection LOS = F

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E. 57th Street @ 1st Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 7/25/05 Jurisd:
 Period: MD WMC BD SEG 3 Year : 2008 Build Segment 3
 Project ID: 0411C 2008 Build WMC MD Segment 3
 E/W St: East 57th Street N/S St: 1st Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	2	0	0	2	0	0	3	2	0	0	0
LGConfig	DefL	T			TR			LT	R			
Volume	89	136			458	71	276	1728	36			
Lane Width	10.0	10.0			10.0			10.0	10.0			
RTOR Vol						0			0			

Duration	0.25	Area Type: CBD or Similar									
Signal Operations											
Phase Combination	1	2	3	4	5	6	7	8			
EB Left		P			NB Left	P					
Thru		P			Thru	P					
Right					Right	P					
Peds		X	X		Peds	X	X				
WB Left					SB Left						
Thru		P			Thru						
Right		P			Right						
Peds		X	X		Peds	X	X				
NB Right					EB Right						
SB Right					WB Right						
Green		32.0	6.0			36.0	6.0				
Yellow		3.0				3.0					
All Red		2.0	0.0			2.0	0.0				
Cycle Length: 90.0 secs											

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay	LOS	Delay LOS
Eastbound							
DefL	148	415	0.64	0.36	43.1	D	
T	423	1190	0.34	0.36	23.4	C	31.2 C
Westbound							
TR	907	2552	0.61	0.36	27.0	C	27.0 C
Northbound							
LT	1374	3435	1.54	0.40	268.9	F	264.5 F
R	275	688	0.14	0.40	18.2	B	
Southbound							

Intersection Delay = 200.7 (sec/veh) Intersection LOS = F

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E. 57th Street @1st Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 7/25/05 Jurisd: NB-FPB=0.68
 Period: PM Seg 3 Year : 2008 Build Segment 3
 Project ID: 0411C 2008 Build WMC PM Segment 3
 E/W St: East 57th Street N/S St: 1st Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	2	0	0	2	0	1	4	2	0	0	0
LGConfig	DefL	T			TR		L	LT	R			
Volume	90	94			505	54	676	2036	18			
Lane Width	10.0	10.0			10.0		10.0	10.0	10.0			
RTOR Vol						0			0			

Duration	0.25	Area Type:	CBD or Similar									
Signal Operations												
Phase Combination	1	2	3	4	5	6	7	8				
EB Left		P			NB Left	P						
Thru		P			Thru	P						
Right					Right	P						
Peds	X	X			Peds	X	X					
WB Left					SB Left							
Thru		P			Thru							
Right		P			Right							
Peds	X	X			Peds	X	X					
NB Right					EB Right							
SB Right					WB Right							
Green		32.0	6.0			36.0	6.0					
Yellow		3.0				3.0						
All Red		2.0	0.0			2.0	0.0					
Cycle Length: 90.0 secs												

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay	LOS	Delay LOS
Eastbound							
DefL	137	386	0.69	0.36	49.9	D	
T	507	1425	0.20	0.36	20.9	C	35.1 D
Westbound							
TR	902	2536	0.65	0.36	28.0	C	28.0 C
Northbound							
L	389	973	0.97	0.40	62.2	E	
LT	1945	4862	1.27	0.40	151.6	F	139.0 F
R	204	510	0.09	0.40	16.0	B	
Southbound							

Intersection Delay = 115.6 (sec/veh) Intersection LOS = F

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E.58th Street @ 1st Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 7/25/05 Jurisd:
 Period: AM BD WMC SEG 3 Year : 2008 WMC Build Segment 3
 Project ID: 0411C 2008 Build AM Water Main Connection Segment 3
 E/W St: E. 58th Street N/S St: 1st Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	0	0	0	0	0	4	0	0	0	0
LGConfig	L	T						TR				
Volume	514	212						2173	51			
Lane Width	11.0	11.0						10.0				
RTOR Vol									0			

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left		P			NB Left			
Thru		P			Thru	P		
Right					Right	P		
Peds		X			Peds	X		
WB Left					SB Left			
Thru					Thru			
Right					Right			
Peds		X			Peds	X		
NB Right					EB Right			
SB Right					WB Right			
Green		35.0				45.0		
Yellow		3.0				3.0		
All Red		2.0				2.0		

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay	LOS	Delay LOS
Eastbound							
L	520	1336	1.04	0.39	77.9	E	
T	637	1637	0.35	0.39	21.0	C	61.3 E
Westbound							
Northbound							
TR	2545	5089	0.92	0.50	22.8	C	22.8 C
Southbound							

Intersection Delay = 32.3 (sec/veh) Intersection LOS = C

HCS2000: Signalized Intersections Release 4.1e

Analyst: MR Inter.: E.58h Street @1st Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 7/25/05 Jurisd:
 Period: MD WMC BD SEG 3 Year : 2008 Build Segment 3
 Project ID: 0411C 2008 WMC MD BUILD Segment 3
 E/W St: E. 58th Street N/S St: 1st Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	0	0	0	0	0	3	0	0	0	0
LGConfig	LT						TR					
Volume	77	55					1842	46				
Lane Width	16.0						10.0					
RTOR Vol							0					

Duration 0.25 Area Type: CBD or Similar
 Signal Operations

Phase Combination	1	2	3	4	5	6	7	8	
EB Left		P			NB Left				
Thru		P			Thru	P			
Right					Right	P			
Peds		X			Peds	X			
WB Left					SB Left				
Thru					Thru				
Right					Right				
Peds		X			Peds	X			
NB Right					EB Right				
SB Right					WB Right				
Green	35.0			45.0					
Yellow	3.0			3.0					
All Red	2.0			2.0					

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach		
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
LT	554	1425	0.25	0.39	19.7	B	19.7	B
Westbound								
Northbound								
TR	1755	3509	1.13	0.50	84.5	F	84.5	F
Southbound								

Intersection Delay = 80.3 (sec/veh) Intersection LOS = F

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E.58th Street @ 1st Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 7/25/05 Jurisd:
 Period: PM Seg 3 Year : 2008 Build Segment 3
 Project ID: 0411C 2008 Build WMC PM Segment 3
 E/W St: E. 58th Street N/S St: 1st Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	0	0	0	0	0	5	0	0	0	0
LGConfig	LT						TR					
Volume	48	49					2126 54					
Lane Width	16.0						10.0					
RTOR Vol							0					

Duration 0.25 Area Type: CBD or Similar
 Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left		P			NB Left			
Thru		P			Thru P			
Right					Right P			
Peds		X			Peds X			
WB Left					SB Left			
Thru					Thru			
Right					Right			
Peds		X			Peds X			
NB Right					EB Right			
SB Right					WB Right			
Green	35.0			45.0				
Yellow	3.0			3.0				
All Red	2.0			2.0				

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay	LOS	Delay
					LOS		LOS

Eastbound

LT 555 1427 0.19 0.39 18.9 B 18.9 B

Westbound

Northbound

TR 3365 6730 0.68 0.50 14.2 B 14.2 B

Southbound

Intersection Delay = 14.4 (sec/veh) Intersection LOS = B

Traffic Analysis HCS Outputs

Build Conditions

CHAPTER 5: WATER MAIN CONNECTIONS

First Avenue Route Base Scenario – Segment 5

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E. 56th ST@1st AVE
 Agency: PHA Area Type: CBD or Similar
 Date: 1/17/2005 Jurisd:
 Period: BD-AM Seg 5 Year : 2008 Build Segment 5
 Project ID: Shaft 33B E56th St @ 1st Ave 2008 NB - AM Segment 5
 E/W St: East 56th STREET N/S St: 1st AVENUE

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	0	0	0	0	0	5	0	0	0	0
LGConfig	LT						TR					
Volume	246	187					2053 93					
Lane Width	16.0						10.0					
RTOR Vol							0					

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left		P			NB Left			
Thru		P			Thru	P		
Right					Right	P		
Peds	X				Peds	X		
WB Left					SB Left			
Thru					Thru			
Right					Right			
Peds	X				Peds	X		
NB Right					EB Right			
SB Right					WB Right			
Green	35.0				45.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			
Cycle Length: 90.0 secs								

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach		
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
LT	557	1431	0.82	0.39	37.3	D	37.3	D
Westbound								
Northbound								
TR	3050	6099	0.74	0.50	15.4	B	15.4	B
Southbound								

Intersection Delay = 19.0 (sec/veh) Intersection LOS = B

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E. 56th ST@1st AVE
 Agency: PHA Area Type: CBD or Similar
 Date: 1/17/2005 Jurisd:
 Period: BD-MD Seg 5 Year : 2008 Build Segment 5
 Project ID: Shaft 33B E56th St@1st Ave 2008 NB-MD Seg 5-add 1 veh to NBR
 E/W St: East 56th STREET N/S St: 1st AVENUE

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	0	0	0	0	0	5	0	0	0	0
LGConfig	LT						TR					
Volume	97	159					1943	62				
Lane Width	16.0						10.0					
RTOR Vol							0					

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8	
EB Left		P			NB Left				
Thru		P			Thru	P			
Right					Right	P			
Peds	X				Peds	X			
WB Left					SB Left				
Thru					Thru				
Right					Right				
Peds	X				Peds	X			
NB Right					EB Right				
SB Right					WB Right				
Green	31.0			49.0					
Yellow	3.0			3.0					
All Red	2.0			2.0					

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay LOS		Delay LOS
Eastbound							
LT	527	1529	0.51	0.34	27.0	C	27.0 C
Westbound							
Northbound							
TR	3289	6041	0.64	0.54	10.9	B	10.9 B
Southbound							

Intersection Delay = 12.7 (sec/veh) Intersection LOS = B

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E. 56th ST@1st AVE
 Agency: PHA Area Type: CBD or Similar
 Date: 1/17/2005 Jurisd:
 Period: BD-PM Seg 5 Year : 2008 Build Segment 5
 Project ID: Shaft 33B 2008 Build WMC PM Segment 5
 E/W St: East 56th STREET N/S St: 1st AVENUE

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	0	0	0	0	0	6	1	0	0	0
LGConfig	LT						T R					
Volume	134	151					2596 82					
Lane Width	16.0						10.0 12.0					
RTOR Vol							0					

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	P				NB Left			
Thru	P				Thru	P		
Right					Right	P		
Peds	X				Peds	X		
WB Left					SB Left			
Thru					Thru			
Right					Right			
Peds	X				Peds	X		
NB Right					EB Right			
SB Right					WB Right			
Green	35.0				45.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			
Cycle Length: 90.0 secs								

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach		
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
LT	591	1520	0.51	0.39	24.0	C	24.0	C
Westbound								
Northbound								
T	4102	8203	0.67	0.50	13.8	B	13.7	B
R	343	686	0.25	0.50	11.6	B		
Southbound								

Intersection Delay = 14.7 (sec/veh) Intersection LOS = B

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E. 56th Street @ 2nd Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 1/19/2005 Jurisd: Manhattan
 Period: BD-AM Seg 5 Year : 2008 Build Segment 5
 Project ID: Shaft 33B 2008 Build WMC AM Segment 5
 E/W St: E. 56th Street N/S St: Second Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	1	0	0	0	0	0	0	0	6	0
LGConfig		T	R								LT	
Volume		300	285							133	2750	
Lane Width		11.0	11.0								10.0	
RTOR Vol			0									

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left			
Thru	P				Thru			
Right	P				Right			
Peds	X				Peds X			
WB Left					SB Left	P		
Thru					Thru	P		
Right					Right			
Peds	X				Peds X			
NB Right					EB Right			
SB Right					WB Right			
Green	31.0				49.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS

Eastbound

T	448	1301	0.71	0.34	34.6	C	56.9	E
R	301	875	1.00	0.34	80.5	F		

Westbound

Northbound

Southbound

LT	4577	8407	0.66	0.54	10.9	B	10.9	B
----	------	------	------	------	------	---	------	---

Intersection Delay = 18.7 (sec/veh) Intersection LOS = B

HCS2000: Signalized Intersections Release 4.1e

Analyst: MR Inter.: E. 56th Street @ 2nd Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 5/31/2005 Jurisd: Manhattan
 Period: BD-MD Seg 5 Year : 2008 Build Segment 5
 Project ID: Shaft 33B 2008 Build WMC MD Segment 5
 E/W St: E. 56th Street N/S St: Second Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	1	0	0	0	0	0	0	0	5	0
LGConfig		T	R								LT	
Volume		171	239							85	1985	
Lane Width		11.0	11.0								10.0	
RTOR Vol			0									

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left			
Thru	P				Thru			
Right	P				Right			
Peds	X				Peds X			
WB Left					SB Left	P		
Thru					Thru	P		
Right					Right			
Peds	X				Peds X			
NB Right					EB Right			
SB Right					WB Right			
Green	31.0				49.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay	LOS	Delay LOS

Eastbound

T	422	1224	0.43	0.34	25.8	C	40.2 D
R	301	875	0.84	0.34	50.5	D	

Westbound

Northbound

Southbound

LT	3672	6744	0.59	0.54	10.3	B	10.3 B
----	------	------	------	------	------	---	--------

Intersection Delay = 15.2 (sec/veh) Intersection LOS = B

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E. 56th Street @ 2nd Ave
 Agency: PHA Area Type: CBD or Similar
 Date: 5/31/2005 Jurisd: Manhattan
 Period: BD-PM Segment 5 Year : 2008 Build Segment 5
 Project ID: Shaft 33B 2008 Build WMC PM Segment 5
 E/W St: E. 56th Street N/S St: Second Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	1	0	0	0	0	0	0	0	5	0
LGConfig		T	R								LT	
Volume		213	255							72	1619	
Lane Width		11.0	11.0								10.0	
RTOR Vol			0									

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left			
Thru	P				Thru			
Right	P				Right			
Peds	X				Peds X			
WB Left					SB Left	P		
Thru					Thru	P		
Right					Right			
Peds	X				Peds X			
NB Right					EB Right			
SB Right					WB Right			
Green	31.0				49.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay	LOS	Delay LOS

Eastbound

T	448	1301	0.50	0.34	27.3	C	44.0	D
R	301	875	0.89	0.34	58.0	E		

Westbound

Northbound

Southbound

LT	3707	6808	0.48	0.54	9.2	A	9.2	A
----	------	------	------	------	-----	---	-----	---

Intersection Delay = 16.7 (sec/veh) Intersection LOS = B

Traffic Analysis HCS Outputs

Build Conditions

CHAPTER 5: WATER MAIN CONNECTIONS

First Avenue Route Base Scenario – Segment 7

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E. 56th Street @ 2nd Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 8/3/05 Jurisd:
 Period: BD WMC Seg 7 AM Year : 2008 WMC Build Segment 7
 Project ID: 0411C 2008 Build WMC AM Segment 7
 E/W St: E. 56th Street N/S St: Second Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	1	0	0	0	0	0	0	0	6	0
LGConfig		T	R								LT	
Volume		300	285							133	2750	
Lane Width		9.0	9.0								10.0	
RTOR Vol			0									

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left			
Thru	P				Thru			
Right	P				Right			
Peds	X				Peds X			
WB Left					SB Left	P		
Thru					Thru	P		
Right					Right			
Peds	X				Peds X			
NB Right					EB Right			
SB Right					WB Right			
Green	31.0				49.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay	LOS	Delay LOS

Eastbound

T	491	1425	0.64	0.34	31.2	C	65.8	E
R	281	815	1.07	0.34	102.2	F		

Westbound

Northbound

Southbound

LT	4577	8407	0.66	0.54	10.9	B	10.9	B
----	------	------	------	------	------	---	------	---

Intersection Delay = 20.1 (sec/veh) Intersection LOS = C

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E. 56th Street @ 2nd Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 7/25/05 Jurisd: Manhattan
 Period: BD WMC Seg 7 MD Year : 2008 WMC Build Seg 7
 Project ID: 0411C 2008 Build WMC MD Segment 7
 E/W St: E. 56th Street N/S St: Second Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	1	0	0	0	0	0	0	0	5	0
LGConfig		T	R								LT	
Volume		171	239							85	1985	
Lane Width		9.0	9.0								10.0	
RTOR Vol			0									

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left			
Thru	P				Thru			
Right	P				Right			
Peds	X				Peds X			
WB Left					SB Left	P		
Thru					Thru	P		
Right					Right			
Peds	X				Peds X			
NB Right					EB Right			
SB Right					WB Right			
Green	31.0				49.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c g/C		Lane Group Delay LOS	Approach Delay LOS	
----------------	---------------------	-----------------------	----------------	--	----------------------	--------------------	--

Eastbound

T	491	1425	0.37	0.34	24.2	C	45.5	D
R	281	815	0.90	0.34	60.7	E		

Westbound

Northbound

Southbound

LT	3672	6744	0.59	0.54	10.3	B	10.3	B
----	------	------	------	------	------	---	------	---

Intersection Delay = 16.1 (sec/veh) Intersection LOS = B

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E. 56th Street @ 2nd Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 7/25/05 Jurisd:
 Period: BD WMC PM Seg 7 Year : 2008 WMC Build Segment 7
 Project ID: 0411C 2008 Build WMC PM Segment 7
 E/W St: E. 56th Street N/S St: Second Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	1	0	0	0	0	0	0	0	5	0
LGConfig		T	R								LT	
Volume		213	255							72	1619	
Lane Width		9.0	9.0								10.0	
RTOR Vol			0									

Duration	0.25	Area Type:	CBD or Similar					
Signal Operations								
Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left			
Thru	P				Thru			
Right	P				Right			
Peds	X				Peds	X		
WB Left					SB Left	P		
Thru					Thru	P		
Right					Right			
Peds	X				Peds	X		
NB Right					EB Right			
SB Right					WB Right			
Green	31.0				49.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			
				Cycle Length: 90.0				secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay	LOS	Delay
					LOS		LOS

Eastbound

T	491	1425	0.46	0.34	26.0	C	51.0	D
R	281	815	0.95	0.34	71.8	E		

Westbound

Northbound

Southbound

LT	3707	6808	0.48	0.54	9.2	A	9.2	A
----	------	------	------	------	-----	---	-----	---

Intersection Delay = 18.2 (sec/veh) Intersection LOS = B

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E. 56th Street @ 3rd Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 7/25/05 Jurisd: Manhattan
 Period: BD-WMC SEG 7 AM Year : 2008 WMC Build SEG 7
 Project ID: 0411C 2008 Build WMC AM Segment 7
 E/W St: E. 56th Street N/S St: 3rd Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	0	0	0	0	0	5	1	0	0	0
LGConfig	LT						T R					
Volume	122	297					1904 288					
Lane Width	16.0						10.0 12.0					
RTOR Vol							0					

Duration	0.25	Area Type:	CBD or Similar							
Signal Operations										
Phase Combination	1	2	3	4	5	6	7	8		
EB Left		P			NB Left					
Thru		P			Thru	P				
Right					Right	P				
Peds		X			Peds	X				
WB Left					SB Left					
Thru					Thru					
Right					Right					
Peds		X			Peds	X				
NB Right					EB Right					
SB Right					WB Right					
Green	35.0				45.0					
Yellow	3.0				3.0					
All Red	2.0				2.0					

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay	LOS	Delay
					LOS	LOS	
Eastbound							
LT	540	1389	0.82	0.39	37.5	D	37.5 D
Westbound							
Northbound							
T	2994	5987	0.67	0.50	14.2	B	24.7 C
R	280	560	1.08	0.50	94.7	F	
Southbound							

Intersection Delay = 26.8 (sec/veh) Intersection LOS = C

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E. 56th Street @ 3rd Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 7/25/05 Jurisd: Manhattan
 Period: BD WMC SEG 7 MD Year : 2008 WMC Build Segment 7
 Project ID: 0411C 2008 Build WMC MD Segment 7
 E/W St: E. 56th Street N/S St: 3rd Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	0	0	0	0	0	5	1	0	0	0
LGConfig	LT						T R					
Volume	149	220					1959 190					
Lane Width	16.0						10.0 12.0					
RTOR Vol							0					

Duration	0.25	Area Type:	CBD or Similar							
Signal Operations										
Phase Combination	1	2	3	4	5	6	7	8		
EB Left		P			NB Left					
Thru		P			Thru	P				
Right					Right	P				
Peds		X			Peds	X				
WB Left					SB Left					
Thru					Thru					
Right					Right					
Peds		X			Peds	X				
NB Right					EB Right					
SB Right					WB Right					
Green	40.0				40.0					
Yellow	3.0				3.0					
All Red	2.0				2.0					
Cycle Length: 90.0 secs										

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay	LOS	Delay
					LOS	LOS	
Eastbound							
LT	567	1276	0.69	0.44	26.6	C	26.6 C
Westbound							
Northbound							
T	2740	6165	0.75	0.44	19.6	B	23.3 C
R	219	492	0.91	0.44	61.5	E	
Southbound							

Intersection Delay = 23.8 (sec/veh) Intersection LOS = C

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E. 56th Street @ 3rd Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 5/7/05 Jurisd:
 Period: BD WMC SEG 7 PM Year : 2008 WMC Build SEG 7
 Project ID: 0411C 2008 Build WMC PM Segment 7
 E/W St: E. 56th Street N/S St: 3rd Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	0	0	0	0	0	6	1	0	0	0
LGConfig	LT						T R					
Volume	138	325					2229 143					
Lane Width	16.0						10.0 10.0					
RTOR Vol							0					

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left		P			NB Left			
Thru		P			Thru	P		
Right					Right	P		
Peds	X				Peds	X		
WB Left					SB Left			
Thru					Thru			
Right					Right			
Peds	X				Peds	X		
NB Right					EB Right			
SB Right					WB Right			
Green	35.0				45.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			
Cycle Length: 90.0 secs								

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay	LOS	Delay
					LOS	LOS	
Eastbound							
LT	540	1388	0.90	0.39	46.7	D	46.7 D
Westbound							
Northbound							
T	3882	7763	0.60	0.50	13.1	B	13.8 B
R	238	475	0.63	0.50	24.9	C	
Southbound							

Intersection Delay = 19.2 (sec/veh) Intersection LOS = B

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E. 57th ST@2nd AVE
 Agency: PHA Area Type: CBD or Similar
 Date: 1/17/2005 Jurisd: EB-frt=0.96,S=2000,WB-flt=0.9
 Period: B-AM Segment 7 Year : 2008 Build SEG 7
 Project ID: Shaft 33B E57th St @ 2nd Ave 2008 B - AM Segment 7
 E/W St: East 57th STREET N/S St: 2nd AVENUE

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	2	0	0	2	0	0	0	0	1	5	0
LGConfig	TR			DefL T						L LTR		
Volume	311 202			566 699						30 2115 189		
Lane Width	10.0			10.0 10.0						8.0 10.0		
RTOR Vol	0									0		

Duration	0.25	Area Type:	CBD or Similar					
Signal Operations								
Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left			
Thru	P				Thru			
Right	P				Right			
Peds	X				Peds	X	X	
WB Left	P	P			SB Left	P		
Thru	P	P			Thru	P		
Right					Right	P		
Peds	X				Peds	X	X	
NB Right					EB Right			
SB Right					WB Right			
Green	18.0	18.0			34.0	5.0		
Yellow	3.0	3.0			3.0			
All Red	2.0	2.0			2.0	0.0		
Cycle Length: 90.0 secs								

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
TR	509	2547	1.06	0.20	93.0	F	93.0	F
Westbound								
DefL	568	1277	1.05	0.46	77.9	E		
T	713	1565	1.03	0.46	66.8	E	71.7	E
Northbound								
Southbound								
L	222	588	0.14	0.38	18.3	B		
LTR	2351	6222	1.03	0.38	52.9	D	52.5	D

Intersection Delay = 63.4 (sec/veh) Intersection LOS = E

HCS2000: Signalized Intersections Release 4.1e

Analyst: JP Inter.: E. 57th ST@2nd AVE
 Agency: PHA Area Type: CBD or Similar
 Date: 1/17/2005 Jurisd: EB-FRT=1.0, S=2000
 Period: B-MD Seg 7 Year : 2008 Build SEG 7
 Project ID: Shaft 33B E57th St @ 2nd Ave 2008 B - MD Segment 7
 E/W St: East 57th STREET N/S St: 2nd AVENUE

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	2	0	0	2	0	0	0	0	0	5	0
LGConfig	TR			DefL T						LTR		
Volume	572 117			104 280						150 1849 241		
Lane Width	10.0			10.0 10.0						10.0		
RTOR Vol	0									0		

Duration	0.25	Area Type:	CBD or Similar									
Signal Operations												
Phase Combination	1	2	3	4	5	6	7	8				
EB Left					NB Left							
Thru		P			Thru							
Right			P		Right							
Peds			X		Peds	X	X					
WB Left	P	P			SB Left	P						
Thru	P	P			Thru	P						
Right					Right	P						
Peds			X		Peds	X	X					
NB Right					EB Right							
SB Right					WB Right							
Green	9.0	22.0			39.0	5.0						
Yellow	3.0	3.0			3.0							
All Red	2.0	2.0			2.0	0.0						
Cycle Length: 90.0 secs												

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/c	Delay	LOS	Delay LOS
Eastbound							
TR	673	2754	1.08	0.24	91.4	F	91.4 F
Westbound							
DefL	208	1283	0.52	0.40	29.1	C	
T	586	1464	0.50	0.40	23.4	C	24.9 C
Northbound							
Southbound							
LTR	2509	5791	0.90	0.43	25.9	C	25.9 C

Intersection Delay = 39.8 (sec/veh) Intersection LOS = D

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E. 57th ST@2nd AVE
 Agency: PHA Area Type: CBD or Similar
 Date: 1/17/2005 Jurisd: EB-FLT=LU=1.0
 Period: B-PM Segment 7 Year : 2008 Build SEG 7
 Project ID: Shaft 33B E57th St @ 2nd Ave 2008 B - PM Segment 7
 E/W St: East 57th STREET N/S St: 2nd AVENUE

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	3	0	0	2	0	0	0	0	1	5	0
LGConfig	TR			DefL T						L LTR		
Volume	1065 42			42 174						49 1607 205		
Lane Width	10.0			10.0 10.0						8.0 10.0		
RTOR Vol	0									0		

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left			
Thru		P			Thru			
Right			P		Right			
Peds					Peds	X		
WB Left	P	P			SB Left	P		
Thru	P	P			Thru	P		
Right					Right	P		
Peds	X	X			Peds		X	
NB Right					EB Right			
SB Right					WB Right			
Green	9.0	22.0			39.0	5.0		
Yellow	3.0	3.0			3.0			
All Red	2.0	2.0			2.0	0.0		

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/c	Delay	LOS	Delay LOS
Eastbound							
TR	1152	4714	1.01	0.24	63.3	E	63.3 E
Westbound							
DefL	223	1430	0.20	0.40	20.8	C	
T	602	1506	0.30	0.40	19.7	B	19.9 B
Northbound							
Southbound							
L	413	954	0.13	0.43	13.7	B	
LTR	3026	6983	0.63	0.43	18.0	B	17.9 B

Intersection Delay = 33.8 (sec/veh) Intersection LOS = C

Traffic Analysis HCS Outputs

Build Conditions

CHAPTER 5: WATER MAIN CONNECTIONS

First Avenue Route Base Scenario – Segment 9

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E. 55th ST@1st AVE
 Agency: PHA Area Type: CBD or Similar
 Date: 7/26/05 Jurisd:
 Period: BD-AM Seg 9 Year : 2008 Build Segment 9
 Project ID: Shaft 33B 2008 Build WMC AM Segment 9
 E/W St: East 55th STREET N/S St: 1st AVENUE

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	0	0	0	1	1	0	5	0	0	0	0
LGConfig					T	R		LT				
Volume					272	62	241	2084				
Lane Width					10.0	12.0		10.0				
RTOR Vol						0						

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left	P		
Thru					Thru	P		
Right					Right			
Peds	X				Peds	X		
WB Left					SB Left			
Thru	P				Thru			
Right	P				Right			
Peds	X				Peds	X		
NB Right					EB Right			
SB Right					WB Right			
Green	31.0				49.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay	LOS	Delay LOS

Eastbound

Westbound

T	387	1124	0.74	0.34	37.9	D	35.1	D
R	301	873	0.22	0.34	22.5	C		

Northbound

LT	3237	5946	0.76	0.54	12.7	B	12.7	B
----	------	------	------	------	------	---	------	---

Southbound

Intersection Delay = 15.5 (sec/veh) Intersection LOS = B

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E. 55th ST@1st AVE
 Agency: PHA Area Type: CBD or Similar
 Date: 7/26/05 Jurisd:
 Period: BD-MD Seg 9 Year : 2008 Build Segment 9
 Project ID: Shaft 33B 2008 Build WMC MD Segment 9
 E/W St: East 55th STREET N/S St: 1st AVENUE

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	0	0	0	1	1	0	5	0	0	0	0
LGConfig					T	R		LT				
Volume					247	68	183	1937				
Lane Width					10.0	12.0		10.0				
RTOR Vol						0						

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left	P		
Thru					Thru	P		
Right					Right			
Peds	X				Peds	X		
WB Left					SB Left			
Thru	P				Thru			
Right	P				Right			
Peds	X				Peds	X		
NB Right					EB Right			
SB Right					WB Right			
Green	31.0				49.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay	LOS	Delay LOS

Eastbound

Westbound

T	407	1182	0.64	0.34	32.3	C	30.3	C
R	301	873	0.24	0.34	22.9	C		

Northbound

LT	3205	5886	0.70	0.54	11.7	B	11.7	B
----	------	------	------	------	------	---	------	---

Southbound

Intersection Delay = 14.1 (sec/veh) Intersection LOS = B

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E. 55th ST@1st AVE
 Agency: PHA Area Type: CBD or Similar
 Date: 7/26/05 Jurisd:
 Period: BD-PM Seg 9 Year : 2008 Build Segment 9
 Project ID: Shaft 33B 2008 Build WMC PM Segment 9
 E/W St: East 55th STREET N/S St: 1st AVENUE

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	0	0	0	1	1	1	5	0	0	0	0
LGConfig					T	R	L	T				
Volume				288	68		155	2610				
Lane Width				10.0	12.0		10.0	10.0				
RTOR Vol					0							

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left	P		
Thru					Thru	P		
Right					Right			
Peds	X				Peds	X		
WB Left					SB Left			
Thru	P				Thru			
Right	P				Right			
Peds	X				Peds	X		
NB Right					EB Right			
SB Right					WB Right			
Green	31.0				49.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay	LOS	Delay LOS

Eastbound

Westbound

T	394	1143	0.77	0.34	39.8	D	36.5	D
R	301	873	0.24	0.34	22.9	C		
Northbound								
L	355	652	0.46	0.54	12.8	B		
T	3722	6836	0.74	0.54	12.1	B	12.2	B

Southbound

Intersection Delay = 15.0 (sec/veh) Intersection LOS = B

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: 55th ST@2nd AVE
 Agency: PHA Area Type: CBD or Similar
 Date: 7/26/05 Jurisd:
 Period: BD-AM Seg 9 Year : 2008 Build Segment 9
 Project ID: Shaft 33B 2008 Build WMC AM Segment 9
 E/W St: 55th St N/S St: 2nd Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	0	0	0	2	0	0	0	0	0	6	1
LGConfig					LT						T	R
Volume				150	363					2614	421	
Lane Width					9.0					10.0	12.0	
RTOR Vol											0	

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left			
Thru					Thru			
Right					Right			
Peds	X				Peds	X		
WB Left	P				SB Left			
Thru	P				Thru	P		
Right					Right	P		
Peds	X				Peds	X		
NB Right					EB Right			
SB Right					WB Right			
Green	31.0				49.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay	LOS	Delay LOS

Eastbound

Westbound

LT 840 2440 0.64 0.34 28.6 C 28.6 C

Northbound

Southbound

T 4227 7763 0.65 0.54 10.8 B 12.2 B
 R 571 1048 0.78 0.54 21.1 C

Intersection Delay = 14.6 (sec/veh) Intersection LOS = B

HCS2000: Signalized Intersections Release 4.1e

Analyst: MR Inter.: 55th ST@2nd AVE
 Agency: PHA Area Type: CBD or Similar
 Date: 7/26/05 Jurisd: LT=PB=1.0
 Period: BD-MD Seg 9 Year : 2008 Build Segment 9
 Project ID: Shaft 33B 2008 Build WMC MD Segment 9
 E/W St: 55th St N/S St: 2nd Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	0	0	0	2	0	0	0	0	0	5	0
LGConfig					LT						TR	
Volume				204	226						2009	215
Lane Width					9.0						10.0	
RTOR Vol												0

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left			
Thru					Thru			
Right					Right			
Peds	X				Peds	X		
WB Left	P				SB Left			
Thru	P				Thru	P		
Right					Right	P		
Peds	X				Peds	X		
NB Right					EB Right			
SB Right					WB Right			
Green	31.0				49.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay	LOS	Delay LOS

Eastbound

Westbound

LT 925 2685 0.49 0.34 25.1 C 25.1 C

Northbound

Southbound

TR 3270 6007 0.72 0.54 12.0 B 12.0 B

Intersection Delay = 14.1 (sec/veh) Intersection LOS = B

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: 55th ST@2nd AVE
 Agency: PHA Area Type: CBD or Similar
 Date: 7/26/05 Jurisd: LT=PB=1.0
 Period: BD-PM Seg 9 Year : 2008 Build Segment 9
 Project ID: Shaft 33B 2008 Build WMC PM Segment 9
 E/W St: 55th St N/S St: 2nd Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	0	0	0	2	0	0	0	0	0	5	1
LGConfig					LT						T R	
Volume				187	256					1666	208	
Lane Width				9.0						10.0	12.0	
RTOR Vol											0	

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left			
Thru					Thru			
Right					Right			
Peds	X				Peds	X		
WB Left	P				SB Left			
Thru	P				Thru	P		
Right					Right	P		
Peds	X				Peds	X		
NB Right					EB Right			
SB Right					WB Right			
Green	31.0				49.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group	Adj Sat Flow Rate (s)	Ratios v/c g/C		Lane Group	Approach Delay LOS	
----------------------	---------------	-----------------------------	-------------------	--	------------	-----------------------	--

Eastbound

Westbound

LT 922 2677 0.51 0.34 25.4 C 25.4 C

Northbound

Southbound

T 3416 6275 0.51 0.54 9.5 A 9.6 A
 R 571 1048 0.38 0.54 10.1 B

Intersection Delay = 12.6 (sec/veh) Intersection LOS = B

Traffic Analysis HCS Outputs

Build Conditions

CHAPTER 5: WATER MAIN CONNECTIONS

First Avenue Route Base Scenario – Segment 10

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E 55th Street @2nd Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 8/3/05 Jurisd:
 Period: BD WMC SEG 10 AM Year : 2008 WMC Build SEG 10
 Project ID: 0411C 2008 Build WMC AM SEG 10
 E/W St: E 55th St N/S St: 2nd Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	0	0	1	1	0	0	0	0	0	6	1
LGConfig				L	T						T	R
Volume				150	363						2614	421
Lane Width				10.0	10.0						10.0	12.0
RTOR Vol												0

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left			
Thru					Thru			
Right					Right			
Peds	X				Peds	X		
WB Left	P				SB Left			
Thru	P				Thru	P		
Right					Right	P		
Peds	X				Peds	X		
NB Right					EB Right			
SB Right					WB Right			
Green	31.0				49.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay	LOS	Delay LOS

Eastbound

Westbound

L	330	958	0.48	0.34	28.1	C	
T	491	1425	0.78	0.34	37.9	D	35.0+ D

Northbound

Southbound

T	4227	7763	0.65	0.54	10.8	B	14.7 B
R	480	881	0.92	0.54	38.8	D	
			Intersection Delay = 17.6 (sec/veh)		Intersection LOS = B		

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E 55th Street @ 2nd Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 7/25/05 Jurisd:
 Period: BD WMC SEG 10 MD Year : 2008 WMC Build Segment 10
 Project ID: 0411C 2008 Build WMC MD Segment 10
 E/W St: E 55th Street N/S St: 2nd Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	0	0	1	1	0	0	0	0	0	5	0
LGConfig				L	T						TR	
Volume				204	226						2009	215
Lane Width				10.0	10.0						10.0	
RTOR Vol												0

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left			
Thru					Thru			
Right					Right			
Peds	X				Peds	X		
WB Left	P				SB Left			
Thru	P				Thru	P		
Right					Right	P		
Peds	X				Peds	X		
NB Right					EB Right			
SB Right					WB Right			
Green	31.0				49.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay	LOS	Delay LOS

Eastbound

Westbound

L	320	930	0.67	0.34	35.9	D	
T	491	1425	0.48	0.34	26.6	C	31.0 C

Northbound

Southbound

TR	3229	5931	0.72	0.54	12.1	B	12.1 B
----	------	------	------	------	------	---	--------

Intersection Delay = 15.2 (sec/veh) Intersection LOS = B

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E 55th Street @ 2nd Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 7/25/05 Jurisd:
 Period: BD WMC SEG 10 PM Year : 2008 WMC Build SEG 10
 Project ID: 0411C 2008 Build WMC PM Segment 10
 E/W St: E 55th St N/S St: 2nd Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	0	0	1	1	0	0	0	0	0	5	1
LGConfig				L	T						T	R
Volume				187	256						1666	208
Lane Width				10.0	10.0						10.0	12.0
RTOR Vol												0

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left			
Thru					Thru			
Right					Right			
Peds	X				Peds	X		
WB Left	P				SB Left			
Thru	P				Thru	P		
Right					Right	P		
Peds	X				Peds	X		
NB Right					EB Right			
SB Right					WB Right			
Green	31.0				49.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay	LOS	Delay LOS

Eastbound

Westbound

L	330	958	0.60	0.34	32.1	C		
T	491	1425	0.55	0.34	28.2	C	29.8	C

Northbound

Southbound

T	3416	6275	0.51	0.54	9.5	A	9.8	A
R	480	881	0.46	0.54	11.7	B		

Intersection Delay = 13.6 (sec/veh) Intersection LOS = B

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E.55th Street @ 3rd Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 7/25/05 Jurisd:
 Period: BD WMC Segment 10 AM Year : 2008 WMC Build Seg 10
 Project ID: 0411C 2008 Build WMC SEG 10
 E/W St: 55th Street N/S St: 3rd Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	0	0	0	2	0	0	5	0	0	0	0
LGConfig					TR			LT				
Volume					480	304	201	1888				
Lane Width					9.0			16.0				
RTOR Vol					0							

Duration	0.25	Area Type:	CBD or Similar									
Signal Operations												
Phase Combination	1	2	3	4	5	6	7	8				
EB Left					NB Left	P						
Thru					Thru	P						
Right					Right							
Peds	X				Peds	X						
WB Left					SB Left							
Thru	P				Thru							
Right	P				Right							
Peds	X				Peds	X						
NB Right					EB Right							
SB Right					WB Right							
Green	33.0				47.0							
Yellow	3.0				3.0							
All Red	2.0				2.0							
Cycle Length: 90.0 secs												

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C		Delay	LOS

Eastbound

Westbound

TR 884 2411 0.93 0.37 45.3 D 45.3 D

Northbound

LT 3851 7374 0.57 0.52 11.3 B 11.3 B

Southbound

Intersection Delay = 20.6 (sec/veh) Intersection LOS = C

HCS2000: Signalized Intersections Release 4.1e

Analyst: MWR Inter.: E 55th ST@3rd AVE
 Agency: PHA Area Type: CBD or Similar
 Date: 7/25/05 Jurisd:
 Period: BD WMC Seg 10 MD Year : 2008 WMC Build Seg 10
 Project ID: 0411C 2008 Build WMC MD Segment 10
 E/W St: E 55th Street N/S St: 3rd Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	0	0	0	1	0	0	5	0	0	0	0
LGConfig					TR			LT				
Volume				292	149		212	2000				
Lane Width				16.0			10.0					
RTOR Vol					0							

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left	P		
Thru					Thru	P		
Right					Right			
Peds	X				Peds	X		
WB Left					SB Left			
Thru	P				Thru			
Right	P				Right			
Peds	X				Peds	X		
NB Right					EB Right			
SB Right					WB Right			
Green	40.0				40.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay	LOS	Delay LOS

Eastbound

Westbound

TR 709 1595 0.65 0.44 24.3 C 24.3 C

Northbound

LT 2640 5939 0.88 0.44 23.9 C 23.9 C

Southbound

Intersection Delay = 24.0 (sec/veh) Intersection LOS = C

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E 55th Street@3rd Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 7/25/05 Jurisd:
 Period: BD WMC Seg 10 PM Year : 2008 WMC Build SEG 10
 Project ID: 0411C 2008 Build WMC PM Segment 10
 E/W St: E 55th Street N/S St: 3rd Avenue

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	0	0	0	2	0	0	6	0	0	0	0
LGConfig					TR			LT				
Volume				240	224		220	2148				
Lane Width				9.0			10.0					
RTOR Vol					0							

Duration	0.25	Area Type:	CBD or Similar					
Signal Operations								
Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left	P		
Thru					Thru	P		
Right					Right			
Peds	X				Peds	X		
WB Left					SB Left			
Thru	P				Thru			
Right	P				Right			
Peds	X				Peds	X		
NB Right					EB Right			
SB Right					WB Right			
Green	33.0				47.0			
Yellow	3.0				3.0			
All Red	2.0				2.0			
				Cycle Length: 90.0				secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay	LOS	Delay
					LOS		LOS

Eastbound

Westbound

TR 884 2411 0.55 0.37 25.1 C 25.1 C

Northbound

LT 3928 7521 0.63 0.52 12.0 B 12.0 B

Southbound

Intersection Delay = 14.2 (sec/veh) Intersection LOS = B