

Traffic Analysis HCS Outputs

Build Conditions

CHAPTER 8: EAST 54TH STREET/SECOND AVENUE SHAFT SITE

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: 54th Street @ 2nd Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 8/9/05 Jurisd: fpr=1.0
 Period: AM Alt Shaft at E.54@2 Ave Year : 2008 Build Alt Shaft Site
 Project ID: 2008 Build Alt Shaft Site E. 54th @ 2nd Ave AM
 E/W St: 54th 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	1	0	0	0	0	0	0	0	0	4	0
LGConfig	TR									LT		
Volume	246		238							61	2708	
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					
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

TR	519	1508	0.98	0.34	64.7	E	64.7	E
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Westbound

Northbound

Southbound

LT	2809	5160	1.04	0.54	41.9	D	41.9	D
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Intersection Delay = 45.3 (sec/veh) Intersection LOS = D

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: 54th Street @ 2nd Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 8/9/05 Jurisd: fRPB=1.0
 Period: B-MD Alt Shaft at E.54@2 Ave Year : 2008 Build Alt Shaft Site
 Project ID: 2004 Build Alt Shaft Site at E. 54 and 2 Ave MD
 E/W St: 54th 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	1	0	0	0	0	0	0	0	0	4	0
LGConfig	TR									LT		
Volume	219 236									67 2151		
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			
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

TR 513 1488 0.93 0.34 54.8 D 54.8 D

Westbound

Northbound

Southbound

LT 2718 4993 0.86 0.54 15.9 B 15.9 B

Intersection Delay = 22.6 (sec/veh) Intersection LOS = C

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: E.54th Street @ 2nd Avenue
 Agency: PHA Area Type: CBD or Similar
 Date: 8/9/05 Jurisd: fRPB=1.0
 Period: PM Alt Shaft at E.54@2 Ave Year : 2008 Build Alt Shaft Site
 Project ID: 2008 Build Alt Shaft Sites at E.54@2nd
 E/W St: 54th 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	1	0	0	0	0	0	0	0	0	4	0
LGConfig	TR									LT		
Volume	317 218									69 1787		
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			
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

TR 541 1571 1.04 0.34 79.2 E 79.2 E

Westbound

Northbound

Southbound

LT 2823 5185 0.69 0.54 11.8 B 11.8 B

Intersection Delay = 26.9 (sec/veh) Intersection LOS = C

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: 55th ST@2nd AVE
 Agency: PHA Area Type: CBD or Similar
 Date: 4/6/2004 Jurisd:
 Period: B-AM Alt Shaft at E.54@2 Ave Year : 2008 Build
 Project ID: Shaft 33B 55th St @ 2nd Ave 2008 B - AM Alt Shaft Site
 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	4	1
LGConfig					LT						T R	
Volume				150	363					2619	417	
Lane Width					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 v/c g/C		Lane Group Delay LOS	Approach Delay LOS	
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Eastbound

Westbound

LT 817 2372 0.66 0.34 29.2 C 29.2 C

Northbound

Southbound

T 2818 5176 0.98 0.54 26.4 C 25.6 C
 R 571 1048 0.77 0.54 20.7 C

Intersection Delay = 26.2 (sec/veh) Intersection LOS = C

HCS2000: Signalized Intersections Release 4.1e

Analyst: MR Inter.: 55th ST@2nd AVE
 Agency: PHA Area Type: CBD or Similar
 Date: 4/6/2004 Jurisd: LT=PB=1.0
 Period: MD Alt Shaft at E.54@2 Ave Year : 2008 Build Alt Shaft Site
 Project ID: Shaft 33B 55th St @ 2nd Ave 2008 B - MD Alt Shaft Site
 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	4	0
LGConfig					LT						TR	
Volume				204	226						2014	211
Lane Width					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

Eastbound

Westbound

LT 887 2575 0.51 0.34 25.6 C 25.6 C

Northbound

Southbound

TR 2590 4758 0.90 0.54 18.5 B 18.5 B

Intersection Delay = 19.7 (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: 4/6/2004 Jurisd: LT=PB=1.0
 Period: PM Alt Shaft at E.54@2 Ave Year : 2008 Build
 Project ID: Shaft 33B 55th St @ 2nd Ave 2008 B - PM
 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	4	1	
LGConfig					LT					T R		
Volume				187	256					1669	204	
Lane Width					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

LT 897 2603 0.52 0.34 25.7 C 25.7 C

Northbound

Southbound

T 2712 4982 0.65 0.54 11.2 B 11.1 B
 R 571 1048 0.38 0.54 10.0+ B

Intersection Delay = 13.9 (sec/veh) Intersection LOS = B