

ATTACHMENT I

Application Package
Part 2

Appendix H

Capacity Analyses

Existing AM Street Peak Hour
2: Young Circle/Young Circle & Harrison Street

05/19/2023



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø4	Ø6
Lane Configurations			↑↑↑						
Traffic Volume (vph)	0	0	656	727	0	0			
Future Volume (vph)	0	0	656	727	0	0			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Satd. Flow (prot)	0	0	4558	0	0	0			
Flt Permitted									
Satd. Flow (perm)	0	0	4558	0	0	0			
Right Turn on Red		Yes		Yes					
Satd. Flow (RTOR)									
Link Speed (mph)	25		25			25			
Link Distance (ft)	95		89			425			
Travel Time (s)	2.6		2.4			11.6			
Confl. Peds. (#/hr)				24					
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87			
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	0	0	1590	0	0	0			
Turn Type			NA						
Protected Phases							2	4	6
Permitted Phases			2 4						
Total Split (s)							57.0	43.0	57.0
Total Lost Time (s)									
Act Effct Green (s)			100.0						
Actuated g/C Ratio			1.00						
v/c Ratio			0.35						
Control Delay			0.2						
Queue Delay			0.0						
Total Delay			0.2						
LOS			A						
Approach Delay			0.2						
Approach LOS			A						
Queue Length 50th (ft)			0						
Queue Length 95th (ft)			0						
Internal Link Dist (ft)	15		9			345			
Turn Bay Length (ft)									
Base Capacity (vph)			4558						
Starvation Cap Reductn			0						
Spillback Cap Reductn			0						
Storage Cap Reductn			0						
Reduced v/c Ratio			0.35						
Intersection Summary									
Area Type:	Other								
Cycle Length: 100									
Actuated Cycle Length: 100									
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow									
Control Type: Actuated-Coordinated									
Maximum v/c Ratio: 0.62									
Intersection Signal Delay: 0.2	Intersection LOS: A								

Existing AM Street Peak Hour
2: Youg Circle/Young Circle & Harrison Street

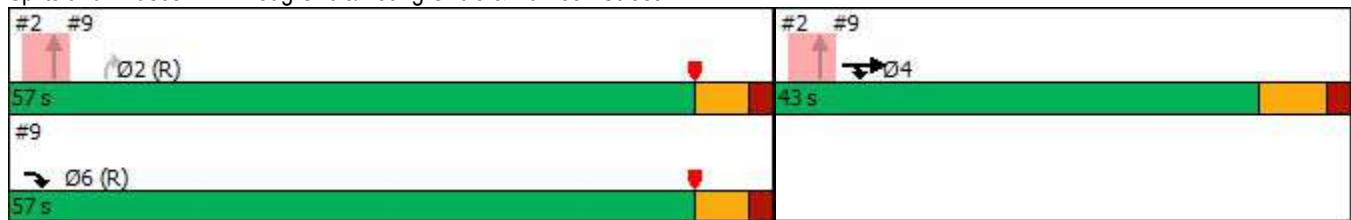
05/19/2023

Intersection Capacity Utilization 35.2%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: Youg Circle/Young Circle & Harrison Street



Existing AM Street Peak Hour
8: US-1/Federal Hwy & Van Buren Street

05/19/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	98	17	14	5	16	90	779	31	58	714	19
Future Volume (vph)	21	98	17	14	5	16	90	779	31	58	714	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Storage Length (ft)	60		0	0		55	175		0	80		0
Storage Lanes	1		0	0		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1745	1771	0	0	1757	1561	1728	3400	0	1711	3377	0
Flt Permitted	0.744				0.754		0.327			0.301		
Satd. Flow (perm)	1292	1771	0	0	1356	1455	595	3400	0	542	3377	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8				98		6			4	
Link Speed (mph)		25			25			35			25	
Link Distance (ft)		571			357			334			294	
Travel Time (s)		15.6			9.7			6.5			8.0	
Confl. Peds. (#/hr)	47		18	18		47			1	1		
Confl. Bikes (#/hr)			2			1						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	6%	1%	0%	0%	1%	2%	0%	2%	3%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	22	121	0	0	20	17	95	853	0	61	772	0
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8	2			6		
Total Split (s)	26.0	26.0		26.0	26.0	26.0	18.0	56.0		18.0	56.0	
Total Lost Time (s)	6.0	6.0			6.0	6.0	6.0	6.0		6.0	6.0	
Act Effct Green (s)	13.7	13.7			13.7	13.7	70.1	64.1		68.9	63.5	
Actuated g/C Ratio	0.14	0.14			0.14	0.14	0.70	0.64		0.69	0.64	
v/c Ratio	0.12	0.49			0.11	0.06	0.19	0.39		0.14	0.36	
Control Delay	36.3	42.3			35.8	0.4	5.5	10.8		5.5	10.8	
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0		0.0	0.4	
Total Delay	36.3	42.3			35.8	0.4	5.5	10.9		5.5	11.2	
LOS	D	D			D	A	A	B		A	B	
Approach Delay		41.3			19.5			10.3			10.8	
Approach LOS		D			B			B			B	
Queue Length 50th (ft)	13	69			12	0	12	123		8	110	
Queue Length 95th (ft)	33	115			31	0	35	213		24	194	
Internal Link Dist (ft)		491			277			254			214	
Turn Bay Length (ft)	60					55	175			80		
Base Capacity (vph)	258	360			271	369	574	2180		536	2145	
Starvation Cap Reductn	0	0			0	0	0	0		0	785	
Spillback Cap Reductn	0	0			0	4	0	171		0	0	
Storage Cap Reductn	0	0			0	0	0	0		0	0	
Reduced v/c Ratio	0.09	0.34			0.07	0.05	0.17	0.42		0.11	0.57	
Intersection Summary												
Area Type:	Other											
Cycle Length: 100												

Existing AM Street Peak Hour

8: US-1/Federal Hwy & Van Buren Street

05/19/2023

Actuated Cycle Length: 100

Offset: 40 (40%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.49

Intersection Signal Delay: 13.0

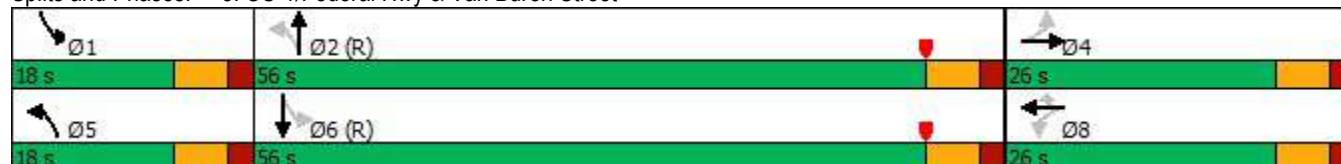
Intersection LOS: B

Intersection Capacity Utilization 68.0%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 8: US-1/Federal Hwy & Van Buren Street



Existing AM Street Peak Hour
9: US-1/Federal Hwy & Young Circle

05/19/2023

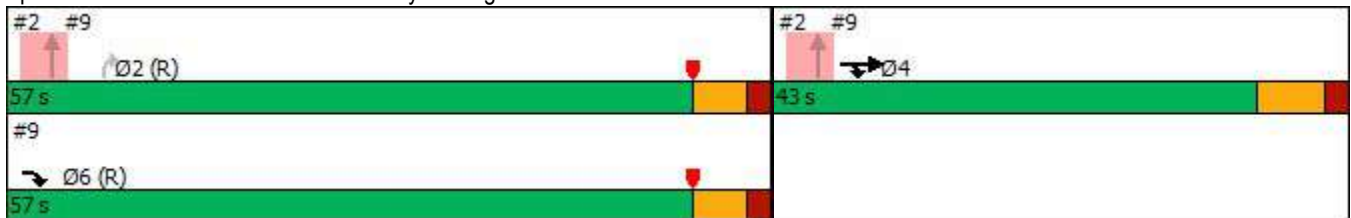
	→	↘	↙	←	↖	↗	
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6
Lane Configurations	↑↑	↑↑				↑↑	
Traffic Volume (vph)	482	798	0	0	0	814	
Future Volume (vph)	482	798	0	0	0	814	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Satd. Flow (prot)	3438	2760	0	0	0	2760	
Flt Permitted							
Satd. Flow (perm)	3438	2760	0	0	0	2760	
Right Turn on Red		No				No	
Satd. Flow (RTOR)							
Link Speed (mph)	25			25	25		
Link Distance (ft)	317			168	294		
Travel Time (s)	8.6			4.6	8.0		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	
Heavy Vehicles (%)	5%	3%	2%	2%	2%	3%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	518	858	0	0	0	875	
Turn Type	NA	custom				Perm	
Protected Phases	4	6 4					6
Permitted Phases						2	
Total Split (s)	43.0					57.0	57.0
Total Lost Time (s)	7.0					6.0	
Act Effct Green (s)	36.0	100.0				51.0	
Actuated g/C Ratio	0.36	1.00				0.51	
v/c Ratio	0.42	0.31				0.62	
Control Delay	25.4	0.3				11.1	
Queue Delay	0.0	0.0				0.1	
Total Delay	25.4	0.3				11.1	
LOS	C	A				B	
Approach Delay	9.8				11.1		
Approach LOS	A				B		
Queue Length 50th (ft)	129	0				222	
Queue Length 95th (ft)	176	0				34	
Internal Link Dist (ft)	237			88	214		
Turn Bay Length (ft)							
Base Capacity (vph)	1237	2760				1407	
Starvation Cap Reductn	0	0				34	
Spillback Cap Reductn	0	48				0	
Storage Cap Reductn	0	0				0	
Reduced v/c Ratio	0.42	0.32				0.64	
Intersection Summary							
Area Type:	Other						
Cycle Length: 100							
Actuated Cycle Length: 100							
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow							
Control Type: Actuated-Coordinated							
Maximum v/c Ratio: 0.62							
Intersection Signal Delay: 10.3				Intersection LOS: B			
Intersection Capacity Utilization 52.6%				ICU Level of Service A			

Existing AM Street Peak Hour
9: US-1/Federal Hwy & Young Circle

05/19/2023

Analysis Period (min) 15

Splits and Phases: 9: US-1/Federal Hwy & Young Circle



Existing AM Street Peak Hour
3: S 17th Avenue & Harrison Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	346	358	2	0	0	0	0	349	61	0	0	0
Future Volume (Veh/h)	346	358	2	0	0	0	0	349	61	0	0	0
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	372	385	2	0	0	0	0	375	66	0	0	0
Pedestrians	2											
Lane Width (ft)	12.0											
Walking Speed (ft/s)	3.5											
Percent Blockage	0											
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)	420											
pX, platoon unblocked												
vC, conflicting volume	0			389			1132	1132	388	1382	1133	0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			389			1132	1132	388	1382	1133	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	77			100			100	0	90	0	100	100
cM capacity (veh/h)	1617			1178			149	157	663	0	157	1091
Direction, Lane #	EB 1	EB 2	EB 3	NB 1								
Volume Total	186	186	387	441								
Volume Left	186	186	0	0								
Volume Right	0	0	2	66								
cSH	1617	1617	1700	178								
Volume to Capacity	0.23	0.23	0.23	2.48								
Queue Length 95th (ft)	22	22	0	934								
Control Delay (s)	7.9	7.9	0.0	724.4								
Lane LOS	A	A		F								
Approach Delay (s)	3.9			724.4								
Approach LOS				F								
Intersection Summary												
Average Delay				268.7								
Intersection Capacity Utilization				47.7%	ICU Level of Service				A			
Analysis Period (min)				15								

Existing AM Street Peak Hour
5: S 17th Avenue & Van Buren Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	9	31	93	8	388	1	5	13	50	0	0	4
Future Volume (vph)	9	31	93	8	388	1	5	13	50	0	0	4
Peak Hour Factor	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68
Hourly flow rate (vph)	13	46	137	12	571	1	7	19	74	0	0	6
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	196	584	100	6								
Volume Left (vph)	13	12	7	0								
Volume Right (vph)	137	1	74	6								
Hadj (s)	-0.41	0.00	-0.43	-0.60								
Departure Headway (s)	4.4	4.4	5.2	5.2								
Degree Utilization, x	0.24	0.72	0.14	0.01								
Capacity (veh/h)	777	801	616	590								
Control Delay (s)	8.8	17.7	9.1	8.3								
Approach Delay (s)	8.8	17.7	9.1	8.3								
Approach LOS	A	C	A	A								
Intersection Summary												
Delay				14.7								
Level of Service				B								
Intersection Capacity Utilization				45.1%	ICU Level of Service	A						
Analysis Period (min)				15								

Existing AM Street Peak Hour
14: S 17th Avenue & HAAS Access/Alley

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	388	0	0	1	0	1	0	23	0	0	3	0
Future Volume (Veh/h)	388	0	0	1	0	1	0	23	0	0	3	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
Hourly flow rate (vph)	1176	0	0	3	0	3	0	70	0	0	9	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	82	79	9	79	79	70	9			70		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	82	79	9	79	79	70	9			70		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	100	100	100	100	100	100			100		
cM capacity (veh/h)	908	815	1079	914	815	998	1624			1544		
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1							
Volume Total	1176	0	6	70	9							
Volume Left	1176	0	3	0	0							
Volume Right	0	0	3	0	0							
cSH	908	1700	955	1700	1544							
Volume to Capacity	1.30	0.00	0.01	0.04	0.00							
Queue Length 95th (ft)	1091	0	0	0	0							
Control Delay (s)	157.6	0.0	8.8	0.0	0.0							
Lane LOS	F	A	A									
Approach Delay (s)	157.6		8.8	0.0	0.0							
Approach LOS	F		A									
Intersection Summary												
Average Delay			147.0									
Intersection Capacity Utilization			38.2%	ICU Level of Service					A			
Analysis Period (min)			15									

Existing AM Street Peak Hour
16: Van Buren Street & HAAS Access

05/19/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	136	20	388	0	0
Future Volume (Veh/h)	0	136	20	388	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.69	0.69	0.69	0.69	0.69	0.69
Hourly flow rate (vph)	0	197	29	562	0	0
Pedestrians					49	
Lane Width (ft)					0.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		357				
pX, platoon unblocked					0.96	
vC, conflicting volume	640				556	359
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	640				520	359
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	954				501	690
Direction, Lane #	EB 1	WB 1				
Volume Total	197	591				
Volume Left	0	0				
Volume Right	0	562				
cSH	954	1700				
Volume to Capacity	0.00	0.35				
Queue Length 95th (ft)	0	0				
Control Delay (s)	0.0	0.0				
Lane LOS						
Approach Delay (s)	0.0	0.0				
Approach LOS						
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		32.1%		ICU Level of Service		A
Analysis Period (min)		15				

Existing AM School Peak Hour
2: Young Circle/Young Circle & Harrison Street

05/19/2023



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø4	Ø6
Lane Configurations			↑↑↑						
Traffic Volume (vph)	0	0	636	604	0	0			
Future Volume (vph)	0	0	636	604	0	0			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Satd. Flow (prot)	0	0	4594	0	0	0			
Flt Permitted									
Satd. Flow (perm)	0	0	4594	0	0	0			
Right Turn on Red		Yes		Yes					
Satd. Flow (RTOR)									
Link Speed (mph)	25		25			25			
Link Distance (ft)	95		89			425			
Travel Time (s)	2.6		2.4			11.6			
Confl. Peds. (#/hr)				24					
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87			
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	0	0	1425	0	0	0			
Turn Type			NA						
Protected Phases							2	4	6
Permitted Phases			2 4						
Total Split (s)							57.0	43.0	57.0
Total Lost Time (s)									
Act Effct Green (s)			100.0						
Actuated g/C Ratio			1.00						
v/c Ratio			0.31						
Control Delay			0.2						
Queue Delay			0.0						
Total Delay			0.2						
LOS			A						
Approach Delay			0.2						
Approach LOS			A						
Queue Length 50th (ft)			0						
Queue Length 95th (ft)			0						
Internal Link Dist (ft)	15		9			345			
Turn Bay Length (ft)									
Base Capacity (vph)			4594						
Starvation Cap Reductn			0						
Spillback Cap Reductn			0						
Storage Cap Reductn			0						
Reduced v/c Ratio			0.31						
Intersection Summary									
Area Type:	Other								
Cycle Length: 100									
Actuated Cycle Length: 100									
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow									
Control Type: Actuated-Coordinated									
Maximum v/c Ratio: 0.63									
Intersection Signal Delay: 0.2	Intersection LOS: A								

Existing AM School Peak Hour
2: Youg Circle/Young Circle & Harrison Street

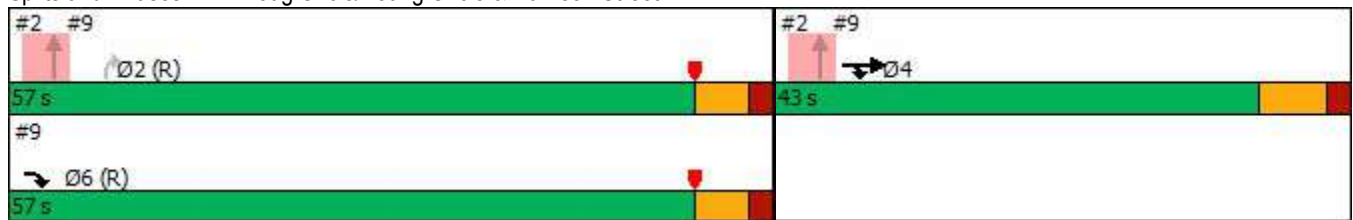
05/19/2023

Intersection Capacity Utilization 31.9%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: Youg Circle/Young Circle & Harrison Street



Existing AM School Peak Hour
8: US-1/Federal Hwy & Van Buren Street

05/19/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	81	19	16	16	15	76	740	25	39	698	19
Future Volume (vph)	14	81	19	16	16	15	76	740	25	39	698	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Storage Length (ft)	60		0	0		55	175		0	80		0
Storage Lanes	1		0	0		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1745	1735	0	0	1784	1561	1728	3372	0	1662	3377	0
Flt Permitted	0.734				0.811		0.301			0.299		
Satd. Flow (perm)	1276	1735	0	0	1468	1455	547	3372	0	523	3377	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11				98		5			4	
Link Speed (mph)		25			25			35			25	
Link Distance (ft)		571			357			334			294	
Travel Time (s)		15.6			9.7			6.5			8.0	
Confl. Peds. (#/hr)	47		18	18		47			1	1		
Confl. Bikes (#/hr)			2			1						
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	0%	0%	11%	1%	0%	0%	1%	3%	0%	5%	3%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	16	115	0	0	36	17	87	880	0	45	824	0
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8	2			6		
Total Split (s)	26.0	26.0		26.0	26.0	26.0	18.0	56.0		18.0	56.0	
Total Lost Time (s)	6.0	6.0			6.0	6.0	6.0	6.0		6.0	6.0	
Act Effct Green (s)	13.5	13.5			13.5	13.5	71.5	66.9		69.1	63.8	
Actuated g/C Ratio	0.14	0.14			0.14	0.14	0.72	0.67		0.69	0.64	
v/c Ratio	0.09	0.47			0.18	0.06	0.18	0.39		0.10	0.38	
Control Delay	35.5	40.9			37.6	0.4	5.5	10.0		5.3	10.9	
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0		0.0	0.4	
Total Delay	35.5	40.9			37.6	0.4	5.5	10.0		5.3	11.3	
LOS	D	D			D	A	A	B		A	B	
Approach Delay		40.2			25.7			9.6			11.0	
Approach LOS		D			C			A			B	
Queue Length 50th (ft)	9	64			21	0	11	127		6	118	
Queue Length 95th (ft)	26	104			45	0	31	210		19	199	
Internal Link Dist (ft)		491			277			254			214	
Turn Bay Length (ft)	60					55	175			80		
Base Capacity (vph)	255	355			293	369	546	2256		520	2157	
Starvation Cap Reductn	0	0			0	0	0	0		0	748	
Spillback Cap Reductn	0	0			0	5	0	181		0	0	
Storage Cap Reductn	0	0			0	0	0	0		0	0	
Reduced v/c Ratio	0.06	0.32			0.12	0.05	0.16	0.42		0.09	0.58	
Intersection Summary												
Area Type:	Other											
Cycle Length: 100												

Existing AM School Peak Hour
8: US-1/Federal Hwy & Van Buren Street

05/19/2023

Actuated Cycle Length: 100

Offset: 40 (40%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.47

Intersection Signal Delay: 12.6

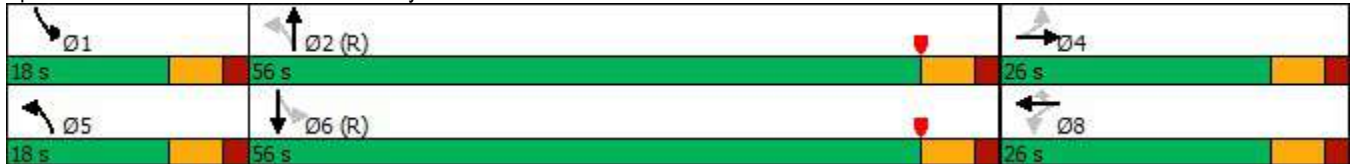
Intersection LOS: B

Intersection Capacity Utilization 66.3%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 8: US-1/Federal Hwy & Van Buren Street



Existing AM School Peak Hour
9: US-1/Federal Hwy & Young Circle

05/19/2023

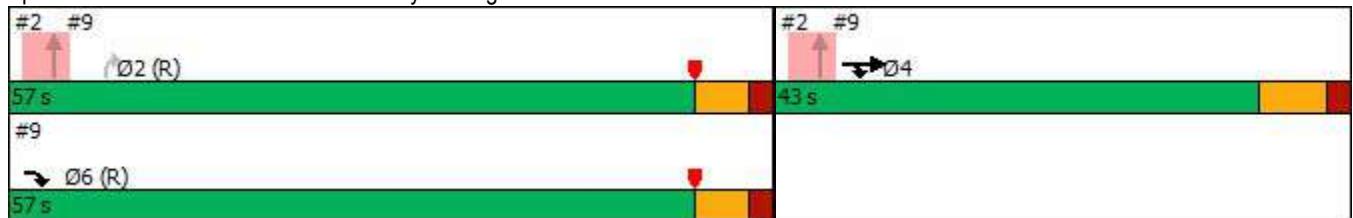
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6
Lane Configurations	↑↑	↑↑				↑↑	
Traffic Volume (vph)	433	761	0	0	0	761	
Future Volume (vph)	433	761	0	0	0	761	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Satd. Flow (prot)	3438	2760	0	0	0	2760	
Flt Permitted							
Satd. Flow (perm)	3438	2760	0	0	0	2760	
Right Turn on Red		No				No	
Satd. Flow (RTOR)							
Link Speed (mph)	25			25	25		
Link Distance (ft)	317			168	294		
Travel Time (s)	8.6			4.6	8.0		
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	
Heavy Vehicles (%)	5%	3%	2%	2%	2%	3%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	503	885	0	0	0	885	
Turn Type	NA	custom				Perm	
Protected Phases	4	6 4					6
Permitted Phases						2	
Total Split (s)	43.0					57.0	57.0
Total Lost Time (s)	7.0					6.0	
Act Effct Green (s)	36.0	100.0				51.0	
Actuated g/C Ratio	0.36	1.00				0.51	
v/c Ratio	0.41	0.32				0.63	
Control Delay	25.2	0.3				11.6	
Queue Delay	0.0	0.0				0.0	
Total Delay	25.2	0.3				11.6	
LOS	C	A				B	
Approach Delay	9.3				11.6		
Approach LOS	A				B		
Queue Length 50th (ft)	124	0				225	
Queue Length 95th (ft)	161	0				26	
Internal Link Dist (ft)	237			88	214		
Turn Bay Length (ft)							
Base Capacity (vph)	1237	2760				1407	
Starvation Cap Reductn	0	0				22	
Spillback Cap Reductn	0	77				0	
Storage Cap Reductn	0	0				0	
Reduced v/c Ratio	0.41	0.33				0.64	
Intersection Summary							
Area Type:	Other						
Cycle Length: 100							
Actuated Cycle Length: 100							
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow							
Control Type: Actuated-Coordinated							
Maximum v/c Ratio: 0.63							
Intersection Signal Delay: 10.2				Intersection LOS: B			
Intersection Capacity Utilization 49.4%				ICU Level of Service A			

Existing AM School Peak Hour
9: US-1/Federal Hwy & Young Circle

05/19/2023

Analysis Period (min) 15

Splits and Phases: 9: US-1/Federal Hwy & Young Circle



Existing AM School Peak Hour
3: S 17th Avenue & Harrison Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	340	250	6	0	0	0	0	267	44	0	0	0
Future Volume (Veh/h)	340	250	6	0	0	0	0	267	44	0	0	0
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	386	284	7	0	0	0	0	303	50	0	0	0
Pedestrians								2				
Lane Width (ft)								12.0				
Walking Speed (ft/s)								3.5				
Percent Blockage								0				
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)	420											
pX, platoon unblocked												
vC, conflicting volume	0			293			1062	1062	290	1258	1065	0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			293			1062	1062	290	1258	1065	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	76			100			100	0	93	0	100	100
cM capacity (veh/h)	1617			1278			165	169	753	0	170	1091
Direction, Lane #	EB 1	EB 2	EB 3	NB 1								
Volume Total	193	193	291	353								
Volume Left	193	193	0	0								
Volume Right	0	0	7	50								
cSH	1617	1617	1700	190								
Volume to Capacity	0.24	0.24	0.17	1.86								
Queue Length 95th (ft)	23	23	0	639								
Control Delay (s)	7.9	7.9	0.0	447.1								
Lane LOS	A	A		F								
Approach Delay (s)	4.5			447.1								
Approach LOS				F								
Intersection Summary												
Average Delay			156.2									
Intersection Capacity Utilization			36.9%	ICU Level of Service				A				
Analysis Period (min)			15									

Existing AM School Peak Hour
5: S 17th Avenue & Van Buren Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	15	26	76	7	268	3	7	25	40	0	1	5
Future Volume (vph)	15	26	76	7	268	3	7	25	40	0	1	5
Peak Hour Factor	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
Hourly flow rate (vph)	27	46	136	12	479	5	12	45	71	0	2	9
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	209	496	128	11								
Volume Left (vph)	27	12	12	0								
Volume Right (vph)	136	5	71	9								
Hadj (s)	-0.34	0.00	-0.31	-0.49								
Departure Headway (s)	4.5	4.5	5.2	5.2								
Degree Utilization, x	0.26	0.62	0.18	0.02								
Capacity (veh/h)	759	774	609	572								
Control Delay (s)	9.1	14.7	9.4	8.3								
Approach Delay (s)	9.1	14.7	9.4	8.3								
Approach LOS	A	B	A	A								
Intersection Summary												
Delay			12.4									
Level of Service			B									
Intersection Capacity Utilization			38.0%	ICU Level of Service		A						
Analysis Period (min)			15									

Existing AM School Peak Hour
14: S 17th Avenue & HAAS Access/Alley

05/19/2023

																			
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR							
Lane Configurations																			
Traffic Volume (veh/h)	268	0	0	1	0	2	0	43	0	1	5	0							
Future Volume (Veh/h)	268	0	0	1	0	2	0	43	0	1	5	0							
Sign Control		Stop			Stop			Free			Free								
Grade		0%			0%			0%			0%								
Peak Hour Factor	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54							
Hourly flow rate (vph)	496	0	0	2	0	4	0	80	0	2	9	0							
Pedestrians																			
Lane Width (ft)																			
Walking Speed (ft/s)																			
Percent Blockage																			
Right turn flare (veh)																			
Median type	None								None										
Median storage veh																			
Upstream signal (ft)																			
pX, platoon unblocked																			
vC, conflicting volume	97	93	9	93	93	80	9			80									
vC1, stage 1 conf vol																			
vC2, stage 2 conf vol																			
vCu, unblocked vol	97	93	9	93	93	80	9			80									
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1									
tC, 2 stage (s)																			
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2									
p0 queue free %	44	100	100	100	100	100	100			100									
cM capacity (veh/h)	886	800	1079	895	800	986	1624			1531									
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1														
Volume Total	496	0	6	80	11														
Volume Left	496	0	2	0	2														
Volume Right	0	0	4	0	0														
cSH	886	1700	953	1700	1531														
Volume to Capacity	0.56	0.00	0.01	0.05	0.00														
Queue Length 95th (ft)	89	0	0	0	0														
Control Delay (s)	14.1	0.0	8.8	0.0	1.3														
Lane LOS	B	A	A		A														
Approach Delay (s)	14.1		8.8	0.0	1.3														
Approach LOS	B		A																
Intersection Summary																			
Average Delay			11.9																
Intersection Capacity Utilization			31.5%	ICU Level of Service					A										
Analysis Period (min)			15																

Existing AM School Peak Hour
16: Van Buren Street & HAAS Access

05/19/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	116	24	268	0	0
Future Volume (Veh/h)	0	116	24	268	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.54	0.54	0.54	0.54	0.54	0.54
Hourly flow rate (vph)	0	215	44	496	0	0
Pedestrians					49	
Lane Width (ft)					0.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)		357				
pX, platoon unblocked					0.97	
vC, conflicting volume	589				556	341
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	589				530	341
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	996				499	706
Direction, Lane #	EB 1	WB 1				
Volume Total	215	540				
Volume Left	0	0				
Volume Right	0	496				
cSH	996	1700				
Volume to Capacity	0.00	0.32				
Queue Length 95th (ft)	0	0				
Control Delay (s)	0.0	0.0				
Lane LOS						
Approach Delay (s)	0.0	0.0				
Approach LOS						
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		24.7%		ICU Level of Service		A
Analysis Period (min)		15				

Existing PM Street Peak Hour
2: Young Circle/Young Circle & Harrison Street

05/19/2023



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø4	Ø6
Lane Configurations			↑↑↑						
Traffic Volume (vph)	0	0	677	605	0	0			
Future Volume (vph)	0	0	677	605	0	0			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Satd. Flow (prot)	0	0	4606	0	0	0			
Flt Permitted									
Satd. Flow (perm)	0	0	4606	0	0	0			
Right Turn on Red		Yes		Yes					
Satd. Flow (RTOR)									
Link Speed (mph)	25		25			25			
Link Distance (ft)	95		89			425			
Travel Time (s)	2.6		2.4			11.6			
Confl. Peds. (#/hr)				24					
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90			
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	0	0	1424	0	0	0			
Turn Type			NA						
Protected Phases							2	4	6
Permitted Phases			2 4						
Total Split (s)							57.0	43.0	57.0
Total Lost Time (s)									
Act Effct Green (s)			100.0						
Actuated g/C Ratio			1.00						
v/c Ratio			0.31						
Control Delay			0.2						
Queue Delay			0.0						
Total Delay			0.2						
LOS			A						
Approach Delay			0.2						
Approach LOS			A						
Queue Length 50th (ft)			0						
Queue Length 95th (ft)			0						
Internal Link Dist (ft)	15		9			345			
Turn Bay Length (ft)									
Base Capacity (vph)			4606						
Starvation Cap Reductn			0						
Spillback Cap Reductn			0						
Storage Cap Reductn			0						
Reduced v/c Ratio			0.31						
Intersection Summary									
Area Type:	Other								
Cycle Length: 100									
Actuated Cycle Length: 100									
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow									
Control Type: Actuated-Coordinated									
Maximum v/c Ratio: 0.60									
Intersection Signal Delay: 0.2	Intersection LOS: A								

Existing PM Street Peak Hour
2: Youg Circle/Young Circle & Harrison Street

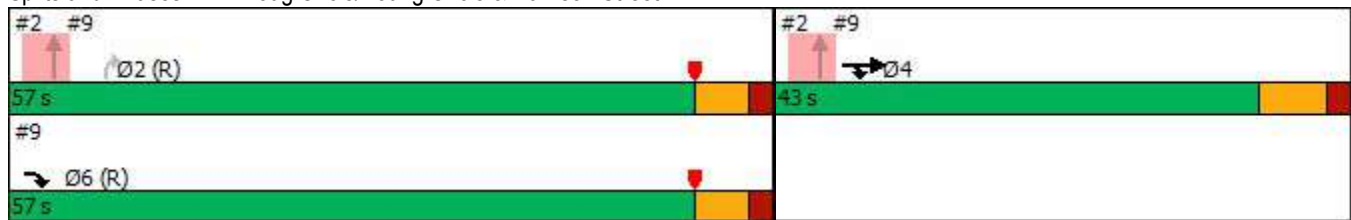
05/19/2023

Intersection Capacity Utilization 32.7%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: Youg Circle/Young Circle & Harrison Street



Existing PM Street Peak Hour
8: US-1/Federal Hwy & Van Buren Street

05/19/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	59	35	13	40	24	91	751	29	56	742	31
Future Volume (vph)	25	59	35	13	40	24	91	751	29	56	742	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Storage Length (ft)	60		0	0		55	175		0	80		0
Storage Lanes	1		0	0		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1745	1702	0	0	1810	1546	1745	3363	0	1711	3400	0
Flt Permitted	0.720				0.895		0.314			0.318		
Satd. Flow (perm)	1256	1702	0	0	1638	1441	576	3363	0	566	3400	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27				98		6			6	
Link Speed (mph)		25			25			35			25	
Link Distance (ft)		571			357			334			294	
Travel Time (s)		15.6			9.7			6.5			8.0	
Confl. Peds. (#/hr)	45		3	3		45	2		21	21		2
Confl. Bikes (#/hr)						3			1			1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	2%	0%	1%	0%	1%	0%	3%	0%	2%	2%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	99	0	0	56	25	96	822	0	59	814	0
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8	2			6		
Total Split (s)	26.0	26.0		26.0	26.0	26.0	18.0	56.0		18.0	56.0	
Total Lost Time (s)	6.0	6.0			6.0	6.0	6.0	6.0		6.0	6.0	
Act Effct Green (s)	12.7	12.7			12.7	12.7	73.5	68.7		72.4	68.2	
Actuated g/C Ratio	0.13	0.13			0.13	0.13	0.74	0.69		0.72	0.68	
v/c Ratio	0.16	0.41			0.27	0.09	0.19	0.36		0.12	0.35	
Control Delay	37.8	32.7			39.9	0.7	5.3	9.9		5.2	10.2	
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0		0.0	0.3	
Total Delay	37.8	32.7			39.9	0.7	5.3	10.0		5.2	10.5	
LOS	D	C			D	A	A	A		A	B	
Approach Delay		33.8			27.8			9.5			10.1	
Approach LOS		C			C			A			B	
Queue Length 50th (ft)	16	44			34	0	11	109		7	110	
Queue Length 95th (ft)	37	85			65	0	35	204		24	206	
Internal Link Dist (ft)		491			277			254			214	
Turn Bay Length (ft)	60					55	175			80		
Base Capacity (vph)	251	362			327	366	584	2312		570	2319	
Starvation Cap Reductn	0	0			0	0	0	0		0	789	
Spillback Cap Reductn	0	0			0	3	0	114		0	0	
Storage Cap Reductn	0	0			0	0	0	0		0	0	
Reduced v/c Ratio	0.10	0.27			0.17	0.07	0.16	0.37		0.10	0.53	
Intersection Summary												
Area Type:	Other											
Cycle Length: 100												

Existing PM Street Peak Hour
8: US-1/Federal Hwy & Van Buren Street

05/19/2023

Actuated Cycle Length: 100

Offset: 40 (40%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.41

Intersection Signal Delay: 12.0

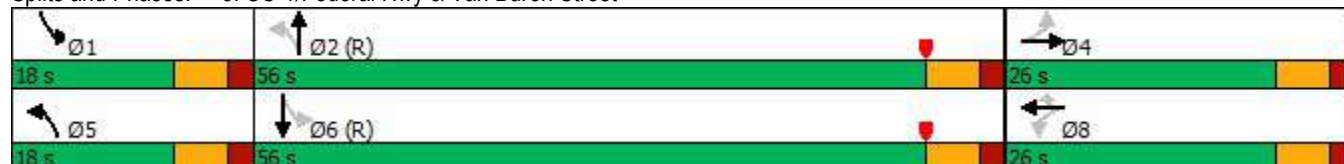
Intersection LOS: B

Intersection Capacity Utilization 60.9%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 8: US-1/Federal Hwy & Van Buren Street



Existing PM Street Peak Hour
9: US-1/Federal Hwy & Young Circle

05/19/2023

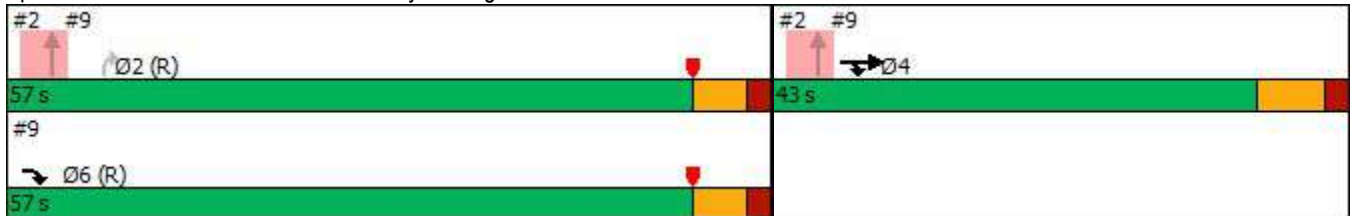
	→	↘	↙	←	↖	↗	
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6
Lane Configurations	↑↑	↑↑				↑↑	
Traffic Volume (vph)	414	830	0	0	0	791	
Future Volume (vph)	414	830	0	0	0	791	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Satd. Flow (prot)	3471	2787	0	0	0	2760	
Flt Permitted							
Satd. Flow (perm)	3471	2787	0	0	0	2760	
Right Turn on Red		No				No	
Satd. Flow (RTOR)							
Link Speed (mph)	25			25	25		
Link Distance (ft)	317			168	294		
Travel Time (s)	8.6			4.6	8.0		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	
Heavy Vehicles (%)	4%	2%	2%	2%	2%	3%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	440	883	0	0	0	841	
Turn Type	NA	custom				Perm	
Protected Phases	4	6 4					6
Permitted Phases						2	
Total Split (s)	43.0					57.0	57.0
Total Lost Time (s)	7.0					6.0	
Act Effct Green (s)	36.0	100.0				51.0	
Actuated g/C Ratio	0.36	1.00				0.51	
v/c Ratio	0.35	0.32				0.60	
Control Delay	24.5	0.3				11.4	
Queue Delay	0.0	0.0				0.1	
Total Delay	24.5	0.3				11.5	
LOS	C	A				B	
Approach Delay	8.3				11.5		
Approach LOS	A				B		
Queue Length 50th (ft)	106	0				211	
Queue Length 95th (ft)	148	0				33	
Internal Link Dist (ft)	237			88	214		
Turn Bay Length (ft)							
Base Capacity (vph)	1249	2787				1407	
Starvation Cap Reductn	0	0				70	
Spillback Cap Reductn	0	72				0	
Storage Cap Reductn	0	0				0	
Reduced v/c Ratio	0.35	0.33				0.63	
Intersection Summary							
Area Type:	Other						
Cycle Length: 100							
Actuated Cycle Length: 100							
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow							
Control Type: Actuated-Coordinated							
Maximum v/c Ratio: 0.60							
Intersection Signal Delay: 9.6					Intersection LOS: A		
Intersection Capacity Utilization 49.9%					ICU Level of Service A		

Existing PM Street Peak Hour
9: US-1/Federal Hwy & Young Circle

05/19/2023

Analysis Period (min) 15

Splits and Phases: 9: US-1/Federal Hwy & Young Circle



Existing PM Street Peak Hour
3: S 17th Avenue & Harrison Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	372	266	13	0	0	0	0	294	47	0	0	0
Future Volume (Veh/h)	372	266	13	0	0	0	0	294	47	0	0	0
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	423	302	15	0	0	0	0	334	53	0	0	0
Pedestrians	10											
Lane Width (ft)	12.0											
Walking Speed (ft/s)	3.5											
Percent Blockage	1											
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)	420											
pX, platoon unblocked												
vC, conflicting volume	0			327			1166	1166	320	1368	1173	0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			327			1166	1166	320	1368	1173	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	74			100			100	0	93	0	100	100
cM capacity (veh/h)	1617			1232			135	141	719	0	142	1091
Direction, Lane #	EB 1	EB 2	EB 3	NB 1								
Volume Total	212	212	317	387								
Volume Left	212	212	0	0								
Volume Right	0	0	15	53								
cSH	1617	1617	1700	159								
Volume to Capacity	0.26	0.26	0.19	2.44								
Queue Length 95th (ft)	26	26	0	823								
Control Delay (s)	8.0	8.0	0.0	711.2								
Lane LOS	A	A		F								
Approach Delay (s)	4.6			711.2								
Approach LOS				F								
Intersection Summary												
Average Delay	247.2											
Intersection Capacity Utilization	39.8%			ICU Level of Service					A			
Analysis Period (min)	15											

Existing PM Street Peak Hour
5: S 17th Avenue & Van Buren Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	8	40	62	3	300	1	9	35	30	0	6	7
Future Volume (vph)	8	40	62	3	300	1	9	35	30	0	6	7
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	9	44	68	3	330	1	10	38	33	0	7	8
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	121	334	81	15								
Volume Left (vph)	9	3	10	0								
Volume Right (vph)	68	1	33	8								
Hadj (s)	-0.30	0.02	-0.20	-0.32								
Departure Headway (s)	4.2	4.3	4.7	4.7								
Degree Utilization, x	0.14	0.40	0.11	0.02								
Capacity (veh/h)	825	815	694	680								
Control Delay (s)	7.9	10.1	8.3	7.8								
Approach Delay (s)	7.9	10.1	8.3	7.8								
Approach LOS	A	B	A	A								
Intersection Summary												
Delay			9.3									
Level of Service			A									
Intersection Capacity Utilization			38.0%	ICU Level of Service					A			
Analysis Period (min)			15									

Existing PM Street Peak Hour
14: S 17th Avenue & HAAS Access/Alley

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	302	0	1	0	0	1	0	39	5	0	12	0
Future Volume (Veh/h)	302	0	1	0	0	1	0	39	5	0	12	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44
Hourly flow rate (vph)	686	0	2	0	0	2	0	89	11	0	27	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None								None			
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	124	127	27	124	122	94	27	100				
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	124	127	27	124	122	94	27	100				
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1	4.1				
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2	2.2				
p0 queue free %	20	100	100	100	100	100	100	100				
cM capacity (veh/h)	854	767	1054	854	773	968	1600	1505				
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1							
Volume Total	686	2	2	100	27							
Volume Left	686	0	0	0	0							
Volume Right	0	2	2	11	0							
cSH	854	1054	968	1700	1505							
Volume to Capacity	0.80	0.00	0.00	0.06	0.00							
Queue Length 95th (ft)	217	0	0	0	0							
Control Delay (s)	24.0	8.4	8.7	0.0	0.0							
Lane LOS	C	A	A									
Approach Delay (s)	23.9		8.7	0.0	0.0							
Approach LOS	C		A									
Intersection Summary												
Average Delay			20.2									
Intersection Capacity Utilization			33.4%	ICU Level of Service					A			
Analysis Period (min)			15									

Existing PM Street Peak Hour
16: Van Buren Street & HAAS Access

05/19/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↰	↰			
Traffic Volume (veh/h)	0	109	23	300	0	0
Future Volume (Veh/h)	0	109	23	300	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	0	127	27	349	0	0
Pedestrians					19	
Lane Width (ft)					0.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)		357				
pX, platoon unblocked						
vC, conflicting volume	395				348	220
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	395				348	220
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1175				653	824
Direction, Lane #	EB 1	WB 1				
Volume Total	127	376				
Volume Left	0	0				
Volume Right	0	349				
cSH	1175	1700				
Volume to Capacity	0.00	0.22				
Queue Length 95th (ft)	0	0				
Control Delay (s)	0.0	0.0				
Lane LOS						
Approach Delay (s)	0.0	0.0				
Approach LOS						
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		24.8%		ICU Level of Service		A
Analysis Period (min)		15				

Existing PM School Peak Hour
2: Young Circle/Young Circle & Harrison Street

05/19/2023



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø4	Ø6
Lane Configurations			↑↑↑						
Traffic Volume (vph)	0	0	780	436	0	0			
Future Volume (vph)	0	0	780	436	0	0			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Satd. Flow (prot)	0	0	4692	0	0	0			
Flt Permitted									
Satd. Flow (perm)	0	0	4692	0	0	0			
Right Turn on Red		Yes		Yes					
Satd. Flow (RTOR)									
Link Speed (mph)	25		25			25			
Link Distance (ft)	95		89			425			
Travel Time (s)	2.6		2.4			11.6			
Confl. Peds. (#/hr)				24					
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90			
Heavy Vehicles (%)	2%	2%	3%	4%	2%	2%			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	0	0	1351	0	0	0			
Turn Type			NA						
Protected Phases							2	4	6
Permitted Phases			2 4						
Total Split (s)							57.0	43.0	57.0
Total Lost Time (s)									
Act Effct Green (s)			100.0						
Actuated g/C Ratio			1.00						
v/c Ratio			0.29						
Control Delay			0.1						
Queue Delay			0.0						
Total Delay			0.1						
LOS			A						
Approach Delay			0.1						
Approach LOS			A						
Queue Length 50th (ft)			0						
Queue Length 95th (ft)			0						
Internal Link Dist (ft)	15		9			345			
Turn Bay Length (ft)									
Base Capacity (vph)			4692						
Starvation Cap Reductn			0						
Spillback Cap Reductn			0						
Storage Cap Reductn			0						
Reduced v/c Ratio			0.29						
Intersection Summary									
Area Type:	Other								
Cycle Length: 100									
Actuated Cycle Length: 100									
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow									
Control Type: Actuated-Coordinated									
Maximum v/c Ratio: 0.61									
Intersection Signal Delay: 0.1	Intersection LOS: A								

Existing PM School Peak Hour
2: Youg Circle/Young Circle & Harrison Street

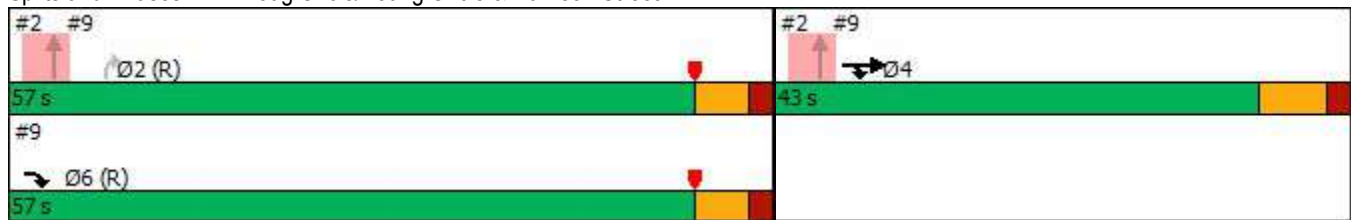
05/19/2023

Intersection Capacity Utilization 30.6%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: Youg Circle/Young Circle & Harrison Street



Existing PM School Peak Hour
8: US-1/Federal Hwy & Van Buren Street

05/19/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	42	26	30	32	10	70	795	25	41	717	22
Future Volume (vph)	16	42	26	30	32	10	70	795	25	41	717	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Storage Length (ft)	60		0	0		55	175		0	80		0
Storage Lanes	1		0	0		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1745	1699	0	0	1741	1446	1745	3367	0	1631	3407	0
Flt Permitted	0.714				0.809		0.322			0.305		
Satd. Flow (perm)	1247	1699	0	0	1441	1347	591	3367	0	518	3407	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28				98		4			4	
Link Speed (mph)		25			25			35			25	
Link Distance (ft)		571			357			334			294	
Travel Time (s)		15.6			9.7			6.5			8.0	
Confl. Peds. (#/hr)	45		3	3		45	2		21	21		2
Confl. Bikes (#/hr)						3			1			1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	2%	0%	4%	2%	8%	0%	3%	0%	7%	2%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	73	0	0	66	11	74	873	0	44	786	0
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8	2			6		
Total Split (s)	26.0	26.0		26.0	26.0	26.0	18.0	56.0		18.0	56.0	
Total Lost Time (s)	6.0	6.0			6.0	6.0	6.0	6.0		6.0	6.0	
Act Effct Green (s)	12.8	12.8			12.8	12.8	74.4	71.2		72.4	68.4	
Actuated g/C Ratio	0.13	0.13			0.13	0.13	0.74	0.71		0.72	0.68	
v/c Ratio	0.11	0.30			0.36	0.04	0.14	0.36		0.10	0.34	
Control Delay	36.2	27.5			42.8	0.3	5.1	9.4		5.1	9.9	
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0		0.0	0.3	
Total Delay	36.2	27.5			42.8	0.3	5.1	9.4		5.1	10.2	
LOS	D	C			D	A	A	A		A	B	
Approach Delay		29.1			36.8			9.1			9.9	
Approach LOS		C			D			A			A	
Queue Length 50th (ft)	10	27			40	0	9	119		5	104	
Queue Length 95th (ft)	28	62			74	0	28	218		19	194	
Internal Link Dist (ft)		491			277			254			214	
Turn Bay Length (ft)	60					55	175			80		
Base Capacity (vph)	249	362			288	347	594	2397		531	2332	
Starvation Cap Reductn	0	0			0	0	0	0		0	822	
Spillback Cap Reductn	0	0			0	3	0	140		0	0	
Storage Cap Reductn	0	0			0	0	0	0		0	0	
Reduced v/c Ratio	0.07	0.20			0.23	0.03	0.12	0.39		0.08	0.52	
Intersection Summary												
Area Type:	Other											
Cycle Length: 100												

Existing PM School Peak Hour

8: US-1/Federal Hwy & Van Buren Street

05/19/2023

Actuated Cycle Length: 100

Offset: 40 (40%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.36

Intersection Signal Delay: 11.5

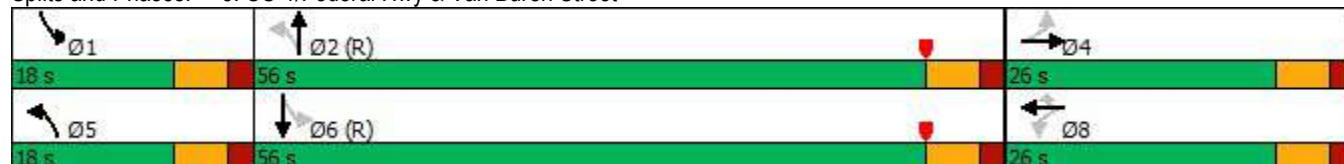
Intersection LOS: B

Intersection Capacity Utilization 61.6%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 8: US-1/Federal Hwy & Van Buren Street



Existing PM School Peak Hour
9: US-1/Federal Hwy & Young Circle

05/19/2023

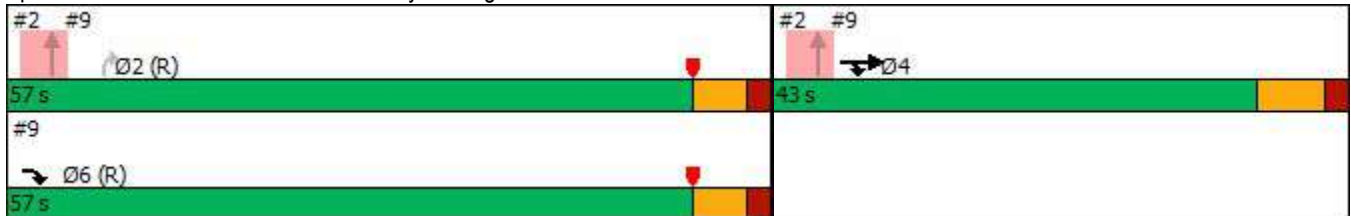
							
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6
Lane Configurations							
Traffic Volume (vph)	391	780	0	0	0	801	
Future Volume (vph)	391	780	0	0	0	801	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Satd. Flow (prot)	3406	2787	0	0	0	2760	
Flt Permitted							
Satd. Flow (perm)	3406	2787	0	0	0	2760	
Right Turn on Red		No				No	
Satd. Flow (RTOR)							
Link Speed (mph)	25			25	25		
Link Distance (ft)	317			168	294		
Travel Time (s)	8.6			4.6	8.0		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	
Heavy Vehicles (%)	6%	2%	2%	2%	2%	3%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	420	839	0	0	0	861	
Turn Type	NA	custom				Perm	
Protected Phases	4	6 4					6
Permitted Phases						2	
Total Split (s)	43.0					57.0	57.0
Total Lost Time (s)	7.0					6.0	
Act Effct Green (s)	36.0	100.0				51.0	
Actuated g/C Ratio	0.36	1.00				0.51	
v/c Ratio	0.34	0.30				0.61	
Control Delay	24.4	0.3				11.7	
Queue Delay	0.0	0.0				0.1	
Total Delay	24.4	0.3				11.8	
LOS	C	A				B	
Approach Delay	8.3				11.8		
Approach LOS	A				B		
Queue Length 50th (ft)	101	0				216	
Queue Length 95th (ft)	142	0				26	
Internal Link Dist (ft)	237			88	214		
Turn Bay Length (ft)							
Base Capacity (vph)	1226	2787				1407	
Starvation Cap Reductn	0	0				46	
Spillback Cap Reductn	0	50				0	
Storage Cap Reductn	0	0				0	
Reduced v/c Ratio	0.34	0.31				0.63	
Intersection Summary							
Area Type:	Other						
Cycle Length: 100							
Actuated Cycle Length: 100							
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow							
Control Type: Actuated-Coordinated							
Maximum v/c Ratio: 0.61							
Intersection Signal Delay: 9.7					Intersection LOS: A		
Intersection Capacity Utilization 49.7%					ICU Level of Service A		

Existing PM School Peak Hour
9: US-1/Federal Hwy & Young Circle

05/19/2023

Analysis Period (min) 15

Splits and Phases: 9: US-1/Federal Hwy & Young Circle



Existing PM School Peak Hour
3: S 17th Avenue & Harrison Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	335	102	48	0	0	0	0	183	32	0	0	0
Future Volume (Veh/h)	335	102	48	0	0	0	0	183	32	0	0	0
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	394	120	56	0	0	0	0	215	38	0	0	0
Pedestrians	10											
Lane Width (ft)	12.0											
Walking Speed (ft/s)	3.5											
Percent Blockage	1											
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)	420											
pX, platoon unblocked												
vC, conflicting volume	0			186			946	946	158	1054	974	0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			186			946	946	158	1054	974	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	76			100			100	0	96	0	100	100
cM capacity (veh/h)	1617			1387			194	195	884	0	190	1091
Direction, Lane #	EB 1	EB 2	EB 3	NB 1								
Volume Total	197	197	176	253								
Volume Left	197	197	0	0								
Volume Right	0	0	56	38								
cSH	1617	1617	1700	221								
Volume to Capacity	0.24	0.24	0.10	1.14								
Queue Length 95th (ft)	24	24	0	299								
Control Delay (s)	7.9	7.9	0.0	151.1								
Lane LOS	A	A		F								
Approach Delay (s)	5.5			151.1								
Approach LOS				F								
Intersection Summary												
Average Delay	50.3											
Intersection Capacity Utilization	28.2%			ICU Level of Service					A			
Analysis Period (min)	15											

Existing PM School Peak Hour
5: S 17th Avenue & Van Buren Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	36	37	31	4	112	26	18	56	4	1	24	23
Future Volume (vph)	36	37	31	4	112	26	18	56	4	1	24	23
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Hourly flow rate (vph)	49	50	42	5	151	35	24	76	5	1	32	31
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	141	191	105	64								
Volume Left (vph)	49	5	24	1								
Volume Right (vph)	42	35	5	31								
Hadj (s)	-0.08	-0.04	0.07	-0.25								
Departure Headway (s)	4.5	4.4	4.8	4.6								
Degree Utilization, x	0.17	0.24	0.14	0.08								
Capacity (veh/h)	769	769	696	722								
Control Delay (s)	8.4	8.8	8.6	8.0								
Approach Delay (s)	8.4	8.8	8.6	8.0								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			8.5									
Level of Service			A									
Intersection Capacity Utilization			44.8%	ICU Level of Service					A			
Analysis Period (min)			15									

Existing PM School Peak Hour
14: S 17th Avenue & HAAS Access/Alley

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	0	1	3	0	3	0	98	8	4	41	0
Future Volume (Veh/h)	114	0	1	3	0	3	0	98	8	4	41	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	131	0	1	3	0	3	0	113	9	5	47	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None								None			
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	178	179	47	176	174	118	47			122		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	178	179	47	176	174	118	47			122		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	83	100	100	100	100	100	100			100		
cM capacity (veh/h)	785	716	1028	789	720	940	1573			1478		
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1							
Volume Total	131	1	6	122	52							
Volume Left	131	0	3	0	5							
Volume Right	0	1	3	9	0							
cSH	785	1028	858	1700	1478							
Volume to Capacity	0.17	0.00	0.01	0.07	0.00							
Queue Length 95th (ft)	15	0	1	0	0							
Control Delay (s)	10.5	8.5	9.2	0.0	0.7							
Lane LOS	B	A	A		A							
Approach Delay (s)	10.5		9.2	0.0	0.7							
Approach LOS	B		A									
Intersection Summary												
Average Delay			4.7									
Intersection Capacity Utilization			23.5%	ICU Level of Service				A				
Analysis Period (min)			15									

Existing PM School Peak Hour
16: Van Buren Street & HAAS Access

05/19/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↩	↩			
Traffic Volume (veh/h)	0	102	42	112	0	0
Future Volume (Veh/h)	0	102	42	112	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72
Hourly flow rate (vph)	0	142	58	156	0	0
Pedestrians					19	
Lane Width (ft)					0.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		357				
pX, platoon unblocked						
vC, conflicting volume	233				297	155
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	233				297	155
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1346				698	896
Direction, Lane #	EB 1	WB 1				
Volume Total	142	214				
Volume Left	0	0				
Volume Right	0	156				
cSH	1346	1700				
Volume to Capacity	0.00	0.13				
Queue Length 95th (ft)	0	0				
Control Delay (s)	0.0	0.0				
Lane LOS						
Approach Delay (s)	0.0	0.0				
Approach LOS						
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		15.1%		ICU Level of Service		A
Analysis Period (min)		15				

No Build AM Street Peak Hour
2: Youg Circle/Young Circle & Harrison Street

05/19/2023



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø4	Ø6
Lane Configurations			↑↑↑						
Traffic Volume (vph)	0	0	805	786	0	0			
Future Volume (vph)	0	0	805	786	0	0			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Satd. Flow (prot)	0	0	4588	0	0	0			
Flt Permitted									
Satd. Flow (perm)	0	0	4588	0	0	0			
Right Turn on Red		Yes		Yes					
Satd. Flow (RTOR)									
Link Speed (mph)	25		25			25			
Link Distance (ft)	95		89			425			
Travel Time (s)	2.6		2.4			11.6			
Confl. Peds. (#/hr)				24					
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87			
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	0	0	1828	0	0	0			
Turn Type			NA						
Protected Phases							2	4	6
Permitted Phases			2 4						
Total Split (s)							57.0	43.0	57.0
Total Lost Time (s)									
Act Effct Green (s)			100.0						
Actuated g/C Ratio			1.00						
v/c Ratio			0.40						
Control Delay			0.2						
Queue Delay			0.0						
Total Delay			0.2						
LOS			A						
Approach Delay			0.2						
Approach LOS			A						
Queue Length 50th (ft)			0						
Queue Length 95th (ft)			0						
Internal Link Dist (ft)	15		9			345			
Turn Bay Length (ft)									
Base Capacity (vph)			4588						
Starvation Cap Reductn			0						
Spillback Cap Reductn			0						
Storage Cap Reductn			0						
Reduced v/c Ratio			0.40						
Intersection Summary									
Area Type:	Other								
Cycle Length: 100									
Actuated Cycle Length: 100									
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow									
Control Type: Actuated-Coordinated									
Maximum v/c Ratio: 0.73									
Intersection Signal Delay: 0.2	Intersection LOS: A								

No Build AM Street Peak Hour
2: Youg Circle/Young Circle & Harrison Street

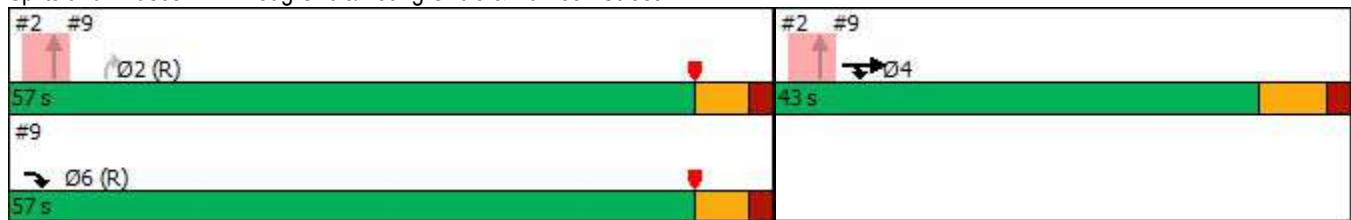
05/19/2023

Intersection Capacity Utilization 39.3%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: Youg Circle/Young Circle & Harrison Street



No Build AM Street Peak Hour
8: US-1/Federal Hwy & Van Buren Street

05/19/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	109	18	72	46	91	126	846	66	107	779	20
Future Volume (vph)	22	109	18	72	46	91	126	846	66	107	779	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Storage Length (ft)	60		0	0		55	175		0	80		0
Storage Lanes	1		0	0		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1745	1774	0	0	1771	1561	1728	3383	0	1711	3377	0
Flt Permitted	0.664				0.695		0.292			0.251		
Satd. Flow (perm)	1162	1774	0	0	1255	1455	531	3383	0	452	3377	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7				98		11			4	
Link Speed (mph)		25			25			35			25	
Link Distance (ft)		571			357			334			294	
Travel Time (s)		15.6			9.7			6.5			8.0	
Confl. Peds. (#/hr)	47		18	18		47			1	1		
Confl. Bikes (#/hr)			2			1						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	6%	1%	0%	0%	1%	2%	0%	2%	3%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	23	134	0	0	124	96	133	960	0	113	841	0
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8	2			6		
Total Split (s)	26.0	26.0		26.0	26.0	26.0	18.0	56.0		18.0	56.0	
Total Lost Time (s)	6.0	6.0			6.0	6.0	6.0	6.0		6.0	6.0	
Act Effct Green (s)	15.0	15.0			15.0	15.0	67.4	59.4		66.6	59.0	
Actuated g/C Ratio	0.15	0.15			0.15	0.15	0.67	0.59		0.67	0.59	
v/c Ratio	0.13	0.49			0.66	0.32	0.29	0.48		0.29	0.42	
Control Delay	36.0	41.9			55.7	9.9	6.6	13.3		6.8	12.9	
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.2		0.0	0.5	
Total Delay	36.0	41.9			55.7	9.9	6.6	13.5		6.8	13.4	
LOS	D	D			E	A	A	B		A	B	
Approach Delay		41.1			35.7			12.6			12.6	
Approach LOS		D			D			B			B	
Queue Length 50th (ft)	13	75			76	0	21	164		18	140	
Queue Length 95th (ft)	34	127			130	41	46	258		40	223	
Internal Link Dist (ft)		491			277			254			214	
Turn Bay Length (ft)	60					55	175			80		
Base Capacity (vph)	232	360			251	369	522	2014		472	1994	
Starvation Cap Reductn	0	0			0	0	0	0		0	672	
Spillback Cap Reductn	0	0			0	9	0	324		0	0	
Storage Cap Reductn	0	0			0	0	0	0		0	0	
Reduced v/c Ratio	0.10	0.37			0.49	0.27	0.25	0.57		0.24	0.64	
Intersection Summary												
Area Type:	Other											
Cycle Length:	100											

No Build AM Street Peak Hour 8: US-1/Federal Hwy & Van Buren Street

05/19/2023

Actuated Cycle Length: 100

Offset: 40 (40%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 16.6

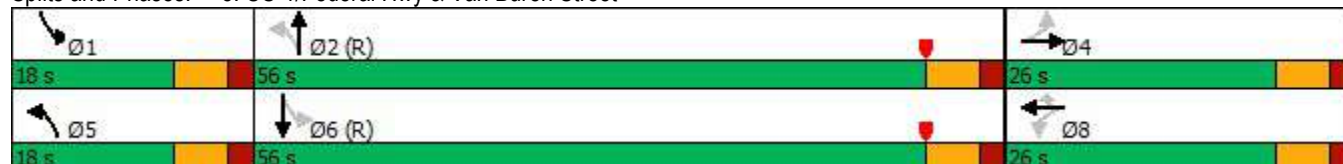
Intersection LOS: B

Intersection Capacity Utilization 82.5%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 8: US-1/Federal Hwy & Van Buren Street



No Build AM Street Peak Hour
9: US-1/Federal Hwy & Young Circle

05/19/2023

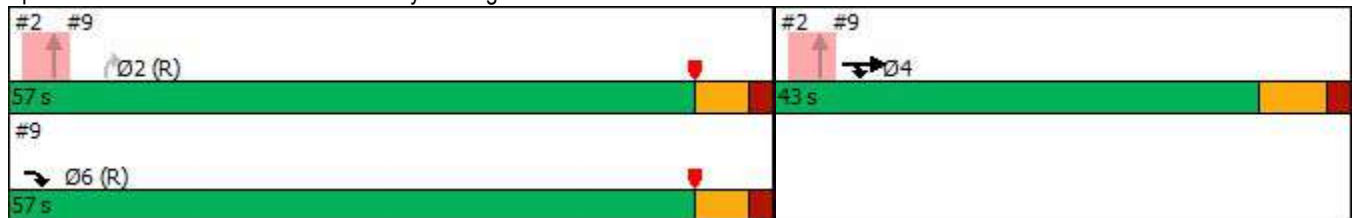
							
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6
Lane Configurations							
Traffic Volume (vph)	545	914	0	0	0	957	
Future Volume (vph)	545	914	0	0	0	957	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Satd. Flow (prot)	3438	2760	0	0	0	2760	
Flt Permitted							
Satd. Flow (perm)	3438	2760	0	0	0	2760	
Right Turn on Red		No				No	
Satd. Flow (RTOR)							
Link Speed (mph)	25			25	25		
Link Distance (ft)	317			168	294		
Travel Time (s)	8.6			4.6	8.0		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	
Heavy Vehicles (%)	5%	3%	2%	2%	2%	3%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	586	983	0	0	0	1029	
Turn Type	NA	custom				Perm	
Protected Phases	4	6 4					6
Permitted Phases						2	
Total Split (s)	43.0					57.0	57.0
Total Lost Time (s)	7.0					6.0	
Act Effct Green (s)	36.0	100.0				51.0	
Actuated g/C Ratio	0.36	1.00				0.51	
v/c Ratio	0.47	0.36				0.73	
Control Delay	26.3	0.4				13.2	
Queue Delay	0.0	0.0				0.0	
Total Delay	26.3	0.4				13.2	
LOS	C	A				B	
Approach Delay	10.0				13.2		
Approach LOS	B				B		
Queue Length 50th (ft)	150	0				283	
Queue Length 95th (ft)	201	0				378	
Internal Link Dist (ft)	237			88	214		
Turn Bay Length (ft)							
Base Capacity (vph)	1237	2760				1407	
Starvation Cap Reductn	0	0				0	
Spillback Cap Reductn	0	100				0	
Storage Cap Reductn	0	0				0	
Reduced v/c Ratio	0.47	0.37				0.73	
Intersection Summary							
Area Type:	Other						
Cycle Length: 100							
Actuated Cycle Length: 100							
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow							
Control Type: Actuated-Coordinated							
Maximum v/c Ratio: 0.73							
Intersection Signal Delay: 11.3				Intersection LOS: B			
Intersection Capacity Utilization 59.4%				ICU Level of Service B			

No Build AM Street Peak Hour
9: US-1/Federal Hwy & Young Circle

05/19/2023

Analysis Period (min) 15

Splits and Phases: 9: US-1/Federal Hwy & Young Circle



No Build AM Street Peak Hour
3: S 17th Avenue & Harrison Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	366	380	18	0	0	0	0	390	115	0	0	0
Future Volume (Veh/h)	366	380	18	0	0	0	0	390	115	0	0	0
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	394	409	19	0	0	0	0	419	124	0	0	0
Pedestrians	2											
Lane Width (ft)	12.0											
Walking Speed (ft/s)	3.5											
Percent Blockage	0											
Right turn flare (veh)												
Median type	None			None								
Median storage veh												
Upstream signal (ft)	420											
pX, platoon unblocked												
vC, conflicting volume	0			430			1208	1208	420	1530	1218	0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			430			1208	1208	420	1530	1218	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	76			100			100	0	81	0	100	100
cM capacity (veh/h)	1617			1138			131	139	636	0	137	1091
Direction, Lane #	EB 1	EB 2	EB 3	NB 1								
Volume Total	197	197	428	543								
Volume Left	197	197	0	0								
Volume Right	0	0	19	124								
cSH	1617	1617	1700	170								
Volume to Capacity	0.24	0.24	0.25	3.20								
Queue Length 95th (ft)	24	24	0	Err								
Control Delay (s)	7.9	7.9	0.0	Err								
Lane LOS	A	A		F								
Approach Delay (s)	3.8			Err								
Approach LOS				F								
Intersection Summary												
Average Delay	3979.9											
Intersection Capacity Utilization	55.3%			ICU Level of Service				B				
Analysis Period (min)	15											

No Build AM Street Peak Hour
5: S 17th Avenue & Van Buren Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	9	62	110	8	388	1	13	16	53	0	0	4
Future Volume (vph)	9	62	110	8	388	1	13	16	53	0	0	4
Peak Hour Factor	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68
Hourly flow rate (vph)	13	91	162	12	571	1	19	24	78	0	0	6
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	266	584	121	6								
Volume Left (vph)	13	12	19	0								
Volume Right (vph)	162	1	78	6								
Hadj (s)	-0.36	0.00	-0.36	-0.60								
Departure Headway (s)	4.6	4.6	5.5	5.5								
Degree Utilization, x	0.34	0.74	0.18	0.01								
Capacity (veh/h)	751	771	593	558								
Control Delay (s)	9.9	19.6	9.7	8.6								
Approach Delay (s)	9.9	19.6	9.7	8.6								
Approach LOS	A	C	A	A								
Intersection Summary												
Delay				15.7								
Level of Service				C								
Intersection Capacity Utilization				47.8%	ICU Level of Service	A						
Analysis Period (min)				15								

No Build AM Street Peak Hour
14: S 17th Avenue & HAAS Access/Alley

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	388	0	0	1	0	1	0	23	0	0	3	0
Future Volume (Veh/h)	388	0	0	1	0	1	0	23	0	0	3	0
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
Hourly flow rate (vph)	1176	0	0	3	0	3	0	70	0	0	9	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None			None		
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	82	79	9	79	79	70	9				70	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	82	79	9	79	79	70	9				70	
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1				4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2	
p0 queue free %	0	100	100	100	100	100	100				100	
cM capacity (veh/h)	908	815	1079	914	815	998	1624				1544	
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1							
Volume Total	1176	0	6	70	9							
Volume Left	1176	0	3	0	0							
Volume Right	0	0	3	0	0							
cSH	908	1700	955	1700	1544							
Volume to Capacity	1.30	0.00	0.01	0.04	0.00							
Queue Length 95th (ft)	1091	0	0	0	0							
Control Delay (s)	157.6	0.0	8.8	0.0	0.0							
Lane LOS	F	A	A									
Approach Delay (s)	157.6	8.8		0.0	0.0							
Approach LOS	F	A										
Intersection Summary												
Average Delay			147.0									
Intersection Capacity Utilization			38.2%	ICU Level of Service				A				
Analysis Period (min)			15									

No Build AM Street Peak Hour
16: Van Buren Street & HAAS Access

05/19/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	184	29	388	0	0
Future Volume (Veh/h)	0	184	29	388	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.69	0.69	0.69	0.69	0.69	0.69
Hourly flow rate (vph)	0	267	42	562	0	0
Pedestrians					49	
Lane Width (ft)					0.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		357				
pX, platoon unblocked					0.97	
vC, conflicting volume	653				639	372
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	653				609	372
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	943				446	678
Direction, Lane #	EB 1	WB 1				
Volume Total	267	604				
Volume Left	0	0				
Volume Right	0	562				
cSH	943	1700				
Volume to Capacity	0.00	0.36				
Queue Length 95th (ft)	0	0				
Control Delay (s)	0.0	0.0				
Lane LOS						
Approach Delay (s)	0.0	0.0				
Approach LOS						
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		32.5%		ICU Level of Service		A
Analysis Period (min)		15				

No Build AM School Peak Hour
2: Youg Circle/Young Circle & Harrison Street

05/19/2023



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø4	Ø6
Lane Configurations			↑↑↑						
Traffic Volume (vph)	0	0	784	657	0	0			
Future Volume (vph)	0	0	784	657	0	0			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Satd. Flow (prot)	0	0	4624	0	0	0			
Flt Permitted									
Satd. Flow (perm)	0	0	4624	0	0	0			
Right Turn on Red		Yes		Yes					
Satd. Flow (RTOR)									
Link Speed (mph)	25		25			25			
Link Distance (ft)	95		89			425			
Travel Time (s)	2.6		2.4			11.6			
Confl. Peds. (#/hr)				24					
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87			
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	0	0	1656	0	0	0			
Turn Type			NA						
Protected Phases							2	4	6
Permitted Phases			2 4						
Total Split (s)							57.0	43.0	57.0
Total Lost Time (s)									
Act Effct Green (s)			100.0						
Actuated g/C Ratio			1.00						
v/c Ratio			0.36						
Control Delay			0.2						
Queue Delay			0.0						
Total Delay			0.2						
LOS			A						
Approach Delay			0.2						
Approach LOS			A						
Queue Length 50th (ft)			0						
Queue Length 95th (ft)			0						
Internal Link Dist (ft)	15		9			345			
Turn Bay Length (ft)									
Base Capacity (vph)			4624						
Starvation Cap Reductn			0						
Spillback Cap Reductn			0						
Storage Cap Reductn			0						
Reduced v/c Ratio			0.36						
Intersection Summary									
Area Type:	Other								
Cycle Length: 100									
Actuated Cycle Length: 100									
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow									
Control Type: Actuated-Coordinated									
Maximum v/c Ratio: 0.74									
Intersection Signal Delay: 0.2	Intersection LOS: A								

No Build AM School Peak Hour
2: Youg Circle/Young Circle & Harrison Street

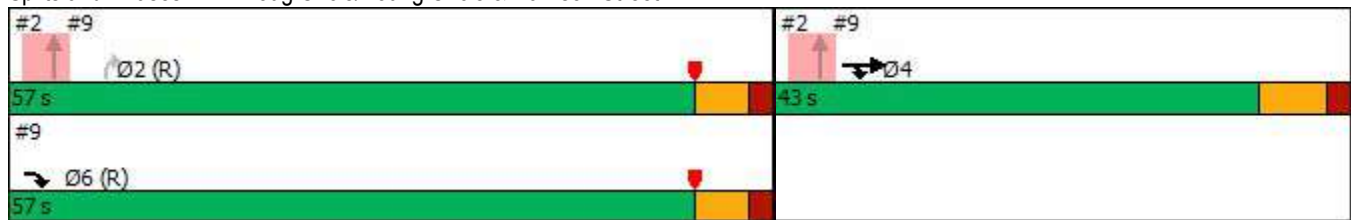
05/19/2023

Intersection Capacity Utilization 35.9%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: Youg Circle/Young Circle & Harrison Street



No Build AM School Peak Hour
8: US-1/Federal Hwy & Van Buren Street

05/19/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	91	20	74	58	90	111	805	59	87	763	20
Future Volume (vph)	15	91	20	74	58	90	111	805	59	87	763	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Storage Length (ft)	60		0	0		55	175		0	80		0
Storage Lanes	1		0	0		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1745	1741	0	0	1777	1561	1728	3356	0	1662	3377	0
Flt Permitted	0.587				0.736		0.261			0.245		
Satd. Flow (perm)	1030	1741	0	0	1331	1455	475	3356	0	428	3377	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10				98		11			4	
Link Speed (mph)		25			25			35			25	
Link Distance (ft)		571			357			334			294	
Travel Time (s)		15.6			9.7			6.5			8.0	
Confl. Peds. (#/hr)	47		18	18		47			1	1		
Confl. Bikes (#/hr)			2			1						
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	0%	0%	11%	1%	0%	0%	1%	3%	0%	5%	3%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	128	0	0	152	103	128	993	0	100	900	0
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8	2			6		
Total Split (s)	26.0	26.0		26.0	26.0	26.0	18.0	56.0		18.0	56.0	
Total Lost Time (s)	6.0	6.0			6.0	6.0	6.0	6.0		6.0	6.0	
Act Effct Green (s)	15.9	15.9			15.9	15.9	67.7	61.0		65.7	58.2	
Actuated g/C Ratio	0.16	0.16			0.16	0.16	0.68	0.61		0.66	0.58	
v/c Ratio	0.10	0.45			0.72	0.33	0.30	0.48		0.27	0.46	
Control Delay	35.1	39.1			58.3	11.0	7.0	13.2		6.9	13.6	
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.1		0.0	0.5	
Total Delay	35.1	39.1			58.3	11.0	7.0	13.4		6.9	14.2	
LOS	D	D			E	B	A	B		A	B	
Approach Delay		38.6			39.2			12.6			13.4	
Approach LOS		D			D			B			B	
Queue Length 50th (ft)	9	68			92	3	22	181		17	161	
Queue Length 95th (ft)	27	116			149	43	43	256		35	230	
Internal Link Dist (ft)		491			277			254			214	
Turn Bay Length (ft)	60					55	175			80		
Base Capacity (vph)	206	356			266	369	485	2052		448	1967	
Starvation Cap Reductn	0	0			0	0	0	0		0	609	
Spillback Cap Reductn	0	0			0	7	0	280		0	0	
Storage Cap Reductn	0	0			0	0	0	0		0	0	
Reduced v/c Ratio	0.08	0.36			0.57	0.28	0.26	0.56		0.22	0.66	
Intersection Summary												
Area Type:	Other											
Cycle Length: 100												

No Build AM School Peak Hour 8: US-1/Federal Hwy & Van Buren Street

05/19/2023

Actuated Cycle Length: 100

Offset: 40 (40%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.72

Intersection Signal Delay: 17.1

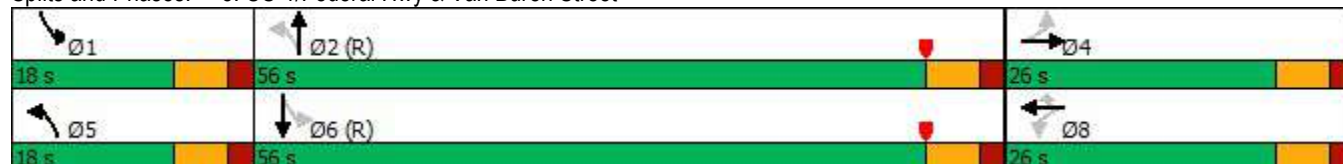
Intersection LOS: B

Intersection Capacity Utilization 70.4%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 8: US-1/Federal Hwy & Van Buren Street



No Build AM School Peak Hour
9: US-1/Federal Hwy & Young Circle

05/19/2023

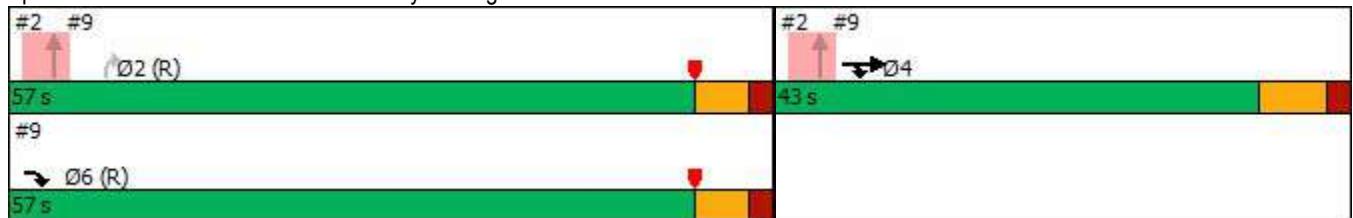
	→	↘	↙	←	↖	↗	
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6
Lane Configurations	↑↑	↑↑				↑↑	
Traffic Volume (vph)	493	875	0	0	0	901	
Future Volume (vph)	493	875	0	0	0	901	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Satd. Flow (prot)	3438	2760	0	0	0	2760	
Flt Permitted							
Satd. Flow (perm)	3438	2760	0	0	0	2760	
Right Turn on Red		No				No	
Satd. Flow (RTOR)							
Link Speed (mph)	25			25	25		
Link Distance (ft)	317			168	294		
Travel Time (s)	8.6			4.6	8.0		
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	
Heavy Vehicles (%)	5%	3%	2%	2%	2%	3%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	573	1017	0	0	0	1048	
Turn Type	NA	custom				Perm	
Protected Phases	4	6 4					6
Permitted Phases						2	
Total Split (s)	43.0					57.0	57.0
Total Lost Time (s)	7.0					6.0	
Act Effct Green (s)	36.0	100.0				51.0	
Actuated g/C Ratio	0.36	1.00				0.51	
v/c Ratio	0.46	0.37				0.74	
Control Delay	26.1	0.4				13.4	
Queue Delay	0.0	0.0				0.0	
Total Delay	26.1	0.4				13.4	
LOS	C	A				B	
Approach Delay	9.7				13.4		
Approach LOS	A				B		
Queue Length 50th (ft)	145	0				292	
Queue Length 95th (ft)	185	0				59	
Internal Link Dist (ft)	237			88	214		
Turn Bay Length (ft)							
Base Capacity (vph)	1237	2760				1407	
Starvation Cap Reductn	0	0				0	
Spillback Cap Reductn	0	127				0	
Storage Cap Reductn	0	0				0	
Reduced v/c Ratio	0.46	0.39				0.74	
Intersection Summary							
Area Type:	Other						
Cycle Length: 100							
Actuated Cycle Length: 100							
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow							
Control Type: Actuated-Coordinated							
Maximum v/c Ratio: 0.74							
Intersection Signal Delay: 11.1				Intersection LOS: B			
Intersection Capacity Utilization 56.0%				ICU Level of Service B			

No Build AM School Peak Hour
9: US-1/Federal Hwy & Young Circle

05/19/2023

Analysis Period (min) 15

Splits and Phases: 9: US-1/Federal Hwy & Young Circle



No Build AM School Peak Hour
3: S 17th Avenue & Harrison Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	359	267	22	0	0	0	0	304	97	0	0	0
Future Volume (Veh/h)	359	267	22	0	0	0	0	304	97	0	0	0
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	408	303	25	0	0	0	0	345	110	0	0	0
Pedestrians	2											
Lane Width (ft)	12.0											
Walking Speed (ft/s)	3.5											
Percent Blockage	0											
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)	420											
pX, platoon unblocked												
vC, conflicting volume	0			330			1134	1134	318	1402	1146	0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			330			1134	1134	318	1402	1146	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	75			100			100	0	85	0	100	100
cM capacity (veh/h)	1617			1238			146	151	726	0	150	1091
Direction, Lane #	EB 1	EB 2	EB 3	NB 1								
Volume Total	204	204	328	455								
Volume Left	204	204	0	0								
Volume Right	0	0	25	110								
cSH	1617	1617	1700	186								
Volume to Capacity	0.25	0.25	0.19	2.44								
Queue Length 95th (ft)	25	25	0	952								
Control Delay (s)	8.0	8.0	0.0	704.5								
Lane LOS	A	A		F								
Approach Delay (s)	4.4			704.5								
Approach LOS				F								
Intersection Summary												
Average Delay				271.9								
Intersection Capacity Utilization				44.0%	ICU Level of Service				A			
Analysis Period (min)				15								

No Build AM School Peak Hour
5: S 17th Avenue & Van Buren Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	16	56	92	7	268	3	15	26	44	0	1	5
Future Volume (vph)	16	56	92	7	268	3	15	26	44	0	1	5
Peak Hour Factor	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
Hourly flow rate (vph)	29	100	164	12	479	5	27	46	79	0	2	9
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	293	496	152	11								
Volume Left (vph)	29	12	27	0								
Volume Right (vph)	164	5	79	9								
Hadj (s)	-0.29	0.00	-0.28	-0.49								
Departure Headway (s)	4.7	4.7	5.5	5.6								
Degree Utilization, x	0.38	0.65	0.23	0.02								
Capacity (veh/h)	725	741	578	527								
Control Delay (s)	10.6	16.2	10.1	8.7								
Approach Delay (s)	10.6	16.2	10.1	8.7								
Approach LOS	B	C	B	A								
Intersection Summary												
Delay				13.4								
Level of Service				B								
Intersection Capacity Utilization				40.9%	ICU Level of Service		A					
Analysis Period (min)				15								

No Build AM School Peak Hour
14: S 17th Avenue & HAAS Access/Alley

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	268	0	0	1	0	2	0	43	0	1	5	0
Future Volume (Veh/h)	268	0	0	1	0	2	0	43	0	1	5	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54
Hourly flow rate (vph)	496	0	0	2	0	4	0	80	0	2	9	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	97	93	9	93	93	80	9			80		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	97	93	9	93	93	80	9			80		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	44	100	100	100	100	100	100			100		
cM capacity (veh/h)	886	800	1079	895	800	986	1624			1531		
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1							
Volume Total	496	0	6	80	11							
Volume Left	496	0	2	0	2							
Volume Right	0	0	4	0	0							
cSH	886	1700	953	1700	1531							
Volume to Capacity	0.56	0.00	0.01	0.05	0.00							
Queue Length 95th (ft)	89	0	0	0	0							
Control Delay (s)	14.1	0.0	8.8	0.0	1.3							
Lane LOS	B	A	A		A							
Approach Delay (s)	14.1		8.8	0.0	1.3							
Approach LOS	B		A									
Intersection Summary												
Average Delay			11.9									
Intersection Capacity Utilization			31.5%	ICU Level of Service					A			
Analysis Period (min)			15									

No Build AM School Peak Hour
16: Van Buren Street & HAAS Access

05/19/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↰	↰			
Traffic Volume (veh/h)	0	163	33	268	0	0
Future Volume (Veh/h)	0	163	33	268	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.54	0.54	0.54	0.54	0.54	0.54
Hourly flow rate (vph)	0	302	61	496	0	0
Pedestrians					49	
Lane Width (ft)					0.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		357				
pX, platoon unblocked					0.96	
vC, conflicting volume	606				660	358
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	606				629	358
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	982				433	691
Direction, Lane #	EB 1	WB 1				
Volume Total	302	557				
Volume Left	0	0				
Volume Right	0	496				
cSH	982	1700				
Volume to Capacity	0.00	0.33				
Queue Length 95th (ft)	0	0				
Control Delay (s)	0.0	0.0				
Lane LOS						
Approach Delay (s)	0.0	0.0				
Approach LOS						
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		25.1%		ICU Level of Service		A
Analysis Period (min)		15				

No Build PM Street Peak Hour
2: Youg Circle/Young Circle & Harrison Street

05/19/2023



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø4	Ø6
Lane Configurations			↑↑↑						
Traffic Volume (vph)	0	0	795	666	0	0			
Future Volume (vph)	0	0	795	666	0	0			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Satd. Flow (prot)	0	0	4624	0	0	0			
Flt Permitted									
Satd. Flow (perm)	0	0	4624	0	0	0			
Right Turn on Red		Yes		Yes					
Satd. Flow (RTOR)									
Link Speed (mph)	25		25			25			
Link Distance (ft)	95		89			425			
Travel Time (s)	2.6		2.4			11.6			
Confl. Peds. (#/hr)				24					
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90			
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	0	0	1623	0	0	0			
Turn Type			NA						
Protected Phases							2	4	6
Permitted Phases			2 4						
Total Split (s)							57.0	43.0	57.0
Total Lost Time (s)									
Act Effct Green (s)			100.0						
Actuated g/C Ratio			1.00						
v/c Ratio			0.35						
Control Delay			0.2						
Queue Delay			0.0						
Total Delay			0.2						
LOS			A						
Approach Delay			0.2						
Approach LOS			A						
Queue Length 50th (ft)			0						
Queue Length 95th (ft)			0						
Internal Link Dist (ft)	15		9			345			
Turn Bay Length (ft)									
Base Capacity (vph)			4624						
Starvation Cap Reductn			0						
Spillback Cap Reductn			0						
Storage Cap Reductn			0						
Reduced v/c Ratio			0.35						
Intersection Summary									
Area Type:	Other								
Cycle Length: 100									
Actuated Cycle Length: 100									
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow									
Control Type: Actuated-Coordinated									
Maximum v/c Ratio: 0.68									
Intersection Signal Delay: 0.2	Intersection LOS: A								

No Build PM Street Peak Hour
2: Youg Circle/Young Circle & Harrison Street

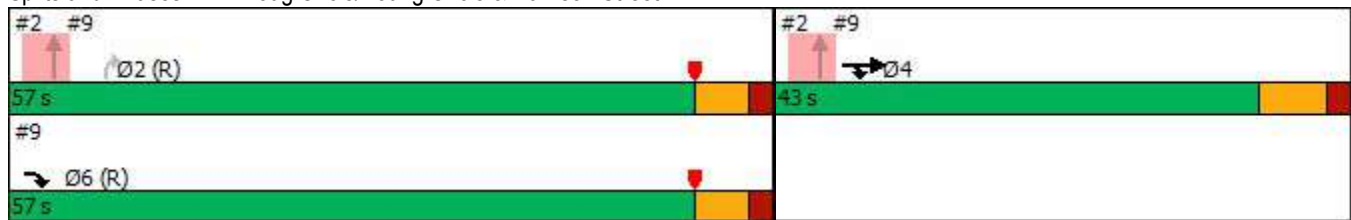
05/19/2023

Intersection Capacity Utilization 36.3%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: Youg Circle/Young Circle & Harrison Street



No Build PM Street Peak Hour
8: US-1/Federal Hwy & Van Buren Street

05/19/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	80	37	39	60	59	116	817	69	125	815	33
Future Volume (vph)	26	80	37	39	60	59	116	817	69	125	815	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Storage Length (ft)	60		0	0		55	175		0	80		0
Storage Lanes	1		0	0		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1745	1716	0	0	1795	1546	1745	3337	0	1711	3400	0
Flt Permitted	0.690				0.799		0.278			0.260		
Satd. Flow (perm)	1208	1716	0	0	1460	1441	510	3337	0	464	3400	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21				98		13			6	
Link Speed (mph)		25			25			35			25	
Link Distance (ft)		571			357			334			294	
Travel Time (s)		15.6			9.7			6.5			8.0	
Confl. Peds. (#/hr)	45		3	3		45	2		21	21		2
Confl. Bikes (#/hr)						3			1			1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	2%	0%	1%	0%	1%	0%	3%	0%	2%	2%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	27	123	0	0	104	62	122	933	0	132	893	0
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8	2			6		
Total Split (s)	26.0	26.0		26.0	26.0	26.0	18.0	56.0		18.0	56.0	
Total Lost Time (s)	6.0	6.0			6.0	6.0	6.0	6.0		6.0	6.0	
Act Effect Green (s)	13.9	13.9			13.9	13.9	67.9	60.3		68.4	60.5	
Actuated g/C Ratio	0.14	0.14			0.14	0.14	0.68	0.60		0.68	0.60	
v/c Ratio	0.16	0.48			0.51	0.22	0.28	0.46		0.32	0.43	
Control Delay	37.3	37.6			47.5	4.4	6.4	12.9		6.7	12.4	
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.1		0.0	0.5	
Total Delay	37.3	37.6			47.5	4.4	6.4	13.0		6.7	12.9	
LOS	D	D			D	A	A	B		A	B	
Approach Delay		37.6			31.4			12.2			12.1	
Approach LOS		D			C			B			B	
Queue Length 50th (ft)	16	62			64	0	17	146		18	137	
Queue Length 95th (ft)	38	109			109	15	43	253		46	236	
Internal Link Dist (ft)		491			277			254			214	
Turn Bay Length (ft)	60					55	175			80		
Base Capacity (vph)	241	360			292	366	516	2016		486	2059	
Starvation Cap Reductn	0	0			0	0	0	0		0	679	
Spillback Cap Reductn	0	0			0	7	0	270		0	0	
Storage Cap Reductn	0	0			0	0	0	0		0	0	
Reduced v/c Ratio	0.11	0.34			0.36	0.17	0.24	0.53		0.27	0.65	
Intersection Summary												
Area Type:	Other											
Cycle Length: 100												

No Build PM Street Peak Hour 8: US-1/Federal Hwy & Van Buren Street

05/19/2023

Actuated Cycle Length: 100

Offset: 40 (40%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.51

Intersection Signal Delay: 15.1

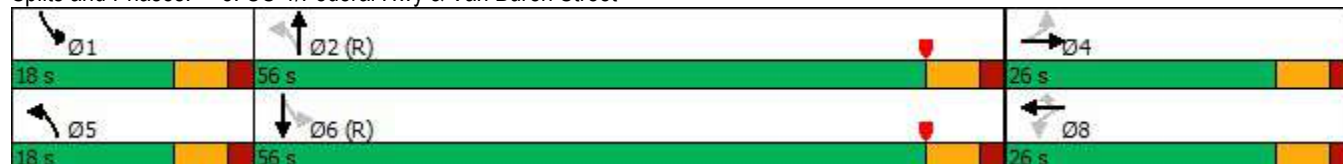
Intersection LOS: B

Intersection Capacity Utilization 65.7%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 8: US-1/Federal Hwy & Van Buren Street



No Build PM Street Peak Hour
9: US-1/Federal Hwy & Young Circle

05/19/2023

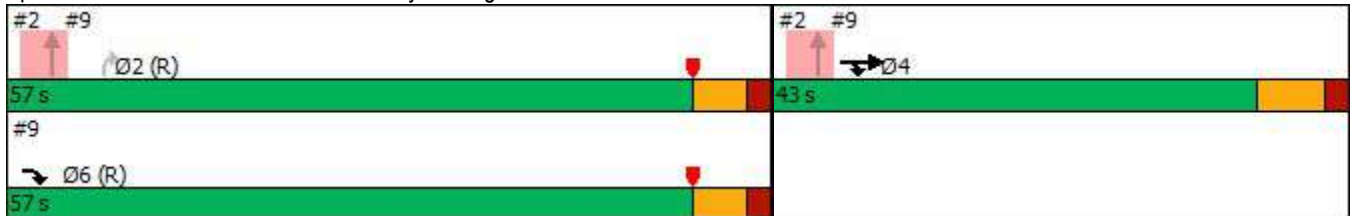
							
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6
Lane Configurations							
Traffic Volume (vph)	486	973	0	0	0	893	
Future Volume (vph)	486	973	0	0	0	893	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Satd. Flow (prot)	3471	2787	0	0	0	2760	
Flt Permitted							
Satd. Flow (perm)	3471	2787	0	0	0	2760	
Right Turn on Red		No				No	
Satd. Flow (RTOR)							
Link Speed (mph)	25			25	25		
Link Distance (ft)	317			168	294		
Travel Time (s)	8.6			4.6	8.0		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	
Heavy Vehicles (%)	4%	2%	2%	2%	2%	3%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	517	1035	0	0	0	950	
Turn Type	NA	custom				Perm	
Protected Phases	4	6 4					6
Permitted Phases						2	
Total Split (s)	43.0					57.0	57.0
Total Lost Time (s)	7.0					6.0	
Act Effct Green (s)	36.0	100.0				51.0	
Actuated g/C Ratio	0.36	1.00				0.51	
v/c Ratio	0.41	0.37				0.68	
Control Delay	25.3	0.4				11.2	
Queue Delay	0.0	0.0				0.0	
Total Delay	25.3	0.4				11.2	
LOS	C	A				B	
Approach Delay	8.7				11.2		
Approach LOS	A				B		
Queue Length 50th (ft)	128	0				251	
Queue Length 95th (ft)	175	0				47	
Internal Link Dist (ft)	237			88	214		
Turn Bay Length (ft)							
Base Capacity (vph)	1249	2787				1407	
Starvation Cap Reductn	0	0				0	
Spillback Cap Reductn	0	122				0	
Storage Cap Reductn	0	0				0	
Reduced v/c Ratio	0.41	0.39				0.68	
Intersection Summary							
Area Type:	Other						
Cycle Length: 100							
Actuated Cycle Length: 100							
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow							
Control Type: Actuated-Coordinated							
Maximum v/c Ratio: 0.68							
Intersection Signal Delay: 9.6				Intersection LOS: A			
Intersection Capacity Utilization 55.5%				ICU Level of Service B			

No Build PM Street Peak Hour
9: US-1/Federal Hwy & Young Circle

05/19/2023

Analysis Period (min) 15

Splits and Phases: 9: US-1/Federal Hwy & Young Circle



No Build PM Street Peak Hour
3: S 17th Avenue & Harrison Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	395	286	34	0	0	0	0	320	72	0	0	0
Future Volume (Veh/h)	395	286	34	0	0	0	0	320	72	0	0	0
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	449	325	39	0	0	0	0	364	82	0	0	0
Pedestrians	10											
Lane Width (ft)	12.0											
Walking Speed (ft/s)	3.5											
Percent Blockage	1											
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)	420											
pX, platoon unblocked												
vC, conflicting volume	0			374			1252	1252	354	1487	1272	0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			374			1252	1252	354	1487	1272	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	72			100			100	0	88	0	100	100
cM capacity (veh/h)	1617			1184			116	123	687	0	121	1091
Direction, Lane #	EB 1	EB 2	EB 3	NB 1								
Volume Total	224	224	364	446								
Volume Left	224	224	0	0								
Volume Right	0	0	39	82								
cSH	1617	1617	1700	144								
Volume to Capacity	0.28	0.28	0.21	3.09								
Queue Length 95th (ft)	29	29	0	Err								
Control Delay (s)	8.1	8.1	0.0	Err								
Lane LOS	A	A		F								
Approach Delay (s)	4.5			Err								
Approach LOS				F								
Intersection Summary												
Average Delay	3545.0											
Intersection Capacity Utilization	45.1%			ICU Level of Service					A			
Analysis Period (min)	15											

No Build PM Street Peak Hour
5: S 17th Avenue & Van Buren Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	8	64	100	3	300	1	18	41	32	0	6	7
Future Volume (vph)	8	64	100	3	300	1	18	41	32	0	6	7
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	9	70	110	3	330	1	20	45	35	0	7	8
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	189	334	100	15								
Volume Left (vph)	9	3	20	0								
Volume Right (vph)	110	1	35	8								
Hadj (s)	-0.32	0.02	-0.15	-0.32								
Departure Headway (s)	4.2	4.4	4.9	4.9								
Degree Utilization, x	0.22	0.41	0.14	0.02								
Capacity (veh/h)	813	787	661	642								
Control Delay (s)	8.5	10.4	8.7	8.0								
Approach Delay (s)	8.5	10.4	8.7	8.0								
Approach LOS	A	B	A	A								
Intersection Summary												
Delay			9.5									
Level of Service			A									
Intersection Capacity Utilization			38.7%	ICU Level of Service		A						
Analysis Period (min)			15									

No Build PM Street Peak Hour
14: S 17th Avenue & HAAS Access/Alley

05/19/2023

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (veh/h)	302	0	1	0	0	1	0	39	5	0	12	0	
Future Volume (Veh/h)	302	0	1	0	0	1	0	39	5	0	12	0	
Sign Control	Stop			Stop			Free			Free			
Grade	0%			0%			0%			0%			
Peak Hour Factor	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	
Hourly flow rate (vph)	686	0	2	0	0	2	0	89	11	0	27	0	
Pedestrians													
Lane Width (ft)													
Walking Speed (ft/s)													
Percent Blockage													
Right turn flare (veh)													
Median type							None			None			
Median storage veh													
Upstream signal (ft)													
pX, platoon unblocked													
vC, conflicting volume	124	127	27	124	122	94	27						100
vC1, stage 1 conf vol													
vC2, stage 2 conf vol													
vCu, unblocked vol	124	127	27	124	122	94	27						100
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1						4.1
tC, 2 stage (s)													
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2						2.2
p0 queue free %	20	100	100	100	100	100	100						100
cM capacity (veh/h)	854	767	1054	854	773	968	1600						1505
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1								
Volume Total	686	2	2	100	27								
Volume Left	686	0	0	0	0								
Volume Right	0	2	2	11	0								
cSH	854	1054	968	1700	1505								
Volume to Capacity	0.80	0.00	0.00	0.06	0.00								
Queue Length 95th (ft)	217	0	0	0	0								
Control Delay (s)	24.0	8.4	8.7	0.0	0.0								
Lane LOS	C	A	A										
Approach Delay (s)	23.9		8.7	0.0	0.0								
Approach LOS	C		A										
Intersection Summary													
Average Delay			20.2										
Intersection Capacity Utilization			33.4%	ICU Level of Service					A				
Analysis Period (min)			15										

No Build PM Street Peak Hour
16: Van Buren Street & HAAS Access

05/19/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	172	33	300	0	0
Future Volume (Veh/h)	0	172	33	300	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	0	200	38	349	0	0
Pedestrians					19	
Lane Width (ft)					0.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		357				
pX, platoon unblocked						
vC, conflicting volume	406				432	232
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	406				432	232
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1164				585	813
Direction, Lane #	EB 1	WB 1				
Volume Total	200	387				
Volume Left	0	0				
Volume Right	0	349				
cSH	1164	1700				
Volume to Capacity	0.00	0.23				
Queue Length 95th (ft)	0	0				
Control Delay (s)	0.0	0.0				
Lane LOS						
Approach Delay (s)	0.0	0.0				
Approach LOS						
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		25.3%		ICU Level of Service		A
Analysis Period (min)		15				

No Build PM School Peak Hour
2: Youg Circle/Young Circle & Harrison Street

05/19/2023



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø4	Ø6
Lane Configurations			↑↑↑						
Traffic Volume (vph)	0	0	903	488	0	0			
Future Volume (vph)	0	0	903	488	0	0			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Satd. Flow (prot)	0	0	4698	0	0	0			
Flt Permitted									
Satd. Flow (perm)	0	0	4698	0	0	0			
Right Turn on Red		Yes		Yes					
Satd. Flow (RTOR)									
Link Speed (mph)	25		25			25			
Link Distance (ft)	95		89			425			
Travel Time (s)	2.6		2.4			11.6			
Confl. Peds. (#/hr)				24					
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90			
Heavy Vehicles (%)	2%	2%	3%	4%	2%	2%			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	0	0	1545	0	0	0			
Turn Type			NA						
Protected Phases							2	4	6
Permitted Phases			2 4						
Total Split (s)							57.0	43.0	57.0
Total Lost Time (s)									
Act Effct Green (s)			100.0						
Actuated g/C Ratio			1.00						
v/c Ratio			0.33						
Control Delay			0.2						
Queue Delay			0.0						
Total Delay			0.2						
LOS			A						
Approach Delay			0.2						
Approach LOS			A						
Queue Length 50th (ft)			0						
Queue Length 95th (ft)			0						
Internal Link Dist (ft)	15		9			345			
Turn Bay Length (ft)									
Base Capacity (vph)			4698						
Starvation Cap Reductn			0						
Spillback Cap Reductn			0						
Storage Cap Reductn			0						
Reduced v/c Ratio			0.33						
Intersection Summary									
Area Type:	Other								
Cycle Length: 100									
Actuated Cycle Length: 100									
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow									
Control Type: Actuated-Coordinated									
Maximum v/c Ratio: 0.69									
Intersection Signal Delay: 0.2	Intersection LOS: A								

No Build PM School Peak Hour 2: Youg Circle/Young Circle & Harrison Street

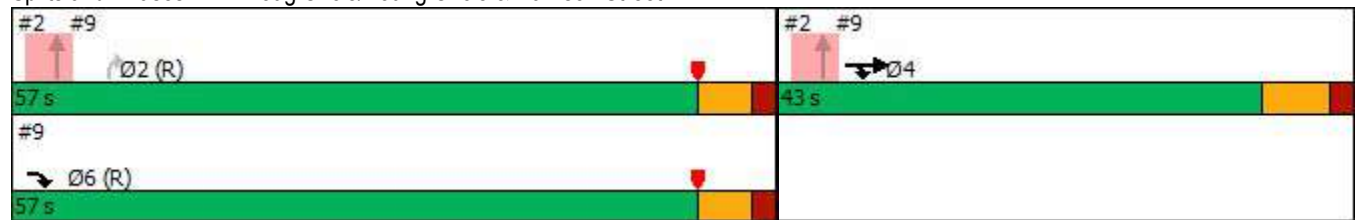
05/19/2023

Intersection Capacity Utilization 34.2%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: Youg Circle/Young Circle & Harrison Street



No Build PM School Peak Hour
8: US-1/Federal Hwy & Van Buren Street

05/19/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	62	27	57	52	23	94	924	65	109	789	23
Future Volume (vph)	17	62	27	57	52	23	94	924	65	109	789	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Storage Length (ft)	60		0	0		55	175		0	80		0
Storage Lanes	1		0	0		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1745	1720	0	0	1736	1446	1745	3345	0	1631	3407	0
Flt Permitted	0.682				0.785		0.298			0.212		
Satd. Flow (perm)	1195	1720	0	0	1397	1347	547	3345	0	361	3407	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20				98		10			4	
Link Speed (mph)		25			25			35			25	
Link Distance (ft)		571			357			334			294	
Travel Time (s)		15.6			9.7			6.5			8.0	
Confl. Peds. (#/hr)	45		3	3		45	2		21	21		2
Confl. Bikes (#/hr)						3			1			1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	2%	0%	4%	2%	8%	0%	3%	0%	7%	2%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	18	95	0	0	116	24	100	1052	0	116	863	0
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8	2			6		
Total Split (s)	26.0	26.0		26.0	26.0	26.0	18.0	56.0		18.0	56.0	
Total Lost Time (s)	6.0	6.0			6.0	6.0	6.0	6.0		6.0	6.0	
Act Effct Green (s)	14.5	14.5			14.5	14.5	67.0	59.8		69.1	62.6	
Actuated g/C Ratio	0.14	0.14			0.14	0.14	0.67	0.60		0.69	0.63	
v/c Ratio	0.10	0.36			0.57	0.09	0.22	0.53		0.33	0.40	
Control Delay	35.5	32.3			49.9	0.6	6.0	14.0		7.4	11.7	
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.2		0.0	0.4	
Total Delay	35.5	32.3			49.9	0.6	6.0	14.1		7.4	12.1	
LOS	D	C			D	A	A	B		A	B	
Approach Delay		32.8			41.5			13.4			11.5	
Approach LOS		C			D			B			B	
Queue Length 50th (ft)	10	44			71	0	15	183		17	137	
Queue Length 95th (ft)	29	86			120	0	36	297		41	223	
Internal Link Dist (ft)		491			277			254			214	
Turn Bay Length (ft)	60					55	175			80		
Base Capacity (vph)	239	360			279	347	536	2002		412	2133	
Starvation Cap Reductn	0	0			0	0	0	0		0	697	
Spillback Cap Reductn	0	0			0	6	0	240		0	0	
Storage Cap Reductn	0	0			0	0	0	0		0	0	
Reduced v/c Ratio	0.08	0.26			0.42	0.07	0.19	0.60		0.28	0.60	
Intersection Summary												
Area Type:	Other											
Cycle Length: 100												

No Build PM School Peak Hour 8: US-1/Federal Hwy & Van Buren Street

05/19/2023

Actuated Cycle Length: 100

Offset: 40 (40%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.57

Intersection Signal Delay: 15.2

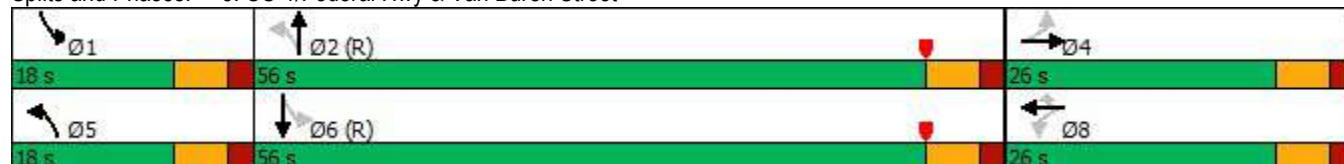
Intersection LOS: B

Intersection Capacity Utilization 67.8%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 8: US-1/Federal Hwy & Van Buren Street



No Build PM School Peak Hour
9: US-1/Federal Hwy & Young Circle

05/19/2023

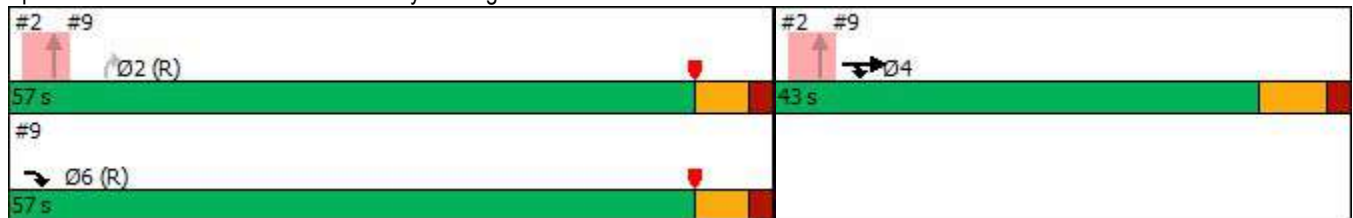
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6
Lane Configurations	↑↑	↑↑				↑↑	
Traffic Volume (vph)	462	921	0	0	0	904	
Future Volume (vph)	462	921	0	0	0	904	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Satd. Flow (prot)	3406	2787	0	0	0	2760	
Flt Permitted							
Satd. Flow (perm)	3406	2787	0	0	0	2760	
Right Turn on Red		No				No	
Satd. Flow (RTOR)							
Link Speed (mph)	25			25	25		
Link Distance (ft)	317			168	294		
Travel Time (s)	8.6			4.6	8.0		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	
Heavy Vehicles (%)	6%	2%	2%	2%	2%	3%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	497	990	0	0	0	972	
Turn Type	NA	custom				Perm	
Protected Phases	4	6 4					6
Permitted Phases						2	
Total Split (s)	43.0					57.0	57.0
Total Lost Time (s)	7.0					6.0	
Act Effct Green (s)	36.0	100.0				51.0	
Actuated g/C Ratio	0.36	1.00				0.51	
v/c Ratio	0.41	0.36				0.69	
Control Delay	25.2	0.4				9.5	
Queue Delay	0.0	0.0				0.0	
Total Delay	25.2	0.4				9.5	
LOS	C	A				A	
Approach Delay	8.7				9.5		
Approach LOS	A				A		
Queue Length 50th (ft)	123	0				259	
Queue Length 95th (ft)	168	0				31	
Internal Link Dist (ft)	237			88	214		
Turn Bay Length (ft)							
Base Capacity (vph)	1226	2787				1407	
Starvation Cap Reductn	0	0				0	
Spillback Cap Reductn	0	101				0	
Storage Cap Reductn	0	0				0	
Reduced v/c Ratio	0.41	0.37				0.69	
Intersection Summary							
Area Type:	Other						
Cycle Length: 100							
Actuated Cycle Length: 100							
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow							
Control Type: Actuated-Coordinated							
Maximum v/c Ratio: 0.69							
Intersection Signal Delay: 9.0				Intersection LOS: A			
Intersection Capacity Utilization 55.2%				ICU Level of Service B			

No Build PM School Peak Hour
 9: US-1/Federal Hwy & Young Circle

05/19/2023

Analysis Period (min) 15

Splits and Phases: 9: US-1/Federal Hwy & Young Circle



No Build PM School Peak Hour
3: S 17th Avenue & Harrison Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	356	113	70	0	0	0	0	203	57	0	0	0
Future Volume (Veh/h)	356	113	70	0	0	0	0	203	57	0	0	0
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	419	133	82	0	0	0	0	239	67	0	0	0
Pedestrians	10											
Lane Width (ft)	12.0											
Walking Speed (ft/s)	3.5											
Percent Blockage	1											
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)	420											
pX, platoon unblocked												
vC, conflicting volume	0			225			1022	1022	184	1158	1063	0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			225			1022	1022	184	1158	1063	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	74			100			100	0	92	0	100	100
cM capacity (veh/h)	1617			1343			170	172	855	0	165	1091
Direction, Lane #	EB 1	EB 2	EB 3	NB 1								
Volume Total	210	210	215	306								
Volume Left	210	210	0	0								
Volume Right	0	0	82	67								
cSH	1617	1617	1700	209								
Volume to Capacity	0.26	0.26	0.13	1.46								
Queue Length 95th (ft)	26	26	0	459								
Control Delay (s)	8.0	8.0	0.0	275.9								
Lane LOS	A	A		F								
Approach Delay (s)	5.3			275.9								
Approach LOS				F								
Intersection Summary												
Average Delay	93.4											
Intersection Capacity Utilization	32.2%			ICU Level of Service					A			
Analysis Period (min)	15											

No Build PM School Peak Hour
5: S 17th Avenue & Van Buren Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	38	61	68	4	112	27	28	59	8	1	25	24
Future Volume (vph)	38	61	68	4	112	27	28	59	8	1	25	24
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Hourly flow rate (vph)	51	82	92	5	151	36	38	80	11	1	34	32
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	225	192	129	67								
Volume Left (vph)	51	5	38	1								
Volume Right (vph)	92	36	11	32								
Hadj (s)	-0.16	-0.04	0.05	-0.25								
Departure Headway (s)	4.5	4.6	5.0	4.8								
Degree Utilization, x	0.28	0.25	0.18	0.09								
Capacity (veh/h)	756	733	659	669								
Control Delay (s)	9.2	9.1	9.1	8.3								
Approach Delay (s)	9.2	9.1	9.1	8.3								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			9.1									
Level of Service			A									
Intersection Capacity Utilization			48.2%		ICU Level of Service				A			
Analysis Period (min)			15									

No Build PM School Peak Hour
14: S 17th Avenue & HAAS Access/Alley

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	0	1	3	0	3	0	98	8	4	41	0
Future Volume (Veh/h)	114	0	1	3	0	3	0	98	8	4	41	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	131	0	1	3	0	3	0	113	9	5	47	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None								None			
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	178	179	47	176	174	118	47			122		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	178	179	47	176	174	118	47			122		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	83	100	100	100	100	100	100			100		
cM capacity (veh/h)	785	716	1028	789	720	940	1573			1478		
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1							
Volume Total	131	1	6	122	52							
Volume Left	131	0	3	0	5							
Volume Right	0	1	3	9	0							
cSH	785	1028	858	1700	1478							
Volume to Capacity	0.17	0.00	0.01	0.07	0.00							
Queue Length 95th (ft)	15	0	1	0	0							
Control Delay (s)	10.5	8.5	9.2	0.0	0.7							
Lane LOS	B	A	A		A							
Approach Delay (s)	10.5		9.2	0.0	0.7							
Approach LOS	B		A									
Intersection Summary												
Average Delay			4.7									
Intersection Capacity Utilization			23.5%	ICU Level of Service					A			
Analysis Period (min)			15									

No Build PM School Peak Hour
16: Van Buren Street & HAAS Access

05/19/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	164	53	112	0	0
Future Volume (Veh/h)	0	164	53	112	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72
Hourly flow rate (vph)	0	228	74	156	0	0
Pedestrians					19	
Lane Width (ft)					0.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		357				
pX, platoon unblocked						
vC, conflicting volume	249				399	171
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	249				399	171
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1328				611	878
Direction, Lane #	EB 1	WB 1				
Volume Total	228	230				
Volume Left	0	0				
Volume Right	0	156				
cSH	1328	1700				
Volume to Capacity	0.00	0.14				
Queue Length 95th (ft)	0	0				
Control Delay (s)	0.0	0.0				
Lane LOS						
Approach Delay (s)	0.0	0.0				
Approach LOS						
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		15.4%		ICU Level of Service		A
Analysis Period (min)		15				

Build AM Street Peak Hour

2: Youg Circle/Young Circle & Harrison Street

05/19/2023



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø4	Ø6
Lane Configurations			↑↑↑						
Traffic Volume (vph)	0	0	805	1162	0	0			
Future Volume (vph)	0	0	805	1162	0	0			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Satd. Flow (prot)	0	0	4499	0	0	0			
Flt Permitted									
Satd. Flow (perm)	0	0	4499	0	0	0			
Right Turn on Red		Yes		Yes					
Satd. Flow (RTOR)									
Link Speed (mph)	25		25			25			
Link Distance (ft)	95		89			425			
Travel Time (s)	2.6		2.4			11.6			
Confl. Peds. (#/hr)				24					
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87			
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	0	0	2261	0	0	0			
Turn Type			NA						
Protected Phases							2	4	6
Permitted Phases			2 4						
Total Split (s)							57.0	43.0	57.0
Total Lost Time (s)									
Act Effct Green (s)			100.0						
Actuated g/C Ratio			1.00						
v/c Ratio			0.85dr						
Control Delay			0.3						
Queue Delay			0.0						
Total Delay			0.3						
LOS			A						
Approach Delay			0.3						
Approach LOS			A						
Queue Length 50th (ft)			0						
Queue Length 95th (ft)			0						
Internal Link Dist (ft)	15		9			345			
Turn Bay Length (ft)									
Base Capacity (vph)			4499						
Starvation Cap Reductn			0						
Spillback Cap Reductn			0						
Storage Cap Reductn			0						
Reduced v/c Ratio			0.50						
Intersection Summary									
Area Type:	Other								
Cycle Length: 100									
Actuated Cycle Length: 100									
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow									
Control Type: Actuated-Coordinated									
Maximum v/c Ratio: 0.93									
Intersection Signal Delay: 0.3	Intersection LOS: A								

Build AM Street Peak Hour

2: Youg Circle/Young Circle & Harrison Street

05/19/2023

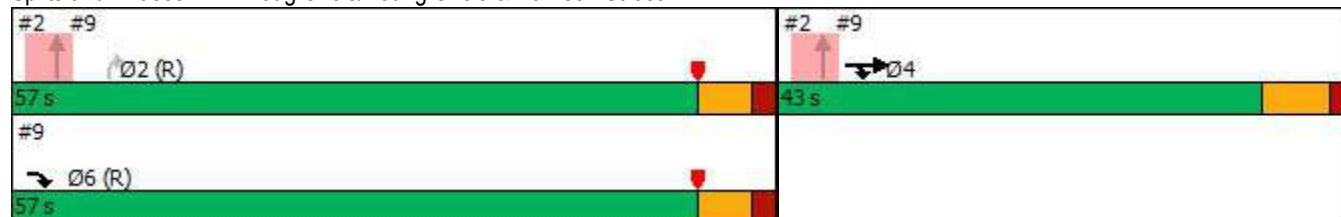
Intersection Capacity Utilization 48.0%

ICU Level of Service A

Analysis Period (min) 15

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 2: Youg Circle/Young Circle & Harrison Street



Build AM Street Peak Hour
8: US-1/Federal Hwy & Van Buren Street

05/19/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	109	18	72	46	279	126	908	66	107	779	20
Future Volume (vph)	31	109	18	72	46	279	126	908	66	107	779	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Storage Length (ft)	60		0	0		55	175		0	80		0
Storage Lanes	1		0	0		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1745	1774	0	0	1771	1561	1728	3386	0	1711	3377	0
Flt Permitted	0.664				0.695		0.292			0.228		
Satd. Flow (perm)	1162	1774	0	0	1255	1455	531	3386	0	410	3377	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7				280		11			4	
Link Speed (mph)		25			25			35			25	
Link Distance (ft)		571			357			334			294	
Travel Time (s)		15.6			9.7			6.5			8.0	
Confl. Peds. (#/hr)	47		18	18		47			1	1		
Confl. Bikes (#/hr)			2			1						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	6%	1%	0%	0%	1%	2%	0%	2%	3%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	33	134	0	0	124	294	133	1025	0	113	841	0
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8	2			6		
Total Split (s)	26.0	26.0		26.0	26.0	26.0	18.0	56.0		18.0	56.0	
Total Lost Time (s)	6.0	6.0			6.0	6.0	6.0	6.0		6.0	6.0	
Act Effct Green (s)	15.0	15.0			15.0	15.0	67.4	59.4		66.6	59.0	
Actuated g/C Ratio	0.15	0.15			0.15	0.15	0.67	0.59		0.67	0.59	
v/c Ratio	0.19	0.49			0.66	0.64	0.29	0.51		0.31	0.42	
Control Delay	37.4	41.9			55.7	12.4	6.6	13.8		7.1	12.9	
Queue Delay	0.0	0.0			0.0	0.4	0.0	0.4		0.0	0.5	
Total Delay	37.4	41.9			55.7	12.8	6.6	14.2		7.1	13.4	
LOS	D	D			E	B	A	B		A	B	
Approach Delay		41.0			25.5			13.3			12.7	
Approach LOS		D			C			B			B	
Queue Length 50th (ft)	19	75			76	8	21	181		18	140	
Queue Length 95th (ft)	45	127			130	82	46	282		40	223	
Internal Link Dist (ft)		491			277			254			214	
Turn Bay Length (ft)	60					55	175			80		
Base Capacity (vph)	232	360			251	515	522	2016		447	1994	
Starvation Cap Reductn	0	0			0	0	0	0		0	672	
Spillback Cap Reductn	0	0			0	39	0	482		0	0	
Storage Cap Reductn	0	0			0	0	0	0		0	0	
Reduced v/c Ratio	0.14	0.37			0.49	0.62	0.25	0.67		0.25	0.64	
Intersection Summary												
Area Type:	Other											
Cycle Length: 100												

Build AM Street Peak Hour

8: US-1/Federal Hwy & Van Buren Street

05/19/2023

Actuated Cycle Length: 100

Offset: 40 (40%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 16.7

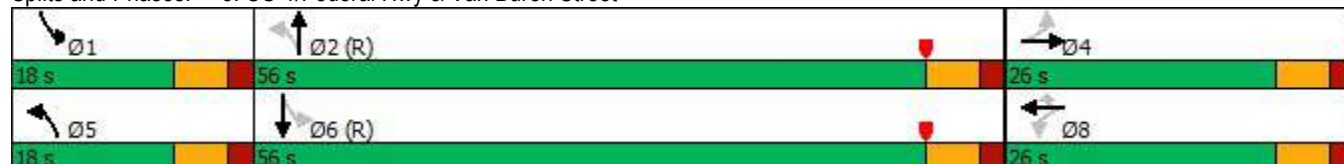
Intersection LOS: B

Intersection Capacity Utilization 84.2%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 8: US-1/Federal Hwy & Van Buren Street



Build AM Street Peak Hour
9: US-1/Federal Hwy & Young Circle

05/19/2023

	→	↘	↙	←	↖	↗	
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6
Lane Configurations	↑↑	↑↑				↑↑	
Traffic Volume (vph)	662	914	0	0	0	1216	
Future Volume (vph)	662	914	0	0	0	1216	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Satd. Flow (prot)	3438	2760	0	0	0	2760	
Flt Permitted							
Satd. Flow (perm)	3438	2760	0	0	0	2760	
Right Turn on Red		No				No	
Satd. Flow (RTOR)							
Link Speed (mph)	25			25	25		
Link Distance (ft)	317			168	294		
Travel Time (s)	8.6			4.6	8.0		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	
Heavy Vehicles (%)	5%	3%	2%	2%	2%	3%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	712	983	0	0	0	1308	
Turn Type	NA	custom				Perm	
Protected Phases	4	6 4					6
Permitted Phases						2	
Total Split (s)	43.0					57.0	57.0
Total Lost Time (s)	7.0					6.0	
Act Effct Green (s)	36.0	100.0				51.0	
Actuated g/C Ratio	0.36	1.00				0.51	
v/c Ratio	0.58	0.36				0.93	
Control Delay	28.1	0.4				27.6	
Queue Delay	0.0	0.0				0.0	
Total Delay	28.1	0.4				27.6	
LOS	C	A				C	
Approach Delay	12.0				27.6		
Approach LOS	B				C		
Queue Length 50th (ft)	190	0				429	
Queue Length 95th (ft)	250	0				#608	
Internal Link Dist (ft)	237			88	214		
Turn Bay Length (ft)							
Base Capacity (vph)	1237	2760				1407	
Starvation Cap Reductn	0	0				0	
Spillback Cap Reductn	0	100				0	
Storage Cap Reductn	0	0				0	
Reduced v/c Ratio	0.58	0.37				0.93	
Intersection Summary							
Area Type:	Other						
Cycle Length: 100							
Actuated Cycle Length: 100							
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow							
Control Type: Actuated-Coordinated							
Maximum v/c Ratio: 0.93							
Intersection Signal Delay: 18.8				Intersection LOS: B			
Intersection Capacity Utilization 71.7%				ICU Level of Service C			

Build AM Street Peak Hour
9: US-1/Federal Hwy & Young Circle

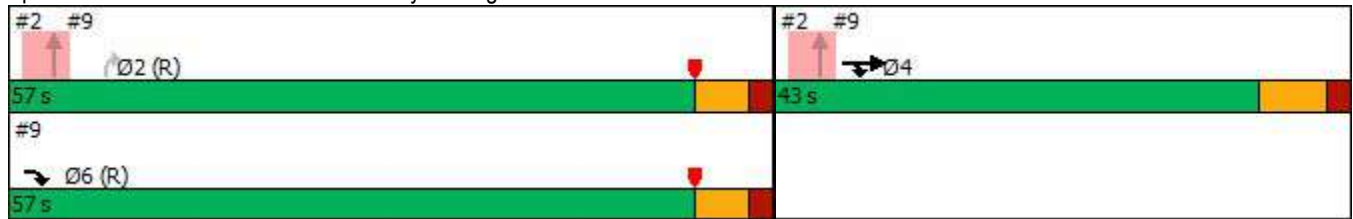
05/19/2023

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 9: US-1/Federal Hwy & Young Circle



Build AM Street Peak Hour
3: S 17th Avenue & Harrison Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	366	568	18	0	0	0	0	550	143	0	0	0
Future Volume (Veh/h)	366	568	18	0	0	0	0	550	143	0	0	0
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	394	611	19	0	0	0	0	591	154	0	0	0
Pedestrians	2											
Lane Width (ft)	12.0											
Walking Speed (ft/s)	3.5											
Percent Blockage	0											
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)	420											
pX, platoon unblocked												
vC, conflicting volume	0	632			1410			1410	622	1848	1420	0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0	632			1410			1410	622	1848	1420	0
tC, single (s)	4.1	4.1			7.1			6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2	2.2			3.5			4.0	3.3	3.5	4.0	3.3
p0 queue free %	76	100			100			0	69	0	100	100
cM capacity (veh/h)	1617	959			95			105	489	0	104	1091
Direction, Lane #	EB 1	EB 2	EB 3	NB 1								
Volume Total	197	197	630	745								
Volume Left	197	197	0	0								
Volume Right	0	0	19	154								
cSH	1617	1617	1700	126								
Volume to Capacity	0.24	0.24	0.37	5.92								
Queue Length 95th (ft)	24	24	0	Err								
Control Delay (s)	7.9	7.9	0.0	Err								
Lane LOS	A	A		F								
Approach Delay (s)	3.1				Err							
Approach LOS												
Intersection Summary												
Average Delay	4212.8											
Intersection Capacity Utilization	75.3%			ICU Level of Service					D			
Analysis Period (min)	15											

Build AM Street Peak Hour
5: S 17th Avenue & Van Buren Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	9	62	110	8	576	1	13	16	53	0	0	4
Future Volume (vph)	9	62	110	8	576	1	13	16	53	0	0	4
Peak Hour Factor	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68
Hourly flow rate (vph)	13	91	162	12	847	1	19	24	78	0	0	6
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	266	860	121	6								
Volume Left (vph)	13	12	19	0								
Volume Right (vph)	162	1	78	6								
Hadj (s)	-0.36	0.00	-0.36	-0.60								
Departure Headway (s)	4.8	4.6	5.9	5.9								
Degree Utilization, x	0.36	1.10	0.20	0.01								
Capacity (veh/h)	735	766	592	559								
Control Delay (s)	10.4	84.5	10.3	9.0								
Approach Delay (s)	10.4	84.5	10.3	9.0								
Approach LOS	B	F	B	A								
Intersection Summary												
Delay			61.2									
Level of Service			F									
Intersection Capacity Utilization			57.7%	ICU Level of Service				B				
Analysis Period (min)			15									

Build AM Street Peak Hour
14: S 17th Avenue & HAAS Access/Alley

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	576	0	0	1	0	1	0	23	0	0	3	0
Future Volume (Veh/h)	576	0	0	1	0	1	0	23	0	0	3	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
Hourly flow rate (vph)	1745	0	0	3	0	3	0	70	0	0	9	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	82	79	9	79	79	70	9			70		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	82	79	9	79	79	70	9			70		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	100	100	100	100	100	100			100		
cM capacity (veh/h)	908	815	1079	914	815	998	1624			1544		
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1							
Volume Total	1745	0	6	70	9							
Volume Left	1745	0	3	0	0							
Volume Right	0	0	3	0	0							
cSH	908	1700	955	1700	1544							
Volume to Capacity	1.92	0.00	0.01	0.04	0.00							
Queue Length 95th (ft)	2765	0	0	0	0							
Control Delay (s)	432.3	0.0	8.8	0.0	0.0							
Lane LOS	F	A	A									
Approach Delay (s)	432.3		8.8	0.0	0.0							
Approach LOS	F		A									
Intersection Summary												
Average Delay			412.2									
Intersection Capacity Utilization			48.6%	ICU Level of Service					A			
Analysis Period (min)			15									

Build AM Street Peak Hour
16: Van Buren Street & HAAS Access

05/19/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		←	←			
Traffic Volume (veh/h)	0	184	217	388	0	0
Future Volume (Veh/h)	0	184	217	388	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.69	0.69	0.69	0.69	0.69	0.69
Hourly flow rate (vph)	0	267	314	562	0	0
Pedestrians					49	
Lane Width (ft)					0.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)		357				
pX, platoon unblocked					0.97	
vC, conflicting volume	925				911	644
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	925				890	644
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	747				305	476
Direction, Lane #	EB 1	WB 1				
Volume Total	267	876				
Volume Left	0	0				
Volume Right	0	562				
cSH	747	1700				
Volume to Capacity	0.00	0.52				
Queue Length 95th (ft)	0	0				
Control Delay (s)	0.0	0.0				
Lane LOS						
Approach Delay (s)	0.0	0.0				
Approach LOS						
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		41.1%		ICU Level of Service		A
Analysis Period (min)		15				

Build AM School Peak Hour
2: Youg Circle/Young Circle & Harrison Street

05/19/2023



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø4	Ø6
Lane Configurations			↑↑↑						
Traffic Volume (vph)	0	0	784	1235	0	0			
Future Volume (vph)	0	0	784	1235	0	0			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Satd. Flow (prot)	0	0	4481	0	0	0			
Flt Permitted									
Satd. Flow (perm)	0	0	4481	0	0	0			
Right Turn on Red		Yes		Yes					
Satd. Flow (RTOR)									
Link Speed (mph)	25		25			25			
Link Distance (ft)	95		89			425			
Travel Time (s)	2.6		2.4			11.6			
Confl. Peds. (#/hr)				24					
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87			
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	0	0	2321	0	0	0			
Turn Type			NA						
Protected Phases							2	4	6
Permitted Phases			2 4						
Total Split (s)							57.0	43.0	57.0
Total Lost Time (s)									
Act Effct Green (s)			100.0						
Actuated g/C Ratio			1.00						
v/c Ratio			0.91dr						
Control Delay			0.2						
Queue Delay			0.0						
Total Delay			0.2						
LOS			A						
Approach Delay			0.2						
Approach LOS			A						
Queue Length 50th (ft)			0						
Queue Length 95th (ft)			m0						
Internal Link Dist (ft)	15		9			345			
Turn Bay Length (ft)									
Base Capacity (vph)			4481						
Starvation Cap Reductn			0						
Spillback Cap Reductn			0						
Storage Cap Reductn			0						
Reduced v/c Ratio			0.52						
Intersection Summary									
Area Type:	Other								
Cycle Length: 100									
Actuated Cycle Length: 100									
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow									
Control Type: Actuated-Coordinated									
Maximum v/c Ratio: 1.07									
Intersection Signal Delay: 0.2	Intersection LOS: A								

Build AM School Peak Hour

2: Youg Circle/Young Circle & Harrison Street

05/19/2023

Intersection Capacity Utilization 49.3%

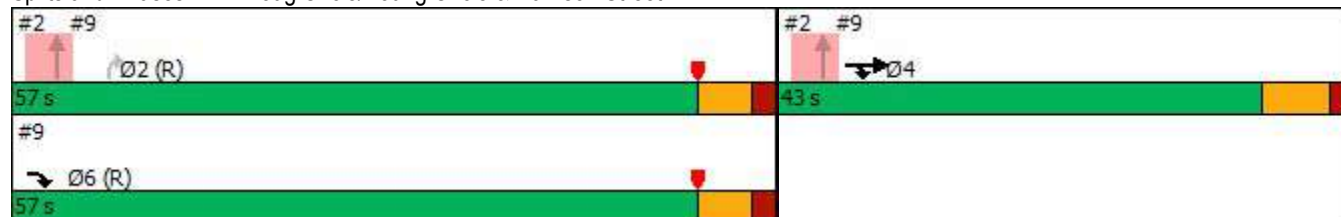
ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 2: Youg Circle/Young Circle & Harrison Street



Build AM School Peak Hour
8: US-1/Federal Hwy & Van Buren Street

05/19/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	91	20	74	58	379	111	900	59	87	763	20
Future Volume (vph)	30	91	20	74	58	379	111	900	59	87	763	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Storage Length (ft)	60		0	0		55	175		0	80		0
Storage Lanes	1		0	0		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1745	1741	0	0	1777	1561	1728	3359	0	1662	3377	0
Flt Permitted	0.599				0.742		0.256			0.203		
Satd. Flow (perm)	1051	1741	0	0	1342	1455	466	3359	0	355	3377	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10				266		10			4	
Link Speed (mph)		25			25			35			25	
Link Distance (ft)		571			357			334			294	
Travel Time (s)		15.6			9.7			6.5			8.0	
Confl. Peds. (#/hr)	47		18	18		47			1	1		
Confl. Bikes (#/hr)			2			1						
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	0%	0%	11%	1%	0%	0%	1%	3%	0%	5%	3%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	34	128	0	0	152	436	128	1102	0	100	900	0
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8	2			6		
Total Split (s)	26.0	26.0		26.0	26.0	26.0	18.0	56.0		18.0	56.0	
Total Lost Time (s)	6.0	6.0			6.0	6.0	6.0	6.0		6.0	6.0	
Act Effct Green (s)	17.4	17.4			17.4	17.4	66.2	59.5		64.1	56.6	
Actuated g/C Ratio	0.17	0.17			0.17	0.17	0.66	0.60		0.64	0.57	
v/c Ratio	0.19	0.41			0.65	0.92	0.31	0.55		0.31	0.47	
Control Delay	36.3	37.0			51.4	42.2	7.5	15.0		8.0	14.5	
Queue Delay	0.0	0.0			0.0	6.4	0.0	0.7		0.0	0.6	
Total Delay	36.3	37.0			51.4	48.6	7.5	15.7		8.0	15.1	
LOS	D	D			D	D	A	B		A	B	
Approach Delay		36.8			49.3			14.9			14.4	
Approach LOS		D			D			B			B	
Queue Length 50th (ft)	18	65			88	109	25	234		19	178	
Queue Length 95th (ft)	45	116			149	#263	43	295		35	230	
Internal Link Dist (ft)		491			277			254			214	
Turn Bay Length (ft)	60					55	175			80		
Base Capacity (vph)	210	356			268	503	473	2001		400	1913	
Starvation Cap Reductn	0	0			0	0	0	0		0	568	
Spillback Cap Reductn	0	0			0	40	0	512		0	0	
Storage Cap Reductn	0	0			0	0	0	0		0	0	
Reduced v/c Ratio	0.16	0.36			0.57	0.94	0.27	0.74		0.25	0.67	
Intersection Summary												
Area Type:	Other											
Cycle Length: 100												

Build AM School Peak Hour

8: US-1/Federal Hwy & Van Buren Street

05/19/2023

Actuated Cycle Length: 100

Offset: 40 (40%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.92

Intersection Signal Delay: 22.7

Intersection LOS: C

Intersection Capacity Utilization 81.9%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 8: US-1/Federal Hwy & Van Buren Street



Build AM School Peak Hour
9: US-1/Federal Hwy & Young Circle

05/19/2023

	→	↘	↙	←	↖	↗	
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6
Lane Configurations	↑↑	↑↑				↑↑	
Traffic Volume (vph)	672	875	0	0	0	1300	
Future Volume (vph)	672	875	0	0	0	1300	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Satd. Flow (prot)	3438	2760	0	0	0	2760	
Flt Permitted							
Satd. Flow (perm)	3438	2760	0	0	0	2760	
Right Turn on Red		No				No	
Satd. Flow (RTOR)							
Link Speed (mph)	25			25	25		
Link Distance (ft)	317			168	294		
Travel Time (s)	8.6			4.6	8.0		
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	
Heavy Vehicles (%)	5%	3%	2%	2%	2%	3%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	781	1017	0	0	0	1512	
Turn Type	NA	custom				Perm	
Protected Phases	4	6 4					6
Permitted Phases						2	
Total Split (s)	43.0					57.0	57.0
Total Lost Time (s)	7.0					6.0	
Act Effct Green (s)	36.0	100.0				51.0	
Actuated g/C Ratio	0.36	1.00				0.51	
v/c Ratio	0.63	0.37				1.07	
Control Delay	29.3	0.4				65.3	
Queue Delay	0.0	0.0				0.0	
Total Delay	29.3	0.4				65.3	
LOS	C	A				E	
Approach Delay	13.0				65.3		
Approach LOS	B				E		
Queue Length 50th (ft)	214	0				~618	
Queue Length 95th (ft)	262	0				#711	
Internal Link Dist (ft)	237			88	214		
Turn Bay Length (ft)							
Base Capacity (vph)	1237	2760				1407	
Starvation Cap Reductn	0	0				0	
Spillback Cap Reductn	0	127				0	
Storage Cap Reductn	0	0				0	
Reduced v/c Ratio	0.63	0.39				1.07	
Intersection Summary							
Area Type:	Other						
Cycle Length: 100							
Actuated Cycle Length: 100							
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow							
Control Type: Actuated-Coordinated							
Maximum v/c Ratio: 1.07							
Intersection Signal Delay: 36.9				Intersection LOS: D			
Intersection Capacity Utilization 74.9%				ICU Level of Service D			

Build AM School Peak Hour
9: US-1/Federal Hwy & Young Circle

05/19/2023

Analysis Period (min) 15

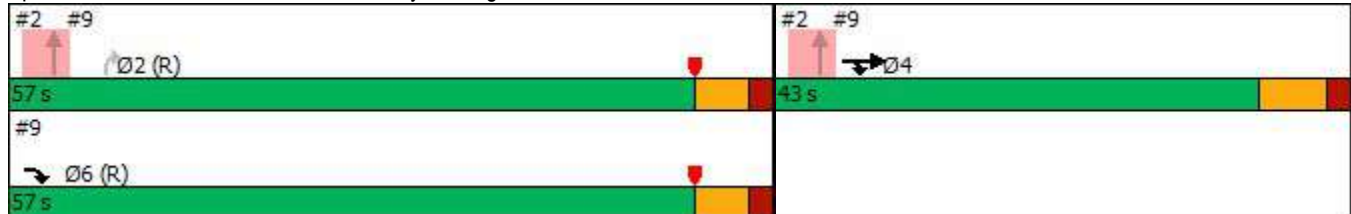
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 9: US-1/Federal Hwy & Young Circle



Build AM School Peak Hour
3: S 17th Avenue & Harrison Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	359	556	22	0	0	0	0	550	140	0	0	0
Future Volume (Veh/h)	359	556	22	0	0	0	0	550	140	0	0	0
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	408	632	25	0	0	0	0	625	159	0	0	0
Pedestrians	2											
Lane Width (ft)	12.0											
Walking Speed (ft/s)	3.5											
Percent Blockage	0											
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)	420											
pX, platoon unblocked												
vC, conflicting volume	0			659			1462	1462	646	1920	1475	0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			659			1462	1462	646	1920	1475	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	75			100			100	0	66	0	100	100
cM capacity (veh/h)	1617			937			86	95	474	0	95	1091
Direction, Lane #	EB 1	EB 2	EB 3	NB 1								
Volume Total	204	204	657	784								
Volume Left	204	204	0	0								
Volume Right	0	0	25	159								
cSH	1617	1617	1700	114								
Volume to Capacity	0.25	0.25	0.39	6.88								
Queue Length 95th (ft)	25	25	0	Err								
Control Delay (s)	8.0	8.0	0.0	Err								
Lane LOS	A	A		F								
Approach Delay (s)	3.1			Err								
Approach LOS				F								
Intersection Summary												
Average Delay	4241.5											
Intersection Capacity Utilization	74.7%			ICU Level of Service					D			
Analysis Period (min)	15											

Build AM School Peak Hour
5: S 17th Avenue & Van Buren Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	16	56	92	7	557	3	15	26	44	0	1	5
Future Volume (vph)	16	56	92	7	557	3	15	26	44	0	1	5
Peak Hour Factor	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
Hourly flow rate (vph)	29	100	164	12	995	5	27	46	79	0	2	9
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	293	1012	152	11								
Volume Left (vph)	29	12	27	0								
Volume Right (vph)	164	5	79	9								
Hadj (s)	-0.29	0.00	-0.28	-0.49								
Departure Headway (s)	5.0	4.8	6.0	6.2								
Degree Utilization, x	0.41	1.35	0.25	0.02								
Capacity (veh/h)	702	748	576	528								
Control Delay (s)	11.4	183.3	11.1	9.3								
Approach Delay (s)	11.4	183.3	11.1	9.3								
Approach LOS	B	F	B	A								
Intersection Summary												
Delay				129.8								
Level of Service				F								
Intersection Capacity Utilization				54.5%	ICU Level of Service	A						
Analysis Period (min)				15								

Build AM School Peak Hour
14: S 17th Avenue & HAAS Access/Alley

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	557	0	0	1	0	2	0	43	0	1	5	0
Future Volume (Veh/h)	557	0	0	1	0	2	0	43	0	1	5	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54
Hourly flow rate (vph)	1031	0	0	2	0	4	0	80	0	2	9	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	97	93	9	93	93	80	9			80		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	97	93	9	93	93	80	9			80		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	100	100	100	100	100	100			100		
cM capacity (veh/h)	886	800	1079	895	800	986	1624			1531		
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1							
Volume Total	1031	0	6	80	11							
Volume Left	1031	0	2	0	2							
Volume Right	0	0	4	0	0							
cSH	886	1700	953	1700	1531							
Volume to Capacity	1.16	0.00	0.01	0.05	0.00							
Queue Length 95th (ft)	769	0	0	0	0							
Control Delay (s)	105.1	0.0	8.8	0.0	1.3							
Lane LOS	F	A	A		A							
Approach Delay (s)	105.1		8.8	0.0	1.3							
Approach LOS	F		A									
Intersection Summary												
Average Delay			96.1									
Intersection Capacity Utilization			47.5%	ICU Level of Service					A			
Analysis Period (min)			15									

Build AM School Peak Hour
16: Van Buren Street & HAAS Access

05/19/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	163	322	268	0	0
Future Volume (Veh/h)	0	163	322	268	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.54	0.54	0.54	0.54	0.54	0.54
Hourly flow rate (vph)	0	302	596	496	0	0
Pedestrians					49	
Lane Width (ft)					0.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)		357				
pX, platoon unblocked					0.97	
vC, conflicting volume	1141				1195	893
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1141				1184	893
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	620				204	343
Direction, Lane #	EB 1	WB 1				
Volume Total	302	1092				
Volume Left	0	0				
Volume Right	0	496				
cSH	620	1700				
Volume to Capacity	0.00	0.64				
Queue Length 95th (ft)	0	0				
Control Delay (s)	0.0	0.0				
Lane LOS						
Approach Delay (s)	0.0	0.0				
Approach LOS						
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		38.4%		ICU Level of Service		A
Analysis Period (min)		15				

Build PM Street Peak Hour

2: Youg Circle/Young Circle & Harrison Street

05/19/2023



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø4	Ø6
Lane Configurations			↑↑↑						
Traffic Volume (vph)	0	0	795	890	0	0			
Future Volume (vph)	0	0	795	890	0	0			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Satd. Flow (prot)	0	0	4558	0	0	0			
Flt Permitted									
Satd. Flow (perm)	0	0	4558	0	0	0			
Right Turn on Red		Yes		Yes					
Satd. Flow (RTOR)									
Link Speed (mph)	25		25			25			
Link Distance (ft)	95		89			425			
Travel Time (s)	2.6		2.4			11.6			
Confl. Peds. (#/hr)				24					
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90			
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	0	0	1872	0	0	0			
Turn Type			NA						
Protected Phases							2	4	6
Permitted Phases			2 4						
Total Split (s)							57.0	43.0	57.0
Total Lost Time (s)									
Act Effct Green (s)			100.0						
Actuated g/C Ratio			1.00						
v/c Ratio			0.41						
Control Delay			0.2						
Queue Delay			0.0						
Total Delay			0.2						
LOS			A						
Approach Delay			0.2						
Approach LOS			A						
Queue Length 50th (ft)			0						
Queue Length 95th (ft)			0						
Internal Link Dist (ft)	15		9			345			
Turn Bay Length (ft)									
Base Capacity (vph)			4558						
Starvation Cap Reductn			0						
Spillback Cap Reductn			0						
Storage Cap Reductn			0						
Reduced v/c Ratio			0.41						
Intersection Summary									
Area Type:	Other								
Cycle Length: 100									
Actuated Cycle Length: 100									
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow									
Control Type: Actuated-Coordinated									
Maximum v/c Ratio: 0.79									
Intersection Signal Delay: 0.2	Intersection LOS: A								

Build PM Street Peak Hour

2: Youg Circle/Young Circle & Harrison Street

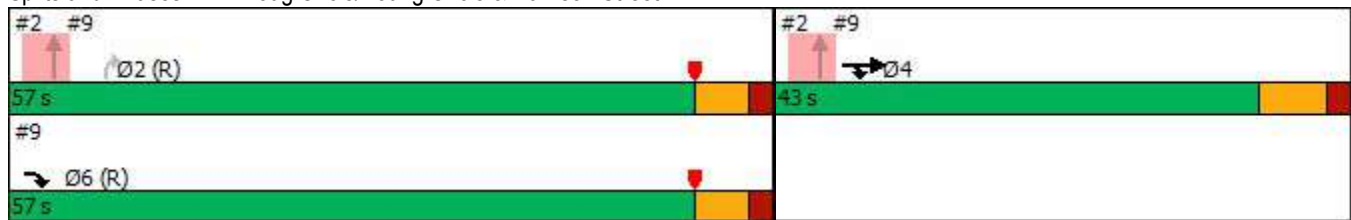
05/19/2023

Intersection Capacity Utilization 41.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: Youg Circle/Young Circle & Harrison Street



Build PM Street Peak Hour
8: US-1/Federal Hwy & Van Buren Street

05/19/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	80	37	39	60	171	116	854	69	125	815	33
Future Volume (vph)	32	80	37	39	60	171	116	854	69	125	815	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Storage Length (ft)	60		0	0		55	175		0	80		0
Storage Lanes	1		0	0		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1745	1716	0	0	1795	1546	1745	3341	0	1711	3400	0
Flt Permitted	0.690				0.799		0.278			0.245		
Satd. Flow (perm)	1208	1716	0	0	1460	1441	510	3341	0	437	3400	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21				180		12			6	
Link Speed (mph)		25			25			35			25	
Link Distance (ft)		571			357			334			294	
Travel Time (s)		15.6			9.7			6.5			8.0	
Confl. Peds. (#/hr)	45		3	3		45	2		21	21		2
Confl. Bikes (#/hr)						3			1			1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	2%	0%	1%	0%	1%	0%	3%	0%	2%	2%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	34	123	0	0	104	180	122	972	0	132	893	0
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8	2			6		
Total Split (s)	26.0	26.0		26.0	26.0	26.0	18.0	56.0		18.0	56.0	
Total Lost Time (s)	6.0	6.0			6.0	6.0	6.0	6.0		6.0	6.0	
Act Effect Green (s)	13.9	13.9			13.9	13.9	67.9	60.3		68.4	60.5	
Actuated g/C Ratio	0.14	0.14			0.14	0.14	0.68	0.60		0.68	0.60	
v/c Ratio	0.20	0.48			0.51	0.51	0.28	0.48		0.33	0.43	
Control Delay	38.3	37.6			47.5	10.7	6.4	13.1		6.9	12.4	
Queue Delay	0.0	0.0			0.0	0.1	0.0	0.3		0.0	0.5	
Total Delay	38.3	37.6			47.5	10.8	6.4	13.4		6.9	12.9	
LOS	D	D			D	B	A	B		A	B	
Approach Delay		37.8			24.2			12.6			12.1	
Approach LOS		D			C			B			B	
Queue Length 50th (ft)	20	62			64	0	17	155		18	137	
Queue Length 95th (ft)	46	109			109	56	43	268		46	236	
Internal Link Dist (ft)		491			277			254			214	
Turn Bay Length (ft)	60					55	175			80		
Base Capacity (vph)	241	360			292	432	516	2018		469	2059	
Starvation Cap Reductn	0	0			0	0	0	0		0	679	
Spillback Cap Reductn	0	0			0	22	0	420		0	0	
Storage Cap Reductn	0	0			0	0	0	0		0	0	
Reduced v/c Ratio	0.14	0.34			0.36	0.44	0.24	0.61		0.28	0.65	
Intersection Summary												
Area Type:	Other											
Cycle Length: 100												

Build PM Street Peak Hour

8: US-1/Federal Hwy & Van Buren Street

05/19/2023

Actuated Cycle Length: 100

Offset: 40 (40%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.51

Intersection Signal Delay: 15.3

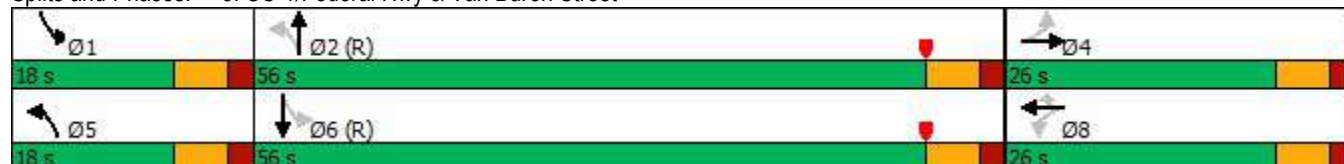
Intersection LOS: B

Intersection Capacity Utilization 68.2%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 8: US-1/Federal Hwy & Van Buren Street



Build PM Street Peak Hour
9: US-1/Federal Hwy & Young Circle

05/19/2023

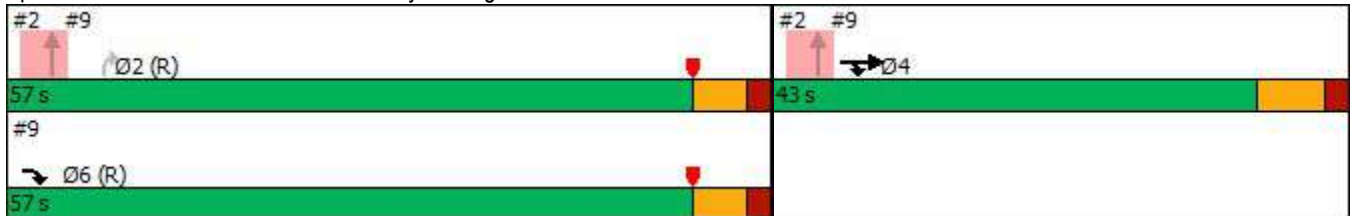
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6
Lane Configurations	↑↑	↑↑				↑↑	
Traffic Volume (vph)	555	973	0	0	0	1048	
Future Volume (vph)	555	973	0	0	0	1048	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Satd. Flow (prot)	3471	2787	0	0	0	2760	
Flt Permitted							
Satd. Flow (perm)	3471	2787	0	0	0	2760	
Right Turn on Red		No				No	
Satd. Flow (RTOR)							
Link Speed (mph)	25			25	25		
Link Distance (ft)	317			168	294		
Travel Time (s)	8.6			4.6	8.0		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	
Heavy Vehicles (%)	4%	2%	2%	2%	2%	3%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	590	1035	0	0	0	1115	
Turn Type	NA	custom				Perm	
Protected Phases	4	6 4					6
Permitted Phases						2	
Total Split (s)	43.0					57.0	57.0
Total Lost Time (s)	7.0					6.0	
Act Effct Green (s)	36.0	100.0				51.0	
Actuated g/C Ratio	0.36	1.00				0.51	
v/c Ratio	0.47	0.37				0.79	
Control Delay	26.2	0.4				16.8	
Queue Delay	0.0	0.0				0.0	
Total Delay	26.2	0.4				16.8	
LOS	C	A				B	
Approach Delay	9.8				16.8		
Approach LOS	A				B		
Queue Length 50th (ft)	151	0				323	
Queue Length 95th (ft)	202	0				432	
Internal Link Dist (ft)	237			88	214		
Turn Bay Length (ft)							
Base Capacity (vph)	1249	2787				1407	
Starvation Cap Reductn	0	0				0	
Spillback Cap Reductn	0	122				0	
Storage Cap Reductn	0	0				0	
Reduced v/c Ratio	0.47	0.39				0.79	
Intersection Summary							
Area Type:	Other						
Cycle Length: 100							
Actuated Cycle Length: 100							
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow							
Control Type: Actuated-Coordinated							
Maximum v/c Ratio: 0.79							
Intersection Signal Delay: 12.6				Intersection LOS: B			
Intersection Capacity Utilization 62.8%				ICU Level of Service B			

Build PM Street Peak Hour
9: US-1/Federal Hwy & Young Circle

05/19/2023

Analysis Period (min) 15

Splits and Phases: 9: US-1/Federal Hwy & Young Circle



Build PM Street Peak Hour
3: S 17th Avenue & Harrison Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	395	398	34	0	0	0	0	415	89	0	0	0
Future Volume (Veh/h)	395	398	34	0	0	0	0	415	89	0	0	0
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	449	452	39	0	0	0	0	472	101	0	0	0
Pedestrians	10											
Lane Width (ft)	12.0											
Walking Speed (ft/s)	3.5											
Percent Blockage	1											
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)	420											
pX, platoon unblocked												
vC, conflicting volume	0			501			1380	1380	482	1687	1399	0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			501			1380	1380	482	1687	1399	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	72			100			100	0	83	0	100	100
cM capacity (veh/h)	1617			1063			95	103	583	0	101	1091
Direction, Lane #	EB 1	EB 2	EB 3	NB 1								
Volume Total	224	224	491	573								
Volume Left	224	224	0	0								
Volume Right	0	0	39	101								
cSH	1617	1617	1700	120								
Volume to Capacity	0.28	0.28	0.29	4.77								
Queue Length 95th (ft)	29	29	0	Err								
Control Delay (s)	8.1	8.1	0.0	Err								
Lane LOS	A	A		F								
Approach Delay (s)	3.9			Err								
Approach LOS				F								
Intersection Summary												
Average Delay	3789.2											
Intersection Capacity Utilization	57.0%			ICU Level of Service					B			
Analysis Period (min)	15											

Build PM Street Peak Hour
5: S 17th Avenue & Van Buren Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	8	64	100	3	412	1	18	41	32	0	6	7
Future Volume (vph)	8	64	100	3	412	1	18	41	32	0	6	7
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	9	70	110	3	453	1	20	45	35	0	7	8
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	189	457	100	15								
Volume Left (vph)	9	3	20	0								
Volume Right (vph)	110	1	35	8								
Hadj (s)	-0.32	0.02	-0.15	-0.32								
Departure Headway (s)	4.4	4.4	5.2	5.2								
Degree Utilization, x	0.23	0.56	0.15	0.02								
Capacity (veh/h)	781	789	606	590								
Control Delay (s)	8.7	13.0	9.1	8.3								
Approach Delay (s)	8.7	13.0	9.1	8.3								
Approach LOS	A	B	A	A								
Intersection Summary												
Delay				11.3								
Level of Service				B								
Intersection Capacity Utilization				44.6%	ICU Level of Service	A						
Analysis Period (min)				15								

Build PM Street Peak Hour
14: S 17th Avenue & HAAS Access/Alley

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	414	0	1	0	0	1	0	39	5	0	12	0
Future Volume (Veh/h)	414	0	1	0	0	1	0	39	5	0	12	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44
Hourly flow rate (vph)	941	0	2	0	0	2	0	89	11	0	27	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	124	127	27	124	122	94	27			100		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	124	127	27	124	122	94	27			100		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	100	100	100	100	100	100			100		
cM capacity (veh/h)	854	767	1054	854	773	968	1600			1505		
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1							
Volume Total	941	2	2	100	27							
Volume Left	941	0	0	0	0							
Volume Right	0	2	2	11	0							
cSH	854	1054	968	1700	1505							
Volume to Capacity	1.10	0.00	0.00	0.06	0.00							
Queue Length 95th (ft)	625	0	0	0	0							
Control Delay (s)	83.4	8.4	8.7	0.0	0.0							
Lane LOS	F	A	A									
Approach Delay (s)	83.2		8.7	0.0	0.0							
Approach LOS	F		A									
Intersection Summary												
Average Delay			73.2									
Intersection Capacity Utilization			39.6%			ICU Level of Service			A			
Analysis Period (min)			15									

Build PM Street Peak Hour
16: Van Buren Street & HAAS Access

05/19/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	172	145	300	0	0
Future Volume (Veh/h)	0	172	145	300	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	0	200	169	349	0	0
Pedestrians					19	
Lane Width (ft)					0.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		357				
pX, platoon unblocked						
vC, conflicting volume	537				562	362
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	537				562	362
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1041				491	687
Direction, Lane #	EB 1	WB 1				
Volume Total	200	518				
Volume Left	0	0				
Volume Right	0	349				
cSH	1041	1700				
Volume to Capacity	0.00	0.30				
Queue Length 95th (ft)	0	0				
Control Delay (s)	0.0	0.0				
Lane LOS						
Approach Delay (s)	0.0	0.0				
Approach LOS						
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		30.6%		ICU Level of Service		A
Analysis Period (min)		15				

Build PM School Peak Hour
2: Youg Circle/Young Circle & Harrison Street

05/19/2023



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø4	Ø6
Lane Configurations			↑↑↑						
Traffic Volume (vph)	0	0	903	854	0	0			
Future Volume (vph)	0	0	903	854	0	0			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Satd. Flow (prot)	0	0	4573	0	0	0			
Flt Permitted									
Satd. Flow (perm)	0	0	4573	0	0	0			
Right Turn on Red		Yes		Yes					
Satd. Flow (RTOR)									
Link Speed (mph)	25		25			25			
Link Distance (ft)	95		89			425			
Travel Time (s)	2.6		2.4			11.6			
Confl. Peds. (#/hr)				24					
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90			
Heavy Vehicles (%)	2%	2%	3%	4%	2%	2%			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	0	0	1952	0	0	0			
Turn Type			NA						
Protected Phases							2	4	6
Permitted Phases			2 4						
Total Split (s)							57.0	43.0	57.0
Total Lost Time (s)									
Act Effct Green (s)			100.0						
Actuated g/C Ratio			1.00						
v/c Ratio			0.43						
Control Delay			0.2						
Queue Delay			0.0						
Total Delay			0.2						
LOS			A						
Approach Delay			0.2						
Approach LOS			A						
Queue Length 50th (ft)			0						
Queue Length 95th (ft)			0						
Internal Link Dist (ft)	15		9			345			
Turn Bay Length (ft)									
Base Capacity (vph)			4573						
Starvation Cap Reductn			0						
Spillback Cap Reductn			0						
Storage Cap Reductn			0						
Reduced v/c Ratio			0.43						
Intersection Summary									
Area Type:	Other								
Cycle Length: 100									
Actuated Cycle Length: 100									
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow									
Control Type: Actuated-Coordinated									
Maximum v/c Ratio: 0.88									
Intersection Signal Delay: 0.2	Intersection LOS: A								

Build PM School Peak Hour
2: Youg Circle/Young Circle & Harrison Street

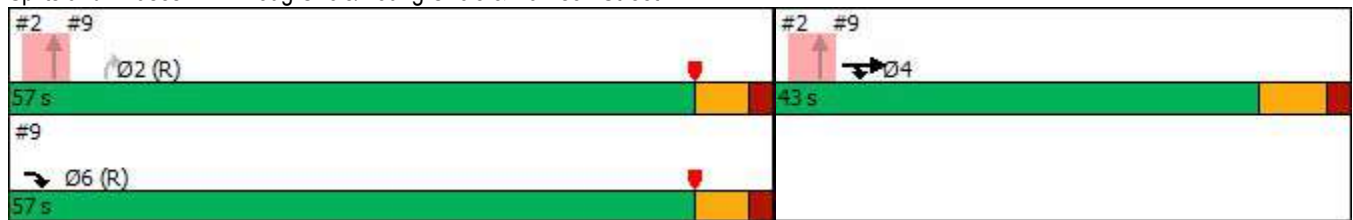
05/19/2023

Intersection Capacity Utilization 42.7%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: Youg Circle/Young Circle & Harrison Street



Build PM School Peak Hour
8: US-1/Federal Hwy & Van Buren Street

05/19/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	62	27	57	52	206	94	924	65	109	789	23
Future Volume (vph)	27	62	27	57	52	206	94	924	65	109	789	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Storage Length (ft)	60		0	0		55	175		0	80		0
Storage Lanes	1		0	0		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1745	1720	0	0	1736	1446	1745	3345	0	1631	3407	0
Flt Permitted	0.682				0.785		0.298			0.212		
Satd. Flow (perm)	1195	1720	0	0	1397	1347	547	3345	0	361	3407	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20				219		10			4	
Link Speed (mph)		25			25			35			25	
Link Distance (ft)		571			357			334			294	
Travel Time (s)		15.6			9.7			6.5			8.0	
Confl. Peds. (#/hr)	45		3	3		45	2		21	21		2
Confl. Bikes (#/hr)						3			1			1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	2%	0%	4%	2%	8%	0%	3%	0%	7%	2%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	29	95	0	0	116	219	100	1052	0	116	863	0
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8	2			6		
Total Split (s)	26.0	26.0		26.0	26.0	26.0	18.0	56.0		18.0	56.0	
Total Lost Time (s)	6.0	6.0			6.0	6.0	6.0	6.0		6.0	6.0	
Act Effct Green (s)	14.5	14.5			14.5	14.5	67.0	59.8		69.1	62.6	
Actuated g/C Ratio	0.14	0.14			0.14	0.14	0.67	0.60		0.69	0.63	
v/c Ratio	0.17	0.36			0.57	0.57	0.22	0.53		0.33	0.40	
Control Delay	37.1	32.3			49.9	11.3	6.0	14.0		7.4	11.7	
Queue Delay	0.0	0.0			0.0	0.2	0.0	0.4		0.0	0.4	
Total Delay	37.1	32.3			49.9	11.5	6.0	14.4		7.4	12.1	
LOS	D	C			D	B	A	B		A	B	
Approach Delay		33.4			24.8			13.6			11.5	
Approach LOS		C			C			B			B	
Queue Length 50th (ft)	17	44			71	0	15	183		17	137	
Queue Length 95th (ft)	41	86			120	63	36	297		41	223	
Internal Link Dist (ft)		491			277			254			214	
Turn Bay Length (ft)	60					55	175			80		
Base Capacity (vph)	239	360			279	444	536	2002		412	2133	
Starvation Cap Reductn	0	0			0	0	0	0		0	697	
Spillback Cap Reductn	0	0			0	27	0	431		0	0	
Storage Cap Reductn	0	0			0	0	0	0		0	0	
Reduced v/c Ratio	0.12	0.26			0.42	0.53	0.19	0.67		0.28	0.60	
Intersection Summary												
Area Type:	Other											
Cycle Length: 100												

Build PM School Peak Hour

8: US-1/Federal Hwy & Van Buren Street

05/19/2023

Actuated Cycle Length: 100

Offset: 40 (40%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.57

Intersection Signal Delay: 15.2

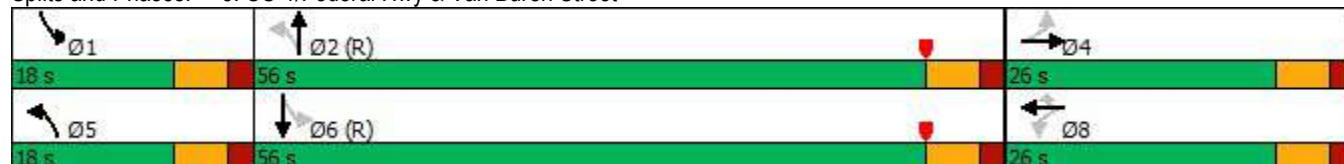
Intersection LOS: B

Intersection Capacity Utilization 69.1%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 8: US-1/Federal Hwy & Van Buren Street



Build PM School Peak Hour
9: US-1/Federal Hwy & Young Circle

05/19/2023

	→	↘	↙	←	↖	↗	
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6
Lane Configurations	↑↑	↑↑				↑↑	
Traffic Volume (vph)	575	921	0	0	0	1157	
Future Volume (vph)	575	921	0	0	0	1157	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Satd. Flow (prot)	3406	2787	0	0	0	2760	
Flt Permitted							
Satd. Flow (perm)	3406	2787	0	0	0	2760	
Right Turn on Red		No				No	
Satd. Flow (RTOR)							
Link Speed (mph)	25			25	25		
Link Distance (ft)	317			168	294		
Travel Time (s)	8.6			4.6	8.0		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	
Heavy Vehicles (%)	6%	2%	2%	2%	2%	3%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	618	990	0	0	0	1244	
Turn Type	NA	custom				Perm	
Protected Phases	4	6 4					6
Permitted Phases						2	
Total Split (s)	43.0					57.0	57.0
Total Lost Time (s)	7.0					6.0	
Act Effct Green (s)	36.0	100.0				51.0	
Actuated g/C Ratio	0.36	1.00				0.51	
v/c Ratio	0.50	0.36				0.88	
Control Delay	26.8	0.4				21.7	
Queue Delay	0.0	0.0				0.0	
Total Delay	26.8	0.4				21.7	
LOS	C	A				C	
Approach Delay	10.5				21.7		
Approach LOS	B				C		
Queue Length 50th (ft)	160	0				389	
Queue Length 95th (ft)	213	0				#534	
Internal Link Dist (ft)	237			88	214		
Turn Bay Length (ft)							
Base Capacity (vph)	1226	2787				1407	
Starvation Cap Reductn	0	0				0	
Spillback Cap Reductn	0	101				0	
Storage Cap Reductn	0	0				0	
Reduced v/c Ratio	0.50	0.37				0.88	
Intersection Summary							
Area Type:	Other						
Cycle Length: 100							
Actuated Cycle Length: 100							
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow							
Control Type: Actuated-Coordinated							
Maximum v/c Ratio: 0.88							
Intersection Signal Delay: 15.4				Intersection LOS: B			
Intersection Capacity Utilization 67.2%				ICU Level of Service C			

Build PM School Peak Hour
9: US-1/Federal Hwy & Young Circle

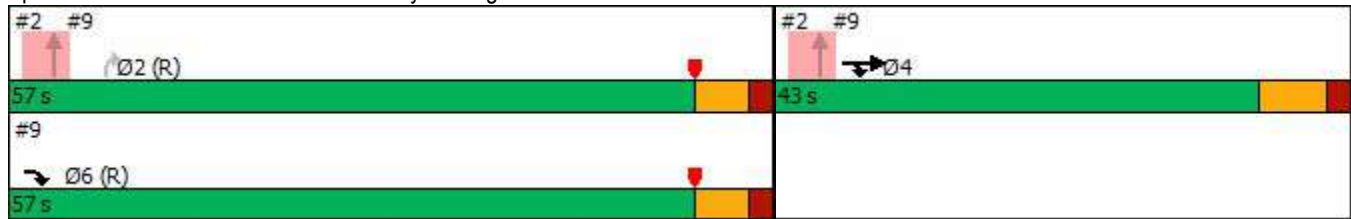
05/19/2023

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 9: US-1/Federal Hwy & Young Circle



Build PM School Peak Hour
3: S 17th Avenue & Harrison Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	356	296	70	0	0	0	0	359	84	0	0	0
Future Volume (Veh/h)	356	296	70	0	0	0	0	359	84	0	0	0
Sign Control	Free				Free				Stop		Stop	
Grade	0%				0%				0%		0%	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	419	348	82	0	0	0	0	422	99	0	0	0
Pedestrians								10				
Lane Width (ft)								12.0				
Walking Speed (ft/s)								3.5				
Percent Blockage								1				
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)	420											
pX, platoon unblocked												
vC, conflicting volume	0			440			1237	1237	399	1496	1278	0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			440			1237	1237	399	1496	1278	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	74			100			100	0	85	0	100	100
cM capacity (veh/h)	1617			1120			121	128	649	0	123	1091
Direction, Lane #	EB 1	EB 2	EB 3	NB 1								
Volume Total	210	210	430	521								
Volume Left	210	210	0	0								
Volume Right	0	0	82	99								
cSH	1617	1617	1700	152								
Volume to Capacity	0.26	0.26	0.25	3.44								
Queue Length 95th (ft)	26	26	0	Err								
Control Delay (s)	8.0	8.0	0.0	Err								
Lane LOS	A	A	F									
Approach Delay (s)	4.0			Err								
Approach LOS				F								
Intersection Summary												
Average Delay			3805.0									
Intersection Capacity Utilization			50.7%	ICU Level of Service					A			
Analysis Period (min)			15									

Build PM School Peak Hour
5: S 17th Avenue & Van Buren Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	38	61	68	4	295	27	28	59	8	1	25	24
Future Volume (vph)	38	61	68	4	295	27	28	59	8	1	25	24
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Hourly flow rate (vph)	51	82	92	5	399	36	38	80	11	1	34	32
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	225	440	129	67								
Volume Left (vph)	51	5	38	1								
Volume Right (vph)	92	36	11	32								
Hadj (s)	-0.16	0.03	0.05	-0.25								
Departure Headway (s)	4.9	4.8	5.7	5.5								
Degree Utilization, x	0.31	0.59	0.20	0.10								
Capacity (veh/h)	687	725	558	558								
Control Delay (s)	10.0	14.4	10.2	9.2								
Approach Delay (s)	10.0	14.4	10.2	9.2								
Approach LOS	B	B	B	A								
Intersection Summary												
Delay			12.2									
Level of Service			B									
Intersection Capacity Utilization			53.0%	ICU Level of Service		A						
Analysis Period (min)			15									

Build PM School Peak Hour
14: S 17th Avenue & HAAS Access/Alley

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	297	0	1	3	0	3	0	98	8	4	41	0
Future Volume (Veh/h)	297	0	1	3	0	3	0	98	8	4	41	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	341	0	1	3	0	3	0	113	9	5	47	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	178	179	47	176	174	118	47			122		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	178	179	47	176	174	118	47			122		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	57	100	100	100	100	100	100			100		
cM capacity (veh/h)	785	716	1028	789	720	940	1573			1478		
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1							
Volume Total	341	1	6	122	52							
Volume Left	341	0	3	0	5							
Volume Right	0	1	3	9	0							
cSH	785	1028	858	1700	1478							
Volume to Capacity	0.43	0.00	0.01	0.07	0.00							
Queue Length 95th (ft)	55	0	1	0	0							
Control Delay (s)	13.1	8.5	9.2	0.0	0.7							
Lane LOS	B	A	A		A							
Approach Delay (s)	13.1		9.2	0.0	0.7							
Approach LOS	B		A									
Intersection Summary												
Average Delay			8.7									
Intersection Capacity Utilization			35.4%			ICU Level of Service			A			
Analysis Period (min)			15									

Build PM School Peak Hour
16: Van Buren Street & HAAS Access

05/19/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	164	236	112	0	0
Future Volume (Veh/h)	0	164	236	112	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72
Hourly flow rate (vph)	0	228	328	156	0	0
Pedestrians					19	
Lane Width (ft)					0.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		357				
pX, platoon unblocked						
vC, conflicting volume	503				653	425
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	503				653	425
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1072				435	634
Direction, Lane #	EB 1	WB 1				
Volume Total	228	484				
Volume Left	0	0				
Volume Right	0	156				
cSH	1072	1700				
Volume to Capacity	0.00	0.28				
Queue Length 95th (ft)	0	0				
Control Delay (s)	0.0	0.0				
Lane LOS						
Approach Delay (s)	0.0	0.0				
Approach LOS						
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		23.2%		ICU Level of Service		A
Analysis Period (min)		15				

Build AM Street Peak Hour with Block 57
2: Young Circle/Young Circle & Harrison Street

05/19/2023



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø4	Ø6
Lane Configurations			↑↑↑						
Traffic Volume (vph)	0	0	1217	922	0	0			
Future Volume (vph)	0	0	1217	922	0	0			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Satd. Flow (prot)	0	0	4642	0	0	0			
Flt Permitted									
Satd. Flow (perm)	0	0	4642	0	0	0			
Right Turn on Red		Yes		Yes					
Satd. Flow (RTOR)									
Link Speed (mph)	25		25			25			
Link Distance (ft)	95		89			425			
Travel Time (s)	2.6		2.4			11.6			
Confl. Peds. (#/hr)				24					
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87			
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	0	0	2459	0	0	0			
Turn Type			NA						
Protected Phases							2	4	6
Permitted Phases			2 4						
Total Split (s)							57.0	43.0	57.0
Total Lost Time (s)									
Act Effct Green (s)			100.0						
Actuated g/C Ratio			1.00						
v/c Ratio			0.53						
Control Delay			0.3						
Queue Delay			0.0						
Total Delay			0.3						
LOS			A						
Approach Delay			0.3						
Approach LOS			A						
Queue Length 50th (ft)			0						
Queue Length 95th (ft)			m0						
Internal Link Dist (ft)	15		9			345			
Turn Bay Length (ft)									
Base Capacity (vph)			4642						
Starvation Cap Reductn			0						
Spillback Cap Reductn			0						
Storage Cap Reductn			0						
Reduced v/c Ratio			0.53						
Intersection Summary									
Area Type:	Other								
Cycle Length: 100									
Actuated Cycle Length: 100									
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow									
Control Type: Actuated-Coordinated									
Maximum v/c Ratio: 0.97									
Intersection Signal Delay: 0.3	Intersection LOS: A								

Build AM Street Peak Hour with Block 57

2: Youg Circle/Young Circle & Harrison Street

05/19/2023

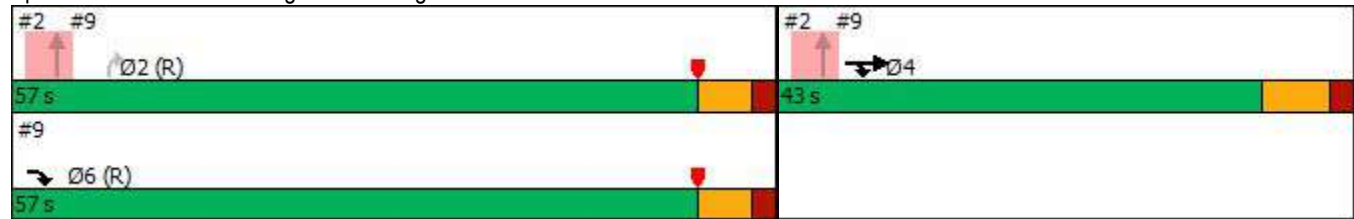
Intersection Capacity Utilization 50.2%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Youg Circle/Young Circle & Harrison Street



Build AM Street Peak Hour with Block 57
8: US-1/Federal Hwy & Van Buren Street

05/19/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	109	18	72	46	279	126	960	66	107	839	20
Future Volume (vph)	31	109	18	72	46	279	126	960	66	107	839	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Storage Length (ft)	60		0	0		55	175		0	80		0
Storage Lanes	1		0	0		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1745	1774	0	0	1771	1561	1728	3386	0	1711	3380	0
Flt Permitted	0.664				0.695		0.267			0.210		
Satd. Flow (perm)	1162	1774	0	0	1255	1455	486	3386	0	378	3380	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7				270		10			3	
Link Speed (mph)		25			25			35			25	
Link Distance (ft)		571			357			334			294	
Travel Time (s)		15.6			9.7			6.5			8.0	
Confl. Peds. (#/hr)	47		18	18		47			1	1		
Confl. Bikes (#/hr)			2			1						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	6%	1%	0%	0%	1%	2%	0%	2%	3%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	33	134	0	0	124	294	133	1080	0	113	904	0
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8	2			6		
Total Split (s)	26.0	26.0		26.0	26.0	26.0	18.0	56.0		18.0	56.0	
Total Lost Time (s)	6.0	6.0			6.0	6.0	6.0	6.0		6.0	6.0	
Act Effect Green (s)	15.0	15.0			15.0	15.0	67.4	59.4		66.6	59.0	
Actuated g/C Ratio	0.15	0.15			0.15	0.15	0.67	0.59		0.67	0.59	
v/c Ratio	0.19	0.49			0.66	0.66	0.31	0.54		0.32	0.45	
Control Delay	37.4	41.9			55.7	13.7	6.9	14.2		7.4	13.3	
Queue Delay	0.0	0.0			0.0	0.5	0.0	0.5		0.0	0.5	
Total Delay	37.4	41.9			55.7	14.1	6.9	14.8		7.4	13.8	
LOS	D	D			E	B	A	B		A	B	
Approach Delay		41.0			26.4			13.9			13.1	
Approach LOS		D			C			B			B	
Queue Length 50th (ft)	19	75			76	13	21	195		18	155	
Queue Length 95th (ft)	45	127			130	90	46	304		40	244	
Internal Link Dist (ft)		491			277			254			214	
Turn Bay Length (ft)	60					55	175			80		
Base Capacity (vph)	232	360			251	507	495	2016		428	1996	
Starvation Cap Reductn	0	0			0	0	0	0		0	624	
Spillback Cap Reductn	0	0			0	38	0	490		0	0	
Storage Cap Reductn	0	0			0	0	0	0		0	0	
Reduced v/c Ratio	0.14	0.37			0.49	0.63	0.27	0.71		0.26	0.66	
Intersection Summary												
Area Type:	Other											
Cycle Length:	100											

Build AM Street Peak Hour with Block 57

8: US-1/Federal Hwy & Van Buren Street

05/19/2023

Actuated Cycle Length: 100

Offset: 40 (40%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 17.1

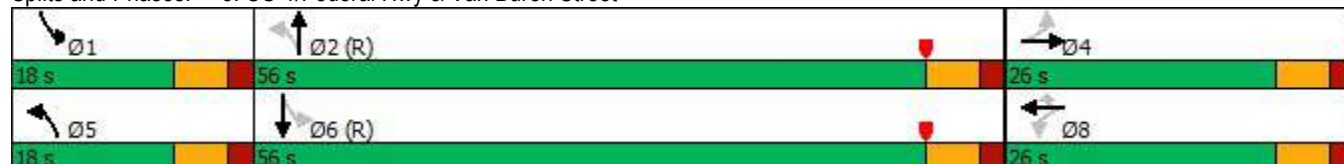
Intersection LOS: B

Intersection Capacity Utilization 85.7%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 8: US-1/Federal Hwy & Van Buren Street



Build AM Street Peak Hour with Block 57

9: US-1/Federal Hwy & Young Circle

05/19/2023

							
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6
Lane Configurations	↑↑	↑↑				↑↑	
Traffic Volume (vph)	784	974	0	0	0	1268	
Future Volume (vph)	784	974	0	0	0	1268	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Satd. Flow (prot)	3438	2760	0	0	0	2760	
Flt Permitted							
Satd. Flow (perm)	3438	2760	0	0	0	2760	
Right Turn on Red		No				No	
Satd. Flow (RTOR)							
Link Speed (mph)	25			25	25		
Link Distance (ft)	317			168	294		
Travel Time (s)	8.6			4.6	8.0		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	
Heavy Vehicles (%)	5%	3%	2%	2%	2%	3%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	843	1047	0	0	0	1363	
Turn Type	NA	custom				Perm	
Protected Phases	4	6 4					6
Permitted Phases						2	
Total Split (s)	43.0					57.0	57.0
Total Lost Time (s)	7.0					6.0	
Act Effct Green (s)	36.0	100.0				51.0	
Actuated g/C Ratio	0.36	1.00				0.51	
v/c Ratio	0.68	0.38				0.97	
Control Delay	30.5	0.4				33.4	
Queue Delay	0.0	0.0				0.0	
Total Delay	30.5	0.4				33.4	
LOS	C	A				C	
Approach Delay	13.9				33.4		
Approach LOS	B				C		
Queue Length 50th (ft)	236	0				464	
Queue Length 95th (ft)	306	0				#650	
Internal Link Dist (ft)	237			88	214		
Turn Bay Length (ft)							
Base Capacity (vph)	1237	2760				1407	
Starvation Cap Reductn	0	0				0	
Spillback Cap Reductn	0	131				0	
Storage Cap Reductn	0	0				0	
Reduced v/c Ratio	0.68	0.40				0.97	
Intersection Summary							
Area Type:	Other						
Cycle Length: 100							
Actuated Cycle Length: 100							
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow							
Control Type: Actuated-Coordinated							
Maximum v/c Ratio: 0.97							
Intersection Signal Delay: 22.0				Intersection LOS: C			
Intersection Capacity Utilization 76.9%				ICU Level of Service D			

Build AM Street Peak Hour with Block 57

9: US-1/Federal Hwy & Young Circle

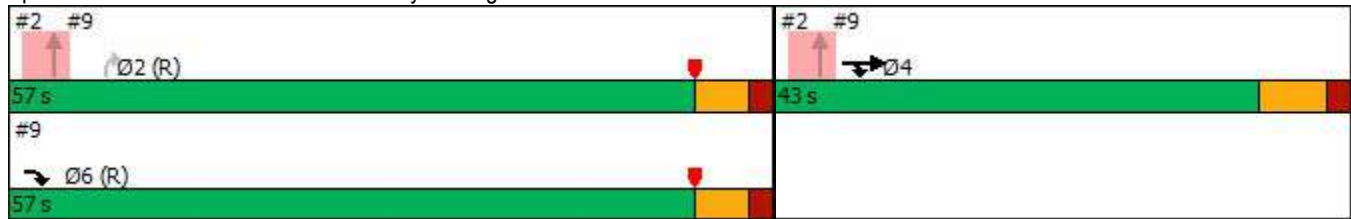
05/19/2023

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 9: US-1/Federal Hwy & Young Circle



Build AM Street Peak Hour with Block 57
3: S 17th Avenue & Harrison Street

05/19/2023

														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations														
Traffic Volume (veh/h)	128	568	18	0	0	0	0	550	143	0	0	0		
Future Volume (Veh/h)	128	568	18	0	0	0	0	550	143	0	0	0		
Sign Control	Free			Free			Stop			Stop				
Grade	0%			0%			0%			0%				
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93		
Hourly flow rate (vph)	138	611	19	0	0	0	0	591	154	0	0	0		
Pedestrians								2						
Lane Width (ft)								12.0						
Walking Speed (ft/s)								3.5						
Percent Blockage								0						
Right turn flare (veh)														
Median type	None			None										
Median storage (veh)														
Upstream signal (ft)	420													
pX, platoon unblocked														
vC, conflicting volume	0				632				898	898	622	1336	908	0
vC1, stage 1 conf vol														
vC2, stage 2 conf vol														
vCu, unblocked vol	0				632				898	898	622	1336	908	0
tC, single (s)	4.1				4.1				7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)														
tF (s)	2.2				2.2				3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	91				100				100	0	69	0	100	100
cM capacity (veh/h)	1617				959				244	256	489	0	253	1091
Direction, Lane #	EB 1	EB 2	NB 1											
Volume Total	138	630	745											
Volume Left	138	0	0											
Volume Right	0	19	154											
cSH	1617	1700	284											
Volume to Capacity	0.09	0.37	2.62											
Queue Length 95th (ft)	7	0	1552											
Control Delay (s)	7.4	0.0	766.3											
Lane LOS	A		F											
Approach Delay (s)	1.3		766.3											
Approach LOS			F											
Intersection Summary														
Average Delay	378.0													
Intersection Capacity Utilization	75.3%			ICU Level of Service					D					
Analysis Period (min)	15													

Build AM Street Peak Hour with Block 57
5: S 17th Avenue & Van Buren Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	9	62	110	8	576	1	13	16	53	0	0	4
Future Volume (vph)	9	62	110	8	576	1	13	16	53	0	0	4
Peak Hour Factor	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68
Hourly flow rate (vph)	13	91	162	12	847	1	19	24	78	0	0	6
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	266	860	121	6								
Volume Left (vph)	13	12	19	0								
Volume Right (vph)	162	1	78	6								
Hadj (s)	-0.36	0.00	-0.36	-0.60								
Departure Headway (s)	4.8	4.6	5.9	5.9								
Degree Utilization, x	0.36	1.10	0.20	0.01								
Capacity (veh/h)	735	766	592	559								
Control Delay (s)	10.4	84.5	10.3	9.0								
Approach Delay (s)	10.4	84.5	10.3	9.0								
Approach LOS	B	F	B	A								
Intersection Summary												
Delay			61.2									
Level of Service			F									
Intersection Capacity Utilization			57.7%	ICU Level of Service					B			
Analysis Period (min)			15									

Build AM Street Peak Hour with Block 57
14: S 17th Avenue & HAAS Access/Alley

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	576	0	0	1	0	1	0	23	0	0	3	0
Future Volume (Veh/h)	576	0	0	1	0	1	0	23	0	0	3	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
Hourly flow rate (vph)	1745	0	0	3	0	3	0	70	0	0	9	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	82	79	9	79	79	70	9			70		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	82	79	9	79	79	70	9			70		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	100	100	100	100	100	100			100		
cM capacity (veh/h)	908	815	1079	914	815	998	1624			1544		
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1							
Volume Total	1745	0	6	70	9							
Volume Left	1745	0	3	0	0							
Volume Right	0	0	3	0	0							
cSH	908	1700	955	1700	1544							
Volume to Capacity	1.92	0.00	0.01	0.04	0.00							
Queue Length 95th (ft)	2765	0	0	0	0							
Control Delay (s)	432.3	0.0	8.8	0.0	0.0							
Lane LOS	F	A	A									
Approach Delay (s)	432.3		8.8	0.0	0.0							
Approach LOS	F		A									
Intersection Summary												
Average Delay			412.2									
Intersection Capacity Utilization			48.6%			ICU Level of Service				A		
Analysis Period (min)			15									

Build AM Street Peak Hour with Block 57
16: Van Buren Street & HAAS Access

05/19/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		←	←			
Traffic Volume (veh/h)	0	184	217	388	0	0
Future Volume (Veh/h)	0	184	217	388	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.69	0.69	0.69	0.69	0.69	0.69
Hourly flow rate (vph)	0	267	314	562	0	0
Pedestrians					49	
Lane Width (ft)					0.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)		357				
pX, platoon unblocked					0.97	
vC, conflicting volume	925				911	644
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	925				890	644
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	747				305	476
Direction, Lane #	EB 1	WB 1				
Volume Total	267	876				
Volume Left	0	0				
Volume Right	0	562				
cSH	747	1700				
Volume to Capacity	0.00	0.52				
Queue Length 95th (ft)	0	0				
Control Delay (s)	0.0	0.0				
Lane LOS						
Approach Delay (s)	0.0	0.0				
Approach LOS						
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		41.1%		ICU Level of Service		A
Analysis Period (min)		15				

Build AM School Peak Hour with Block 57
2: Youg Circle/Young Circle & Harrison Street

05/19/2023



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø4	Ø6
Lane Configurations			↑↑↑						
Traffic Volume (vph)	0	0	1196	995	0	0			
Future Volume (vph)	0	0	1196	995	0	0			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Satd. Flow (prot)	0	0	4624	0	0	0			
Flt Permitted									
Satd. Flow (perm)	0	0	4624	0	0	0			
Right Turn on Red		Yes		Yes					
Satd. Flow (RTOR)									
Link Speed (mph)	25		25			25			
Link Distance (ft)	95		89			425			
Travel Time (s)	2.6		2.4			11.6			
Confl. Peds. (#/hr)				24					
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87			
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	0	0	2519	0	0	0			
Turn Type			NA						
Protected Phases							2	4	6
Permitted Phases			2 4						
Total Split (s)							57.0	43.0	57.0
Total Lost Time (s)									
Act Effct Green (s)			100.0						
Actuated g/C Ratio			1.00						
v/c Ratio			0.54						
Control Delay			0.1						
Queue Delay			0.0						
Total Delay			0.1						
LOS			A						
Approach Delay			0.1						
Approach LOS			A						
Queue Length 50th (ft)			0						
Queue Length 95th (ft)			m0						
Internal Link Dist (ft)	15		9			345			
Turn Bay Length (ft)									
Base Capacity (vph)			4624						
Starvation Cap Reductn			0						
Spillback Cap Reductn			0						
Storage Cap Reductn			0						
Reduced v/c Ratio			0.54						
Intersection Summary									
Area Type:	Other								
Cycle Length: 100									
Actuated Cycle Length: 100									
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow									
Control Type: Actuated-Coordinated									
Maximum v/c Ratio: 1.12									
Intersection Signal Delay: 0.1	Intersection LOS: A								

Build AM School Peak Hour with Block 57

2: Youg Circle/Young Circle & Harrison Street

05/19/2023

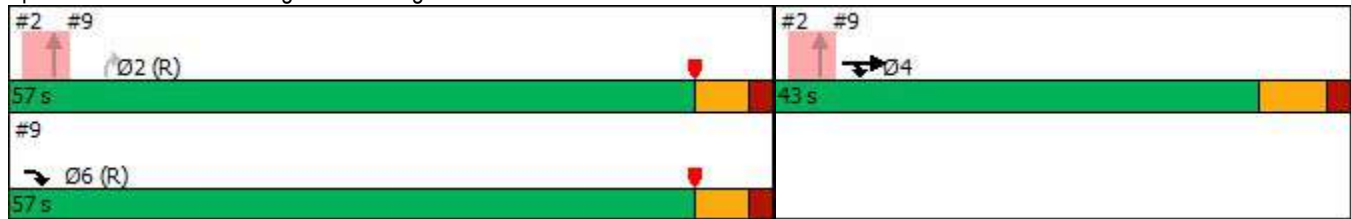
Intersection Capacity Utilization 51.5%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Youg Circle/Young Circle & Harrison Street



Build AM School Peak Hour with Block 57
8: US-1/Federal Hwy & Van Buren Street

05/19/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	91	20	74	58	379	111	952	59	87	823	20
Future Volume (vph)	30	91	20	74	58	379	111	952	59	87	823	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Storage Length (ft)	60		0	0		55	175		0	80		0
Storage Lanes	1		0	0		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1745	1741	0	0	1777	1561	1728	3359	0	1662	3377	0
Flt Permitted	0.601				0.744		0.230			0.183		
Satd. Flow (perm)	1055	1741	0	0	1345	1455	418	3359	0	320	3377	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10				258		9			3	
Link Speed (mph)		25			25			35			25	
Link Distance (ft)		571			357			334			294	
Travel Time (s)		15.6			9.7			6.5			8.0	
Confl. Peds. (#/hr)	47		18	18		47			1	1		
Confl. Bikes (#/hr)			2			1						
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	0%	0%	11%	1%	0%	0%	1%	3%	0%	5%	3%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	34	128	0	0	152	436	128	1162	0	100	969	0
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8	2			6		
Total Split (s)	26.0	26.0		26.0	26.0	26.0	18.0	56.0		18.0	56.0	
Total Lost Time (s)	6.0	6.0			6.0	6.0	6.0	6.0		6.0	6.0	
Act Effct Green (s)	17.7	17.7			17.7	17.7	66.0	59.2		63.8	56.3	
Actuated g/C Ratio	0.18	0.18			0.18	0.18	0.66	0.59		0.64	0.56	
v/c Ratio	0.18	0.41			0.64	0.93	0.34	0.58		0.33	0.51	
Control Delay	36.1	36.7			50.4	44.1	8.0	15.8		8.4	15.2	
Queue Delay	0.0	0.0			0.0	7.2	0.0	1.0		0.0	0.6	
Total Delay	36.1	36.7			50.4	51.3	8.0	16.7		8.4	15.8	
LOS	D	D			D	D	A	B		A	B	
Approach Delay		36.6			51.1			15.9			15.1	
Approach LOS		D			D			B			B	
Queue Length 50th (ft)	18	65			88	115	25	254		19	197	
Queue Length 95th (ft)	45	116			149	#272	43	318		35	253	
Internal Link Dist (ft)		491			277			254			214	
Turn Bay Length (ft)	60					55	175			80		
Base Capacity (vph)	211	356			269	497	444	1990		379	1903	
Starvation Cap Reductn	0	0			0	0	0	0		0	519	
Spillback Cap Reductn	0	0			0	39	0	515		0	0	
Storage Cap Reductn	0	0			0	0	0	0		0	0	
Reduced v/c Ratio	0.16	0.36			0.57	0.95	0.29	0.79		0.26	0.70	
Intersection Summary												
Area Type:	Other											
Cycle Length:	100											

Build AM School Peak Hour with Block 57

8: US-1/Federal Hwy & Van Buren Street

05/19/2023

Actuated Cycle Length: 100

Offset: 40 (40%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 23.4

Intersection LOS: C

Intersection Capacity Utilization 83.3%

ICU Level of Service E

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 8: US-1/Federal Hwy & Van Buren Street



Build AM School Peak Hour with Block 57
9: US-1/Federal Hwy & Young Circle

05/19/2023

							
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6
Lane Configurations	↑↑	↑↑				↑↑	
Traffic Volume (vph)	794	935	0	0	0	1352	
Future Volume (vph)	794	935	0	0	0	1352	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Satd. Flow (prot)	3438	2760	0	0	0	2760	
Flt Permitted							
Satd. Flow (perm)	3438	2760	0	0	0	2760	
Right Turn on Red		No				No	
Satd. Flow (RTOR)							
Link Speed (mph)	25			25	25		
Link Distance (ft)	317			168	294		
Travel Time (s)	8.6			4.6	8.0		
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	
Heavy Vehicles (%)	5%	3%	2%	2%	2%	3%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	923	1087	0	0	0	1572	
Turn Type	NA	custom				Perm	
Protected Phases	4	6 4					6
Permitted Phases						2	
Total Split (s)	43.0					57.0	57.0
Total Lost Time (s)	7.0					6.0	
Act Effct Green (s)	36.0	100.0				51.0	
Actuated g/C Ratio	0.36	1.00				0.51	
v/c Ratio	0.75	0.39				1.12	
Control Delay	32.5	0.4				81.6	
Queue Delay	0.0	0.0				0.0	
Total Delay	32.5	0.5				81.6	
LOS	C	A				F	
Approach Delay	15.2				81.6		
Approach LOS	B				F		
Queue Length 50th (ft)	267	0				~664	
Queue Length 95th (ft)	321	0				#755	
Internal Link Dist (ft)	237			88	214		
Turn Bay Length (ft)							
Base Capacity (vph)	1237	2760				1407	
Starvation Cap Reductn	0	0				0	
Spillback Cap Reductn	0	220				0	
Storage Cap Reductn	0	0				0	
Reduced v/c Ratio	0.75	0.43				1.12	
Intersection Summary							
Area Type:	Other						
Cycle Length: 100							
Actuated Cycle Length: 100							
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow							
Control Type: Actuated-Coordinated							
Maximum v/c Ratio: 1.12							
Intersection Signal Delay: 44.3					Intersection LOS: D		
Intersection Capacity Utilization 80.1%					ICU Level of Service D		

Build AM School Peak Hour with Block 57

9: US-1/Federal Hwy & Young Circle

05/19/2023

Analysis Period (min) 15

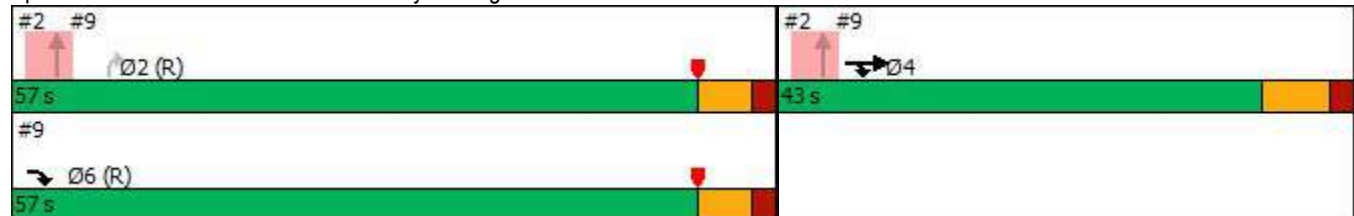
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 9: US-1/Federal Hwy & Young Circle



Build AM School Peak Hour with Block 57
3: S 17th Avenue & Harrison Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	151	556	22	0	0	0	0	550	140	0	0	0
Future Volume (Veh/h)	151	556	22	0	0	0	0	550	140	0	0	0
Sign Control	Free				Free				Stop		Stop	
Grade	0%				0%				0%		0%	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	172	632	25	0	0	0	0	625	159	0	0	0
Pedestrians								2				
Lane Width (ft)								12.0				
Walking Speed (ft/s)								3.5				
Percent Blockage								0				
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)	420											
pX, platoon unblocked												
vC, conflicting volume	0			659			990	990	646	1448	1003	0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			659			990	990	646	1448	1003	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	89			100			100	0	66	0	100	100
cM capacity (veh/h)	1617			937			208	219	474	0	218	1091
Direction, Lane #	EB 1	EB 2	NB 1									
Volume Total	172	657	784									
Volume Left	172	0	0									
Volume Right	0	25	159									
cSH	1617	1700	246									
Volume to Capacity	0.11	0.39	3.19									
Queue Length 95th (ft)	9	0	Err									
Control Delay (s)	7.5	0.0	Err									
Lane LOS	A		F									
Approach Delay (s)	1.6		Err									
Approach LOS			F									
Intersection Summary												
Average Delay			4860.8									
Intersection Capacity Utilization			74.7%	ICU Level of Service					D			
Analysis Period (min)			15									

Build AM School Peak Hour with Block 57
5: S 17th Avenue & Van Buren Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	16	56	92	7	557	3	15	26	44	0	1	5
Future Volume (vph)	16	56	92	7	557	3	15	26	44	0	1	5
Peak Hour Factor	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
Hourly flow rate (vph)	29	100	164	12	995	5	27	46	79	0	2	9
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	293	1012	152	11								
Volume Left (vph)	29	12	27	0								
Volume Right (vph)	164	5	79	9								
Hadj (s)	-0.29	0.00	-0.28	-0.49								
Departure Headway (s)	5.0	4.8	6.0	6.2								
Degree Utilization, x	0.41	1.35	0.25	0.02								
Capacity (veh/h)	702	748	576	528								
Control Delay (s)	11.4	183.3	11.1	9.3								
Approach Delay (s)	11.4	183.3	11.1	9.3								
Approach LOS	B	F	B	A								
Intersection Summary												
Delay			129.8									
Level of Service			F									
Intersection Capacity Utilization			54.5%	ICU Level of Service					A			
Analysis Period (min)			15									

Build AM School Peak Hour with Block 57
14: S 17th Avenue & HAAS Access/Alley

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	557	0	0	1	0	2	0	43	0	1	5	0
Future Volume (Veh/h)	557	0	0	1	0	2	0	43	0	1	5	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54
Hourly flow rate (vph)	1031	0	0	2	0	4	0	80	0	2	9	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None			None		
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	97	93	9	93	93	80	9			80		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	97	93	9	93	93	80	9			80		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	100	100	100	100	100	100			100		
cM capacity (veh/h)	886	800	1079	895	800	986	1624			1531		
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1							
Volume Total	1031	0	6	80	11							
Volume Left	1031	0	2	0	2							
Volume Right	0	0	4	0	0							
cSH	886	1700	953	1700	1531							
Volume to Capacity	1.16	0.00	0.01	0.05	0.00							
Queue Length 95th (ft)	769	0	0	0	0							
Control Delay (s)	105.1	0.0	8.8	0.0	1.3							
Lane LOS	F	A	A		A							
Approach Delay (s)	105.1		8.8	0.0	1.3							
Approach LOS	F		A									
Intersection Summary												
Average Delay			96.1									
Intersection Capacity Utilization			47.5%		ICU Level of Service				A			
Analysis Period (min)			15									

Build AM School Peak Hour with Block 57
16: Van Buren Street & HAAS Access

05/19/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	163	322	268	0	0
Future Volume (Veh/h)	0	163	322	268	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.54	0.54	0.54	0.54	0.54	0.54
Hourly flow rate (vph)	0	302	596	496	0	0
Pedestrians					49	
Lane Width (ft)					0.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)		357				
pX, platoon unblocked					0.97	
vC, conflicting volume	1141				1195	893
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1141				1184	893
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	620				204	343
Direction, Lane #	EB 1	WB 1				
Volume Total	302	1092				
Volume Left	0	0				
Volume Right	0	496				
cSH	620	1700				
Volume to Capacity	0.00	0.64				
Queue Length 95th (ft)	0	0				
Control Delay (s)	0.0	0.0				
Lane LOS						
Approach Delay (s)	0.0	0.0				
Approach LOS						
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		38.4%		ICU Level of Service		A
Analysis Period (min)		15				

Build PM Street Peak Hour with Block 57
2: Youg Circle/Young Circle & Harrison Street

05/19/2023



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø4	Ø6
Lane Configurations			↑↑↑						
Traffic Volume (vph)	0	0	1244	638	0	0			
Future Volume (vph)	0	0	1244	638	0	0			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Satd. Flow (prot)	0	0	4726	0	0	0			
Flt Permitted									
Satd. Flow (perm)	0	0	4726	0	0	0			
Right Turn on Red		Yes		Yes					
Satd. Flow (RTOR)									
Link Speed (mph)	25		25			25			
Link Distance (ft)	95		89			425			
Travel Time (s)	2.6		2.4			11.6			
Confl. Peds. (#/hr)				24					
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90			
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	0	0	2091	0	0	0			
Turn Type			NA						
Protected Phases							2	4	6
Permitted Phases			2 4						
Total Split (s)							57.0	43.0	57.0
Total Lost Time (s)									
Act Effct Green (s)			100.0						
Actuated g/C Ratio			1.00						
v/c Ratio			0.44						
Control Delay			0.2						
Queue Delay			0.0						
Total Delay			0.2						
LOS			A						
Approach Delay			0.2						
Approach LOS			A						
Queue Length 50th (ft)			0						
Queue Length 95th (ft)			0						
Internal Link Dist (ft)	15		9			345			
Turn Bay Length (ft)									
Base Capacity (vph)			4726						
Starvation Cap Reductn			0						
Spillback Cap Reductn			0						
Storage Cap Reductn			0						
Reduced v/c Ratio			0.44						
Intersection Summary									
Area Type:	Other								
Cycle Length: 100									
Actuated Cycle Length: 100									
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow									
Control Type: Actuated-Coordinated									
Maximum v/c Ratio: 0.84									
Intersection Signal Delay: 0.2	Intersection LOS: A								

Build PM Street Peak Hour with Block 57

2: Youg Circle/Young Circle & Harrison Street

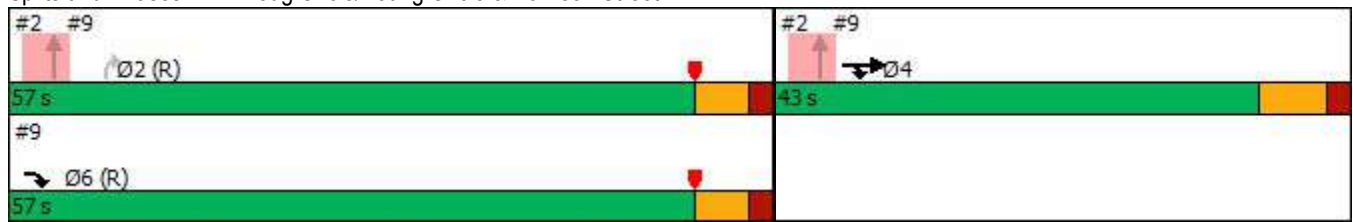
05/19/2023

Intersection Capacity Utilization 44.1%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: Youg Circle/Young Circle & Harrison Street



Build PM Street Peak Hour with Block 57
8: US-1/Federal Hwy & Van Buren Street

05/19/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	80	37	39	60	171	116	914	69	125	873	33
Future Volume (vph)	32	80	37	39	60	171	116	914	69	125	873	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Storage Length (ft)	60		0	0		55	175		0	80		0
Storage Lanes	1		0	0		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1745	1716	0	0	1795	1546	1745	3341	0	1711	3400	0
Flt Permitted	0.690				0.799		0.255			0.224		
Satd. Flow (perm)	1208	1716	0	0	1460	1441	468	3341	0	400	3400	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21				180		11			5	
Link Speed (mph)		25			25			35			25	
Link Distance (ft)		571			357			334			294	
Travel Time (s)		15.6			9.7			6.5			8.0	
Confl. Peds. (#/hr)	45		3	3		45	2		21	21		2
Confl. Bikes (#/hr)						3			1			1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	2%	0%	1%	0%	1%	0%	3%	0%	2%	2%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	34	123	0	0	104	180	122	1035	0	132	954	0
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8	2			6		
Total Split (s)	26.0	26.0		26.0	26.0	26.0	18.0	56.0		18.0	56.0	
Total Lost Time (s)	6.0	6.0			6.0	6.0	6.0	6.0		6.0	6.0	
Act Effct Green (s)	13.9	13.9			13.9	13.9	67.9	60.3		68.4	60.5	
Actuated g/C Ratio	0.14	0.14			0.14	0.14	0.68	0.60		0.68	0.60	
v/c Ratio	0.20	0.48			0.51	0.51	0.29	0.51		0.35	0.46	
Control Delay	38.3	37.6			47.5	10.7	6.6	13.6		7.2	12.8	
Queue Delay	0.0	0.0			0.0	0.1	0.0	0.3		0.0	0.5	
Total Delay	38.3	37.6			47.5	10.8	6.6	14.0		7.2	13.3	
LOS	D	D			D	B	A	B		A	B	
Approach Delay		37.8			24.2			13.2			12.6	
Approach LOS		D			C			B			B	
Queue Length 50th (ft)	20	62			64	0	17	171		18	151	
Queue Length 95th (ft)	46	109			109	56	43	293		46	258	
Internal Link Dist (ft)		491			277			254			214	
Turn Bay Length (ft)	60					55	175			80		
Base Capacity (vph)	241	360			292	432	491	2017		447	2058	
Starvation Cap Reductn	0	0			0	0	0	0		0	627	
Spillback Cap Reductn	0	0			0	22	0	427		0	0	
Storage Cap Reductn	0	0			0	0	0	0		0	0	
Reduced v/c Ratio	0.14	0.34			0.36	0.44	0.25	0.65		0.30	0.67	
Intersection Summary												
Area Type:	Other											
Cycle Length:	100											

Build PM Street Peak Hour with Block 57 8: US-1/Federal Hwy & Van Buren Street

05/19/2023

Actuated Cycle Length: 100

Offset: 40 (40%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.51

Intersection Signal Delay: 15.5

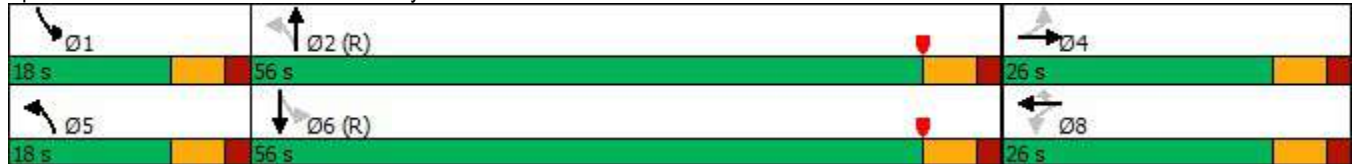
Intersection LOS: B

Intersection Capacity Utilization 69.9%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 8: US-1/Federal Hwy & Van Buren Street



Build PM Street Peak Hour with Block 57

9: US-1/Federal Hwy & Young Circle

05/19/2023

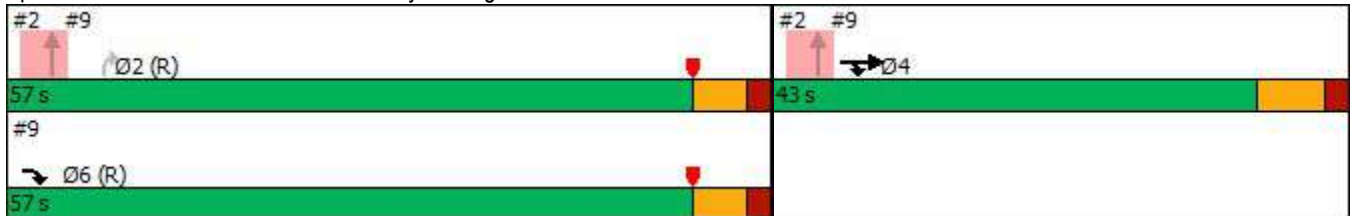
	→	↘	↙	←	↖	↗	
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6
Lane Configurations	↑↑	↑↑				↑↑	
Traffic Volume (vph)	692	1031	0	0	0	1108	
Future Volume (vph)	692	1031	0	0	0	1108	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Satd. Flow (prot)	3471	2787	0	0	0	2760	
Flt Permitted							
Satd. Flow (perm)	3471	2787	0	0	0	2760	
Right Turn on Red		No				No	
Satd. Flow (RTOR)							
Link Speed (mph)	25			25	25		
Link Distance (ft)	317			168	294		
Travel Time (s)	8.6			4.6	8.0		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	
Heavy Vehicles (%)	4%	2%	2%	2%	2%	3%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	736	1097	0	0	0	1179	
Turn Type	NA	custom				Perm	
Protected Phases	4	6 4					6
Permitted Phases						2	
Total Split (s)	43.0					57.0	57.0
Total Lost Time (s)	7.0					6.0	
Act Effct Green (s)	36.0	100.0				51.0	
Actuated g/C Ratio	0.36	1.00				0.51	
v/c Ratio	0.59	0.39				0.84	
Control Delay	28.4	0.4				18.5	
Queue Delay	0.0	0.0				0.0	
Total Delay	28.4	0.4				18.5	
LOS	C	A				B	
Approach Delay	11.6				18.5		
Approach LOS	B				B		
Queue Length 50th (ft)	197	0				355	
Queue Length 95th (ft)	259	0				472	
Internal Link Dist (ft)	237			88	214		
Turn Bay Length (ft)							
Base Capacity (vph)	1249	2787				1407	
Starvation Cap Reductn	0	0				0	
Spillback Cap Reductn	0	150				0	
Storage Cap Reductn	0	0				0	
Reduced v/c Ratio	0.59	0.42				0.84	
Intersection Summary							
Area Type:	Other						
Cycle Length: 100							
Actuated Cycle Length: 100							
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow							
Control Type: Actuated-Coordinated							
Maximum v/c Ratio: 0.84							
Intersection Signal Delay: 14.3				Intersection LOS: B			
Intersection Capacity Utilization 68.7%				ICU Level of Service C			

Build PM Street Peak Hour with Block 57
9: US-1/Federal Hwy & Young Circle

05/19/2023

Analysis Period (min) 15

Splits and Phases: 9: US-1/Federal Hwy & Young Circle



Build PM Street Peak Hour with Block 57
3: S 17th Avenue & Harrison Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	202	398	34	0	0	0	0	415	89	0	0	0
Future Volume (Veh/h)	202	398	34	0	0	0	0	415	89	0	0	0
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	230	452	39	0	0	0	0	472	101	0	0	0
Pedestrians	10											
Lane Width (ft)	12.0											
Walking Speed (ft/s)	3.5											
Percent Blockage	1											
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)	420											
pX, platoon unblocked												
vC, conflicting volume	0			501			942	942	482	1249	961	0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			501			942	942	482	1249	961	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	86			100			100	0	83	0	100	100
cM capacity (veh/h)	1617			1063			215	223	583	0	219	1091
Direction, Lane #	EB 1	EB 2	NB 1									
Volume Total	230	491	573									
Volume Left	230	0	0									
Volume Right	0	39	101									
cSH	1617	1700	250									
Volume to Capacity	0.14	0.29	2.29									
Queue Length 95th (ft)	12	0	1129									
Control Delay (s)	7.6	0.0	625.8									
Lane LOS	A		F									
Approach Delay (s)	2.4		625.8									
Approach LOS			F									
Intersection Summary												
Average Delay	278.5											
Intersection Capacity Utilization	57.0%			ICU Level of Service					B			
Analysis Period (min)	15											

Build PM Street Peak Hour with Block 57

5: S 17th Avenue & Van Buren Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	8	64	100	3	412	1	18	41	32	0	6	7
Future Volume (vph)	8	64	100	3	412	1	18	41	32	0	6	7
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	9	70	110	3	453	1	20	45	35	0	7	8
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	189	457	100	15								
Volume Left (vph)	9	3	20	0								
Volume Right (vph)	110	1	35	8								
Hadj (s)	-0.32	0.02	-0.15	-0.32								
Departure Headway (s)	4.4	4.4	5.2	5.2								
Degree Utilization, x	0.23	0.56	0.15	0.02								
Capacity (veh/h)	781	789	606	590								
Control Delay (s)	8.7	13.0	9.1	8.3								
Approach Delay (s)	8.7	13.0	9.1	8.3								
Approach LOS	A	B	A	A								
Intersection Summary												
Delay			11.3									
Level of Service			B									
Intersection Capacity Utilization			44.6%	ICU Level of Service		A						
Analysis Period (min)			15									

Build PM Street Peak Hour with Block 57
14: S 17th Avenue & HAAS Access/Alley

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	414	0	1	0	0	1	0	39	5	0	12	0
Future Volume (Veh/h)	414	0	1	0	0	1	0	39	5	0	12	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44
Hourly flow rate (vph)	941	0	2	0	0	2	0	89	11	0	27	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	124	127	27	124	122	94	27			100		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	124	127	27	124	122	94	27			100		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	100	100	100	100	100	100			100		
cM capacity (veh/h)	854	767	1054	854	773	968	1600			1505		
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1							
Volume Total	941	2	2	100	27							
Volume Left	941	0	0	0	0							
Volume Right	0	2	2	11	0							
cSH	854	1054	968	1700	1505							
Volume to Capacity	1.10	0.00	0.00	0.06	0.00							
Queue Length 95th (ft)	625	0	0	0	0							
Control Delay (s)	83.4	8.4	8.7	0.0	0.0							
Lane LOS	F	A	A									
Approach Delay (s)	83.2		8.7	0.0	0.0							
Approach LOS	F		A									
Intersection Summary												
Average Delay			73.2									
Intersection Capacity Utilization			39.6%			ICU Level of Service			A			
Analysis Period (min)			15									

Build PM Street Peak Hour with Block 57
16: Van Buren Street & HAAS Access

05/19/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	172	145	300	0	0
Future Volume (Veh/h)	0	172	145	300	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	0	200	169	349	0	0
Pedestrians					19	
Lane Width (ft)					0.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		357				
pX, platoon unblocked						
vC, conflicting volume	537				562	362
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	537				562	362
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1041				491	687
Direction, Lane #	EB 1	WB 1				
Volume Total	200	518				
Volume Left	0	0				
Volume Right	0	349				
cSH	1041	1700				
Volume to Capacity	0.00	0.30				
Queue Length 95th (ft)	0	0				
Control Delay (s)	0.0	0.0				
Lane LOS						
Approach Delay (s)	0.0	0.0				
Approach LOS						
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		30.6%		ICU Level of Service		A
Analysis Period (min)		15				

Build PM School Peak Hour with Block 57
2: Youg Circle/Young Circle & Harrison Street

05/19/2023



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø4	Ø6
Lane Configurations			↑↑↑						
Traffic Volume (vph)	0	0	1352	602	0	0			
Future Volume (vph)	0	0	1352	602	0	0			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Satd. Flow (prot)	0	0	4742	0	0	0			
Flt Permitted									
Satd. Flow (perm)	0	0	4742	0	0	0			
Right Turn on Red		Yes		Yes					
Satd. Flow (RTOR)									
Link Speed (mph)	25		25			25			
Link Distance (ft)	95		89			425			
Travel Time (s)	2.6		2.4			11.6			
Confl. Peds. (#/hr)				24					
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90			
Heavy Vehicles (%)	2%	2%	3%	4%	2%	2%			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	0	0	2171	0	0	0			
Turn Type			NA						
Protected Phases							2	4	6
Permitted Phases			2 4						
Total Split (s)							57.0	43.0	57.0
Total Lost Time (s)									
Act Effct Green (s)			100.0						
Actuated g/C Ratio			1.00						
v/c Ratio			0.46						
Control Delay			0.2						
Queue Delay			0.0						
Total Delay			0.2						
LOS			A						
Approach Delay			0.2						
Approach LOS			A						
Queue Length 50th (ft)			0						
Queue Length 95th (ft)			m0						
Internal Link Dist (ft)	15		9			345			
Turn Bay Length (ft)									
Base Capacity (vph)			4742						
Starvation Cap Reductn			0						
Spillback Cap Reductn			0						
Storage Cap Reductn			0						
Reduced v/c Ratio			0.46						
Intersection Summary									
Area Type:	Other								
Cycle Length: 100									
Actuated Cycle Length: 100									
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow									
Control Type: Actuated-Coordinated									
Maximum v/c Ratio: 0.93									
Intersection Signal Delay: 0.2	Intersection LOS: A								

Build PM School Peak Hour with Block 57

2: Youg Circle/Young Circle & Harrison Street

05/19/2023

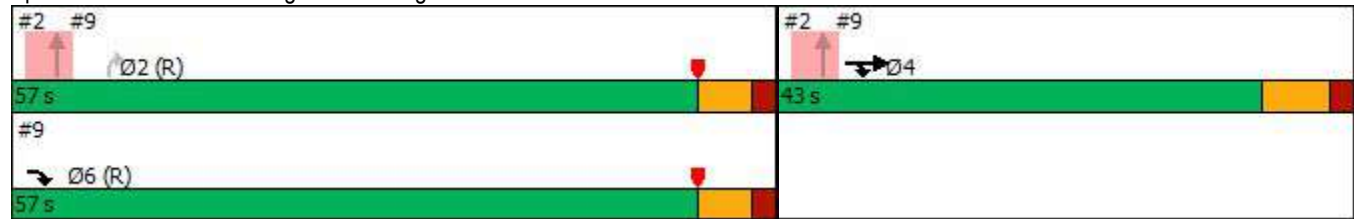
Intersection Capacity Utilization 45.3%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Youg Circle/Young Circle & Harrison Street



Build PM School Peak Hour with Block 57
8: US-1/Federal Hwy & Van Buren Street

05/19/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	62	27	57	52	206	94	984	65	109	847	23
Future Volume (vph)	27	62	27	57	52	206	94	984	65	109	847	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Storage Length (ft)	60		0	0		55	175		0	80		0
Storage Lanes	1		0	0		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1745	1720	0	0	1736	1446	1745	3349	0	1631	3407	0
Flt Permitted	0.682				0.785		0.274			0.193		
Satd. Flow (perm)	1195	1720	0	0	1397	1347	503	3349	0	329	3407	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20				219		10			4	
Link Speed (mph)		25			25			35			25	
Link Distance (ft)		571			357			334			294	
Travel Time (s)		15.6			9.7			6.5			8.0	
Confl. Peds. (#/hr)	45		3	3		45	2		21	21		2
Confl. Bikes (#/hr)						3			1			1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	2%	0%	4%	2%	8%	0%	3%	0%	7%	2%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	29	95	0	0	116	219	100	1116	0	116	925	0
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8	2			6		
Total Split (s)	26.0	26.0		26.0	26.0	26.0	18.0	56.0		18.0	56.0	
Total Lost Time (s)	6.0	6.0			6.0	6.0	6.0	6.0		6.0	6.0	
Act Effct Green (s)	14.5	14.5			14.5	14.5	67.0	59.8		69.1	62.6	
Actuated g/C Ratio	0.14	0.14			0.14	0.14	0.67	0.60		0.69	0.63	
v/c Ratio	0.17	0.36			0.57	0.57	0.23	0.56		0.35	0.43	
Control Delay	37.1	32.3			49.9	11.3	6.2	14.5		7.8	12.0	
Queue Delay	0.0	0.0			0.0	0.2	0.0	0.5		0.0	0.4	
Total Delay	37.1	32.3			49.9	11.5	6.2	15.0		7.8	12.4	
LOS	D	C			D	B	A	B		A	B	
Approach Delay		33.4			24.8			14.3			11.9	
Approach LOS		C			C			B			B	
Queue Length 50th (ft)	17	44			71	0	15	200		17	150	
Queue Length 95th (ft)	41	86			120	63	36	322		41	244	
Internal Link Dist (ft)		491			277			254			214	
Turn Bay Length (ft)	60					55	175			80		
Base Capacity (vph)	239	360			279	444	509	2005		393	2133	
Starvation Cap Reductn	0	0			0	0	0	0		0	646	
Spillback Cap Reductn	0	0			0	27	0	435		0	0	
Storage Cap Reductn	0	0			0	0	0	0		0	0	
Reduced v/c Ratio	0.12	0.26			0.42	0.53	0.20	0.71		0.30	0.62	
Intersection Summary												
Area Type:	Other											
Cycle Length: 100												

Build PM School Peak Hour with Block 57

8: US-1/Federal Hwy & Van Buren Street

05/19/2023

Actuated Cycle Length: 100

Offset: 40 (40%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.57

Intersection Signal Delay: 15.5

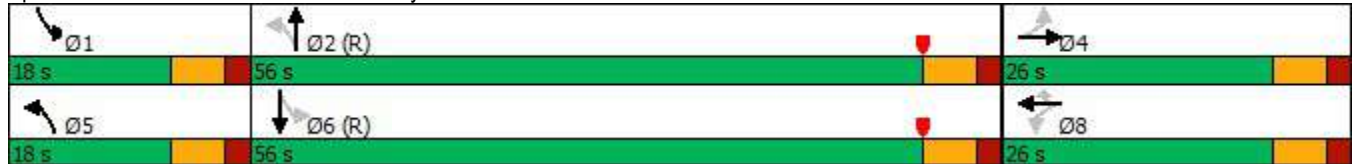
Intersection LOS: B

Intersection Capacity Utilization 70.8%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 8: US-1/Federal Hwy & Van Buren Street



Build PM School Peak Hour with Block 57

9: US-1/Federal Hwy & Young Circle

05/19/2023

	→	↘	↙	←	↖	↗	
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6
Lane Configurations	↑↑	↑↑				↑↑	
Traffic Volume (vph)	712	979	0	0	0	1217	
Future Volume (vph)	712	979	0	0	0	1217	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Satd. Flow (prot)	3406	2787	0	0	0	2760	
Flt Permitted							
Satd. Flow (perm)	3406	2787	0	0	0	2760	
Right Turn on Red		No				No	
Satd. Flow (RTOR)							
Link Speed (mph)	25			25	25		
Link Distance (ft)	317			168	294		
Travel Time (s)	8.6			4.6	8.0		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	
Heavy Vehicles (%)	6%	2%	2%	2%	2%	3%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	766	1053	0	0	0	1309	
Turn Type	NA	custom				Perm	
Protected Phases	4	6 4					6
Permitted Phases						2	
Total Split (s)	43.0					57.0	57.0
Total Lost Time (s)	7.0					6.0	
Act Effct Green (s)	36.0	100.0				51.0	
Actuated g/C Ratio	0.36	1.00				0.51	
v/c Ratio	0.62	0.38				0.93	
Control Delay	29.2	0.4				25.8	
Queue Delay	0.0	0.0				0.0	
Total Delay	29.2	0.4				25.8	
LOS	C	A				C	
Approach Delay	12.5				25.8		
Approach LOS	B				C		
Queue Length 50th (ft)	209	0				427	
Queue Length 95th (ft)	273	0				#605	
Internal Link Dist (ft)	237			88	214		
Turn Bay Length (ft)							
Base Capacity (vph)	1226	2787				1407	
Starvation Cap Reductn	0	0				0	
Spillback Cap Reductn	0	130				0	
Storage Cap Reductn	0	0				0	
Reduced v/c Ratio	0.62	0.40				0.93	
Intersection Summary							
Area Type:	Other						
Cycle Length: 100							
Actuated Cycle Length: 100							
Offset: 44 (44%), Referenced to phase 2:NBT and 6:, Start of Yellow							
Control Type: Actuated-Coordinated							
Maximum v/c Ratio: 0.93							
Intersection Signal Delay: 18.1				Intersection LOS: B			
Intersection Capacity Utilization 73.1%				ICU Level of Service D			

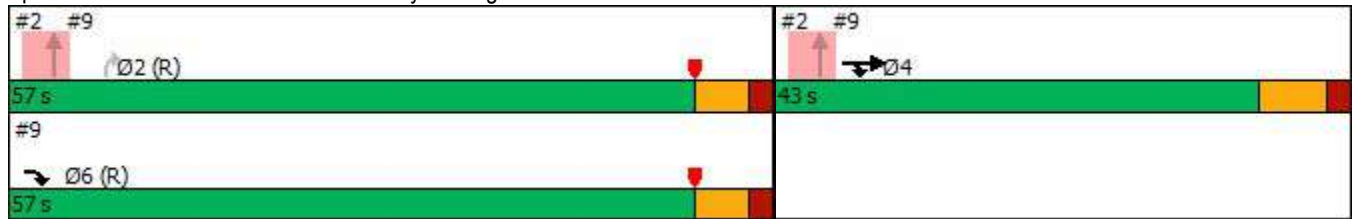
Build PM School Peak Hour with Block 57
9: US-1/Federal Hwy & Young Circle

05/19/2023

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 9: US-1/Federal Hwy & Young Circle



Build PM School Peak Hour with Block 57
3: S 17th Avenue & Harrison Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	163	296	70	0	0	0	0	359	84	0	0	0
Future Volume (Veh/h)	163	296	70	0	0	0	0	359	84	0	0	0
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	192	348	82	0	0	0	0	422	99	0	0	0
Pedestrians								10				
Lane Width (ft)								12.0				
Walking Speed (ft/s)								3.5				
Percent Blockage								1				
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)	420											
pX, platoon unblocked												
vC, conflicting volume	0			440			783	783	399	1042	824	0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			440			783	783	399	1042	824	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	88			100			100	0	85	0	100	100
cM capacity (veh/h)	1617			1120			280	283	649	0	271	1091
Direction, Lane #	EB 1	EB 2	NB 1									
Volume Total	192	430	521									
Volume Left	192	0	0									
Volume Right	0	82	99									
cSH	1617	1700	317									
Volume to Capacity	0.12	0.25	1.64									
Queue Length 95th (ft)	10	0	792									
Control Delay (s)	7.5	0.0	332.5									
Lane LOS	A	F										
Approach Delay (s)	2.3	332.5										
Approach LOS	F											
Intersection Summary												
Average Delay	152.8											
Intersection Capacity Utilization	50.7%			ICU Level of Service					A			
Analysis Period (min)	15											

Build PM School Peak Hour with Block 57
5: S 17th Avenue & Van Buren Street

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	38	61	68	4	295	27	28	59	8	1	25	24
Future Volume (vph)	38	61	68	4	295	27	28	59	8	1	25	24
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Hourly flow rate (vph)	51	82	92	5	399	36	38	80	11	1	34	32
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	225	440	129	67								
Volume Left (vph)	51	5	38	1								
Volume Right (vph)	92	36	11	32								
Hadj (s)	-0.16	0.03	0.05	-0.25								
Departure Headway (s)	4.9	4.8	5.7	5.5								
Degree Utilization, x	0.31	0.59	0.20	0.10								
Capacity (veh/h)	687	725	558	558								
Control Delay (s)	10.0	14.4	10.2	9.2								
Approach Delay (s)	10.0	14.4	10.2	9.2								
Approach LOS	B	B	B	A								
Intersection Summary												
Delay				12.2								
Level of Service				B								
Intersection Capacity Utilization				53.0%	ICU Level of Service	A						
Analysis Period (min)				15								

Build PM School Peak Hour with Block 57
14: S 17th Avenue & HAAS Access/Alley

05/19/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	297	0	1	3	0	3	0	98	8	4	41	0
Future Volume (Veh/h)	297	0	1	3	0	3	0	98	8	4	41	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	341	0	1	3	0	3	0	113	9	5	47	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	178	179	47	176	174	118	47			122		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	178	179	47	176	174	118	47			122		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	57	100	100	100	100	100	100			100		
cM capacity (veh/h)	785	716	1028	789	720	940	1573			1478		
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1							
Volume Total	341	1	6	122	52							
Volume Left	341	0	3	0	5							
Volume Right	0	1	3	9	0							
cSH	785	1028	858	1700	1478							
Volume to Capacity	0.43	0.00	0.01	0.07	0.00							
Queue Length 95th (ft)	55	0	1	0	0							
Control Delay (s)	13.1	8.5	9.2	0.0	0.7							
Lane LOS	B	A	A		A							
Approach Delay (s)	13.1		9.2	0.0	0.7							
Approach LOS	B		A									
Intersection Summary												
Average Delay			8.7									
Intersection Capacity Utilization			35.4%			ICU Level of Service			A			
Analysis Period (min)			15									

Build PM School Peak Hour with Block 57
16: Van Buren Street & HAAS Access

05/19/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	164	236	112	0	0
Future Volume (Veh/h)	0	164	236	112	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72
Hourly flow rate (vph)	0	228	328	156	0	0
Pedestrians					19	
Lane Width (ft)					0.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)		357				
pX, platoon unblocked						
vC, conflicting volume	503				653	425
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	503				653	425
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1072				435	634
Direction, Lane #	EB 1	WB 1				
Volume Total	228	484				
Volume Left	0	0				
Volume Right	0	156				
cSH	1072	1700				
Volume to Capacity	0.00	0.28				
Queue Length 95th (ft)	0	0				
Control Delay (s)	0.0	0.0				
Lane LOS						
Approach Delay (s)	0.0	0.0				
Approach LOS						
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		23.2%		ICU Level of Service		A
Analysis Period (min)		15				

Appendix I

Correspondence

LISA S. BERNSTEIN, PE

— TRAFFIC ENGINEER —

Ms. Azita Behmardi, PE
City Engineer, City of Hollywood
Department of Development Services
P.O. Box 229045
Hollywood, Florida, 33022-6045

January 19, 2023

Re: Hollywood Private School - Methodology Requirements

Dear Ms. Behmardi:

The Hollywood Private School project is proposed to be located at 1720 Harrison Street in an existing building. In reviewing the site plan provided and the site plan for the project site (under construction) to the immediate west, the access to the building for a school use will be problematic. The two (2) site plans are included with this letter.

The two (2) drop-off and pick-up lanes that enter from Harrison Street, have the child exiting on the wrong side of the building and will have to cross in front of vehicles to access the building. Children are required to be dropped off at the building sidewalk, from the passenger side, to avoid conflicts with vehicles for their safety. Crossing in front of the vehicles is dangerous and will not be permitted.

The trip generation for 650 students during the AM Peak Hour of Adjacent Street Traffic is 324 inbound vehicles. The distance from Harrison Street to the crosswalk is 70', which is less than three (3) vehicles. The queue at this location will extend out into the signalized intersection of South Young Circle and Harrison Street.

In addition, realizing that grades 10 through 12 will most likely drive, they will need to park their vehicles near the site. The access and parking for these students will need to be identified with the methodology.

The following comments for the methodology requirements are based on my review of the information provided:

Required Methodology Components

1. A Pre-Application meeting with FDOT will need to be scheduled and held, with the determination letter included with the methodology submittal. The FDOT Pre-Application letter shall approve the Harrison Street driveway connection, as an entrance, as opposed to the existing exit condition.
2. Existing and Proposed Conditions
 - a. Provide existing and proposed site conditions in the area surrounding the project.
3. Surrounding Roadway Conditions
 - a. Provide existing and proposed roadway conditions in the area surrounding the project.
 - b. Include any future roadway improvements in the area surrounding the project.
 - c. The project to the west of this project will be closing the alley just west of the proposed projects driveway connection to the alley.
4. Data Collection
 - a. The intersections to be evaluated are:
 - i. US 1/Van Buren Street
 - ii. US 1/South Young Circle
 - iii. South Young Circle/Harrison Street
 - iv. Harrison Street/South 17 Avenue
 - v. South 17 Avenue/Alley
 - vi. South 17 Avenue/Van Buren Street
 - vii. Harrison Street/Alley
 - viii. Harrison Street/Project Drive
 - ix. Alley/Project Drive
 - b. Traffic count data and pedestrian data will be collected at the above intersections during the AM and PM Peak Hours and during the peak hours for the two existing schools, the Hollywood Academy of Arts and Science and Hollywood Central Elementary, during the morning drop-off and afternoon pick-up times. These existing times will be need to be provided by both schools.
 - c. Traffic count data and pedestrian data will be required to be done with cameras and the files provided to the City for review.

- d. The pedestrian data will need to include student walking to the two (2) nearby schools, the Hollywood Academy of Arts and Science and Hollywood Central Elementary.

5. Trip Generation

- a. The trip generation will include the current existing uses for the entire building. Credit for the existing uses being removed will only be permitted for uses still operating or that have closed within the past year. These uses will need to be documented.
- b. The trip generation will be determined using the latest edition of the Institute of Transportation Engineers (ITE) TripGen Web-Based App, currently it is the 11th Edition.
- c. The trip generation will use the Peak Hour of Adjacent Street Traffic for the AM and PM Peak Hours and the Peak Hour of Generator during the Hollywood Academy of Arts and Science and Hollywood Central Elementary AM drop-off and PM pick-up times.

6. Trip Distribution

- a. The trip distribution will be determined from existing data, area FDOT sites and any knowledge of the existing area. The information will be documented.
- b. The distribution will be shown globally and then assigned to the roadways around the project.
- c. Figures will need to be provided.

7. Background Growth Rates

- a. Please use the FDOT historic data for 2017 to 2022 and use the FDOT Trends Analyses for each site to determine the growth rate. Please provide the FDOT site information and historic data sheets to verify.
- b. If the calculated growth rate is less than one percent (1%), a one percent (1%) growth rate will be applied.

8. Committed Development

- a. The committed development, projects that are under construction and those that have been approved, within a one (1) mile radius of the site will need to be obtained through a Public Records Request.

- b. For the committed development projects, please include each project as a separate line item for each intersection volume development. Please include a location map of those projects.

9. Intersection Analyses

- a. The intersections listed above will be evaluated during the required times (2b.) for the existing condition, the future without the project and the future with the project conditions. Provide the buildout year.
- b. The analyses will be done using the Synchro software and the files provided to the City.
- c. The intersection volume development tables will be included for each location.
- d. Figures will be provided for all conditions and times.
- e. The driveway and queuing analyses will include the volumes for all of the existing and proposed trips with no deductions.
- f. The Broward County Traffic Engineering Division Timing (BCTED) Sheets and Sequence of Operations sheet for the signalized intersections will be provided.
- g. The Level of Service, delay, volume to capacity ratios, queues for all movements, approaches as well as the intersection as a whole will be provided.
- h. The pedestrian data will need to be included.
- i. The results will be provided in tabular form.

10. Future With the Project Analyses

- a. The roadways surrounding the project are proposed to be redesigned in the near future with the addition of committed developments. The constraints based on the proposed construction will impact the traffic and pedestrian circulation of the proposed project. The future with the project condition will need to be evaluated with the existing roadway conditions and the proposed future roadway conditions in order to evaluate the impacts of the future traffic and pedestrian circulation with the project.

- 11. Based on the results of the analyses, any roadway or intersection improvements will need to be evaluated and discussed with the City.

12. Traffic and Pedestrian Circulation

- a. The traffic and pedestrian circulation for the proposed project will be included as a section in the report. A figure detailing the routes will be provided.

13. Parking

- a. Provide a section in the report on the existing available parking for the exclusive use of the building and the location of the parking.
- b. Include the required parking for the proposed project, including students driving to school, and the location of any additional spaces needed.

14. General Requirements

- a. Provide a Table of Contents.
- b. Include all documentation for parcels, trip generation, trip distribution, growth rates, etc.
- c. Please use figures and tables to show distribution, turning movements (all conditions).

Please have the applicant provide the methodology letter per the above comments and submit for review.

If you have any questions or comments, please let me know.

Sincerely,



Lisa S. Bernstein, PE
Senior Traffic Engineer

Attachments

PROPERTY ADDRESS:	1720 HARRISON ST., HOLLYWOOD, FL 33020	
BUILDING AREA - COMMERCIAL UNITS:	36,966 SF (First 4 Floors)	
TOTAL BUILDING AREA:	147,877 SF, Total 19 story	
CURRENT ZONING:	LAND USE DESIGNATION - RAC (Office, Retail).	
ZONING DISTRICT -	PD-YC-858	

INTENDED ZONING AND USE STATEMENT:
The proposed project is a renewal of an Existing School that was on-premises named **HOLLYWOOD FINE CHARTER SCHOOL**.
The New Owner intends to use the space without any further alterations as a Private School for young adolescents in Primary and Secondary age and House of Prayer with **SPECIAL EXCEPTION** as indicated in Zoning by Laws.

RAC ZONING - (REGIONAL ACTIVITY CENTER) - As permitted by RAC owner intends to follow guidelines encouraging "high-quality and functional mixed living, working, shopping, education, and recreational activities".
As part of RETAIL CORE USES in RAC - A SPECIAL EXCEPTION is requested as indicated for:

1. Day Care Facility Schools (K-12)
2. Place of Worship,
3. Meeting Hall

PREVIOUSLY USE - ARTS CHARTER SCHOOL. Permit presented on 2-16-2004 to the City of Hollywood, FL, permitted and active for 5 years on-premises with waived Parking.

SITE CONFIGURATION: The Site consists of an EXISTING Commercial Building on the first 4 Floors and an Additional Existing Condominium Building on the 5th Floor and up.

PARKING: There is no current Parking on the Site neither previously nor was permitted by Waiver. The area around the building has large parking garages.

A large PORTE COCHERE / Drop off Area exists on the site and is used by Residents and Commercial Units. There is an existing Agreement for the use of the Drop Off Area for the intended use proposed.

STATEMENT OF OWNERSHIP

The Commercial site was purchased on 6/30/2022.

OWNER: BET MIDRASH OHR HA-CHAYIM HA-KADOSH INC.

FOLIOS numbers are indicated as follows:

FOLIOS numbers are indicated as follows:

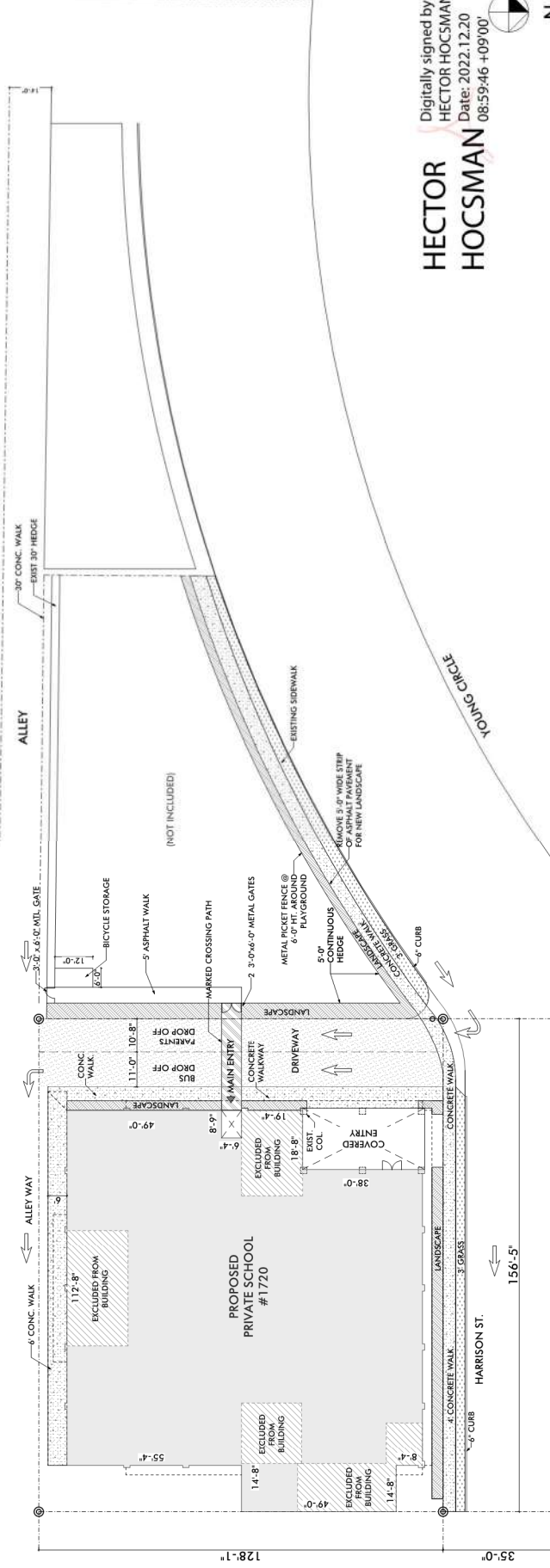
514215AA0010
BET MIDRASH OHR HA-CHAYIM
HA-KADOSH INC
1720 HARRISON STREET 1A

514215AA0020
BET MIDRASH OHR HA-CHAYIM
HA-KADOSH INC
1720 HARRISON STREET 2A

514215AA0030
BET MIDRASH OHR HA-CHAYIM
HA-KADOSH INC
1720 HARRISON STREET 3A

TRAFFIC CIRCULATION

REFER TO TRAFFIC CIRCULATION ON REPORT



Existing Site Plan
NOT TO SCALE

HECTOR
HOCSMAN

NOTE:
DRAWINGS FOR SPECIAL EXCEPTION

A-001

urbanica
ARCHITECTURE & DEVELOPMENT
HECTOR HOOZMAN, AIA
901 Pennsylvania Ave., Suite 3
MIAMI BEACH, FL 33139
TEL: 305-14-301
OL: 141 419 142

HOLLYWOOD PRIVATE SCHOOL
1720 Harrison St.
HOLLYWOOD, FL 33020
Midrash Ohr Ha-Chayim Ha-Kadosh

Client:

Project:

Site Plan Zoning

Revisión	Fecha
01	15/05/2018
02	15/05/2018
03	15/05/2018

Scale:	As Shown
Date:	08-20-22
Dwg:	

LISA S. BERNSTEIN, PE

TRAFFIC ENGINEER

Ms. Azita Behmardi, PE
City Engineer, City of Hollywood
Department of Development Services
P.O. Box 229045
Hollywood, Florida, 33022-6045

April 7, 2023

Re: Hollywood Private School – Application Submittal Comments

Dear Ms. Behmardi:

The Hollywood Private School project is proposed to be located at 1720 Harrison Street in an existing building. The Application Package submitted to the City included a section by Dynamic Traffic referred to as “Circulation Assessment”.

This project will require a Traffic Impact Analysis. The methodology requirements have been provided to the City and will need to be acknowledged by the Applicant and followed for the Traffic Impact Analysis prior to approval of the project.

The “Circulation Assessment” does not substantiate the existing traffic circulation in the area or the actual operations of the HAAS school for drop-off and pick-up. It does not demonstrate how the two (2) schools will operate together with regard to queuing, traffic volumes and impacts to the surrounding roadways.

The following are some items the document states with comments:

1. The roadway around the existing HAAS school has sufficient width for two (2) lanes of travel.
Comment: The alley behind the school is one (1) lane, EB only.
2. HAAS has agreed to allow the usage of the roadway for drop/off and pick-up for the proposed school.
Comment: The roadway on the west side of the HAAS school is owned by someone else. Please provide written proof from the property owner, the HAAS school and an “easement for use right” if required.

3. The discussion on the circulation for the existing school in this document states there are 1600 students currently using the site for drop-off and pick-up (within a 30-minute timeframe) and states the proposed school using the same area would not have an impact.

Comment: This will need to be demonstrated by queuing analyses of the existing school drop-off and pick-up times and will need to show the backup on the surrounding roadways.

4. Figure 1, Option1 has students being dropped off behind the school.

Comment: If this is a viable option, please provide documentation of how the children will be individually escorted across the street and into the building safely and what will the plan will be during inclement weather.

5. Figure 1, Option 2 conflicts with Sheet A-002. The direction of travel does not match.

Comment: These movements will need to be analyzed. A Pre-Application Letter will need to be provided from FDOT for the direction of travel change from ingress to egress.

6. Sheet A-002 states that the port cochere will still be used by residents and commercial units.

Comment: An analysis will need to be provided that demonstrates there will not be comingling of students with residents and commercial units.

7. Sheet A-002 states that there is no on-site parking and that parking is available in garages in the area around the building. Sheet LS-104 shows Municipal Parking Garages away from the project site, 3-hour limited parking next to the site and 24-hour metered parking in the vicinity.

Comment: A detailed analysis of where teachers, students and staff will park and their route to the school will need to be provided.

If you have any questions or comments, please let me know.

Sincerely,



Lisa S. Bernstein, PE
Senior Traffic Engineer

MEMORANDUM

To: Ms. Azita Behmardi, PE
City Engineer, City of Hollywood

From: Craig W. Peregoy, PE

Date: May 22, 2023

Re: Hollywood Private School
1720 Harrison Street, Hollywood, FL
4472-22-01924

Following are responses to the comments provided in the Traffic Engineering Assessment dated April 7, 2023:

1. The roadway around the existing HAAS school has sufficient width for two (2) lanes of travel.

Comment: The alley behind the school is one (1) lane, EB only.

Response: While the alley is a one-way in the eastbound direction, it provides sufficient width and is striped with 2 travel lanes including a drop off zone and bypass lane to the west and a through/left-turn lane and exclusive right-turn lane to the east.



2. HAAS has agreed to allow the usage of the roadway for drop/off and pick-up for the proposed school.

Comment: The roadway on the west side of the HAAS school is owned by someone else. Please provide written proof from the property owner, the HAAS school and an "easement for use right" if required.

Response: The Applicant continues to work with the owner of the roadway on the west side of HAAS and anticipates an agreement, however, absent the agreement at the time of the preparation of the Traffic Impact Study, use of this roadway was not considered.

3. The discussion on the circulation for the existing school in this document states there are 1600 students currently using the site for drop-off and pick-up (within a 30-minute timeframe) and states the proposed school using the same area would not have an impact.

Comment: This will need to be demonstrated by queuing analyses of the existing school drop-off and pick-up times and will need to show the backup on the surrounding roadways.

Response: A Traffic Impact Study has been prepared with a more detailed assessment.

4. Figure 1, Option1 has students being dropped off behind the school.

Comment: If this is a viable option, please provide documentation of how the children will be individually escorted across the street and into the building safely and what the plan will be during inclement weather.

Response: The students will be dropped off and picked up in the existing porte-cochere covered drop off area.

5. Figure 1, Option 2 conflicts with Sheet A-002. The direction of travel does not match.

Comment: These movements will need to be analyzed. A Pre-Application Letter will need to be provided from FDOT for the direction of travel change from ingress to egress.

Response: The driveway will remain an ingress driveway at this time. If an agreement is reached with the owner of the alley to the west of HAAS, it is acknowledged that FDOT approval will be required.

6. Sheet A-002 states that the port cochere will still be used by residents and commercial units.

Comment: An analysis will need to be provided that demonstrates there will not be comingling of students with residents and commercial units.

Response: The porte-cochere will be utilized exclusively for school pick-up and drop-off during those hours.

7. Sheet A-002 states that there is no on-site parking and that parking is available in garages in the area around the building. Sheet LS-104 shows Municipal Parking Garages away from the project site, 3-hour limited parking next to the site and 24-hour metered parking in the vicinity.

Comment: A detailed analysis of where teachers, students and staff will park and their route to the school will need to be provided.

Response: The Traffic Impact Study includes an assessment of staff parking.



April 24, 2023

To whom it may concern,

This letter is to iterate our dismissal and arrival procedures from our meeting from February 20th to assist in accommodating the new Jewish Day School. Below is our arrangement to ensure we share the easement.

Hollywood Academy Of Arts & Science	Ben Porat Yosef Yitzchok school
Arrival: 7:45 am to 8:15 am	Arrival: 8:20 am to 8:45 am

Hollywood Academy of Arts & Science Dismissal
K-2 Starts 2:25 pm 3-5 Dismissed at 2:45 pm 6-8 Dismissed at 3:00 pm
Ben Porat Yosef Yitzchok school Dismissal
Monday- Thursday Dismissal begins at 3:45 pm to 4:10 pm Friday dismissal: 1:00 pm – 1:30 pm

If you have any questions or comments, please feel free to email to reach out.

Sincerely,

Johna Giordano

Ms. Johna Giordano

Principal

JGiordano@hollywoodcharter.org

1705 Van Buren Street • Hollywood, Florida 33020

Phone: 954-925-6404 • Fax: 954-925-8123

www.hollywoodcharter.org

A Member of the Charter Schools USA Family of Schools.