APPENDIX K

Opening Year (2019) I-75 Ramp Terminal Intersection HCS Analysis
Summary Sheets

ALTERNATIVE 1

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AJC
Agency/Co.	AIM ENGR
Date Performed	2/21/2012
Analysis Time Period	AM

Site Information

Intersection	WB OFF @ SR 29
Jurisdiction	
Analysis Year	2019 NO-BUILD

Project Description

East/West Street: I-75 WB OFF Ramp | North/South Street: SR 29

Intersection Orientation: North-South | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	298 ✓	155 ✓			264 ✓	
Peak-Hour Factor, PHF	0.90	0.90	1.00	1.00	0.90	1.00
Hourly Flow Rate, HFR (veh/h)	331	172	0	0	293	0
Percent Heavy Vehicles	22	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	1	1	0	0	1	0
Configuration	L	T			T	
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)				39 ✓		
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.90	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	0	0	0	43	0	0
Percent Heavy Vehicles	0	0	0	6	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	1	0	0
Configuration				L		

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L		L					
v (veh/h)	331		43					
C (m) (veh/h)	1163		159					
v/c	0.28		0.27					
95% queue length	1.18		1.04					
Control Delay (s/veh)	9.3		35.8					
LOS	A		E					
Approach Delay (s/veh)	--	--	35.8					
Approach LOS	--	--	E					

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AJC
Agency/Co.	AIM ENGR
Date Performed	2/21/2012
Analysis Time Period	AM

Site Information

Intersection	I-75 EB OFF@ SR 29
Jurisdiction	
Analysis Year	2019 NO-BUILD

Project Description

East/West Street: *I-75 Ramps* | North/South Street: *SR 29*

Intersection Orientation: *North-South* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		360 ✓		186 ✓	117 ✓	
Peak-Hour Factor, PHF	0.95	0.90	1.00	0.90	0.90	1.00
Hourly Flow Rate, HFR (veh/h)	0	400	0	206	130	0
Percent Heavy Vehicles	6	--	--	22	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	1	1	0
Configuration		T		L	T	
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	93 ✓					
Peak-Hour Factor, PHF	0.90	1.00	1.00	0.95	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	103	0	0	0	0	0
Percent Heavy Vehicles	6	0	0	6	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	1	0	0	0	0	0
Configuration	L					

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		L				L		
v (veh/h)		206				103		
C (m) (veh/h)		1058				231		
v/c		0.19 ✓				0.45 ✓		
95% queue length		0.72				2.13		
Control Delay (s/veh)		9.2				32.6		
LOS		A				D		
Approach Delay (s/veh)	--	--				32.6		
Approach LOS	--	--				D		

SHORT REPORT

General Information		Site Information	
Analyst	*GSR*	Intersection	*I-75 NB Off Ramp & CR 951*
Agency or Co.	*AIM ENGINEERING*	Area Type	*All other areas*
Date Performed	*03/28/2012*	Jurisdiction	
Time Period	*AM*	Analysis Year	*2019 NO-BUILD*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes				*1*		*1*	*2*	*4*			*4*	*1*
Lane Group				*L*		*R*	*L*	*T*			*T*	*R*
Volume (vph)				*160* ✓		*67* ✓	*1463* ✓	*2071* ✓			*1724* ✓	*433* ✓
% Heavy Vehicles				*6*		*6*	*4*	*4*			*4*	*4*
PHF				*0.95*		*0.95*	*0.95*	*0.95*			*0.95*	*0.95*
Pretimed/Actuated (P/A)				*A*		*A*	*A*	*A*			*A*	*A*
Startup Lost Time				*2.0*		*2.0*	*2.0*	*2.0*			*2.0*	*2.0*
Extension of Effective Green				*2.0*		*2.0*	*2.0*	*2.0*			*2.0*	*2.0*
Arrival Type				*3*		*3*	*4*	*4*			*4*	*3*
Unit Extension				*3.0*		*3.0*	*3.0*	*3.0*			*3.0*	*3.0*
Ped/Bike/RTOR Volume				*0*	*0*	*28*	*0*	*0*		*0*	*0*	*56*
Lane Width				*12.0*		*12.0*	*12.0*	*12.0*			*12.0*	*12.0*
Parking/Grade/Parking				*N*	*0*	*N*	*N*	*0*	*N*	*N*	*0*	*N*
Parking/Hour												
Bus Stops/Hour				*0*		*0*	*0*	*0*			*0*	*0*
Minimum Pedestrian Time					*3.2*			*3.2*			*3.2*	

Phasing	WB Only	02	03	04	NB Only	Thru & RT	07	08
Timing	G = *19.5*	G =	G =	G =	G = *60.0*	G = *36.5*	G =	G =
	Y = *5*	Y =	Y =	Y =	Y = *4*	Y = *5*	Y =	Y =
Duration of Analysis (hrs) = *0.25*						Cycle Length C = *130.0*		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate				*168*		*41*	*1540*	*2180*			*1815*	*397*
Lane Group Capacity				*255*		*229*	*1555*	*5129*			*1863*	*729*
v/c Ratio				*0.66*		*0.18*	*0.99*	*0.43*			*0.97*	*0.54*
Green Ratio				*0.15*		*0.15*	*0.46*	*0.77*			*0.28*	*0.47*
Uniform Delay d_1				*52.1*		*48.3*	*34.7*	*5.0*			*46.3*	*24.6*
Delay Factor k				*0.23*		*0.11*	*0.49*	*0.11*			*0.48*	*0.14*
Incremental Delay d_2				*6.1*		*0.4*	*12.6*	*0.0*			*11.1*	*0.5*
PF Factor				*1.000*		*1.000*	*0.821*	*0.253*			*1.000*	*1.000*
Control Delay				*58.2*		*48.6*	*41.1*	*1.3*			*57.4*	*25.1*
Lane Group LOS				*E*		*D*	*D*	*A*			*E*	*C*
Approach Delay				*56.4*			*17.8*			*51.6*		
Approach LOS				*E*			*B*			*D*		
Intersection Delay	*31.3*			Intersection LOS						*C*		

SHORT REPORT

General Information		Site Information	
Analyst	GSR	Intersection	I-75 SB OFF & SR 951
Agency or Co.	AIM ENGINEERING	Area Type	All other areas
Date Performed	03/28/2012	Jurisdiction	
Time Period	AM	Analysis Year	2019 NO-BUILD

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	2		2					4	1	1	4	
Lane Group	L		R					T	R	L	T	
Volume (vph)	340 ✓		1150 ✓					3194 ✓	126 ✓	53 ✓	1831 ✓	
% Heavy Vehicles	6		6					4	4	4	4	
PHF	0.90		0.90					0.90	0.90	0.90	0.90	
Pretimed/Actuated (P/A)	A		A					A	A	A	A	
Startup Lost Time	2.0		2.0					2.0	2.0	2.0	2.0	
Extension of Effective Green	2.0		2.0					2.0	2.0	2.0	2.0	
Arrival Type	4		4					4	4	4	4	
Unit Extension	3.0		3.0					3.0	3.0	3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0				0	0	56	0	0	
Lane Width	12.0		12.0					12.0	12.0	12.0	12.0	
Parking/Grade/Parking	N	0	N				N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0		0					0	0	0	0	
Minimum Pedestrian Time		3.2						3.2			3.2	

Phasing	EB Only	02	03	04	NB Only	Thru & RT	SB Only	08
Timing	G = 22.0	G =	G =	G =	G = 38.0	G = 42.0	G = 10.0	G =
	Y = 5	Y =	Y =	Y =	Y = 4	Y = 4	Y = 5	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 130.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	378		1278					3549	78	59	2034	
Lane Group Capacity	560		1349					4287	1326	134	2858	
v/c Ratio	0.68		0.95					0.83	0.06	0.44	0.71	
Green Ratio	0.17		0.50					0.65	0.85	0.08	0.43	
Uniform Delay d_1	50.6		30.9					17.5	1.5	57.3	30.4	
Delay Factor k	0.25		0.46					0.37	0.11	0.11	0.28	
Incremental Delay d_2	3.2		13.9					0.8	0.0	2.2	0.8	
PF Factor	1.000		0.767					0.450	0.393	1.000	0.860	
Control Delay	53.9		37.6					8.7	0.6	59.5	26.9	
Lane Group LOS	D		D					A	A	E	C	
Approach Delay	41.3						8.5			27.9		
Approach LOS	D						A			C		
Intersection Delay	21.4			Intersection LOS						C		

SHORT REPORT

General Information		Site Information	
Analyst	GSR	Intersection	GGP & I-75 NB OFF
Agency or Co.	AIM Engineering	Area Type	All other areas
Date Performed	4/020/2012	Jurisdiction	
Time Period	AM	Analysis Year	2019 NO-BUILD

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes		3			3		2		1			
Lane Group		T			T		L		R			
Volume (vph)		1676 ✓			1151 ✓		412 ✓		8 ✓			
% Heavy Vehicles		4			4		6		6			
PHF		0.90			0.90		0.90		0.90			
Pretimed/Actuated (P/A)		A			A		A		A			
Startup Lost Time		2.0			2.0		2.0		2.0			
Extension of Effective Green		2.0			2.0		2.0		2.0			
Arrival Type		3			3		3		3			
Unit Extension		3.0			3.0		3.0		3.0			
Ped/Bike/RTOR Volume	0	0		0	0		0	0	0			
Lane Width		12.0			12.0		12.0		12.0			
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N			
Parking/Hour												
Bus Stops/Hour		0			0		0		0			
Minimum Pedestrian Time		3.2			3.2			3.2				

Phasing	Thru Only	02	03	04	NB Only	06	07	08
Timing	G = 66.0	G =	G =	G =	G = 24.0	G =	G =	G =
	Y = 5	Y =	Y =	Y =	Y = 5	Y =	Y =	Y =

Duration of Analysis (hrs) = 0.25 | Cycle Length C = 100.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate		1862			1279		458		9			
Lane Group Capacity		3285			3285		794		366			
v/c Ratio		0.57			0.39		0.58		0.02			
Green Ratio		0.66			0.66		0.24		0.24			
Uniform Delay d_1		9.2			7.8		33.5		29.1			
Delay Factor k		0.16			0.11		0.17		0.11			
Incremental Delay d_2		0.0			0.1		1.0		0.0			
PF Factor		1.000			1.000		1.000		1.000			
Control Delay		9.3			7.9		34.6		29.1			
Lane Group LOS		A			A		C		C			
Approach Delay	9.3			7.9			34.5					
Approach LOS	A			A			C					
Intersection Delay	12.0			Intersection LOS			B					

SHORT REPORT

General Information		Site Information	
Analyst	AJC	Intersection	GGP & I-75 SB OFF
Agency or Co.	AIM Engineering	Area Type	All other areas
Date Performed	03/02/2012	Jurisdiction	
Time Period	AM	Analysis Year	2019 NO-BUILD

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes		3	1	1	3					2		2
Lane Group		T	R	L	T					L		R
Volume (vph)		1494	323	7	1563					771		1323
% Heavy Vehicles		4	4	4	4					6		6
PHF		0.90	0.90	0.90	0.90					0.90		0.90
Pretimed/Actuated (P/A)		A	A	A	A					A		A
Startup Lost Time		2.0	2.0	2.0	2.0					2.0		2.0
Extension of Effective Green		2.0	2.0	2.0	2.0					2.0		2.0
Arrival Type		3	3	3	3					3		3
Unit Extension		3.0	3.0	3.0	3.0					3.0		3.0
Ped/Bike/RTOR Volume	0	0	323	0	0					0	0	0
Lane Width		12.0	12.0	12.0	12.0					12.0		12.0
Parking/Grade/Parking	N	0	N	N	0	N				N	0	N
Parking/Hour												
Bus Stops/Hour		0	0	0	0					0		0
Minimum Pedestrian Time		3.2			3.2						3.2	

Phasing	WB Only	Thru & RT	03	04	SB Only	06	07	08
Timing	G = 8.0	G = 35.0	G =	G =	G = 42.0	G =	G =	G =
	Y = 5	Y = 5	Y =	Y =	Y = 5	Y =	Y =	Y =

Duration of Analysis (hrs) = 0.25 | Cycle Length C = 100.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate		1660	0	8	1737					857		1470
Lane Group Capacity		1742	544	139	1742					1389		1483
v/c Ratio		0.95	0.00	0.06	1.00					0.62		0.99
Green Ratio		0.35	0.35	0.08	0.35					0.42		0.55
Uniform Delay d_1		31.7	21.1	42.5	32.4					22.7		22.3
Delay Factor k		0.46	0.11	0.11	0.50					0.20		0.49
Incremental Delay d_2		12.3	0.0	0.1	18.7					0.8		21.2
PF Factor		1.000	1.000	1.000	1.000					1.000		1.000
Control Delay		44.0	21.1	42.7	51.1					23.5		43.5
Lane Group LOS		D	C	D	D					C		D
Approach Delay		44.0			51.1						36.1	
Approach LOS		D			D						D	
Intersection Delay		43.0			Intersection LOS						D	

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AJC
Agency/Co.	AIM ENGR
Date Performed	2/21/2012
Analysis Time Period	PM

Site Information

Intersection	I-75 WB OFF @ SR 29
Jurisdiction	
Analysis Year	2019 NO-BUILD

Project Description

East/West Street: I-75 WB OFF Ramp | North/South Street: SR 29

Intersection Orientation: North-South | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	234 ✓	197 ✓			299 ✓	
Peak-Hour Factor, PHF	0.90	0.90	1.00	1.00	0.90	1.00
Hourly Flow Rate, HFR (veh/h)	260	218	0	0	332	0
Percent Heavy Vehicles	22	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	1	1	0	0	1	0
Configuration	L	T			T	
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)				30 ✓		
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.90	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	0	0	0	33	0	0
Percent Heavy Vehicles	0	0	0	6	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	1	0	0
Configuration				L		

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L		L					
v (veh/h)	260		33					
C (m) (veh/h)	1123		184					
v/c	0.23		0.18					
95% queue length	0.90		0.63					
Control Delay (s/veh)	9.2		28.8					
LOS	A		D					
Approach Delay (s/veh)	--	--	28.8					
Approach LOS	--	--	D					

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*AJC*
Agency/Co.	*AIM ENGR*
Date Performed	*2/21/2012*
Analysis Time Period	*PM*

Site Information

Intersection	*I-75 EB OFF@ SR 29*
Jurisdiction	
Analysis Year	*2019 NO-BUILD*

Project Description

East/West Street: *I-75 Ramps* | North/South Street: *SR 29*

Intersection Orientation: *North-South* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		*312* ✓		*237* ✓	*92* ✓	
Peak-Hour Factor, PHF	*0.95*	*0.90*	*1.00*	*0.90*	*0.90*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*0*	*346*	*0*	*263*	*102*	*0*
Percent Heavy Vehicles	*6*	--	--	*22*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*1*	*1*	*0*
Configuration		*T*		*L*	*T*	
Upstream Signal		*0*			*0*	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*119* ✓					
Peak-Hour Factor, PHF	*0.90*	*1.00*	*1.00*	*0.95*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*132*	*0*	*0*	*0*	*0*	*0*
Percent Heavy Vehicles	*6*	*0*	*0*	*6*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*1*	*0*	*0*	*0*	*0*	*0*
Configuration	*L*					

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*L*				*L*		
v (veh/h)		*263*				*132*		
C (m) (veh/h)		*1110*				*210*		
v/c		*0.24*				*0.63*		
95% queue length		*0.92*				*3.68*		
Control Delay (s/veh)		*9.2*				*47.4*		
LOS		*A*				*E*		
Approach Delay (s/veh)	--	--				*47.4*		
Approach LOS	--	--				*E*		

SHORT REPORT

General Information		Site Information	
Analyst	GSR	Intersection	I-75 NB Off Ramp & CR 961
Agency or Co.	AIM ENGINEERING	Area Type	All other areas
Date Performed	03/28/2012	Jurisdiction	
Time Period	PM	Analysis Year	2019 NO-BUILD

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes				1		1	2	4			4	1
Lane Group				L		R	L	T			T	R
Volume (vph)				126 ✓		53 ✓	1150 ✓	2104 ✓			1798 ✓	340 ✓
% Heavy Vehicles				6		6	3	3			3	3
PHF				0.90		0.90	0.90	0.90			0.90	0.90
Pretimed/Actuated (P/A)				A		A	A	A			A	A
Startup Lost Time				2.0		2.0	2.0	2.0			2.0	2.0
Extension of Effective Green				2.0		2.0	2.0	2.0			2.0	2.0
Arrival Type				3		3	3	4			4	3
Unit Extension				3.0		3.0	3.0	3.0			3.0	3.0
Ped/Bike/RTOR Volume				0	0	27	0	0		0	0	54
Lane Width				12.0		12.0	12.0	12.0			12.0	12.0
Parking/Grade/Parking				N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour				0		0	0	0			0	0
Minimum Pedestrian Time					3.2			3.2			3.2	

Phasing	WB Only	02	03	04	NB Only	Thru & RT	07	08
Timing	G = 21.0	G =	G =	G =	G = 52.0	G = 48.0	G =	G =
	Y = 5	Y =	Y =	Y =	Y = 4	Y = 5	Y =	Y =

Duration of Analysis (hrs) = 0.25 | Cycle Length C = 135.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate				140		29	1278	2338			1998	318
Lane Group Capacity				265		237	1311	5161			2382	859
v/c Ratio				0.53		0.12	0.97	0.45			0.84	0.37
Green Ratio				0.16		0.16	0.39	0.77			0.36	0.55
Uniform Delay d_1				52.4		49.1	40.9	5.5			39.9	17.3
Delay Factor k				0.13		0.11	0.48	0.11			0.37	0.11
Incremental Delay d_2				2.0		0.2	10.5	0.0			2.0	0.2
PF Factor				1.000		1.000	1.000	0.250			0.939	1.000
Control Delay				54.4		49.3	51.4	1.4			39.5	17.5
Lane Group LOS				D		D	D	A			D	B
Approach Delay				53.6			19.1			36.5		
Approach LOS				D			B			D		
Intersection Delay	26.6			Intersection LOS						C		

SHORT REPORT

General Information		Site Information	
Analyst	GSR	Intersection	I-75 SB OFF & SR 951
Agency or Co.	AIM ENGINEERING	Area Type	All other areas
Date Performed	03/28/2012	Jurisdiction	
Time Period	PM	Analysis Year	2019 NO-BUILD

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	2		2					4	1	1	4	
Lane Group	L		R					T	R	L	T	
Volume (vph)	433		1463					2821	160	67	1857	
% Heavy Vehicles	6		6					3	3	3	3	
PHF	0.90		0.90					0.90	0.90	0.90	0.90	
Pretimed/Actuated (P/A)	A		A					A	A	A	A	
Startup Lost Time	2.0		2.0					2.0	2.0	2.0	2.0	
Extension of Effective Green	2.0		2.0					2.0	2.0	2.0	2.0	
Arrival Type	4		4					4	4	4	4	
Unit Extension	3.0		3.0					3.0	3.0	3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0				0	0	27	0	0	
Lane Width	12.0		12.0					12.0	12.0	12.0	12.0	
Parking/Grade/Parking	N	0	N				N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0		0					0	0	0	0	
Minimum Pedestrian Time		3.2						3.2			3.2	

Phasing	EB Only	02	03	04	NB Only	Thru & RT	SB Only	08
Timing	G = 32.0	G =	G =	G =	G = 45.0	G = 25.0	G = 15.0	G =
	Y = 5	Y =	Y =	Y =	Y = 4	Y = 4	Y = 5	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 135.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	481		1626					3134	148	74	2063	
Lane Group Capacity	784		1638					3673	1289	195	2184	
v/c Ratio	0.61		0.99					0.85	0.11	0.38	0.94	
Green Ratio	0.24		0.61					0.55	0.82	0.11	0.33	
Uniform Delay d_1	46.0		26.2					25.9	2.4	55.7	44.3	
Delay Factor k	0.20		0.49					0.39	0.11	0.11	0.46	
Incremental Delay d_2	1.4		20.4					1.3	0.0	1.2	9.0	
PF Factor	1.000		0.557					0.685	0.323	1.000	0.965	
Control Delay	47.4		35.0					19.1	0.8	56.9	51.7	
Lane Group LOS	D		D					B	A	E	D	
Approach Delay	37.9						18.2			51.9		
Approach LOS	D						B			D		
Intersection Delay	33.3			Intersection LOS						C		

SHORT REPORT

General Information		Site Information	
Analyst	*GSR*	Intersection	*GGP & I-75 NB OFF*
Agency or Co.	*AIM Engineering*	Area Type	*All other areas*
Date Performed	*4/20/2012*	Jurisdiction	
Time Period	*PM*	Analysis Year	*2019 No Build*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes		*3*			*3*		*2*		*1*			
Lane Group		*T*			*T*		*L*		*R*			
Volume (vph)		*2132* ✓			*905* ✓		*323* ✓		*7* ✓			
% Heavy Vehicles		*3*			*3*		*6*		*6*			
PHF		*0.95*			*0.95*		*0.95*		*0.95*			
Pretimed/Actuated (P/A)		*A*			*A*		*A*		*A*			
Startup Lost Time		*2.0*			*2.0*		*2.0*		*2.0*			
Extension of Effective Green		*2.0*			*2.0*		*2.0*		*2.0*			
Arrival Type		*3*			*3*		*3*		*3*			
Unit Extension		*3.0*			*3.0*		*3.0*		*3.0*			
Ped/Bike/RTOR Volume	*0*	*0*		*0*	*0*		*0*	*0*	*0*			
Lane Width		*12.0*			*12.0*		*12.0*		*12.0*			
Parking/Grade/Parking	*N*	*0*	*N*	*N*	*0*	*N*	*N*	*0*	*N*			
Parking/Hour												
Bus Stops/Hour		*0*			*0*		*0*		*0*			
Minimum Pedestrian Time		*3.2*			*3.2*			*3.2*				

Phasing	Thru Only	02	03	04	NB Only	06	07	08
Timing	G = *64.0*	G =	G =	G =	G = *36.0*	G =	G =	G =
	Y = *5*	Y =	Y =	Y =	Y = *5*	Y =	Y =	Y =

Duration of Analysis (hrs) = *0.25* | Cycle Length C = *110.0*

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate		*2244*			*953*		*340*		*7*			
Lane Group Capacity		*2924*			*2924*		*1082*		*499*			
v/c Ratio		*0.77*			*0.33*		*0.31*		*0.01*			
Green Ratio		*0.58*			*0.58*		*0.33*		*0.33*			
Uniform Delay d_1		*17.4*			*11.9*		*27.7*		*25.0*			
Delay Factor k		*0.32*			*0.11*		*0.11*		*0.11*			
Incremental Delay d_2		*0.1*			*0.1*		*0.2*		*0.0*			
PF Factor		*1.000*			*1.000*		*1.000*		*1.000*			
Control Delay		*17.5*			*11.9*		*27.9*		*25.0*			
Lane Group LOS		*B*			*B*		*C*		*C*			
Approach Delay	*17.5*			*11.9*			*27.9*					
Approach LOS	*B*			*B*			*C*					
Intersection Delay	*17.0*			Intersection LOS			*B*					

SHORT REPORT

General Information		Site Information	
Analyst	*GSR*	Intersection	*GGP & I-75 SB OFF*
Agency or Co.	*AIM Engineering*	Area Type	*All other areas*
Date Performed	*4/20/2012*	Jurisdiction	
Time Period	*PM*	Analysis Year	*2019 No Build*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes		3	1	1	3					2		2
Lane Group		T	R	L	T					L		R
Volume (vph)		2474 ✓	412 ✓	8 ✓	1228 ✓					981 ✓		589 ✓
% Heavy Vehicles		3	3	3	3					6		6
PHF		0.95	0.95	0.95	0.95					0.95		0.95
Pretimed/Actuated (P/A)		A	A	A	A					A		A
Startup Lost Time		2.0	2.0	2.0	2.0					2.0		2.0
Extension of Effective Green		2.0	2.0	2.0	2.0					2.0		2.0
Arrival Type		3	3	3	3					3		3
Unit Extension		3.0	3.0	3.0	3.0					3.0		3.0
Ped/Bike/RTOR Volume	0	0	412	0	0					0	0	0
Lane Width		12.0	12.0	12.0	12.0					12.0		12.0
Parking/Grade/Parking	N	0	N	N	0	N				N	0	N
Parking/Hour												
Bus Stops/Hour		0	0	0	0					0		0
Minimum Pedestrian Time		3.2			3.2						3.2	

Phasing	WB Only	Thru & RT	03	04	SB Only	06	07	08
Timing	G = 8.0	G = 54.5	G =	G =	G = 33.5	G =	G =	G =
	Y = 4	Y = 5	Y =	Y =	Y = 5	Y =	Y =	Y =

Duration of Analysis (hrs) = *0.25* | Cycle Length C = *110.0*

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate		2604	0	8	1293					1033		620
Lane Group Capacity		2490	777	127	3038					1007		821
v/c Ratio		1.05	0.00	0.06	0.43					1.03		0.76
Green Ratio		0.50	0.50	0.07	0.60					0.30		0.30
Uniform Delay d_1		27.8	14.0	47.5	11.6					38.3		34.5
Delay Factor k		0.50	0.11	0.11	0.11					0.50		0.31
Incremental Delay d_2		31.4	0.0	0.2	0.1					35.1		4.0
PF Factor		1.000	1.000	1.000	1.000					1.000		1.000
Control Delay		59.2	14.0	47.7	11.7					73.4		38.6
Lane Group LOS		E	B	D	B					E		D
Approach Delay		59.2			11.9					60.3		
Approach LOS		E			B					E		
Intersection Delay		48.4			Intersection LOS					D		

ALTERNATIVE 3A

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AJC
Agency/Co.	FDOT
Date Performed	2/21/2012
Analysis Time Period	AM

Site Information

Intersection	North Ramp (WB SR29)
Jurisdiction	
Analysis Year	2019 GREEN

Project Description

East/West Street: *I-75 Ramps* | North/South Street: *SR 29*

Intersection Orientation: *North-South* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	301 ✓	150 ✓			251 ✓	
Peak-Hour Factor, PHF	0.90	0.90	1.00	1.00	0.90	1.00
Hourly Flow Rate, HFR (veh/h)	334	166	0	0	278	0
Percent Heavy Vehicles	22	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	1	1	0	0	1	0
Configuration	L	T			T	
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)				39 ✓		
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.90	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	0	0	0	43	0	0
Percent Heavy Vehicles	0	0	0	6	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	1	0	0
Configuration				L		

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L		L					
v (veh/h)	334		43					
C (m) (veh/h)	1178		163					
v/c	0.28		0.26					
95% queue length	1.17		1.01					
Control Delay (s/veh)	9.3		34.8					
LOS	A		D					
Approach Delay (s/veh)	--	--	34.8					
Approach LOS	--	--	D					

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AJC
Agency/Co.	FDOT
Date Performed	2/21/2012
Analysis Time Period	AM

Site Information

Intersection	South Ramps (EB SR29)
Jurisdiction	
Analysis Year	2019 GREEN

Project Description

East/West Street: *I-75 Ramps* North/South Street: *SR 29*

Intersection Orientation: *North-South* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		360 ✓		176 ✓	114 ✓	
Peak-Hour Factor, PHF	0.95	0.90	1.00	0.90	0.90	1.00
Hourly Flow Rate, HFR (veh/h)	0	400	0	195	126	0
Percent Heavy Vehicles	6	--	--	22	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	1	1	0
Configuration		T		L	T	
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	91 ✓					
Peak-Hour Factor, PHF	0.90	1.00	1.00	0.95	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	101	0	0	0	0	0
Percent Heavy Vehicles	6	0	0	6	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	1	0	0	0	0	0
Configuration	L					

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		L				L		
v (veh/h)		195				101		
C (m) (veh/h)		1058				242		
v/c		0.18				0.42		
95% queue length		0.67				1.94		
Control Delay (s/veh)		9.2				30.1		
LOS		A				D		
Approach Delay (s/veh)	--	--				30.1		
Approach LOS	--	--				D		

SHORT REPORT

General Information		Site Information	
Analyst	*GSR*	Intersection	*I-75 NB Off Ramp & SR 951*
Agency or Co.	*AIM ENGINEERING*	Area Type	*All other areas*
Date Performed	*03/30/2012*	Jurisdiction	
Time Period	*AM*	Analysis Year	*2019 GREEN*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes				*1*		*1*	*2*	*4*			*4*	*1*
Lane Group				*L*		*R*	*L*	*T*			*T*	*R*
Volume (vph)				*160*		*82*	*1463*	*2078*			*1753*	*433*
% Heavy Vehicles				*6*		*6*	*4*	*4*			*4*	*4*
PHF				*0.95*		*0.95*	*0.95*	*0.95*			*0.95*	*0.95*
Pretimed/Actuated (P/A)				*A*		*A*	*A*	*A*			*A*	*A*
Startup Lost Time				*2.0*		*2.0*	*2.0*	*2.0*			*2.0*	*2.0*
Extension of Effective Green				*2.0*		*2.0*	*2.0*	*2.0*			*2.0*	*2.0*
Arrival Type				*3*		*3*	*4*	*4*			*4*	*3*
Unit Extension				*3.0*		*3.0*	*3.0*	*3.0*			*3.0*	*3.0*
Ped/Bike/RTOR Volume				*0*	*0*	*28*	*0*	*0*		*0*	*0*	*56*
Lane Width				*12.0*		*12.0*	*12.0*	*12.0*			*12.0*	*12.0*
Parking/Grade/Parking				*N*	*0*	*N*	*N*	*0*	*N*	*N*	*0*	*N*
Parking/Hour												
Bus Stops/Hour				*0*		*0*	*0*	*0*			*0*	*0*
Minimum Pedestrian Time					*3.2*			*3.2*			*3.2*	

Phasing	WB Only	02	03	04	NB Only	Thru & RT	07	08
Timing	G = *18.5*	G =	G =	G =	G = *60.0*	G = *37.5*	G =	G =
	Y = *5*	Y =	Y =	Y =	Y = *4*	Y = *5*	Y =	Y =
Duration of Analysis (hrs) = *0.25*						Cycle Length C = *130.0*		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate				*168*		*57*	*1540*	*2187*			*1845*	*397*
Lane Group Capacity				*242*		*217*	*1555*	*5180*			*1914*	*729*
v/c Ratio				*0.69*		*0.26*	*0.99*	*0.42*			*0.96*	*0.54*
Green Ratio				*0.14*		*0.14*	*0.46*	*0.78*			*0.29*	*0.47*
Uniform Delay d_1				*53.1*		*49.7*	*34.7*	*4.7*			*45.6*	*24.6*
Delay Factor k				*0.26*		*0.11*	*0.49*	*0.11*			*0.47*	*0.14*
Incremental Delay d_2				*8.3*		*0.6*	*12.5*	*0.0*			*9.0*	*0.5*
PF Factor				*1.000*		*1.000*	*0.821*	*0.262*			*0.995*	*1.000*
Control Delay				*61.4*		*50.3*	*41.0*	*1.2*			*54.3*	*25.1*
Lane Group LOS				*E*		*D*	*D*	*A*			*D*	*C*
Approach Delay				*58.6*			*17.7*			*49.2*		
Approach LOS				*E*			*B*			*D*		
Intersection Delay	*30.6*			Intersection LOS						*C*		

SHORT REPORT

General Information		Site Information	
Analyst	GSR	Intersection	I-75 SB OFF & SR 951
Agency or Co.	AIM ENGINEERING	Area Type	All other areas
Date Performed	03/30/2012	Jurisdiction	
Time Period	AM	Analysis Year	2019 GREEN

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	2		2					4	1	1	4	
Lane Group	L		R					T	R	L	T	
Volume (vph)	340 ✓		1150 ✓					3201 ✓	126 ✓	64 ✓	1849 ✓	
% Heavy Vehicles	6		6					4	4	4	4	
PHF	0.90		0.90					0.90	0.90	0.90	0.90	
Pretimed/Actuated (P/A)	A		A					A	A	A	A	
Startup Lost Time	2.0		2.0					2.0	2.0	2.0	2.0	
Extension of Effective Green	2.0		2.0					2.0	2.0	2.0	2.0	
Arrival Type	4		4					4	4	4	4	
Unit Extension	3.0		3.0					3.0	3.0	3.0	3.0	
Ped/Bike/RTOR Volume	0	0	4				0	0	56	0	0	
Lane Width	12.0		12.0					12.0	12.0	12.0	12.0	
Parking/Grade/Parking	N	0	N				N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0		0					0	0	0	0	
Minimum Pedestrian Time		3.2						3.2			3.2	

Phasing	EB Only	02	03	04	NB Only	Thru & RT	SB Only	08
Timing	G = 22.0	G =	G =	G =	G = 38.0	G = 41.5	G = 10.5	G =
	Y = 5	Y =	Y =	Y =	Y = 4	Y = 4	Y = 5	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 130.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	378		1273					3557	78	71	2054	
Lane Group Capacity	560		1349					4262	998	140	2858	
v/c Ratio	0.68		0.94					0.83	0.08	0.51	0.72	
Green Ratio	0.17		0.50					0.64	0.64	0.08	0.43	
Uniform Delay d_1	50.6		30.8					17.9	8.8	57.3	30.5	
Delay Factor k	0.25		0.46					0.37	0.11	0.12	0.28	
Incremental Delay d_2	3.2		13.4					0.7	0.0	2.9	0.9	
PF Factor	1.000		0.767					0.462	0.462	1.000	0.860	
Control Delay	53.9		36.9					9.0	4.1	60.2	27.1	
Lane Group LOS	D		D					A	A	E	C	
Approach Delay	40.8						8.9			28.2		
Approach LOS	D						A			C		
Intersection Delay	21.5			Intersection LOS						C		

SHORT REPORT

General Information		Site Information	
Analyst	GSR	Intersection	GGP & I-75 NB OFF
Agency or Co.	AIM Engineering	Area Type	All other areas
Date Performed	4/020/2012	Jurisdiction	
Time Period	AM	Analysis Year	2019 GREEN BLVD EXT

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes		3			3		2		1			
Lane Group		T			T		L		R			
Volume (vph)		1685			1154		412		9			
% Heavy Vehicles		4			4		6		6			
PHF		0.90			0.90		0.90		0.90			
Pretimed/Actuated (P/A)		A			A		A		A			
Startup Lost Time		2.0			2.0		2.0		2.0			
Extension of Effective Green		2.0			2.0		2.0		2.0			
Arrival Type		3			3		3		3			
Unit Extension		3.0			3.0		3.0		3.0			
Ped/Bike/RTOR Volume	0	0		0	0		0	0	0			
Lane Width		12.0			12.0		12.0		12.0			
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N			
Parking/Hour												
Bus Stops/Hour		0			0		0		0			
Minimum Pedestrian Time		3.2			3.2			3.2				

Phasing	Thru Only	02	03	04	NB Only	06	07	08
Timing	G = 66.0	G =	G =	G =	G = 24.0	G =	G =	G =
	Y = 5	Y =	Y =	Y =	Y = 5	Y =	Y =	Y =

Duration of Analysis (hrs) = 0.25 | Cycle Length C = 100.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate		1872			1282		458		10			
Lane Group Capacity		3285			3285		794		366			
v/c Ratio		0.57			0.39		0.58		0.03			
Green Ratio		0.66			0.66		0.24		0.24			
Uniform Delay d_1		9.3			7.8		33.5		29.1			
Delay Factor k		0.16			0.11		0.17		0.11			
Incremental Delay d_2		0.0			0.1		1.0		0.0			
PF Factor		1.000			1.000		1.000		1.000			
Control Delay		9.3			7.9		34.6		29.1			
Lane Group LOS		A			A		C		C			
Approach Delay	9.3			7.9			34.4					
Approach LOS	A			A			C					
Intersection Delay	12.0			Intersection LOS			B					

SHORT REPORT

General Information		Site Information	
Analyst	*GSR*	Intersection	*GGP & I-75 SB OFF*
Agency or Co.	*AIM Engineering*	Area Type	*All other areas*
Date Performed	*04/20/2012*	Jurisdiction	
Time Period	*AM*	Analysis Year	*2019 GREEN BLVD EXT*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes		3	1	1	3					2		2
Lane Group		T	R	L	T					L		R
Volume (vph)		1505 ✓	323 ✓	7 ✓	1566 ✓					778 ✓		1329 ✓
% Heavy Vehicles		4	4	4	4					6		6
PHF		0.90	0.90	0.90	0.90					0.90		0.90
Pretimed/Actuated (P/A)		A	A	A	A					A		A
Startup Lost Time		2.0	2.0	2.0	2.0					2.0		2.0
Extension of Effective Green		2.0	2.0	2.0	2.0					2.0		2.0
Arrival Type		3	3	3	3					3		3
Unit Extension		3.0	3.0	3.0	3.0					3.0		3.0
Ped/Bike/RTOR Volume	0	0	323	0	0					0	0	0
Lane Width		12.0	12.0	12.0	12.0					12.0		12.0
Parking/Grade/Parking	N	0	N	N	0	N				N	0	N
Parking/Hour												
Bus Stops/Hour		0	0	0	0					0		0
Minimum Pedestrian Time		3.2			3.2						3.2	

Phasing	WB Only	Thru & RT	03	04	SB Only	06	07	08
Timing	G = 8.0	G = 35.0	G =	G =	G = 42.0	G =	G =	G =
	Y = 5	Y = 5	Y =	Y =	Y = 5	Y =	Y =	Y =

Duration of Analysis (hrs) = *0.25* Cycle Length C = *100.0*

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate		1672	0	8	1740					864		1477
Lane Group Capacity		1742	544	139	1742					1389		1483
v/c Ratio		0.96	0.00	0.06	1.00					0.62		1.00
Green Ratio		0.35	0.35	0.08	0.35					0.42		0.55
Uniform Delay d_1		31.8	21.1	42.5	32.5					22.8		22.4
Delay Factor k		0.47	0.11	0.11	0.50					0.21		0.50
Incremental Delay d_2		13.3	0.0	0.1	19.1					0.9		22.4
PF Factor		1.000	1.000	1.000	1.000					1.000		1.000
Control Delay		45.1	21.1	42.7	51.6					23.6		44.7
Lane Group LOS		D	C	D	D					C		D
Approach Delay		45.1			51.5					37.0		
Approach LOS		D			D					D		
Intersection Delay		43.8			Intersection LOS					D		

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AJC
Agency/Co.	FDOT
Date Performed	2/21/2012
Analysis Time Period	PM

Site Information

Intersection	North Ramp (WB SR 29)
Jurisdiction	
Analysis Year	2019 GREEN

Project Description

East/West Street: *I-75 Ramps* | North/South Street: *SR 29*

Intersection Orientation: *North-South* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	237 ✓	191 ✓			283 ✓	
Peak-Hour Factor, PHF	0.90	0.90	1.00	1.00	0.90	1.00
Hourly Flow Rate, HFR (veh/h)	263	212	0	0	314	0
Percent Heavy Vehicles	22	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	1	1	0	0	1	0
Configuration	L	T			T	
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)				30 ✓		
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.90	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	0	0	0	33	0	0
Percent Heavy Vehicles	0	0	0	6	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	1	0	0
Configuration				L		

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L		L					
v (veh/h)	263		33					
C (m) (veh/h)	1141		190					
v/c	0.23		0.17					
95% queue length	0.89		0.61					
Control Delay (s/veh)	9.1		27.9					
LOS	A		D					
Approach Delay (s/veh)	--	--	27.9					
Approach LOS	--	--	D					

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*AJC*
Agency/Co.	*FDOT*
Date Performed	*2/21/2012*
Analysis Time Period	*PM*

Site Information

Intersection	*South Ramps (EB SR29)*
Jurisdiction	
Analysis Year	*2019 GREEN*

Project Description

East/West Street: *I-75 Ramps* North/South Street: *SR 29*

Intersection Orientation: *North-South* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		*312* ✓		*224* ✓	*89* ✓	
Peak-Hour Factor, PHF	*0.95*	*0.90*	*1.00*	*0.90*	*0.90*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*0*	*346*	*0*	*248*	*98*	*0*
Percent Heavy Vehicles	*6*	--	--	*22*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*1*	*1*	*0*
Configuration		*T*		*L*	*T*	
Upstream Signal		*0*			*0*	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*116* ✓					
Peak-Hour Factor, PHF	*0.90*	*1.00*	*1.00*	*0.95*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*128*	*0*	*0*	*0*	*0*	*0*
Percent Heavy Vehicles	*6*	*0*	*0*	*6*	*0*	*0*
Percent Grade (%)	*0*			*0*		
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*1*	*0*	*0*	*0*	*0*	*0*
Configuration	*L*					

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*L*				*L*		
v (veh/h)		*248*				*128*		
C (m) (veh/h)		*1110*				*224*		
v/c		*0.22*				*0.57*		
95% queue length		*0.86*				*3.17*		
Control Delay (s/veh)		*9.2*				*40.5*		
LOS		*A*				*E*		
Approach Delay (s/veh)	--	--				*40.5*		
Approach LOS	--	--				*E*		

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SHORT REPORT

General Information		Site Information	
Analyst	*GSR*	Intersection	*I-75 NB Off Ramp & SR 951*
Agency or Co.	*AIM ENGINEERING*	Area Type	*All other areas*
Date Performed	*03/30/2012*	Jurisdiction	
Time Period	*PM*	Analysis Year	*2019 GREEN*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes				*1*		*1*	*2*	*4*			*4*	*1*
Lane Group				*L*		*R*	*L*	*T*			*T*	*R*
Volume (vph)				*126* ✓		*64* ✓	*1150* ✓	*2122* ✓			*1820* ✓	*340* ✓
% Heavy Vehicles				*6*		*6*	*3*	*3*			*3*	*3*
PHF				*0.90*		*0.90*	*0.90*	*0.90*			*0.90*	*0.90*
Pretimed/Actuated (P/A)				*A*		*A*	*A*	*A*			*A*	*A*
Startup Lost Time				*2.0*		*2.0*	*2.0*	*2.0*			*2.0*	*2.0*
Extension of Effective Green				*2.0*		*2.0*	*2.0*	*2.0*			*2.0*	*2.0*
Arrival Type				*3*		*3*	*3*	*4*			*4*	*4*
Unit Extension				*3.0*		*3.0*	*3.0*	*3.0*			*3.0*	*3.0*
Ped/Bike/RTOR Volume				*0*	*0*	*27*	*0*	*0*		*0*	*0*	*54*
Lane Width				*12.0*		*12.0*	*12.0*	*12.0*			*12.0*	*12.0*
Parking/Grade/Parking				*N*	*0*	*N*	*N*	*0*	*N*	*N*	*0*	*N*
Parking/Hour												
Bus Stops/Hour				*0*		*0*	*0*	*0*			*0*	*0*
Minimum Pedestrian Time					*3.2*			*3.2*			*3.2*	

Phasing	WB Only	02	03	04	NB Only	Thru & RT	07	08
Timing	G = *21.0*	G =	G =	G =	G = *52.0*	G = *48.0*	G =	G =
	Y = *5*	Y =	Y =	Y =	Y = *4*	Y = *5*	Y =	Y =
Duration of Analysis (hrs) = *0.25*						Cycle Length C = *135.0*		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate				*140*		*41*	*1278*	*2358*			*2022*	*318*
Lane Group Capacity				*265*		*237*	*1311*	*5161*			*2382*	*558*
v/c Ratio				*0.53*		*0.17*	*0.97*	*0.46*			*0.85*	*0.57*
Green Ratio				*0.16*		*0.16*	*0.39*	*0.77*			*0.36*	*0.36*
Uniform Delay d_1				*52.4*		*49.5*	*40.9*	*5.5*			*40.2*	*35.2*
Delay Factor k				*0.13*		*0.11*	*0.48*	*0.11*			*0.38*	*0.16*
Incremental Delay d_2				*2.0*		*0.3*	*10.9*	*0.0*			*2.2*	*1.0*
PF Factor				*1.000*		*1.000*	*1.000*	*0.250*			*0.939*	*0.939*
Control Delay				*54.4*		*49.8*	*51.7*	*1.4*			*39.9*	*34.0*
Lane Group LOS				*D*		*D*	*D*	*A*			*D*	*C*
Approach Delay				*53.4*			*19.1*			*39.1*		
Approach LOS				*D*			*B*			*D*		
Intersection Delay	*27.7*			Intersection LOS						*C*		

SHORT REPORT

General Information		Site Information	
Analyst	GSR	Intersection	I-75 SB OFF & SR 951
Agency or Co.	AIM ENGINEERING	Area Type	All other areas
Date Performed	03/28/2012	Jurisdiction	
Time Period	PM	Analysis Year	2019 GREEN

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	2		2					4	1	1	4	
Lane Group	L		R					T	R	L	T	
Volume (vph)	433		1463					2839	160	82	1864	
% Heavy Vehicles	6		6					3	3	3	3	
PHF	0.90		0.90					0.90	0.90	0.90	0.90	
Pretimed/Actuated (P/A)	A		A					A	A	A	A	
Startup Lost Time	2.0		2.0					2.0	2.0	2.0	2.0	
Extension of Effective Green	2.0		2.0					2.0	2.0	2.0	2.0	
Arrival Type	4		4					4	4	4	4	
Unit Extension	3.0		3.0					3.0	3.0	3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0				0	0	27	0	0	
Lane Width	12.0		12.0					12.0	12.0	12.0	12.0	
Parking/Grade/Parking	N	0	N				N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0		0					0	0	0	0	
Minimum Pedestrian Time		3.2						3.2			3.2	

Phasing	EB Only	02	03	04	NB Only	Thru & RT	SB Only	08
Timing	G = 32.0	G =	G =	G =	G = 45.5	G = 25.0	G = 14.5	G =
	Y = 5	Y =	Y =	Y =	Y = 4	Y = 4	Y = 5	Y =

Duration of Analysis (hrs) = 0.25 | Cycle Length C = 135.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	481		1626					3154	148	91	2071	
Lane Group Capacity	784		1648					3697	865	188	2159	
v/c Ratio	0.61		0.99					0.85	0.17	0.48	0.96	
Green Ratio	0.24		0.61					0.55	0.55	0.11	0.32	
Uniform Delay d_1	46.0		25.7					25.6	15.0	56.7	44.9	
Delay Factor k	0.20		0.49					0.39	0.11	0.11	0.47	
Incremental Delay d_2	1.4		19.0					1.3	0.1	1.9	10.9	
PF Factor	1.000		0.548					0.678	0.678	1.000	0.968	
Control Delay	47.4		33.1					18.7	10.2	58.6	54.4	
Lane Group LOS	D		C					B	B	E	D	
Approach Delay	36.3						18.3			54.5		
Approach LOS	D						B			D		
Intersection Delay	33.7			Intersection LOS						C		