APPENDIX M

Interim Year (2029) 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	3/21/2012
Analysis Time Period	AM

Site Information

Intersection	WB OFF @ SR 29
Jurisdiction	
Analysis Year	2029 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)	332	245			354	
Peak-Hour Factor, PHF	0.95	0.95	1.00	1.00	0.95	1.00
Hourly Flow Rate, HFR (veh/h)	349	257	0	0	372	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)				37		
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.95	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	0	0	0	38	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)	349		38					
C (m) (veh/h)	1085		114					
v/c	0.32		0.33					
95% queue length	1.40		1.32					
Control Delay (s/veh)	9.9		51.6					
LOS	A		F					
Approach Delay (s/veh)	--	--	51.6					
Approach LOS	--	--	F					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	AJC	Intersection	I-75 EB OFF@ SR 29
Agency/Co.	AIM ENGR	Jurisdiction	
Date Performed	2/21/2012	Analysis Year	2029 NO-BUILD
Analysis Time Period	AM		

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)		407		258	133	
Peak-Hour Factor, PHF	0.95	0.95	1.00	0.95	0.95	1.00
Hourly Flow Rate, HFR (veh/h)	0	428	0	271	140	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)	170					
Peak-Hour Factor, PHF	0.95	1.00	1.00	0.95	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	178	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)		271				178		
C (m) (veh/h)		1032				167		
v/c		0.26				1.07		
95% queue length		1.06				8.89		
Control Delay (s/veh)		9.7				144.1		
LOS		A				F		
Approach Delay (s/veh)	--	--				144.1		
Approach LOS	--	--				F		

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SHORT REPORT

General Information		Site Information	
Analyst	*AJC*	Intersection	*I-75 WB Off Ramp & SR 951*
Agency or Co.	*AIM Engineering*	Area Type	*All other areas*
Date Performed	*03/06/2012*	Jurisdiction	
Time Period	*AM*	Analysis Year	*2029 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*			*4*	*1*
Lane Group				*L*		*R*		*T*			*T*	*R*
Volume (vph)				*155*		*77*		*2799*			*2213*	*715*
% Heavy Vehicles				*6*		*6*		*4*			*4*	*4*
PHF				*0.95*		*0.95*		*0.95*			*0.95*	*0.95*
Pretimed/Actuated (P/A)				*A*		*A*		*A*			*A*	*A*
Startup Lost Time				*2.0*		*2.0*		*2.0*			*2.0*	*2.0*
Extension of Effective Green				*2.0*		*2.0*		*2.0*			*2.0*	*2.0*
Arrival Type				*3*		*3*		*4*			*4*	*4*
Unit Extension				*3.0*		*3.0*		*3.0*			*3.0*	*3.0*
Ped/Bike/RTOR Volume				*0*	*0*	*0*	*0*	*0*		*0*	*0*	*715*
Lane Width				*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*
Minimum Pedestrian Time					*3.2*			*3.2*			*3.2*	

Phasing	WB Only	02	03	04	Thru & RT	06	07	08
Timing	G = *18.0*	G =	G =	G =	G = *47.0*	G =	G =	G =
	Y = *5*	Y =	Y =	Y =	Y = *5*	Y =	Y =	Y =

Duration of Analysis (hrs) = *0.25* | Cycle Length C = *75.0*

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate				*163*		*81*		*2946*			*2329*	*0*
Lane Group Capacity				*794*		*647*		*4158*			*4158*	*973*
v/c Ratio				*0.21*		*0.13*		*0.71*			*0.56*	*0.00*
Green Ratio				*0.24*		*0.24*		*0.63*			*0.63*	*0.63*
Uniform Delay d_1				*22.8*		*22.3*		*9.4*			*8.1*	*5.2*
Delay Factor k				*0.11*		*0.11*		*0.27*			*0.16*	*0.11*
Incremental Delay d_2				*0.1*		*0.1*		*0.1*			*0.0*	*0.0*
PF Factor				*1.000*		*1.000*		*0.507*			*0.507*	*1.000*
Control Delay				*22.9*		*22.4*		*4.8*			*4.1*	*5.2*
Lane Group LOS				*C*		*C*		*A*			*A*	*A*
Approach Delay				*22.7*			*4.8*			*4.1*		
Approach LOS				*C*			*A*			*A*		
Intersection Delay	*5.3*			Intersection LOS						*A*		

SHORT REPORT

General Information		Site Information	
Analyst	AJC	Intersection	I-75 EB/SB OFF & SR 951
Agency or Co.	AIM Engineering	Area Type	All other areas
Date Performed	03/20/2012	Jurisdiction	
Time Period	AM	Analysis Year	2029 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		3					4	1	2	4	
Lane Group	L		R					T	R	L	T	
Volume (vph)	562		1349					3954	122	60	2308	
% 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	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	40	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 = 29.0	G =	G =	G =	G = 19.0	G = 71.0	G = 13.0	G =
	Y = 5	Y =	Y =	Y =	Y = 4	Y = 4	Y = 5	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 150.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	592		1420					4162	86	63	2429	
Lane Group Capacity	639		1639					4158	1325	292	3893	
v/c Ratio	0.93		0.87					1.00	0.06	0.22	0.62	
Green Ratio	0.19		0.35					0.63	0.85	0.09	0.59	
Uniform Delay d_1	59.5		45.2					28.0	1.7	63.8	20.2	
Delay Factor k	0.44		0.40					0.50	0.11	0.11	0.21	
Incremental Delay d_2	19.7		5.2					4.4	0.0	0.3	0.3	
PF Factor	1.000		0.941					0.507	0.392	1.000	0.606	
Control Delay	79.1		47.7					18.6	0.7	64.1	12.5	
Lane Group LOS	E		D					B	A	E	B	
Approach Delay	57.0						18.2			13.8		
Approach LOS	E						B			B		
Intersection Delay	25.9			Intersection LOS						C		

SHORT REPORT

General Information		Site Information	
Analyst	AL	Intersection	GGP & I-75 NB OFF
Agency or Co.	AIM Engineering	Area Type	All other areas
Date Performed	4/12/2012	Jurisdiction	
Time Period	AM	Analysis Year	2029 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)		1692			1435		475		12			
% Heavy Vehicles		4			4		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		4			4		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 = 71.0	G =	G =	G =	G = 39.0	G =	G =	G =
	Y = 5	Y =	Y =	Y =	Y = 5	Y =	Y =	Y =

Duration of Analysis (hrs) = 0.25 | Cycle Length C = 120.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate		1781			1511		500		13			
Lane Group Capacity		2945			2945		1075		495			
v/c Ratio		0.60			0.51		0.47		0.03			
Green Ratio		0.59			0.59		0.32		0.32			
Uniform Delay d_1		15.6			14.4		32.2		27.6			
Delay Factor k		0.19			0.12		0.11		0.11			
Incremental Delay d_2		0.4			0.2		0.3		0.0			
PF Factor		0.595			0.595		1.000		1.000			
Control Delay		9.6			8.7		32.5		27.6			
Lane Group LOS		A			A		C		C			
Approach Delay	9.6			8.7			32.4					
Approach LOS	A			A			C					
Intersection Delay	12.3			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	*4/22/2012*	Jurisdiction	
Time Period	*AM*	Analysis Year	*2029 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		*4*	*1*	*1*	*3*					*2*		*2*
Lane Group		*T*	*R*	*L*	*T*					*L*		*R*
Volume (vph)		*1544*	*373*	*9*	*1901*					*768*		*1381*
% Heavy Vehicles		*4*	*4*	*4*	*4*					*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		*4*	*3*	*3*	*4*					*3*		*3*
Unit Extension		*3.0*	*3.0*	*3.0*	*3.0*					*3.0*		*3.0*
Ped/Bike/RTOR Volume	*0*	*0*	*373*	*0*	*0*					*0*	*0*	*60*
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 = *36.0*	G =	G =	G = *62.0*	G =	G =	G =
	Y = *4*	Y = *5*	Y =	Y =	Y = *5*	Y =	Y =	Y =
Duration of Analysis (hrs) = *0.25*						Cycle Length C = *120.0*		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate		*1625*	*0*	*9*	*2001*					*808*		*1391*
Lane Group Capacity		*1991*	*466*	*116*	*1991*					*1709*		*1393*
v/c Ratio		*0.82*	*0.00*	*0.08*	*1.01*					*0.47*		*1.00*
Green Ratio		*0.30*	*0.30*	*0.07*	*0.40*					*0.52*		*0.52*
Uniform Delay d_1		*38.9*	*29.4*	*52.5*	*36.0*					*18.5*		*29.0*
Delay Factor k		*0.36*	*0.11*	*0.11*	*0.50*					*0.11*		*0.50*
Incremental Delay d_2		*2.8*	*0.0*	*0.3*	*21.4*					*0.2*		*23.7*
PF Factor		*0.986*	*1.000*	*1.000*	*0.894*					*1.000*		*1.000*
Control Delay		*41.1*	*29.4*	*52.8*	*53.6*					*18.8*		*52.7*
Lane Group LOS		*D*	*C*	*D*	*D*					*B*		*D*
Approach Delay		*41.1*			*53.6*						*40.2*	
Approach LOS		*D*			*D*						*D*	
Intersection Delay		*45.1*			Intersection LOS						*D*	

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	AJC	Intersection	I-75 WB OFF @ SR 29
Agency/Co.	AIM ENGR	Jurisdiction	
Date Performed	2/21/2012	Analysis Year	2029 NO-BUILD
Analysis Time Period	PM		

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)	261	312			403	
Peak-Hour Factor, PHF	0.95	0.95	1.00	1.00	0.95	1.00
Hourly Flow Rate, HFR (veh/h)	274	328	0	0	424	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)				29		
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.95	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	0	0	0	30	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)	274		30					
C (m) (veh/h)	1036		128					
v/c	0.26		0.23					
95% queue length	1.07		0.86					
Control Delay (s/veh)	9.7		41.5					
LOS	A		E					
Approach Delay (s/veh)	--	--	41.5					
Approach LOS	--	--	E					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	AJC	Intersection	I-75 EB OFF@ SR 29
Agency/Co.	AIM ENGR	Jurisdiction	
Date Performed	2/21/2012	Analysis Year	2029 NO-BUILD
Analysis Time Period	PM		

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)		357		328	104	
Peak-Hour Factor, PHF	0.95	0.95	1.00	0.95	0.95	1.00
Hourly Flow Rate, HFR (veh/h)	0	375	0	345	109	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)	216					
Peak-Hour Factor, PHF	0.95	1.00	1.00	0.95	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	227	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)		345				227		
C (m) (veh/h)		1082				142		
v/c		0.32				1.60		
95% queue length		1.38				15.96		
Control Delay (s/veh)		9.9				355.8		
LOS		A				F		
Approach Delay (s/veh)	--	--				355.8		
Approach LOS	--	--				F		

SHORT REPORT

General Information		Site Information	
Analyst	AJC	Intersection	I-75 WB Off Ramp & CR 951
Agency or Co.	AIM Engineering	Area Type	All other areas
Date Performed	03/20/2012	Jurisdiction	
Time Period	PM	Analysis Year	2029 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			4	1
Lane Group				L		R		T			T	R
Volume (vph)				122		60		2868			2314	562
% Heavy Vehicles				6		6		3			3	3
PHF				0.95		0.95		0.95			0.95	0.95
Pretimed/Actuated (P/A)				A		A		A			A	A
Startup Lost Time				2.0		2.0		2.0			2.0	2.0
Extension of Effective Green				2.0		2.0		2.0			2.0	2.0
Arrival Type				4		4		4			4	4
Unit Extension				3.0		3.0		3.0			3.0	3.0
Ped/Bike/RTOR Volume				0	0	0	0	0		0	0	562
Lane Width				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
Minimum Pedestrian Time					3.2			3.2			3.2	

Phasing	WB Only	02	03	04	Thru & RT	06	07	08
Timing	G = 25.0	G =	G =	G =	G = 52.5	G =	G =	G =
	Y = 5	Y =	Y =	Y =	Y = 5	Y =	Y =	Y =

Duration of Analysis (hrs) = 0.25 | Cycle Length C = 87.5

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate				128		63		3019			2436	0
Lane Group Capacity				945		771		4020			4020	941
v/c Ratio				0.14		0.08		0.75			0.61	0.00
Green Ratio				0.29		0.29		0.60			0.60	0.60
Uniform Delay d_1				23.2		22.9		12.7			11.0	7.0
Delay Factor k				0.11		0.11		0.31			0.19	0.11
Incremental Delay d_2				0.1		0.0		0.8			0.3	0.0
PF Factor				0.997		0.997		0.575			0.575	1.000
Control Delay				23.2		22.8		8.1			6.6	7.0
Lane Group LOS				C		C		A			A	A
Approach Delay				23.1			8.1			6.6		
Approach LOS				C			A			A		
Intersection Delay	8.0			Intersection LOS						A		

SHORT REPORT

General Information		Site Information	
Analyst	*AJC*	Intersection	*I-75 EB OFF & CR 951*
Agency or Co.	*AIM Engineering*	Area Type	*All other areas*
Date Performed	*03/20/2012*	Jurisdiction	
Time Period	*PM*	Analysis Year	*2029 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*		*3*					*4*	*1*	*2*	*4*	
Lane Group	*L*		*R*					*T*	*R*	*L*	*T*	
Volume (vph)	*715*		*1717*					*3502*	*155*	*77*	*2359*	
% Heavy Vehicles	*6*		*6*					*3*	*3*	*3*	*3*	
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	*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*	*21*	*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 = *46.0*	G =	G =	G =	G = *22.0*	G = *72.0*	G = *17.0*	G =
	Y = *5*	Y =	Y =	Y =	Y = *4*	Y = *4*	Y = *5*	Y =
Duration of Analysis (hrs) = *0.25*						Cycle Length C = *175.0*		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	*753*		*1807*					*3686*	*141*	*81*	*2483*	
Lane Group Capacity	*869*		*1935*					*3752*	*1335*	*331*	*3561*	
v/c Ratio	*0.87*		*0.93*					*0.98*	*0.11*	*0.24*	*0.70*	
Green Ratio	*0.26*		*0.42*					*0.56*	*0.85*	*0.10*	*0.53*	
Uniform Delay d_1	*61.6*		*48.7*					*37.7*	*2.1*	*73.1*	*30.5*	
Delay Factor k	*0.40*		*0.45*					*0.49*	*0.11*	*0.11*	*0.26*	
Incremental Delay d_2	*9.2*		*9.0*					*10.9*	*0.0*	*0.4*	*0.6*	
PF Factor	*1.000*		*0.876*					*0.662*	*0.387*	*1.000*	*0.715*	
Control Delay	*70.8*		*51.7*					*35.9*	*0.9*	*73.4*	*22.4*	
Lane Group LOS	*E*		*D*					*D*	*A*	*E*	*C*	
Approach Delay	*57.3*						*34.6*			*24.1*		
Approach LOS	*E*						*C*			*C*		
Intersection Delay	*38.1*			Intersection LOS						*D*		

SHORT REPORT

General Information		Site Information	
Analyst	AL	Intersection	GGP & I-75 NB OFF
Agency or Co.	AIM Engineering	Area Type	All other areas
Date Performed	4/12/2012	Jurisdiction	
Time Period	PM	Analysis Year	2029 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)		2402			936		373		9			
% Heavy Vehicles		4			4		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		4			4		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 = 71.0	G =	G =	G =	G = 39.0	G =	G =	G =
	Y = 5	Y =	Y =	Y =	Y = 5	Y =	Y =	Y =

Duration of Analysis (hrs) = 0.25 | Cycle Length C = 120.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate		2528			985		393		9			
Lane Group Capacity		2945			2945		1075		495			
v/c Ratio		0.86			0.33		0.37		0.02			
Green Ratio		0.59			0.59		0.32		0.32			
Uniform Delay d_1		20.3			12.5		31.0		27.5			
Delay Factor k		0.39			0.11		0.11		0.11			
Incremental Delay d_2		2.8			0.1		0.2		0.0			
PF Factor		0.595			0.595		1.000		1.000			
Control Delay		14.9			7.5		31.2		27.5			
Lane Group LOS		B			A		C		C			
Approach Delay	14.9			7.5			31.2					
Approach LOS	B			A			C					
Intersection Delay	14.7			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	*4/22/2012*	Jurisdiction	
Time Period	*PM*	Analysis Year	*2029 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		*4*	*1*	*1*	*3*					*2*		*2*
Lane Group		*T*	*R*	*L*	*T*					*L*		*R*
Volume (vph)		*2807*	*475*	*12*	*1297*					*976*		*620*
% Heavy Vehicles		*4*	*4*	*4*	*4*					*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		*4*	*3*	*3*	*4*					*3*		*3*
Unit Extension		*3.0*	*3.0*	*3.0*	*3.0*					*3.0*		*3.0*
Ped/Bike/RTOR Volume	*0*	*0*	*475*	*0*	*0*					*0*	*0*	*60*
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 = *60.0*	G =	G =	G = *38.0*	G =	G =	G =
	Y = *4*	Y = *5*	Y =	Y =	Y = *5*	Y =	Y =	Y =
Duration of Analysis (hrs) = *0.25*						Cycle Length C = *120.0*		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate		*2955*	*0*	*13*	*1365*					*1027*		*589*
Lane Group Capacity		*3318*	*777*	*116*	*2986*					*1047*		*854*
v/c Ratio		*0.89*	*0.00*	*0.11*	*0.46*					*0.98*		*0.69*
Green Ratio		*0.50*	*0.50*	*0.07*	*0.60*					*0.32*		*0.32*
Uniform Delay d_1		*27.0*	*15.0*	*52.7*	*13.2*					*40.6*		*35.8*
Delay Factor k		*0.41*	*0.11*	*0.11*	*0.11*					*0.49*		*0.26*
Incremental Delay d_2		*3.4*	*0.0*	*0.4*	*0.1*					*23.2*		*2.4*
PF Factor		*0.767*	*1.000*	*1.000*	*0.575*					*1.000*		*1.000*
Control Delay		*24.2*	*15.0*	*53.1*	*7.7*					*63.8*		*38.2*
Lane Group LOS		*C*	*B*	*D*	*A*					*E*		*D*
Approach Delay		*24.2*			*8.1*						*54.5*	
Approach LOS		*C*			*A*						*D*	
Intersection Delay		*28.7*			Intersection LOS						*C*	

ALTERNATIVE 4

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AJC
Agency/Co.	AIM ENGR
Date Performed	3/21/2012
Analysis Time Period	AM

Site Information

Intersection	WB OFF @ SR 29
Jurisdiction	
Analysis Year	2029 EVERGLADES

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)	356	186			261	
Peak-Hour Factor, PHF	0.95	0.95	1.00	1.00	0.95	1.00
Hourly Flow Rate, HFR (veh/h)	374	195	0	0	274	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)				37		
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.95	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	0	0	0	38	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)	374		38					
C (m) (veh/h)	1182		134					
v/c	0.32		0.28					
95% queue length	1.37		1.09					
Control Delay (s/veh)	9.4		42.2					
LOS	A		E					
Approach Delay (s/veh)	--	--	42.2					
Approach LOS	--	--	E					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	AJC	Intersection	I-75 EB OFF@ SR 29
Agency/Co.	AIM ENGR	Jurisdiction	
Date Performed	3/22/2012	Analysis Year	2029 EVERGLADES
Analysis Time Period	AM		

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)		408		183	115	
Peak-Hour Factor, PHF	0.95	0.95	1.00	0.95	0.95	1.00
Hourly Flow Rate, HFR (veh/h)	0	429	0	192	121	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)	134					
Peak-Hour Factor, PHF	0.95	1.00	1.00	0.95	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	141	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)		192				141		
C (m) (veh/h)		1031				236		
v/c		0.19				0.60		
95% queue length		0.68				3.45		
Control Delay (s/veh)		9.3				40.6		
LOS		A				E		
Approach Delay (s/veh)	--	--				40.6		
Approach LOS	--	--				E		

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	GSR
Agency/Co.	AIM ENGR
Date Performed	3/31/2012
Analysis Time Period	AM

Site Information

Intersection	I-75 EB OFF@ EVERGLADES
Jurisdiction	
Analysis Year	2029 EVERGLADES

Project Description

East/West Street: *I-75 Ramps* | North/South Street: *EVERGLADES BLVD*

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)				122		
Peak-Hour Factor, PHF	0.95	0.95	1.00	0.95	0.95	1.00
Hourly Flow Rate, HFR (veh/h)	0	0	0	128	0	0
Percent Heavy Vehicles	6	--	--	2	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	0	0	1	0	0
Configuration				L		
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	1083					
Peak-Hour Factor, PHF	0.95	1.00	1.00	0.95	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	1140	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)		128				1140		
C (m) (veh/h)		1623				667		
v/c		0.08				1.71		
95% queue length		0.26				65.64		
Control Delay (s/veh)		7.4				342.0		
LOS		A				F		
Approach Delay (s/veh)	--	--				342.0		
Approach LOS	--	--				F		

SHORT REPORT

General Information		Site Information	
Analyst	GSR	Intersection	EB I-75 RAMPS/EVERGLADES
Agency or Co.	AIM ENGINEERING	Area Type	All other areas
Date Performed	3/29/2012	Jurisdiction	
Time Period	AM PEAK HOUR	Analysis Year	INTERIM YEAR 2029

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	2							1		1	1	
Lane Group	L							T		L	T	
Volume (vph)	1083							5		122	5	
% Heavy Vehicles	6							2		6	2	
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	
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	EB Only	02	03	04	NS Perm	06	07	08
Timing	G = 50.0	G =	G =	G =	G = 15.0	G =	G =	G =
	Y = 5	Y =	Y =	Y =	Y = 5	Y =	Y =	Y =

Duration of Analysis (hrs) = 0.25 | Cycle Length C = 75.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	1140							5		128	5	
Lane Group Capacity	2205							373		270	373	
v/c Ratio	0.52							0.01		0.47	0.01	
Green Ratio	0.67							0.20		0.20	0.20	
Uniform Delay d_1	6.4							24.1		26.5	24.1	
Delay Factor k	0.12							0.11		0.11	0.11	
Incremental Delay d_2	0.2							0.0		1.3	0.0	
PF Factor	1.000							1.000		1.000	1.000	
Control Delay	6.6							24.1		27.8	24.1	
Lane Group LOS	A							C		C	C	
Approach Delay	6.6						24.1			27.7		
Approach LOS	A						C			C		
Intersection Delay	8.8			Intersection LOS						A		

SHORT REPORT

General Information		Site Information	
Analyst	AJC	Intersection	WB I-75 OFF & CR 951
Agency or Co.	AIM Engineering	Area Type	All other areas
Date Performed	03/16/2012	Jurisdiction	
Time Period	AM	Analysis Year	2029 Everglades

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			4	1
Lane Group				L		R		T			T	R
Volume (vph)				623		323		2488			2111	674
% Heavy Vehicles				6		6		4			4	4
PHF				0.95		0.95		0.95			0.95	0.95
Pretimed/Actuated (P/A)				A		A		A			A	A
Startup Lost Time				2.0		2.0		2.0			2.0	2.0
Extension of Effective Green				2.0		2.0		2.0			2.0	2.0
Arrival Type				3		3		4			4	3
Unit Extension				3.0		3.0		3.0			3.0	3.0
Ped/Bike/RTOR Volume				0	0	0	0	0		0	0	674
Lane Width				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
Minimum Pedestrian Time					3.2			3.2			3.2	

Phasing	WB Only	02	03	04	Thru & RT	06	07	08
Timing	G = 21.0	G =	G =	G =	G = 44.0	G =	G =	G =
	Y = 5	Y =	Y =	Y =	Y = 5	Y =	Y =	Y =

Duration of Analysis (hrs) = 0.25 | Cycle Length C = 75.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate				656		340		2619			2222	0
Lane Group Capacity				926		755		3893			3893	911
v/c Ratio				0.71		0.45		0.67			0.57	0.00
Green Ratio				0.28		0.28		0.59			0.59	0.59
Uniform Delay d_1				24.3		22.2		10.6			9.6	6.4
Delay Factor k				0.27		0.11		0.24			0.17	0.11
Incremental Delay d_2				2.5		0.4		0.0			0.1	0.0
PF Factor				1.000		1.000		0.606			0.606	1.000
Control Delay				26.8		22.7		6.5			5.9	6.4
Lane Group LOS				C		C		A			A	A
Approach Delay				25.4			6.5			5.9		
Approach LOS				C			A			A		
Intersection Delay	9.5			Intersection LOS						A		

SHORT REPORT

General Information		Site Information	
Analyst	AJC	Intersection	EB I-75 OFF & CR 951
Agency or Co.	AIM Engineering	Area Type	All other areas
Date Performed	03/16/2012	Jurisdiction	
Time Period	AM	Analysis Year	2029 Everglades

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	2		3					4	1	2	4	
Lane Group	L		R					T	R	L	T	
Volume (vph)	529		1341					3665	489	254	2480	
% 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	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	40	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 = 30.0	G =	G =	G =	G = 13.0	G = 71.0	G = 18.0	G =
	Y = 5	Y =	Y =	Y =	Y = 4	Y = 4	Y = 5	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 150.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	557		1412					3858	473	267	2611	
Lane Group Capacity	661		1484					3893	1273	404	4114	
v/c Ratio	0.84		0.95					0.99	0.37	0.66	0.63	
Green Ratio	0.20		0.32					0.59	0.82	0.12	0.62	
Uniform Delay d_1	57.7		49.9					30.6	3.5	63.1	17.9	
Delay Factor k	0.38		0.46					0.49	0.11	0.24	0.22	
Incremental Delay d_2	9.7		13.6					2.7	0.0	4.0	0.3	
PF Factor	1.000		0.970					0.606	0.319	1.000	0.525	
Control Delay	67.4		61.9					21.3	1.1	67.1	9.7	
Lane Group LOS	E		E					C	A	E	A	
Approach Delay	63.5						19.1			15.0		
Approach LOS	E						B			B		
Intersection Delay	27.3			Intersection LOS						C		

SHORT REPORT

General Information		Site Information	
Analyst	AJC	Intersection	GGP & I-75 NB OFF
Agency or Co.	AIM Engineering	Area Type	All other areas
Date Performed	03/16/2012	Jurisdiction	
Time Period	AM	Analysis Year	2029 Everglades

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)		1635			1340		742		20			
% Heavy Vehicles		4			4		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		4			4		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 = 71.0	G =	G =	G =	G = 39.0	G =	G =	G =
	Y = 5	Y =	Y =	Y =	Y = 5	Y =	Y =	Y =

Duration of Analysis (hrs) = 0.25 | Cycle Length C = 120.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate		1721			1411		781		21			
Lane Group Capacity		2945			2945		1075		495			
v/c Ratio		0.58			0.48		0.73		0.04			
Green Ratio		0.59			0.59		0.32		0.32			
Uniform Delay d_1		15.3			14.0		35.8		27.7			
Delay Factor k		0.18			0.11		0.29		0.11			
Incremental Delay d_2		0.3			0.1		2.5		0.0			
PF Factor		0.595			0.595		1.000		1.000			
Control Delay		9.4			8.4		38.3		27.8			
Lane Group LOS		A			A		D		C			
Approach Delay	9.4			8.4			38.0					
Approach LOS	A			A			D					
Intersection Delay	14.9			Intersection LOS						B		