SR-74 (Ortega Highway) Widening Project Supplemental Traffic Study

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The report presents traffic forecast data and related analysis for the Lower SR-74 Widening Project. It has been prepared to provide supporting data for the Project Report/Environmental Determination (PR/ED) being prepared for this section of Ortega Highway within the City of San Juan Capistrano.

TRAFFIC ANALYSIS

The section of Ortega Highway that is to be improved extends from the current two-lane section within the City of San Juan Capistrano (at the intersection of Calle Entradero) to just east of Antonio Parkway. The improvements will include widening to four lanes in this reach of Ortega Highway.

Long-range (2030) traffic volumes for this area were produced using the South County Sub-Area Model (SCSAM) and are consistent with those being used in the I-5/Ortega Highway Project Report (PR). The analysis in this supplemental report addresses the section of roadway within the City limits, including the three unsignalized intersections.

Arterial Analysis

To provide information on performance for roadway sections along Ortega Highway, a volume-to-capacity based analysis was performed. The peak hour lane capacity for the build alternative uses the Caltrans guidelines for multi-lane highways (see Table A-1 in the appendix). For the No Build, the capacity was reduced by 15 percent to account for the existing facility being two lanes with substandard shoulders and other constraints (the 15 percent reduction was estimated by examining the various factors affecting capacity as discussed in the Highway Capacity Manual (HCM)).

Table 1 summarizes the level of service (LOS) performance for these roadway sections within the project limits addressed here. For each of the AM and PM peak hours, the highest directional volume has been used for the analysis. As can be seen here, the roadway segments are forecast to operate at unacceptable levels of service under the 2030 No Build Alternative (LOS E/F). Under the 2030 Build Alternative, the roadway segments are forecast to operate at an acceptable level of service (LOS B/C).

Table 1

MAINLINE LOS SUMMARY

Location	Lane Design Capacity	EXISTING					2030 NO-BUILD					2030 BUILD				
		Number of Lanes	Peak Hour Facility Capacity	Peak Hour Volume*	V/C	LOS	Number of Lanes	Peak Hour Facility Capacity	Peak Hour Volume*	V/C	LOS	Number of Lanes	Peak Hour Facility Capacity	Peak Hour Volumes	V/C	LOS
SR-74 w/o Via Cordova																
AM	2,100	1	1,785	1,586	.89	E	1	1,785	2,046	1.15	F	2	4,200	2,046	.49	C
PM	2,100	1	1,785	1,180	.66	C	1	1,785	1,973	1.11	F	2	4,200	1,973	.47	B
SR-74 w/o Via Cristal																
AM	2,100	1	1,785	1,351	.76	D	1	1,785	1,934	1.08	F	2	4,200	1,934	.46	B
PM	2,100	1	1,785	1,121	.63	C	1	1,785	1,822	1.02	F	2	4,200	1,822	.43	B
SR-74 w/o Avenida Siega																
AM	2,100	1	1,785	1,305	.73	D	1	1,785	1,878	1.05	F	2	4,200	1,878	.45	B
PM	2,100	1	1,785	1,001	.56	C	1	1,785	1,803	1.01	F	2	4,200	1,803	.43	B
SR-74 e/o Avenida Siega																
AM	2,100	1	1,785	1,319	.74	D	1	1,785	1,880	1.05	F	2	4,200	1,880	.45	B
PM	2,100	1	1,785	1,180	.66	C	1	1,785	1,770	.99	E	2	4,200	1,770	.42	B

*Highest one-way volume

Level of service values as follows:
A V/C < .30
B V/C .30 - .47
C V/C .48 - .68
D V/C .69 - .88
E V/C .88 – 1.00
F V/C > 1.00

Intersection Analysis

A Highway Capacity Manual (HCM) delay based analysis was carried out to provide information on performance for the three unsignalized intersections along this stretch of Ortega Highway. Table 2 summarizes the intersection performance for these unsignalized intersections. The analysis addresses only those movements that are stopped (i.e., side street traffic) or that make a left-turn into a side street.

Table 2 reveals that the three unsignalized intersections (Via Cordova and SR-74/Ortega Highway, Via Cristal and SR-74/Ortega Highway and Avenida Siega and SR-74/Ortega Highway) are forecast to operate at an unacceptable level of service (LOS F) under 2030 conditions. The unacceptable intersection LOS is a result of significant delays to minor street traffic due to the volume of traffic on SR-74/Ortega Highway. Although delays to intersection movements are less under the Build Alternative, delay to minor street left turn movements attempting to access the SR-74/Ortega Highway still exceed the acceptable seconds of delay threshold resulting in LOS F.

A possible mitigation for these side street delays would be to provide eastbound left turn lanes at the unsignalized intersections and allow U-turns at these locations. This would facilitate the movement of minor street traffic onto the SR-74/Ortega Highway via a right turn and then a U-turn at the next available intersection.

MEASURES OF EFFECTIVENESS

The measure of effectiveness (MOE) used to compare No-Build to Build conditions was the average travel time per vehicle for the section of highway being improved. Information for the MOE was prepared using data from Synchro 6.0 and SIMTRAFFIC and the results are summarized in Table 3. A comparison between 2030 No-Build and 2030 Build indicates a significant decrease in the average travel time per vehicle, particularly during the PM peak hour.

Table 2

DELAY AND LOS BY INTERSECTION MOVEMENTS

			Via Cordova & SR-74/Ortega Hwy			Via Cristal & SR-74/Ortega Hwy			Avenida Siega & SR-74/Ortega Hwy		
			Existing	2030 No-Build	2030 Build	Existing	2030 No-Build	2030 Build	Existing	2030 No-Build	2030 Build
EBL	AM	Delay	15	22	22	--	--	--	12	18	18
		LOS	B	C	C	--	--	--	B	C	C
	PM	Delay	*	*	23	--	--	--	*	*	14
		LOS	C	F	C	--	--	--	C	F	B
WBL	AM	Delay	*	*	16	10	15	15	*	*	15
		LOS	E	F	C	A	C	C	D	F	C
	PM	Delay	11	18	18	11	17	17	11	17	17
		LOS	B	C	C	B	C	C	B	C	C
NBL	AM	Delay	118	**	**	**	**	**	85	**	**
		LOS	F	F	F	F	F	F	F	F	F
	PM	Delay	106	**	**	64	**	**	91	**	**
		LOS	F	F	F	F	F	F	F	F	F
SBL	AM	Delay	**	**	**	--	--	--	123	**	**
		LOS	F	F	F	--	--	--	F	F	F
	PM	Delay	173	**	**	--	--	--	**	**	**
		LOS	F	F	F	--	--	--	F	F	F
SBR	AM	Delay	19	34	33	--	--	--	26	59	20
		LOS	C	D	D	--	--	--	D	F	C
	PM	Delay	21	**	**	--	--	--	14	36	17
		LOS	C	F	F	--	--	--	B	E	C

* LOS is determined by segment performance (see Table 1)

** Denotes greater than 200 seconds of delay

Seconds of delay per vehicle	
LOS A	< 10
LOS B	> 10-15
LOS C	> 15-25
LOS D	> 25-30
LOS E	> 35-50
LOS F	> 50

SBR = Southbound Right
SBL= Southbound Left
NBL=Northbound Left
WBL=Westbound Left
EBL=Eastbound Left

Table 3

MEASURES OF EFFECTIVENESS

	Existing		2030 No-Build		2030 Build	
Intersection	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**
1. Via Cordova & Ortega						
Travel time/veh (mins)	.4	.5	.6	6.6	.5	.6
2. Cristal & Ortega						
Travel time/veh (mins)	.6	.6	.6	1.2	.6	.7
3. Avenida Siega & Ortega						
Travel time/veh (mins)	1.5	1.3	1.4	4.0	1.4	2.8

COMPARATIVE SUMMARY

This traffic study reviewed the No-build and Build Alternative improvement for the Lower SR-74 Widening Project for 2030 conditions. The improvement is the addition of one through lane in each direction. The analyses first examined the operational performance of individual intersection movements, followed by an analysis of the collective operational performance of these movements to determine intersection LOS. Finally, an evaluation was made of the overall performance of the mainline improvements as a system using a selected MOE.

Table 4 is a comparative summary of the operational performance of the No-build and Build Alternatives. Criteria used here includes intersection LOS, mainline roadway LOS, and overall system operation MOE for average vehicle travel time.

Table 4

COMPARATIVE SUMMARY OF SR-74 WIDENING ALTERNATIVES

Description	Intersection Operational Level of Service	Roadway Segment Level of Service	Measures of Effectiveness (MOE)
Existing – SR-74/Ortega Highway as a two-lane roadway from Calle Entradero to just east of Antonio Parkway.	o HCM LOS indicates acceptable LOS for all intersections.	o Volume-to-capacity LOS is C, D, or E depending on location and direction.	o Average peak hour travel time for a vehicle traversing the network is approximately one minute (62 seconds in the AM and 55 seconds in the PM hour). o
2030 No-Build Alternative – Same as existing but with 2030 forecast volumes.	o HCM LOS indicates unacceptable LOS for all intersections (LOS F) with the exception of Avenida Siega/SR-74 during the AM peak hour. o Unacceptable LOS for intersections results from significant delays experienced by left turning minor street traffic, (>60 secs).	o Volume-to-capacity LOS is unacceptable for roadway segments (LOS E/F).	o Average peak hour travel time for a vehicle traversing the network is approximately 1.2 to 4 minutes (4 minutes in the AM and 1.2 minutes in the PM peak hour). o
2030 Build Alternative – The improvements will widen SR-74/Ortega Highway to four lanes from the current two-lane section within the City of San Juan Capistrano (at the intersection of Calle Entradero) to just east of Antonio Parkway.	o HCM LOS indicates unacceptable LOS for all intersections (LOS F) with the exception of Avenida Siega/SR-74 during the AM peak hour. o Unacceptable LOS for intersections results from significant delays experienced by left turning minor street traffic, (>60 secs). o Provision of left turn lanes and permitting U-turns at intersections would assist minor street traffic to access SR-74/Ortega via a right turn and then a U-turn.	o Volume-to-capacity LOS is acceptable for all roadway segments.	o Average peak hour travel time for a vehicle traversing the network is approximately one minute (55 seconds in the AM and 73 seconds in the PM peak hour).

Note:
HCM = Highway Capacity Manual
LOS = Level of Service

APPENDIX A

HCM CALCULATIONS AND SYNCHRO SUMMARIES

Table A-1

CALTRANS TIA GUIDELINES

BASIC FREEWAY SEGMENTS @ 65 mi/hr

LOS	Maximum Density (pc/mi/ln)	Minimum Speed (mph)	Maximum V/C	Maximum Service Flow Rate (pc/hr/ln)
A	11	65.0	0.30	710
B	18	65.0	0.50	1170
C	26	64.6	0.71	1680
D	35	59.7	0.89	2090
E	45	52.3	1.00	2350

SIGNALIZED INTERSECTIONS and RAMP TERMINALS

LOS	Control Delay per Vehicle (sec/veh)
A	10
B	≤10-20
C	>20-35
D	>35-55
E	>55-80
F	>80

MULTI-LANE HIGHWAYS @ 55 mi/hr

LOS	Maximum Density (pc/mi/ln)	Minimum Speed (mph)	Maximum V/C	Maximum Service Flow Rate (pc/hr/ln)
A	11	55.0	0.29	600
B	18	55.0	0.47	990
C	26	54.9	0.68	1430
D	35	52.9	0.88	1850
E	41	51.2	1.00	2100

Dotted line represents the transition between LOS 'C' and LOS 'D'

Existing AM Peak Hour
1: SR-74 #1 & Via Cordova 8/20/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	33	821	11	2	1511	9	14	0	6	7	0	61
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
Hourly flow rate (vph)	35	864	12	2	1591	9	15	0	6	7	0	64
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	1600			876			1797	2538	864	2539	2545	800
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1600			876			1797	2538	864	2539	2545	800
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
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			61	100	98	41	100	80
cM capacity (veh/h)	405			767			38	24	297	12	24	328

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1	SB 2
Volume Total	35	864	12	2	1060	540	21	7	64
Volume Left	35	0	0	2	0	0	15	7	0
Volume Right	0	0	12	0	0	9	6	0	64
cSH	405	1700	1700	767	1700	1700	51	12	328
Volume to Capacity	0.09	0.51	0.01	0.00	0.62	0.32	0.41	0.59	0.20
Queue Length 95th (ft)	7	0	0	0	0	0	38	34	18
Control Delay (s)	14.7	0.0	0.0	9.7	0.0	0.0	117.8	497.9	18.6
Lane LOS	B			A			F	F	C
Approach Delay (s)	0.6			0.0			117.8	68.0	
Approach LOS							F	F	

Intersection Summary			
Average Delay	3.0		
Intersection Capacity Utilization	57.7%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	949	9	1	1318	33	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	999	9	1	1387	35	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			1008		2388	999
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1008		2388	999
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		7	99
cM capacity (veh/h)			687		37	295

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	999	9	1	1387	38
Volume Left	0	0	1	0	35
Volume Right	0	9	0	0	3
cSH	1700	1700	687	1700	40
Volume to Capacity	0.59	0.01	0.00	0.82	0.94
Queue Length 95th (ft)	0	0	0	0	91
Control Delay (s)	0.0	0.0	10.2	0.0	276.4
Lane LOS			B		F
Approach Delay (s)	0.0		0.0		276.4
Approach LOS					F

Intersection Summary			
Average Delay	4.3		
Intersection Capacity Utilization	79.4%	ICU Level of Service	D
Analysis Period (min)	15		

Existing AM Peak Hour
3: SR-74 #1 & Ave Siega 8/20/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	3	743	13	4	1295	7	3	0	2	3	0	7
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
Hourly flow rate (vph)	3	782	14	4	1363	7	3	0	2	3	0	7
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	1371			796			2174	2174	789	2166	2177	1367
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1371			796			2174	2174	789	2166	2177	1367
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 %	99			99			90	100	99	91	100	96
cM capacity (veh/h)	501			826			32	46	391	33	46	180

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1	SB 2
Volume Total	3	796	4	1371	5	3	7
Volume Left	3	0	4	0	3	3	0
Volume Right	0	14	0	7	2	0	7
cSH	501	1700	826	1700	50	33	180
Volume to Capacity	0.01	0.47	0.01	0.81	0.10	0.09	0.04
Queue Length 95th (ft)	0	0	0	0	8	7	3
Control Delay (s)	12.2	0.0	9.4	0.0	84.7	123.4	25.9
Lane LOS	B		A		F	F	D
Approach Delay (s)	0.0		0.0		84.7	55.1	
Approach LOS					F	F	

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	78.6%	ICU Level of Service	D
Analysis Period (min)	15		

1: SR-74 #1 & Via Cordova

Direction	EB	WB	NB	SB	All
Volume (vph)	865	1522	20	68	2475
Control Delay / Veh (s/v)	1	0	118	68	3
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	1	0	118	68	3
Total Delay (hr)	0	0	1	1	2
Stops / Veh	0.11	0.00	1.00	1.00	0.08
Stops (#)	97	4	20	68	189
Average Speed (mph)	29	30	2	4	26
Total Travel Time (hr)	6	9	1	1	17
Distance Traveled (mi)	164	266	1	5	436
Fuel Consumed (gal)	7	11	1	2	21
Fuel Economy (mpg)	22.2	24.2	NA	3.4	21.3
CO Emissions (kg)	0.52	0.77	0.04	0.11	1.43
NOx Emissions (kg)	0.10	0.15	0.01	0.02	0.28
VOC Emissions (kg)	0.12	0.18	0.01	0.02	0.33
Unserved Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

2: SR-74 #1 & Via Crystal

Direction	EB	WB	NB	All
Volume (vph)	958	1319	36	2313
Control Delay / Veh (s/v)	0	0	276	4
Queue Delay / Veh (s/v)	0	0	0	0
Total Delay / Veh (s/v)	0	0	276	4
Total Delay (hr)	0	0	3	3
Stops / Veh	0.00	0.00	1.00	0.02
Stops (#)	0	2	36	38
Average Speed (mph)	30	30	1	26
Total Travel Time (hr)	6	14	3	22
Distance Traveled (mi)	167	412	2	581
Fuel Consumed (gal)	7	17	2	26
Fuel Economy (mpg)	24.3	24.3	0.8	22.2
CO Emissions (kg)	0.48	1.19	0.16	1.83
NOx Emissions (kg)	0.09	0.23	0.03	0.36
VOC Emissions (kg)	0.11	0.28	0.04	0.42
Unserved Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0

3: SR-74 #1 & Ave Siega

Direction	EB	WB	NB	SB	All
Volume (vph)	759	1306	5	10	2080
Control Delay / Veh (s/v)	0	0	85	55	1
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	0	0	85	55	1
Total Delay (hr)	0	0	0	0	0
Stops / Veh	0.01	0.01	1.00	1.00	0.01
Stops (#)	7	8	5	10	30
Average Speed (mph)	30	30	3	6	30
Total Travel Time (hr)	8	38	0	0	46
Distance Traveled (mi)	237	1143	0	1	1382
Fuel Consumed (gal)	10	47	0	0	57
Fuel Economy (mpg)	24.2	24.3	NA	NA	24.1
CO Emissions (kg)	0.69	3.29	0.01	0.02	4.00
NOx Emissions (kg)	0.13	0.64	0.00	0.00	0.78
VOC Emissions (kg)	0.16	0.76	0.00	0.00	0.93
Unserved Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

4: SR-74 #1 & Antonio

Direction	EB	WB	NB	SB	All
Volume (vph)	751	1112	65	627	2555
Control Delay / Veh (s/v)	437	32	9	11	145
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	437	32	9	11	145
Total Delay (hr)	91	10	0	2	103
Stops / Veh	0.96	0.55	0.74	0.64	0.70
Stops (#)	722	609	48	400	1779
Average Speed (mph)	6	18	22	18	8
Total Travel Time (hr)	113	24	1	5	143
Distance Traveled (mi)	657	436	13	83	1189
Fuel Consumed (gal)	98	28	1	7	134
Fuel Economy (mpg)	6.7	15.3	NA	11.9	8.9
CO Emissions (kg)	6.84	1.99	0.07	0.49	9.39
NOx Emissions (kg)	1.33	0.39	0.01	0.09	1.83
VOC Emissions (kg)	1.59	0.46	0.02	0.11	2.18
Unserved Vehicles (#)	282	0	0	0	282
Vehicles in dilemma zone (#)	0	0	0	0	0

SR-74 #1

Direction	EB	WB	All
Control Delay / Veh (s/v)	99	7	42
Queue Delay / Veh (s/v)	0	0	0
Total Delay / Veh (s/v)	99	7	42
Total Delay (hr)	91	10	101
Stops / Veh	0.25	0.12	0.17
Stops (#)	826	623	1449
Average Speed (mph)	9	27	16
Total Travel Time (hr)	132	85	217
Distance Traveled (mi)	1226	2256	3482
Fuel Consumed (gal)	122	104	225
Fuel Economy (mpg)	10.0	21.8	15.4
CO Emissions (kg)	8.52	7.24	15.76
NOx Emissions (kg)	1.66	1.41	3.07
VOC Emissions (kg)	1.98	1.68	3.65
Unserved Vehicles (#)	282	0	282
Vehicles in dilemma zone (#)	0	0	0
Performance Index	93.6	11.6	105.2

Network Totals

Number of Intersections	4
Control Delay / Veh (s/v)	41
Queue Delay / Veh (s/v)	0
Total Delay / Veh (s/v)	41
Total Delay (hr)	108
Stops / Veh	0.22
Stops (#)	2036
Average Speed (mph)	16
Total Travel Time (hr)	228
Distance Traveled (mi)	3588
Fuel Consumed (gal)	238
Fuel Economy (mpg)	15.1
CO Emissions (kg)	16.65
NOx Emissions (kg)	3.24
VOC Emissions (kg)	3.86
Unserved Vehicles (#)	282
Vehicles in dilemma zone (#)	0
Performance Index	113.8

1: SR-74 #1 & Via Cordova Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Total Delay (hr)	0.0	0.2	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.1	0.5
Delay / Veh (s)	14.4	4.0	12.3	4.2	3.2	2.4	74.2	0.7	40.9	17.2	4.9
Stop Delay (hr)	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.2
St Del/Veh (s)	10.2	1.4	6.3	1.0	0.1	0.0	72.0	2.1	39.0	16.8	2.1
Total Stops	5	0	0	1	0	0	4	0	2	13	25
Stop/Veh	0.83	0.00	0.00	1.00	0.00	0.00	1.33	0.00	1.00	1.00	0.06
Travel Dist (mi)	1.3	29.3	0.2	0.2	35.2	0.2	0.2	0.0	0.1	0.9	67.5
Travel Time (hr)	0.1	1.2	0.0	0.0	1.4	0.0	0.1	0.0	0.0	0.1	2.9
Avg Speed (mph)	21	26	23	27	25	21	3	4	5	9	24
Vehicles Entered	7	160	1	1	218	1	4	0	2	13	407

2: SR-74 #1 & Via Crystal Performance by movement

Movement	EBT	EBR	WBT	NBL	NBR	All
Total Delay (hr)	0.2	0.0	0.6	0.1	0.0	0.9
Delay / Veh (s)	4.5	2.1	10.7	20.5	2.5	7.9
Stop Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.1
St Del/Veh (s)	1.2	0.0	0.0	19.8	2.5	1.0
Total Stops	0	0	0	9	1	10
Stop/Veh	0.00	0.00	0.00	1.00	1.00	0.03
Travel Dist (mi)	29.8	0.3	60.0	0.4	0.0	90.6
Travel Time (hr)	1.3	0.0	2.6	0.1	0.0	4.0
Avg Speed (mph)	25	23	23	6	12	23
Vehicles Entered	186	2	201	10	1	400

3: SR-74 #1 & Ave Siega Performance by movement

Movement	EBT	WBT	WBR	NBL	SBR	All
Total Delay (hr)	0.3	1.4	0.0	0.0	0.0	1.8
Delay / Veh (s)	6.4	25.6	1.3	19.7	3.2	16.4
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
St Del/Veh (s)	0.0	0.2	0.0	18.0	2.5	0.1
Total Stops	0	0	0	1	1	2
Stop/Veh	0.00	0.00	0.00	1.00	1.00	0.01
Travel Dist (mi)	52.7	174.6	1.0	0.1	0.1	228.5
Travel Time (hr)	2.2	7.5	0.0	0.0	0.0	9.7
Avg Speed (mph)	24	23	22	8	21	24
Vehicles Entered	187	201	1	1	1	391

4: SR-74 #1 & Antonio Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR	All
Total Delay (hr)	5.0	1.5	0.3	0.1	1.7	0.1	0.0	0.0	0.0	0.0	0.3	9.1
Delay / Veh (s)	295.1	161.7	90.4	39.2	48.6	5.2	13.6	6.2	14.6	4.8	12.5	80.6
Stop Delay (hr)	4.2	1.1	0.2	0.1	1.2	0.0	0.0	0.0	0.0	0.0	0.2	7.1
St Del/Veh (s)	250.4	120.9	60.4	23.5	32.2	1.7	12.7	4.7	12.7	2.9	10.0	62.9
Total Stops	221	94	19	21	253	24	3	2	11	1	55	704
Stop/Veh	3.62	2.76	1.73	1.91	1.96	0.39	0.75	0.50	0.92	0.33	0.73	1.73
Travel Dist (mi)	70.1	34.6	10.9	4.5	50.8	23.9	0.6	0.8	1.6	0.4	9.6	207.7
Travel Time (hr)	7.5	2.7	0.7	0.3	3.5	1.0	0.0	0.0	0.1	0.0	0.7	16.5
Avg Speed (mph)	9	13	16	17	15	25	15	22	17	24	15	13
Vehicles Entered	97	42	14	12	133	62	3	4	13	3	78	461

Total Network Performance

Total Delay (hr)	12.5
Delay / Veh (s)	92.5
Stop Delay (hr)	7.5
St Del/Veh (s)	55.1
Total Stops	741
Stop/Veh	1.52
Travel Dist (mi)	670.0
Travel Time (hr)	36.0
Avg Speed (mph)	19
Vehicles Entered	565

Arterial Level of Service: EB SR-74 #1

Cross Street	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Via Cordova	4.0	27.1	0.2	27
Via Crystal	4.6	24.6	0.2	27
Ave Siega	6.5	42.1	0.3	27
La Pata	161.7	289.9	0.9	11
Total	176.7	383.8	1.6	15

Arterial Level of Service: WB SR-74 #1

Cross Street	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Antonio	48.6	96.5	0.4	15
Ave Siega	28.0	134.9	0.9	23
Via Crystal	10.8	49.5	0.3	23
Via Cordova	3.3	23.2	0.2	27
Total	90.7	304.1	1.8	21

Intersection: 1: SR-74 #1 & Via Cordova

Movement	EB	WB	NB	SB	SB
Directions Served	L	L	LR	L	TR
Maximum Queue (ft)	51	27	22	31	56
Average Queue (ft)	22	5	21	12	36
95th Queue (ft)	55	23	23	37	52
Link Distance (ft)			253	354	354
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	160	250			
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: SR-74 #1 & Via Crystal

Movement	NB
Directions Served	LR
Maximum Queue (ft)	45
Average Queue (ft)	31
95th Queue (ft)	60
Link Distance (ft)	209
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: SR-74 #1 & Ave Siega

Movement	NB	SB
Directions Served	LR	TR
Maximum Queue (ft)	32	31
Average Queue (ft)	6	6
95th Queue (ft)	27	27
Link Distance (ft)	342	634
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: SR-74 #1 & Antonio

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	TR	L	T	TR
Maximum Queue (ft)	376	2391	32	205	567	55	24	19	47	24	126
Average Queue (ft)	322	1074	19	134	429	45	12	5	30	5	102
95th Queue (ft)	476	2659	44	276	608	62	29	17	44	20	141
Link Distance (ft)		4540			2035	2035		1025		654	654
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	350		350	180			150		190		
Storage Blk Time (%)	58				46						
Queuing Penalty (veh)	160				28						

Nework Summary

Network wide Queuing Penalty: 188

1: SR-74 #1 & Via Cordova

Direction	EB	WB	NB	SB	All
Volume (vph)	1180	890	9	24	2103
Control Delay / Veh (s/v)	1	0	106	27	1
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	1	0	106	27	1
Total Delay (hr)	0	0	0	0	1
Stops / Veh	0.11	0.02	1.00	1.00	0.08
Stops (#)	124	20	9	24	177
Average Speed (mph)	29	30	2	7	28
Total Travel Time (hr)	8	5	0	0	13
Distance Traveled (mi)	224	155	1	2	381
Fuel Consumed (gal)	10	7	0	0	17
Fuel Economy (mpg)	22.3	23.8	NA	NA	22.2
CO Emissions (kg)	0.70	0.46	0.02	0.02	1.20
NOx Emissions (kg)	0.14	0.09	0.00	0.00	0.23
VOC Emissions (kg)	0.16	0.11	0.00	0.01	0.28
Unserved Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

2: SR-74 #1 & Via Crystal

Direction	EB	WB	NB	All
Volume (vph)	1121	805	17	1943
Control Delay / Veh (s/v)	0	0	64	1
Queue Delay / Veh (s/v)	0	0	0	0
Total Delay / Veh (s/v)	0	0	64	1
Total Delay (hr)	0	0	0	0
Stops / Veh	0.00	0.00	1.00	0.01
Stops (#)	0	4	17	21
Average Speed (mph)	30	30	3	29
Total Travel Time (hr)	7	8	0	15
Distance Traveled (mi)	196	252	1	448
Fuel Consumed (gal)	8	10	0	19
Fuel Economy (mpg)	24.3	24.2	NA	23.8
CO Emissions (kg)	0.56	0.73	0.02	1.31
NOx Emissions (kg)	0.11	0.14	0.00	0.26
VOC Emissions (kg)	0.13	0.17	0.01	0.30
Unserved Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0

3: SR-74 #1 & Ave Siega

Direction	EB	WB	NB	SB	All
Volume (vph)	1000	743	24	5	1772
Control Delay / Veh (s/v)	0	0	91	37	1
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	0	0	91	37	1
Total Delay (hr)	0	0	1	0	1
Stops / Veh	0.00	0.03	1.00	1.00	0.03
Stops (#)	2	19	24	5	50
Average Speed (mph)	30	30	3	9	29
Total Travel Time (hr)	10	22	1	0	33
Distance Traveled (mi)	312	650	2	1	965
Fuel Consumed (gal)	13	27	1	0	41
Fuel Economy (mpg)	24.3	24.2	NA	NA	23.8
CO Emissions (kg)	0.90	1.88	0.05	0.01	2.83
NOx Emissions (kg)	0.18	0.37	0.01	0.00	0.55
VOC Emissions (kg)	0.21	0.44	0.01	0.00	0.66
Unserved Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

4: SR-74 #1 & Antonio

Direction	EB	WB	NB	SB	All
Volume (vph)	1180	409	130	568	2287
Control Delay / Veh (s/v)	20	7	15	10	15
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	20	7	15	10	15
Total Delay (hr)	6	1	1	2	9
Stops / Veh	0.68	0.45	0.69	0.37	0.56
Stops (#)	806	183	90	212	1291
Average Speed (mph)	25	26	18	18	25
Total Travel Time (hr)	41	6	1	4	52
Distance Traveled (mi)	1032	160	26	75	1294
Fuel Consumed (gal)	52	8	2	5	67
Fuel Economy (mpg)	20.0	19.7	13.3	13.9	19.3
CO Emissions (kg)	3.61	0.57	0.14	0.38	4.70
NOx Emissions (kg)	0.70	0.11	0.03	0.07	0.91
VOC Emissions (kg)	0.84	0.13	0.03	0.09	1.09
Unserved Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

Network Totals

Number of Intersections	4
Control Delay / Veh (s/v)	5
Queue Delay / Veh (s/v)	0
Total Delay / Veh (s/v)	5
Total Delay (hr)	11
Stops / Veh	0.19
Stops (#)	1539
Average Speed (mph)	27
Total Travel Time (hr)	114
Distance Traveled (mi)	3089
Fuel Consumed (gal)	144
Fuel Economy (mpg)	21.5
CO Emissions (kg)	10.04
NOx Emissions (kg)	1.95
VOC Emissions (kg)	2.33
Unserved Vehicles (#)	0
Vehicles in dilemma zone (#)	0
Performance Index	15.2

Existing PM Peak Hour
1: SR-74 #1 & Via Cordova 8/20/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	60	1085	35	9	877	4	9	0	0	1	2	21
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
Hourly flow rate (vph)	63	1142	37	9	923	4	9	0	0	1	2	22
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	927			1179			1772	2215	1142	2213	2249	464
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	927			1179			1772	2215	1142	2213	2249	464
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
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			98			79	100	100	95	94	96
cM capacity (veh/h)	733			588			45	39	194	22	37	545

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1	SB 2
Volume Total	63	1142	37	9	615	312	9	1	24
Volume Left	63	0	0	9	0	0	9	1	0
Volume Right	0	0	37	0	0	4	0	0	22
cSH	733	1700	1700	588	1700	1700	45	22	248
Volume to Capacity	0.09	0.67	0.02	0.02	0.36	0.18	0.21	0.05	0.10
Queue Length 95th (ft)	7	0	0	1	0	0	17	4	8
Control Delay (s)	10.4	0.0	0.0	11.2	0.0	0.0	106.3	173.4	21.1
Lane LOS	B			B			F	F	C
Approach Delay (s)	0.5			0.1			106.3	27.4	
Approach LOS							F	D	

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	70.9%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	1099	22	2	803	13	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	1157	23	2	845	14	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			1180		2006	1157
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1180		2006	1157
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		79	98
cM capacity (veh/h)			592		65	239

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	1157	23	2	845	18
Volume Left	0	0	2	0	14
Volume Right	0	23	0	0	4
cSH	1700	1700	592	1700	78
Volume to Capacity	0.68	0.01	0.00	0.50	0.23
Queue Length 95th (ft)	0	0	0	0	20
Control Delay (s)	0.0	0.0	11.1	0.0	64.0
Lane LOS			B		F
Approach Delay (s)	0.0		0.0		64.0
Approach LOS					F

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	67.8%	ICU Level of Service	C
Analysis Period (min)	15		

Existing PM Peak Hour
3: SR-74 #1 & Ave Siega 8/20/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	1	991	9	9	730	5	20	0	4	2	0	3
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
Hourly flow rate (vph)	1	1043	9	9	768	5	21	0	4	2	0	3
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	774			1053			1841	1843	1048	1839	1845	771
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	774			1053			1841	1843	1048	1839	1845	771
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 %	100			99			63	100	98	96	100	99
cM capacity (veh/h)	842			661			57	74	277	56	74	400

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1	SB 2
Volume Total	1	1053	9	774	25	2	3
Volume Left	1	0	9	0	21	2	0
Volume Right	0	9	0	5	4	0	3
cSH	842	1700	661	1700	65	56	400
Volume to Capacity	0.00	0.62	0.01	0.46	0.39	0.04	0.01
Queue Length 95th (ft)	0	0	1	0	37	3	1
Control Delay (s)	9.3	0.0	10.5	0.0	91.1	71.3	14.1
Lane LOS	A		B		F	F	B
Approach Delay (s)	0.0		0.1		91.1	36.9	
Approach LOS					F	E	

Intersection Summary			
Average Delay	1.4		
Intersection Capacity Utilization	67.4%	ICU Level of Service	C
Analysis Period (min)	15		

1: SR-74 #1 & Via Cordova Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	SBT	SBR	All
Total Delay (hr)	0.1	1.0	0.0	0.0	0.3	0.0	0.1	0.0	0.0	1.6
Delay / Veh (s)	15.4	6.4	6.9	29.7	2.7	5.1	38.4	81.2	6.9	5.5
Stop Delay (hr)	0.1	0.4	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.6
St Del/Veh (s)	11.9	2.4	4.6	26.2	0.0	0.0	37.9	79.4	6.6	2.1
Total Stops	13	0	0	1	0	0	6	1	9	30
Stop/Veh	0.57	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.12	0.03
Travel Dist (mi)	4.2	102.9	4.4	0.2	67.2	0.2	0.3	0.1	0.5	179.9
Travel Time (hr)	0.3	4.5	0.2	0.0	2.6	0.0	0.1	0.0	0.0	7.8
Avg Speed (mph)	20	25	24	12	26	24	3	3	14	25
Vehicles Entered	23	563	24	1	414	1	5	1	7	1039

2: SR-74 #1 & Via Crystal Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Total Delay (hr)	0.7	0.0	0.0	0.9	0.0	0.0	1.7
Delay / Veh (s)	4.8	4.4	8.7	8.2	22.2	25.9	6.4
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.2
St Del/Veh (s)	0.3	1.1	7.4	0.2	21.2	26.5	0.6
Total Stops	0	0	1	0	8	4	13
Stop/Veh	0.00	0.00	0.50	0.00	1.00	1.00	0.01
Travel Dist (mi)	97.3	1.3	0.6	113.9	0.3	0.2	213.6
Travel Time (hr)	4.1	0.1	0.0	4.8	0.1	0.0	9.0
Avg Speed (mph)	24	22	23	24	5	4	24
Vehicles Entered	569	8	2	383	8	4	974

3: SR-74 #1 & Ave Siega Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBR	All
Total Delay (hr)	0.0	1.3	0.0	0.0	1.8	0.0	0.0	0.0	0.0	3.3
Delay / Veh (s)	14.2	8.7	14.0	26.4	17.8	28.8	24.6	11.3	6.2	12.4
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
St Del/Veh (s)	1.2	0.0	0.0	7.4	0.3	0.2	23.6	11.2	5.6	0.4
Total Stops	1	0	0	4	0	0	6	4	4	19
Stop/Veh	0.50	0.00	0.00	0.80	0.00	0.00	1.00	1.00	1.00	0.02
Travel Dist (mi)	0.6	167.1	1.5	3.6	306.6	3.5	0.4	0.3	0.5	484.0
Travel Time (hr)	0.0	7.1	0.1	0.2	12.4	0.1	0.1	0.0	0.0	20.0
Avg Speed (mph)	23	24	23	22	25	24	7	10	18	24
Vehicles Entered	2	560	5	4	358	4	6	4	3	946

4: SR-74 #1 & Antonio Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	2.6	4.6	0.1	0.0	0.4	0.0	0.3	0.0	0.0	0.7	0.0	0.4
Delay / Veh (s)	54.1	43.0	27.2	18.0	9.5	2.3	26.4	9.4	8.1	23.6	18.2	7.5
Stop Delay (hr)	1.2	1.2	0.0	0.0	0.2	0.0	0.3	0.0	0.0	0.6	0.0	0.3
St Del/Veh (s)	25.3	11.2	1.0	9.8	4.1	1.4	24.0	7.0	7.9	20.6	15.4	5.9
Total Stops	187	295	6	2	51	20	37	2	9	90	6	118
Stop/Veh	1.09	0.76	0.43	1.00	0.34	0.54	0.90	0.33	0.69	0.82	0.75	0.68
Travel Dist (mi)	141.2	318.2	11.8	0.8	57.8	14.0	7.8	1.3	2.7	13.6	1.0	21.9
Travel Time (hr)	7.6	15.6	0.5	0.0	2.4	0.5	0.6	0.1	0.1	1.2	0.1	1.3
Avg Speed (mph)	19	21	22	23	24	26	14	21	21	13	14	18
Vehicles Entered	180	399	14	2	153	37	39	7	14	108	8	173

4: SR-74 #1 & Antonio Performance by movement

Movement	All
Total Delay (hr)	9.2
Delay / Veh (s)	29.7
Stop Delay (hr)	3.9
St Del/Veh (s)	12.5
Total Stops	823
Stop/Veh	0.74
Travel Dist (mi)	592.0
Travel Time (hr)	30.0
Avg Speed (mph)	20
Vehicles Entered	1134

Total Network Performance

Total Delay (hr)	17.5
Delay / Veh (s)	48.0
Stop Delay (hr)	4.7
St Del/Veh (s)	13.0
Total Stops	885
Stop/Veh	0.65
Travel Dist (mi)	1787.4
Travel Time (hr)	79.8
Avg Speed (mph)	23
Vehicles Entered	1354

Arterial Level of Service: EB SR-74 #1

Cross Street	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Via Cordova	6.4	29.2	0.2	25
Via Crystal	4.8	26.0	0.2	24
Ave Siega	8.7	45.9	0.3	25
La Pata	43.1	144.6	0.9	22
Total	63.0	245.7	1.6	23

Arterial Level of Service: WB SR-74 #1

Cross Street	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Antonio	9.5	57.4	0.4	25
Ave Siega	19.2	127.3	0.9	25
Via Crystal	8.3	45.5	0.3	25
Via Cordova	2.8	23.0	0.2	27
Total	39.8	253.2	1.8	25

Intersection: 1: SR-74 #1 & Via Cordova

Movement	EB	WB	NB	SB
Directions Served	L	L	LR	TR
Maximum Queue (ft)	31	31	22	32
Average Queue (ft)	19	3	9	18
95th Queue (ft)	42	17	26	43
Link Distance (ft)			253	354
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	160	250		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: SR-74 #1 & Via Crystal

Movement	WB	NB
Directions Served	L	LR
Maximum Queue (ft)	25	45
Average Queue (ft)	2	15
95th Queue (ft)	12	38
Link Distance (ft)		209
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	90	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: SR-74 #1 & Ave Siega

Movement	EB	WB	NB	SB
Directions Served	L	L	LR	TR
Maximum Queue (ft)	32	31	32	55
Average Queue (ft)	2	9	15	7
95th Queue (ft)	15	32	38	34
Link Distance (ft)			342	634
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	150	150		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: SR-74 #1 & Antonio

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	TR	L	T	TR
Maximum Queue (ft)	353	575	32	32	163	52	112	21	136	25	129
Average Queue (ft)	160	282	8	4	70	28	42	11	85	8	60
95th Queue (ft)	291	509	30	21	136	50	83	27	138	27	107
Link Distance (ft)		4540			2035	2035		1025		654	654
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	350		350	180			150		190		
Storage Blk Time (%)	0	1			0						
Queuing Penalty (veh)	3	4			0						

Nework Summary

Network wide Queuing Penalty: 8

2030 w/o Project AM Peak Hour
1: SR-74 #1 & Via Cordova 8/20/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	58	1667	19	4	1914	16	25	0	11	12	0	107
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
Hourly flow rate (vph)	61	1755	20	4	2015	17	26	0	12	13	0	113
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	2032			1775			3005	3917	1755	3920	3928	1016
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2032			1775			3005	3917	1755	3920	3928	1016
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
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 %	78			99			0	100	84	0	100	52
cM capacity (veh/h)	275			347			3	2	74	1	2	236

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1	SB 2
Volume Total	61	1755	20	4	1343	688	38	13	113
Volume Left	61	0	0	4	0	0	26	13	0
Volume Right	0	0	20	0	0	17	12	0	113
cSH	275	1700	1700	347	1700	1700	4	1	236
Volume to Capacity	0.22	1.03	0.01	0.01	0.79	0.40	10.62	16.72	0.48
Queue Length 95th (ft)	21	0	0	1	0	0	Err	Err	59
Control Delay (s)	21.8	0.0	0.0	15.5	0.0	0.0	Err	Err	33.5
Lane LOS	C			C			F	F	D
Approach Delay (s)	0.7			0.0			Err	1038.4	
Approach LOS							F	F	

Intersection Summary			
Average Delay	126.5		
Intersection Capacity Utilization	103.1%	ICU Level of Service	G
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	1674	16	2	1876	58	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	1762	17	2	1975	61	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			1779		3741	1762
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1779		3741	1762
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		0	95
cM capacity (veh/h)			349		5	105

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	1762	17	2	1975	66
Volume Left	0	0	2	0	61
Volume Right	0	17	0	0	5
cSH	1700	1700	349	1700	5
Volume to Capacity	1.04	0.01	0.01	1.16	12.68
Queue Length 95th (ft)	0	0	0	0	Err
Control Delay (s)	0.0	0.0	15.4	0.0	Err
Lane LOS			C		F
Approach Delay (s)	0.0		0.0		Err
Approach LOS					F

Intersection Summary			
Average Delay	173.5		
Intersection Capacity Utilization	108.9%	ICU Level of Service	G
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	5	1651	23	7	1861	12	5	0	4	5	0	12
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
Hourly flow rate (vph)	5	1738	24	7	1959	13	5	0	4	5	0	13
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	1972			1762			3747	3747	1750	3733	3753	1965
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1972			1762			3747	3747	1750	3733	3753	1965
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 %	98			98			0	100	96	0	100	84
cM capacity (veh/h)	294			354			2	4	106	2	4	79

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1	SB 2
Volume Total	5	1762	7	1972	9	5	13
Volume Left	5	0	7	0	5	5	0
Volume Right	0	24	0	13	4	0	13
cSH	294	1700	354	1700	3	2	79
Volume to Capacity	0.02	1.04	0.02	1.16	2.82	2.37	0.16
Queue Length 95th (ft)	1	0	2	0	58	40	13
Control Delay (s)	17.5	0.0	15.4	0.0	2717.4	3281.4	59.3
Lane LOS	C		C		F	F	F
Approach Delay (s)	0.1		0.1		2717.4	1007.0	
Approach LOS					F	F	

Intersection Summary			
Average Delay	11.7		
Intersection Capacity Utilization	110.3%	ICU Level of Service	H
Analysis Period (min)	15		

1: SR-74 #1 & Via Cordova

Direction	EB	WB	NB	SB	All
Volume (vph)	1744	1934	36	119	3833
Control Delay / Veh (s/v)	1	0	9999	1038	126
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	1	0	9999	1038	126
Total Delay (hr)	0	0	100	34	135
Stops / Veh	0.15	0.01	1.00	1.00	0.11
Stops (#)	253	12	36	119	420
Average Speed (mph)	29	30	0	0	4
Total Travel Time (hr)	11	11	100	35	157
Distance Traveled (mi)	331	338	2	9	679
Fuel Consumed (gal)	15	14	74	26	129
Fuel Economy (mpg)	21.7	24.2	0.0	0.3	5.3
CO Emissions (kg)	1.07	0.98	5.14	1.83	9.02
NOx Emissions (kg)	0.21	0.19	1.00	0.36	1.75
VOC Emissions (kg)	0.25	0.23	1.19	0.42	2.09
Unserved Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

2: SR-74 #1 & Via Crystal

Direction	EB	WB	NB	All
Volume (vph)	1690	1878	63	3631
Control Delay / Veh (s/v)	0	0	9999	173
Queue Delay / Veh (s/v)	0	0	0	0
Total Delay / Veh (s/v)	0	0	9999	173
Total Delay (hr)	0	0	175	175
Stops / Veh	0.00	0.00	1.00	0.02
Stops (#)	0	6	63	69
Average Speed (mph)	30	30	0	4
Total Travel Time (hr)	10	20	175	205
Distance Traveled (mi)	295	587	3	885
Fuel Consumed (gal)	12	24	129	165
Fuel Economy (mpg)	24.3	24.3	0.0	5.4
CO Emissions (kg)	0.85	1.69	9.00	11.54
NOx Emissions (kg)	0.17	0.33	1.75	2.24
VOC Emissions (kg)	0.20	0.39	2.09	2.67
Unserved Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0

3: SR-74 #1 & Ave Siega

Direction	EB	WB	NB	SB	All
Volume (vph)	1679	1880	9	17	3585
Control Delay / Veh (s/v)	0	0	2717	1007	12
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	0	0	2717	1007	12
Total Delay (hr)	0	0	7	5	12
Stops / Veh	0.01	0.01	1.00	1.00	0.02
Stops (#)	17	22	9	17	65
Average Speed (mph)	30	30	0	0	26
Total Travel Time (hr)	18	55	7	5	84
Distance Traveled (mi)	525	1645	1	2	2172
Fuel Consumed (gal)	22	68	5	4	98
Fuel Economy (mpg)	24.2	24.2	0.1	0.6	22.1
CO Emissions (kg)	1.52	4.74	0.35	0.26	6.87
NOx Emissions (kg)	0.30	0.92	0.07	0.05	1.34
VOC Emissions (kg)	0.35	1.10	0.08	0.06	1.59
Unserved Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

4: SR-74 #1 & Antonio

Direction	EB	WB	NB	SB	All
Volume (vph)	1660	680	1201	2290	5831
Control Delay / Veh (s/v)	258	15	221	257	222
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	258	15	221	257	222
Total Delay (hr)	119	3	74	164	359
Stops / Veh	0.84	0.67	0.82	0.76	0.79
Stops (#)	1393	457	990	1744	4584
Average Speed (mph)	9	23	3	2	5
Total Travel Time (hr)	167	12	82	174	435
Distance Traveled (mi)	1452	266	244	304	2266
Fuel Consumed (gal)	155	16	69	142	382
Fuel Economy (mpg)	9.4	17.0	3.5	2.1	5.9
CO Emissions (kg)	10.81	1.09	4.86	9.93	26.69
NOx Emissions (kg)	2.10	0.21	0.94	1.93	5.19
VOC Emissions (kg)	2.51	0.25	1.13	2.30	6.19
Unserved Vehicles (#)	411	0	317	779	1508
Vehicles in dilemma zone (#)	0	0	0	0	0

SR-74 #1

Direction	EB	WB	All
Control Delay / Veh (s/v)	63	2	33
Queue Delay / Veh (s/v)	0	0	0
Total Delay / Veh (s/v)	63	2	33
Total Delay (hr)	119	3	122
Stops / Veh	0.25	0.08	0.16
Stops (#)	1663	497	2160
Average Speed (mph)	13	29	18
Total Travel Time (hr)	206	98	304
Distance Traveled (mi)	2603	2836	5439
Fuel Consumed (gal)	204	122	325
Fuel Economy (mpg)	12.8	23.3	16.7
CO Emissions (kg)	14.24	8.51	22.75
NOx Emissions (kg)	2.77	1.65	4.43
VOC Emissions (kg)	3.30	1.97	5.27
Unserved Vehicles (#)	411	0	411
Vehicles in dilemma zone (#)	0	0	0
Performance Index	123.9	4.4	128.3

Network Totals

Number of Intersections	4
Control Delay / Veh (s/v)	145
Queue Delay / Veh (s/v)	0
Total Delay / Veh (s/v)	145
Total Delay (hr)	680
Stops / Veh	0.30
Stops (#)	5138
Average Speed (mph)	7
Total Travel Time (hr)	881
Distance Traveled (mi)	6003
Fuel Consumed (gal)	774
Fuel Economy (mpg)	7.8
CO Emissions (kg)	54.12
NOx Emissions (kg)	10.53
VOC Emissions (kg)	12.54
Unserved Vehicles (#)	1508
Vehicles in dilemma zone (#)	0
Performance Index	694.7

1: SR-74 #1 & Via Cordova Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	NBL	NBR	SBL	SBR	All
Total Delay (hr)	0.1	1.3	0.0	0.0	0.2	0.1	0.0	0.0	0.0	1.7
Delay / Veh (s)	25.0	17.6	18.0	12.5	3.5	122.5	26.8	119.4	11.3	12.7
Stop Delay (hr)	0.0	0.8	0.0	0.0	0.0	0.1	0.0	0.0	0.0	1.1
St Del/Veh (s)	21.1	11.5	12.9	11.5	0.0	121.1	26.7	117.7	11.2	8.0
Total Stops	5	0	0	1	0	4	4	2	15	31
Stop/Veh	0.62	0.00	0.00	1.00	0.00	2.00	1.33	2.00	1.00	0.07
Travel Dist (mi)	1.5	47.4	0.6	0.2	31.9	0.2	0.2	0.1	1.0	82.9
Travel Time (hr)	0.1	2.9	0.0	0.0	1.3	0.1	0.0	0.0	0.1	4.6
Avg Speed (mph)	19	23	23	18	25	2	6	3	11	22
Vehicles Entered	9	259	3	1	184	3	4	2	15	480

2: SR-74 #1 & Via Crystal Performance by movement

Movement	EBT	EBR	WBT	NBL	All
Total Delay (hr)	0.4	0.0	0.5	0.2	1.1
Delay / Veh (s)	6.1	4.1	10.2	66.4	9.1
Stop Delay (hr)	0.0	0.0	0.0	0.2	0.2
St Del/Veh (s)	0.0	0.0	0.0	66.2	1.5
Total Stops	0	0	0	10	10
Stop/Veh	0.00	0.00	0.00	1.00	0.02
Travel Dist (mi)	44.7	0.5	57.7	0.4	103.3
Travel Time (hr)	2.0	0.0	2.5	0.2	4.7
Avg Speed (mph)	23	22	23	2	22
Vehicles Entered	257	3	189	10	459

3: SR-74 #1 & Ave Siega Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Total Delay (hr)	0.0	0.8	0.0	0.0	1.2	0.0	0.1	0.0	0.0	0.0	2.2
Delay / Veh (s)	35.8	12.0	6.4	1.5	23.2	42.3	228.5	171.4	121.4	14.4	17.8
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2
St Del/Veh (s)	16.5	0.0	0.0	0.0	0.3	0.5	231.2	168.1	120.6	14.4	1.4
Total Stops	1	0	0	0	0	0	2	2	2	4	11
Stop/Veh	1.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	2.00	1.00	0.02
Travel Dist (mi)	0.3	77.0	1.2	0.0	163.4	0.9	0.1	0.1	0.2	0.5	243.7
Travel Time (hr)	0.0	3.5	0.1	0.0	7.0	0.0	0.1	0.1	0.0	0.0	10.8
Avg Speed (mph)	16	22	22	15	23	24	1	2	6	14	23
Vehicles Entered	1	251	4	0	189	1	1	2	2	4	455

4: SR-74 #1 & Antonio Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	3.8	1.2	2.5	2.0	1.1	0.0	6.1	10.7	0.7	0.6	5.9	8.4
Delay / Veh (s)	196.6	122.4	109.8	170.0	90.2	2.7	993.2	918.6	859.4	257.8	215.3	226.9
Stop Delay (hr)	2.8	0.7	1.5	1.8	0.9	0.0	6.0	10.5	0.7	0.5	5.5	7.7
St Del/Veh (s)	145.1	75.7	67.0	152.5	73.6	1.6	979.6	897.2	849.0	245.6	201.5	209.7
Total Stops	253	98	226	135	115	5	79	158	5	18	196	400
Stop/Veh	3.61	2.80	2.79	3.14	2.74	0.38	3.59	3.76	1.67	2.25	2.00	3.01
Travel Dist (mi)	70.3	33.0	76.9	18.7	16.6	5.3	4.3	8.1	0.5	1.1	12.3	16.8
Travel Time (hr)	6.2	2.3	5.2	2.7	1.6	0.2	6.2	11.0	0.7	0.6	6.3	9.1
Avg Speed (mph)	11	14	15	7	10	27	1	2	4	8	7	4
Vehicles Entered	99	45	99	51	43	14	27	53	3	9	102	136

4: SR-74 #1 & Antonio Performance by movement

Movement	All
Total Delay (hr)	42.9
Delay / Veh (s)	260.4
Stop Delay (hr)	38.7
St Del/Veh (s)	234.9
Total Stops	1688
Stop/Veh	2.85
Travel Dist (mi)	263.8
Travel Time (hr)	52.2
Avg Speed (mph)	9
Vehicles Entered	681

Total Network Performance

Total Delay (hr)	48.4
Delay / Veh (s)	271.1
Stop Delay (hr)	40.1
St Del/Veh (s)	225.0
Total Stops	1740
Stop/Veh	2.71
Travel Dist (mi)	799.6
Travel Time (hr)	76.4
Avg Speed (mph)	15
Vehicles Entered	752

Arterial Level of Service: EB SR-74 #1

Cross Street	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Via Cordova	17.6	40.4	0.2	24
Via Crystal	6.1	27.6	0.2	23
Ave Siega	12.0	50.6	0.3	22
La Pata	122.4	236.5	0.9	13
Total	158.2	355.1	1.6	16

Arterial Level of Service: WB SR-74 #1

Cross Street	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Antonio	90.2	140.0	0.4	10
Ave Siega	24.5	135.1	0.9	23
Via Crystal	10.3	49.8	0.3	23
Via Cordova	3.6	25.3	0.2	25
Total	128.6	350.2	1.8	18

Intersection: 1: SR-74 #1 & Via Cordova

Movement	EB	WB	NB	SB	SB
Directions Served	L	L	LR	L	TR
Maximum Queue (ft)	31	25	63	32	54
Average Queue (ft)	18	5	26	15	48
95th Queue (ft)	43	21	59	38	63
Link Distance (ft)			253	354	354
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	160	250			
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: SR-74 #1 & Via Crystal

Movement	NB
Directions Served	LR
Maximum Queue (ft)	86
Average Queue (ft)	57
95th Queue (ft)	84
Link Distance (ft)	209
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: SR-74 #1 & Ave Siega

Movement	EB	NB	SB	SB
Directions Served	L	LR	L	TR
Maximum Queue (ft)	32	71	29	31
Average Queue (ft)	6	31	14	23
95th Queue (ft)	27	77	35	42
Link Distance (ft)		342	634	634
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	150			
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: SR-74 #1 & Antonio

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	TR	L	T	TR
Maximum Queue (ft)	376	3027	376	205	936	32	175	1059	50	668	688
Average Queue (ft)	283	1155	235	174	616	23	175	1048	33	665	672
95th Queue (ft)	468	3075	460	276	1103	41	175	1063	57	676	685
Link Distance (ft)		4540			2035	2035		1025		654	654
Upstream Blk Time (%)								70		16	44
Queuing Penalty (veh)								0		0	0
Storage Bay Dist (ft)	350		350	180			150		190		
Storage Blk Time (%)	38	4	0	60			99			14	
Queuing Penalty (veh)	355	56	1	203			855			11	

Nework Summary

Network wide Queuing Penalty: 1480

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	105	1807	61	16	1799	7	16	0	0	12	4	37
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
Hourly flow rate (vph)	111	1902	64	17	1894	7	17	0	0	13	4	39
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	1901			1966			3145	4058	1902	4054	4118	951
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1901			1966			3145	4058	1902	4054	4118	951
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
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 %	64			94			0	100	100	0	0	85
cM capacity (veh/h)	309			292			0	2	59	1	1	261

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1	SB 2
Volume Total	111	1902	64	17	1262	639	17	13	43
Volume Left	111	0	0	17	0	0	17	13	0
Volume Right	0	0	64	0	0	7	0	0	39
cSH	309	1700	1700	292	1700	1700	0	1	14
Volume to Capacity	0.36	1.12	0.04	0.06	0.74	0.38	Err	21.50	3.12
Queue Length 95th (ft)	39	0	0	5	0	0	Err	Err	Err
Control Delay (s)	23.0	0.0	0.0	18.1	0.0	0.0	Err	Err	Err
Lane LOS	C			C			F	F	F
Approach Delay (s)	1.2			0.2			Err	Err	
Approach LOS							F	F	

Intersection Summary			
Average Delay	Err		
Intersection Capacity Utilization	109.3%	ICU Level of Service	H
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	1770	39	4	1799	23	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	1863	41	4	1894	24	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			1904		3765	1863
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1904		3765	1863
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		0	92
cM capacity (veh/h)			312		5	91

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	1863	41	4	1894	32
Volume Left	0	0	4	0	24
Volume Right	0	41	0	0	7
cSH	1700	1700	312	1700	6
Volume to Capacity	1.10	0.02	0.01	1.11	5.32
Queue Length 95th (ft)	0	0	1	0	Err
Control Delay (s)	0.0	0.0	16.7	0.0	Err
Lane LOS			C		F
Approach Delay (s)	0.0		0.0		Err
Approach LOS					F

Intersection Summary			
Average Delay	82.4		
Intersection Capacity Utilization	104.7%	ICU Level of Service	G
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	1759	16	16	1575	9	223	0	7	4	0	5
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
Hourly flow rate (vph)	2	1852	17	17	1658	9	235	0	7	4	0	5
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	1667			1868			3561	3565	1860	3559	3569	1663
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1667			1868			3561	3565	1860	3559	3569	1663
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 %	99			95			0	100	92	0	100	96
cM capacity (veh/h)	385			322			3	5	91	3	5	120

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1	SB 2
Volume Total	2	1868	17	1667	242	4	5
Volume Left	2	0	17	0	235	4	0
Volume Right	0	17	0	9	7	0	5
cSH	385	1700	322	1700	3	3	120
Volume to Capacity	0.01	1.10	0.05	0.98	80.09	1.49	0.04
Queue Length 95th (ft)	0	0	4	0	Err	34	3
Control Delay (s)	14.4	0.0	16.8	0.0	Err	2317.6	36.4
Lane LOS	B		C		F	F	E
Approach Delay (s)	0.0		0.2		Err	1050.3	
Approach LOS					F	F	

Intersection Summary			
Average Delay	638.7		
Intersection Capacity Utilization	119.7%	ICU Level of Service	H
Analysis Period (min)	15		

1: SR-74 #1 & Via Cordova

Direction	EB	WB	NB	SB	All
Volume (vph)	1973	1822	16	53	3864
Control Delay / Veh (s/v)	1	0	9999	9999	179
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	1	0	9999	9999	179
Total Delay (hr)	1	0	44	147	192
Stops / Veh	0.24	0.03	1.00	1.00	0.16
Stops (#)	482	58	16	53	609
Average Speed (mph)	28	30	0	0	3
Total Travel Time (hr)	13	11	44	147	216
Distance Traveled (mi)	374	318	1	4	697
Fuel Consumed (gal)	19	13	33	108	173
Fuel Economy (mpg)	20.2	23.6	0.0	0.0	4.0
CO Emissions (kg)	1.30	0.94	2.29	7.57	12.10
NOx Emissions (kg)	0.25	0.18	0.44	1.47	2.35
VOC Emissions (kg)	0.30	0.22	0.53	1.76	2.80
Unserved Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

2: SR-74 #1 & Via Crystal

Direction	EB	WB	NB	All
Volume (vph)	1809	1803	29	3641
Control Delay / Veh (s/v)	0	0	9999	80
Queue Delay / Veh (s/v)	0	0	0	0
Total Delay / Veh (s/v)	0	0	9999	80
Total Delay (hr)	0	0	81	81
Stops / Veh	0.00	0.01	1.00	0.01
Stops (#)	0	13	29	42
Average Speed (mph)	30	30	0	8
Total Travel Time (hr)	11	19	81	110
Distance Traveled (mi)	316	563	1	881
Fuel Consumed (gal)	13	23	59	96
Fuel Economy (mpg)	24.3	24.2	0.0	9.2
CO Emissions (kg)	0.91	1.63	4.14	6.68
NOx Emissions (kg)	0.18	0.32	0.81	1.30
VOC Emissions (kg)	0.21	0.38	0.96	1.55
Unserved Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0

3: SR-74 #1 & Ave Siega

Direction	EB	WB	NB	SB	All
Volume (vph)	1778	1600	230	9	3617
Control Delay / Veh (s/v)	0	0	9999	1050	639
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	0	0	9999	1050	639
Total Delay (hr)	0	0	639	3	642
Stops / Veh	0.00	0.03	1.00	1.00	0.08
Stops (#)	6	54	230	9	299
Average Speed (mph)	30	30	0	0	3
Total Travel Time (hr)	19	47	639	3	707
Distance Traveled (mi)	556	1400	16	1	1973
Fuel Consumed (gal)	23	58	470	2	553
Fuel Economy (mpg)	24.3	24.1	0.0	0.6	3.6
CO Emissions (kg)	1.60	4.05	32.86	0.14	38.66
NOx Emissions (kg)	0.31	0.79	6.39	0.03	7.52
VOC Emissions (kg)	0.37	0.94	7.62	0.03	8.96
Unserved Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

4: SR-74 #1 & Antonio

Direction	EB	WB	NB	SB	All
Volume (vph)	1770	490	1460	1970	5690
Control Delay / Veh (s/v)	422	11	323	118	256
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	422	11	323	118	256
Total Delay (hr)	207	1	131	65	404
Stops / Veh	0.93	0.62	0.86	0.66	0.79
Stops (#)	1651	304	1255	1292	4502
Average Speed (mph)	6	24	2	4	5
Total Travel Time (hr)	259	8	141	74	481
Distance Traveled (mi)	1549	192	296	261	2298
Fuel Consumed (gal)	225	11	115	65	416
Fuel Economy (mpg)	6.9	18.0	2.6	4.0	5.5
CO Emissions (kg)	15.71	0.75	8.04	4.57	29.07
NOx Emissions (kg)	3.06	0.15	1.57	0.89	5.66
VOC Emissions (kg)	3.64	0.17	1.86	1.06	6.74
Unserved Vehicles (#)	634	0	576	298	1508
Vehicles in dilemma zone (#)	0	0	0	0	0

SR-74 #1

Direction	EB	WB	All
Control Delay / Veh (s/v)	102	1	58
Queue Delay / Veh (s/v)	0	0	0
Total Delay / Veh (s/v)	102	1	58
Total Delay (hr)	208	2	210
Stops / Veh	0.29	0.08	0.20
Stops (#)	2139	429	2568
Average Speed (mph)	9	29	14
Total Travel Time (hr)	301	84	385
Distance Traveled (mi)	2794	2474	5268
Fuel Consumed (gal)	279	105	385
Fuel Economy (mpg)	10.0	23.5	13.7
CO Emissions (kg)	19.52	7.37	26.89
NOx Emissions (kg)	3.80	1.43	5.23
VOC Emissions (kg)	4.52	1.71	6.23
Unserved Vehicles (#)	634	0	634
Vehicles in dilemma zone (#)	0	0	0
Performance Index	213.9	2.8	216.7

Network Totals

Number of Intersections	4
Control Delay / Veh (s/v)	282
Queue Delay / Veh (s/v)	0
Total Delay / Veh (s/v)	282
Total Delay (hr)	1319
Stops / Veh	0.32
Stops (#)	5452
Average Speed (mph)	4
Total Travel Time (hr)	1514
Distance Traveled (mi)	5849
Fuel Consumed (gal)	1238
Fuel Economy (mpg)	4.7
CO Emissions (kg)	86.51
NOx Emissions (kg)	16.83
VOC Emissions (kg)	20.05
Unserved Vehicles (#)	1508
Vehicles in dilemma zone (#)	0
Performance Index	1334.1

1: SR-74 #1 & Via Cordova Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	SBL	SBT	SBR	All
Total Delay (hr)	4.5	104.1	3.3	0.0	0.6	0.0	0.4	2.4	0.3	1.1	116.8
Delay / Veh (s)	668.6	820.3	734.1	26.3	3.8	4.1	198.2	1762.1	398.3	287.1	381.3
Stop Delay (hr)	4.4	102.4	3.2	0.0	0.0	0.0	0.4	2.5	0.3	1.1	114.3
St Del/Veh (s)	653.7	806.3	722.1	22.6	0.0	0.0	199.9	1764.0	396.6	287.6	373.1
Total Stops	61	827	29	2	0	0	7	9	2	13	950
Stop/Veh	2.54	1.81	1.81	0.40	0.00	0.00	0.88	1.80	0.67	0.93	0.86
Travel Dist (mi)	4.5	83.9	2.9	0.9	98.2	0.7	0.3	0.5	0.1	0.9	192.9
Travel Time (hr)	4.6	107.0	3.4	0.1	4.0	0.0	0.5	2.5	0.3	1.2	123.5
Avg Speed (mph)	6	6	6	13	25	23	1	0	0	1	8
Vehicles Entered	25	464	18	5	573	4	7	9	2	13	1120

2: SR-74 #1 & Via Crystal Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Total Delay (hr)	10.5	0.1	0.0	1.6	0.1	0.0	12.3
Delay / Veh (s)	88.2	23.4	14.9	10.1	33.3	50.6	43.1
Stop Delay (hr)	8.9	0.0	0.0	0.0	0.1	0.0	9.1
St Del/Veh (s)	74.5	15.2	7.2	0.0	32.3	51.2	31.7
Total Stops	889	4	2	0	12	3	910
Stop/Veh	2.07	0.50	1.00	0.00	1.00	1.00	0.88
Travel Dist (mi)	75.0	1.4	0.6	181.9	0.5	0.1	259.5
Travel Time (hr)	13.1	0.1	0.0	7.9	0.1	0.0	21.3
Avg Speed (mph)	6	13	20	23	4	2	12
Vehicles Entered	443	8	2	581	12	3	1049

3: SR-74 #1 & Ave Siega Performance by movement

Movement	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Total Delay (hr)	21.0	0.0	0.0	3.6	0.0	21.3	1.2	0.1	0.0	47.3
Delay / Veh (s)	192.0	115.0	25.2	23.4	24.5	2476.7	4319.2	189.0	7.3	170.4
Stop Delay (hr)	18.2	0.0	0.0	0.0	0.0	21.3	1.2	0.1	0.0	40.8
St Del/Veh (s)	165.9	89.2	8.0	0.3	0.7	2478.3	4323.4	190.8	7.1	147.0
Total Stops	1691	2	3	0	0	38	2	1	2	1739
Stop/Veh	4.29	2.00	0.43	0.00	0.00	1.23	2.00	1.00	1.00	1.74
Travel Dist (mi)	123.2	0.4	5.8	486.4	3.8	1.9	0.1	0.1	0.2	622.0
Travel Time (hr)	25.2	0.0	0.3	20.8	0.2	21.4	1.2	0.1	0.0	69.2
Avg Speed (mph)	5	9	22	23	23	0	0	2	18	12
Vehicles Entered	416	2	7	560	5	37	2	1	2	1032

4: SR-74 #1 & Antonio Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	49.5	16.3	5.5	0.2	0.4	0.1	42.6	83.1	23.3	8.6	18.0	34.4
Delay / Veh (s)	967.8	750.2	656.6	18.3	13.6	5.6	2434.4	2356.0	2333.0	261.5	237.1	296.2
Stop Delay (hr)	44.9	14.4	4.9	0.1	0.3	0.1	42.3	82.2	23.1	8.3	17.1	32.5
St Del/Veh (s)	877.9	666.5	586.2	14.2	9.0	3.5	2414.9	2329.3	2307.3	250.8	224.2	279.8
Total Stops	3021	1051	331	31	69	48	318	626	170	214	491	1183
Stop/Veh	16.42	13.47	11.03	0.86	0.67	0.64	5.05	4.93	4.72	1.80	1.79	2.83
Travel Dist (mi)	168.2	68.0	26.1	13.5	39.9	28.9	12.2	24.8	7.1	14.4	34.2	52.5
Travel Time (hr)	55.3	18.5	6.4	0.7	1.8	1.2	43.1	84.0	23.6	9.2	19.3	36.6
Avg Speed (mph)	3	4	4	21	23	25	1	3	3	5	8	5
Vehicles Entered	240	98	37	35	106	74	66	129	37	115	275	426

4: SR-74 #1 & Antonio Performance by movement

Movement	All
Total Delay (hr)	282.0
Delay / Veh (s)	657.1
Stop Delay (hr)	270.0
St Del/Veh (s)	629.2
Total Stops	7553
Stop/Veh	4.89
Travel Dist (mi)	489.9
Travel Time (hr)	299.5
Avg Speed (mph)	4
Vehicles Entered	1638

Total Network Performance

Total Delay (hr)	459.8
Delay / Veh (s)	973.2
Stop Delay (hr)	434.3
St Del/Veh (s)	919.1
Total Stops	11152
Stop/Veh	6.56
Travel Dist (mi)	1886.3
Travel Time (hr)	526.3
Avg Speed (mph)	8
Vehicles Entered	1858

Arterial Level of Service: EB SR-74 #1

Cross Street	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Via Cordova	820.3	842.8	0.2	7
Via Crystal	87.6	108.9	0.2	6
Ave Siega	192.1	230.5	0.3	5
La Pata	750.2	856.0	0.9	4
Total	1850.2	2038.2	1.6	4

Arterial Level of Service: WB SR-74 #1

Cross Street	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Antonio	13.6	61.3	0.4	23
Ave Siega	25.4	134.3	0.9	23
Via Crystal	10.3	49.8	0.3	23
Via Cordova	3.8	25.3	0.2	25
Total	53.1	270.7	1.8	23

Intersection: 1: SR-74 #1 & Via Cordova

Movement	EB	EB	WB	NB	SB	SB
Directions Served	L	T	L	LR	L	TR
Maximum Queue (ft)	53	1000	31	127	182	246
Average Queue (ft)	19	641	5	24	116	99
95th Queue (ft)	59	1395	24	83	216	236
Link Distance (ft)		966		253	354	354
Upstream Blk Time (%)		43				
Queuing Penalty (veh)		0				
Storage Bay Dist (ft)	160		250			
Storage Blk Time (%)		44				
Queuing Penalty (veh)		73				

Intersection: 2: SR-74 #1 & Via Crystal

Movement	EB	WB	NB
Directions Served	T	L	LR
Maximum Queue (ft)	882	32	67
Average Queue (ft)	596	4	21
95th Queue (ft)	1254	22	49
Link Distance (ft)	856		209
Upstream Blk Time (%)	41		
Queuing Penalty (veh)	740		
Storage Bay Dist (ft)		90	
Storage Blk Time (%)	51		
Queuing Penalty (veh)	20		

Intersection: 3: SR-74 #1 & Ave Siega

Movement	EB	WB	NB	SB	SB
Directions Served	TR	L	LR	L	TR
Maximum Queue (ft)	1617	32	357	30	29
Average Queue (ft)	1194	7	333	4	4
95th Queue (ft)	2338	29	403	18	19
Link Distance (ft)	1592		342	634	634
Upstream Blk Time (%)	44		88		
Queuing Penalty (veh)	779		0		
Storage Bay Dist (ft)		150			
Storage Blk Time (%)	56				
Queuing Penalty (veh)	1				

Intersection: 4: SR-74 #1 & Antonio

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	TR	L	T	TR
Maximum Queue (ft)	395	4569	375	73	138	96	194	1056	215	669	688
Average Queue (ft)	368	3966	32	44	74	44	179	1041	135	659	661
95th Queue (ft)	441	6137	185	76	128	73	190	1048	238	705	715
Link Distance (ft)		4540			2035	2035		1025		654	654
Upstream Blk Time (%)		46						73		16	30
Queuing Penalty (veh)		807						0		0	0
Storage Bay Dist (ft)	350		350	180			150		190		
Storage Blk Time (%)	82	4					97	2	11	7	
Queuing Penalty (veh)	585	47					1103	8	35	20	

Nework Summary

Network wide Queuing Penalty: 4218

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	58	1667	19	4	1914	16	25	0	11	12	0	107
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
Hourly flow rate (vph)	61	1755	20	4	2015	17	26	0	12	13	0	113
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	2032			1775			3005	3917	877	3034	3920	1007
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2032			1775			3005	3917	877	3034	3920	1007
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
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 %	78			99			0	100	96	0	100	53
cM capacity (veh/h)	275			347			3	2	291	4	2	239

Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	WB 4	NB 1	SB 1	SB 2
Volume Total	61	877	877	20	4	1007	1007	17	38	13	113
Volume Left	61	0	0	0	4	0	0	0	26	13	0
Volume Right	0	0	0	20	0	0	0	17	12	0	113
cSH	275	1700	1700	1700	347	1700	1700	1700	4	4	239
Volume to Capacity	0.22	0.52	0.52	0.01	0.01	0.59	0.59	0.01	10.39	2.88	0.47
Queue Length 95th (ft)	21	0	0	0	1	0	0	0	Err	69	58
Control Delay (s)	21.8	0.0	0.0	0.0	15.5	0.0	0.0	0.0	Err	2363.3	32.9
Lane LOS	C				C				F	F	D
Approach Delay (s)	0.7				0.0				Err	267.9	
Approach LOS									F	F	

Intersection Summary			
Average Delay	102.6		
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	1674	16	2	1876	58	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	1762	17	2	1975	61	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			1779		2754	881
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1779		2754	881
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		0	98
cM capacity (veh/h)			345		16	290

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	881	881	17	2	987	987	66
Volume Left	0	0	0	2	0	0	61
Volume Right	0	0	17	0	0	0	5
cSH	1700	1700	1700	345	1700	1700	17
Volume to Capacity	0.52	0.52	0.01	0.01	0.58	0.58	3.91
Queue Length 95th (ft)	0	0	0	0	0	0	Err
Control Delay (s)	0.0	0.0	0.0	15.5	0.0	0.0	Err
Lane LOS				C			F
Approach Delay (s)	0.0			0.0			Err
Approach LOS							F

Intersection Summary			
Average Delay	173.5		
Intersection Capacity Utilization	62.0%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	5	1651	23	7	1861	12	5	0	4	5	0	12
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
Hourly flow rate (vph)	5	1738	24	7	1959	13	5	0	4	5	0	13
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	1972			1762			2755	3735	869	2857	3746	979
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1972			1762			2755	3735	869	2857	3746	979
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
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 %	98			98			38	100	99	28	100	95
cM capacity (veh/h)	290			350			8	4	295	7	4	249

Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	WB 4	NB 1	NB 2	SB 1	SB 2
Volume Total	5	869	869	24	7	979	979	13	5	4	5	13
Volume Left	5	0	0	0	7	0	0	0	5	0	5	0
Volume Right	0	0	0	24	0	0	0	13	0	4	0	13
cSH	290	1700	1700	1700	350	1700	1700	1700	8	295	7	249
Volume to Capacity	0.02	0.51	0.51	0.01	0.02	0.58	0.58	0.01	0.62	0.01	0.72	0.05
Queue Length 95th (ft)	1	0	0	0	2	0	0	0	30	1	32	4
Control Delay (s)	17.6	0.0	0.0	0.0	15.5	0.0	0.0	0.0	698.3	17.4	836.3	20.2
Lane LOS	C				C				F	C	F	C
Approach Delay (s)	0.1				0.1				395.7		260.2	
Approach LOS									F		F	

Intersection Summary			
Average Delay	2.3		
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		

1: SR-74 #1 & Via Cordova

Direction	EB	WB	NB	SB	All
Volume (vph)	1744	1934	36	119	3833
Control Delay / Veh (s/v)	1	0	9999	268	103
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	1	0	9999	268	103
Total Delay (hr)	0	0	100	9	109
Stops / Veh	0.15	0.01	1.00	1.00	0.11
Stops (#)	253	12	36	119	420
Average Speed (mph)	29	30	0	1	5
Total Travel Time (hr)	11	11	100	9	132
Distance Traveled (mi)	331	338	2	9	679
Fuel Consumed (gal)	15	14	74	8	110
Fuel Economy (mpg)	21.7	24.2	0.0	1.2	6.2
CO Emissions (kg)	1.07	0.98	5.14	0.53	7.71
NOx Emissions (kg)	0.21	0.19	1.00	0.10	1.50
VOC Emissions (kg)	0.25	0.23	1.19	0.12	1.79
Unserved Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

2: SR-74 #1 & Via Crystal

Direction	EB	WB	NB	All
Volume (vph)	1690	1878	63	3631
Control Delay / Veh (s/v)	0	0	9999	173
Queue Delay / Veh (s/v)	0	0	0	0
Total Delay / Veh (s/v)	0	0	9999	173
Total Delay (hr)	0	0	175	175
Stops / Veh	0.00	0.00	1.00	0.02
Stops (#)	0	6	63	69
Average Speed (mph)	30	30	0	4
Total Travel Time (hr)	10	20	175	205
Distance Traveled (mi)	295	587	3	885
Fuel Consumed (gal)	12	24	129	165
Fuel Economy (mpg)	24.3	24.3	0.0	5.4
CO Emissions (kg)	0.85	1.69	9.00	11.54
NOx Emissions (kg)	0.17	0.33	1.75	2.24
VOC Emissions (kg)	0.20	0.39	2.09	2.67
Unserved Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0

3: SR-74 #1 & Ave Siega

Direction	EB	WB	NB	SB	All
Volume (vph)	1679	1880	9	17	3585
Control Delay / Veh (s/v)	0	0	396	260	2
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	0	0	396	260	2
Total Delay (hr)	0	0	1	1	2
Stops / Veh	0.01	0.01	1.00	1.00	0.02
Stops (#)	18	22	9	17	66
Average Speed (mph)	30	30	1	2	29
Total Travel Time (hr)	18	55	1	1	75
Distance Traveled (mi)	525	1645	1	2	2172
Fuel Consumed (gal)	22	68	1	1	91
Fuel Economy (mpg)	24.2	24.2	NA	2.0	23.8
CO Emissions (kg)	1.52	4.74	0.06	0.08	6.39
NOx Emissions (kg)	0.30	0.92	0.01	0.01	1.24
VOC Emissions (kg)	0.35	1.10	0.01	0.02	1.48
Unserved Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

4: SR-74 #1 & Antonio

Direction	EB	WB	NB	SB	All
Volume (vph)	1660	680	1200	2290	5830
Control Delay / Veh (s/v)	47	13	25	12	25
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	47	13	25	12	25
Total Delay (hr)	21	2	8	8	40
Stops / Veh	0.72	0.63	0.65	0.56	0.63
Stops (#)	1200	425	775	1288	3688
Average Speed (mph)	21	23	15	17	20
Total Travel Time (hr)	70	11	16	18	116
Distance Traveled (mi)	1452	266	244	304	2266
Fuel Consumed (gal)	82	15	20	25	143
Fuel Economy (mpg)	17.7	17.6	12.0	12.0	15.8
CO Emissions (kg)	5.74	1.06	1.42	1.77	10.00
NOx Emissions (kg)	1.12	0.21	0.28	0.34	1.95
VOC Emissions (kg)	1.33	0.25	0.33	0.41	2.32
Unserved Vehicles (#)	31	0	0	0	31
Vehicles in dilemma zone (#)	0	0	0	0	0

SR-74 #1

Direction	EB	WB	All
Control Delay / Veh (s/v)	12	1	7
Queue Delay / Veh (s/v)	0	0	0
Total Delay / Veh (s/v)	12	1	7
Total Delay (hr)	22	3	24
Stops / Veh	0.22	0.07	0.15
Stops (#)	1471	465	1936
Average Speed (mph)	24	29	26
Total Travel Time (hr)	109	97	206
Distance Traveled (mi)	2603	2836	5439
Fuel Consumed (gal)	131	121	252
Fuel Economy (mpg)	19.8	23.4	21.5
CO Emissions (kg)	9.18	8.47	17.65
NOx Emissions (kg)	1.79	1.65	3.43
VOC Emissions (kg)	2.13	1.96	4.09
Unserved Vehicles (#)	31	0	31
Vehicles in dilemma zone (#)	0	0	0
Performance Index	25.9	3.8	29.8

Network Totals

Number of Intersections	4
Control Delay / Veh (s/v)	70
Queue Delay / Veh (s/v)	0
Total Delay / Veh (s/v)	70
Total Delay (hr)	327
Stops / Veh	0.25
Stops (#)	4243
Average Speed (mph)	11
Total Travel Time (hr)	527
Distance Traveled (mi)	6003
Fuel Consumed (gal)	510
Fuel Economy (mpg)	11.8
CO Emissions (kg)	35.64
NOx Emissions (kg)	6.93
VOC Emissions (kg)	8.26
Unserved Vehicles (#)	31
Vehicles in dilemma zone (#)	0
Performance Index	338.3

1: SR-74 #1 & Via Cordova Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Total Delay (hr)	0.3	0.6	0.0	0.0	1.1	0.0	1.3	0.5	0.5	0.4	4.6
Delay / Veh (s)	36.8	2.7	5.5	4.4	4.8	1.2	419.1	345.8	338.0	26.3	9.2
Stop Delay (hr)	0.2	0.1	0.0	0.0	0.0	0.0	1.3	0.5	0.5	0.4	3.0
St Del/Veh (s)	34.0	0.6	4.3	3.1	0.0	0.1	419.6	346.9	338.8	26.4	5.9
Total Stops	26	0	0	1	5	0	14	6	6	51	109
Stop/Veh	1.04	0.00	0.00	1.00	0.01	0.00	1.27	1.20	1.20	1.02	0.06
Travel Dist (mi)	4.8	153.9	1.9	0.2	150.0	1.2	0.5	0.3	0.4	3.4	316.6
Travel Time (hr)	0.4	6.0	0.1	0.0	6.3	0.1	1.3	0.5	0.5	0.5	15.7
Avg Speed (mph)	12	26	25	23	24	24	0	1	1	6	20
Vehicles Entered	26	839	11	1	870	7	13	6	6	52	1831

2: SR-74 #1 & Via Crystal Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Total Delay (hr)	0.7	0.0	0.0	2.5	0.2	0.0	3.4
Delay / Veh (s)	3.1	1.6	24.3	10.4	23.5	5.7	7.0
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.2	0.0	0.2
St Del/Veh (s)	0.0	0.0	6.9	0.0	22.6	5.7	0.4
Total Stops	0	0	1	1	28	1	31
Stop/Veh	0.00	0.00	1.00	0.00	1.00	1.00	0.02
Travel Dist (mi)	146.2	1.4	0.3	268.6	1.0	0.0	417.6
Travel Time (hr)	5.7	0.1	0.0	11.8	0.2	0.0	17.8
Avg Speed (mph)	26	23	19	23	4	10	23
Vehicles Entered	838	8	1	863	28	1	1739

3: SR-74 #1 & Ave Siega Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Total Delay (hr)	0.0	1.5	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	4.7
Delay / Veh (s)	22.1	6.4	1.5	9.2	13.1	16.0	44.3	7.8	15.0	10.8	9.9
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.2
St Del/Veh (s)	15.1	0.0	0.0	6.1	0.3	0.1	44.4	8.0	13.9	11.2	0.4
Total Stops	3	1	0	3	1	0	4	2	3	12	29
Stop/Veh	0.75	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	0.02
Travel Dist (mi)	1.2	255.2	4.1	2.6	743.4	4.3	0.2	0.1	0.3	1.4	1012.9
Travel Time (hr)	0.1	10.2	0.2	0.1	29.4	0.2	0.1	0.0	0.0	0.1	40.3
Avg Speed (mph)	18	25	26	27	25	25	3	12	14	15	25
Vehicles Entered	4	820	13	3	863	5	3	2	3	12	1728

4: SR-74 #1 & Antonio Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	26.3	3.5	4.9	10.0	1.1	0.1	9.7	1.5	0.0	0.5	1.6	1.4
Delay / Veh (s)	343.4	89.1	56.7	269.5	27.2	4.8	216.2	14.6	3.7	34.2	11.5	9.1
Stop Delay (hr)	23.3	2.4	2.4	9.5	0.9	0.0	9.3	1.0	0.0	0.4	1.1	1.0
St Del/Veh (s)	303.7	59.4	27.9	256.0	20.6	4.7	208.2	9.8	3.5	31.1	7.8	6.1
Total Stops	1218	268	460	283	132	24	232	252	13	48	292	344
Stop/Veh	4.41	1.87	1.47	2.13	0.89	0.63	1.44	0.67	0.38	0.96	0.59	0.60
Travel Dist (mi)	258.7	125.3	273.7	53.8	55.8	14.4	32.3	72.6	6.6	6.0	59.8	68.8
Travel Time (hr)	35.2	7.8	14.6	11.8	3.1	0.6	10.8	4.0	0.3	0.7	3.7	4.3
Avg Speed (mph)	7	16	19	5	18	25	3	19	24	9	17	16
Vehicles Entered	341	153	327	155	147	38	172	380	34	51	498	568

4: SR-74 #1 & Antonio Performance by movement

Movement	All
Total Delay (hr)	60.6
Delay / Veh (s)	79.7
Stop Delay (hr)	51.3
St Del/Veh (s)	67.4
Total Stops	3566
Stop/Veh	1.30
Travel Dist (mi)	1027.8
Travel Time (hr)	97.0
Avg Speed (mph)	11
Vehicles Entered	2864

Total Network Performance

Total Delay (hr)	75.4
Delay / Veh (s)	94.0
Stop Delay (hr)	54.8
St Del/Veh (s)	68.3
Total Stops	3735
Stop/Veh	1.29
Travel Dist (mi)	3324.6
Travel Time (hr)	192.5
Avg Speed (mph)	17
Vehicles Entered	3046

Arterial Level of Service: EB SR-74 #1

Cross Street	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Via Cordova	2.7	25.6	0.2	27
Via Crystal	3.1	24.6	0.2	26
Ave Siega	6.4	44.9	0.3	25
La Pata	89.1	196.9	0.9	16
Total	101.3	291.9	1.6	19

Arterial Level of Service: WB SR-74 #1

Cross Street	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Antonio	27.2	74.1	0.4	19
Ave Siega	11.4	114.2	0.9	28
Via Crystal	10.5	49.4	0.3	23
Via Cordova	4.9	26.3	0.2	24
Total	54.0	264.0	1.8	24

Intersection: 1: SR-74 #1 & Via Cordova

Movement	EB	WB	NB	SB	SB
Directions Served	L	L	LR	L	TR
Maximum Queue (ft)	70	25	151	65	64
Average Queue (ft)	29	2	91	24	44
95th Queue (ft)	68	12	170	56	67
Link Distance (ft)			241	342	342
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	160	250			
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: SR-74 #1 & Via Crystal

Movement	WB	WB	NB
Directions Served	L	T	LR
Maximum Queue (ft)	32	55	53
Average Queue (ft)	2	4	33
95th Queue (ft)	15	26	60
Link Distance (ft)		1591	197
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	90		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: SR-74 #1 & Ave Siega

Movement	EB	WB	NB	NB	SB	SB
Directions Served	L	L	L	TR	L	TR
Maximum Queue (ft)	32	31	26	23	22	22
Average Queue (ft)	8	4	6	3	4	15
95th Queue (ft)	29	22	22	15	18	27
Link Distance (ft)			312	312	603	603
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	150	150				
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 4: SR-74 #1 & Antonio

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	L	T
Maximum Queue (ft)	394	404	3732	3203	374	224	1185	756	42	184	205	547
Average Queue (ft)	316	325	1195	996	184	198	564	201	17	168	183	388
95th Queue (ft)	434	512	3125	2642	335	265	1096	597	37	204	216	652
Link Distance (ft)			4497	4497			1993	1993	1993			1008
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	350	350			350	180				150	150	
Storage Blk Time (%)	35	52	1		1	78				40	85	
Queuing Penalty (veh)	51	75	10		1	132				106	223	

Intersection: 4: SR-74 #1 & Antonio

Movement	NB	NB	NB	SB	SB	SB	SB	SB	SB
Directions Served	T	T	R	L	T	T	T	R	R
Maximum Queue (ft)	516	106	42	97	155	110	74	234	198
Average Queue (ft)	340	60	11	54	101	73	53	141	100
95th Queue (ft)	600	105	30	83	138	104	79	209	173
Link Distance (ft)	1008	1008	1008		636	636	636	636	636
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)				190					
Storage Blk Time (%)									
Queuing Penalty (veh)									

Nework Summary

Network wide Queuing Penalty: 598

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	105	1807	61	16	1799	7	16	0	0	12	4	37
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
Hourly flow rate (vph)	111	1902	64	17	1894	7	17	0	0	13	4	39
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	1901			1966			3145	4058	951	3099	4115	947
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1901			1966			3145	4058	951	3099	4115	947
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
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 %	64			94			0	100	100	0	0	85
cM capacity (veh/h)	309			292			0	2	260	3	1	262

Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	WB 4	NB 1	SB 1	SB 2
Volume Total	111	951	951	64	17	947	947	7	17	13	43
Volume Left	111	0	0	0	17	0	0	0	17	13	0
Volume Right	0	0	0	64	0	0	0	7	0	0	39
cSH	309	1700	1700	1700	292	1700	1700	1700	0	3	14
Volume to Capacity	0.36	0.56	0.56	0.04	0.06	0.56	0.56	0.00	Err	3.69	3.10
Queue Length 95th (ft)	39	0	0	0	5	0	0	0	Err	Err	Err
Control Delay (s)	23.0	0.0	0.0	0.0	18.1	0.0	0.0	0.0	Err	Err	Err
Lane LOS	C				C				F	F	F
Approach Delay (s)	1.2				0.2				Err	Err	
Approach LOS									F	F	

Intersection Summary			
Average Delay	Err		
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	1770	39	4	1799	23	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	1863	41	4	1894	24	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			1904		2818	932
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1904		2818	932
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		0	97
cM capacity (veh/h)			308		14	268

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	932	932	41	4	947	947	32
Volume Left	0	0	0	4	0	0	24
Volume Right	0	0	41	0	0	0	7
cSH	1700	1700	1700	308	1700	1700	18
Volume to Capacity	0.55	0.55	0.02	0.01	0.56	0.56	1.75
Queue Length 95th (ft)	0	0	0	1	0	0	110
Control Delay (s)	0.0	0.0	0.0	16.8	0.0	0.0	806.4
Lane LOS				C			F
Approach Delay (s)	0.0			0.0			806.4
Approach LOS							F

Intersection Summary			
Average Delay	6.7		
Intersection Capacity Utilization	59.7%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	1759	16	16	1575	9	223	0	7	4	0	5
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
Hourly flow rate (vph)	2	1852	17	17	1658	9	235	0	7	4	0	5
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	1667			1868			2724	3557	926	2629	3564	829
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1667			1868			2724	3557	926	2629	3564	829
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
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 %	99			95			0	100	97	61	100	98
cM capacity (veh/h)	382			319			9	5	271	11	5	314

Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	WB 4	NB 1	NB 2	SB 1	SB 2
Volume Total	2	926	926	17	17	829	829	9	235	7	4	5
Volume Left	2	0	0	0	17	0	0	0	235	0	4	0
Volume Right	0	0	0	17	0	0	0	9	0	7	0	5
cSH	382	1700	1700	1700	319	1700	1700	1700	9	271	11	314
Volume to Capacity	0.01	0.54	0.54	0.01	0.05	0.49	0.49	0.01	25.62	0.03	0.39	0.02
Queue Length 95th (ft)	0	0	0	0	4	0	0	0	Err	2	23	1
Control Delay (s)	14.5	0.0	0.0	0.0	16.9	0.0	0.0	0.0	Err	18.7	482.0	16.7
Lane LOS	B				C				F	C	F	C
Approach Delay (s)	0.0				0.2				9695.3		223.5	
Approach LOS									F		F	

Intersection Summary			
Average Delay	617.3		
Intersection Capacity Utilization	74.3%	ICU Level of Service	D
Analysis Period (min)	15		

1: SR-74 #1 & Via Cordova

Direction	EB	WB	NB	SB	All
Volume (vph)	1973	1822	16	53	3864
Control Delay / Veh (s/v)	1	0	9999	9999	179
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	1	0	9999	9999	179
Total Delay (hr)	1	0	44	147	192
Stops / Veh	0.24	0.03	1.00	1.00	0.16
Stops (#)	482	58	16	53	609
Average Speed (mph)	28	30	0	0	3
Total Travel Time (hr)	13	11	44	147	216
Distance Traveled (mi)	374	318	1	4	697
Fuel Consumed (gal)	19	13	33	108	173
Fuel Economy (mpg)	20.2	23.6	0.0	0.0	4.0
CO Emissions (kg)	1.30	0.94	2.29	7.57	12.10
NOx Emissions (kg)	0.25	0.18	0.44	1.47	2.35
VOC Emissions (kg)	0.30	0.22	0.53	1.76	2.80
Unserved Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

2: SR-74 #1 & Via Crystal

Direction	EB	WB	NB	All
Volume (vph)	1809	1803	29	3641
Control Delay / Veh (s/v)	0	0	806	6
Queue Delay / Veh (s/v)	0	0	0	0
Total Delay / Veh (s/v)	0	0	806	6
Total Delay (hr)	0	0	6	7
Stops / Veh	0.00	0.01	1.00	0.01
Stops (#)	0	13	29	42
Average Speed (mph)	30	30	0	25
Total Travel Time (hr)	11	19	7	36
Distance Traveled (mi)	316	563	1	881
Fuel Consumed (gal)	13	23	5	41
Fuel Economy (mpg)	24.3	24.2	0.3	21.3
CO Emissions (kg)	0.91	1.63	0.35	2.88
NOx Emissions (kg)	0.18	0.32	0.07	0.56
VOC Emissions (kg)	0.21	0.38	0.08	0.67
Unserved Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0

3: SR-74 #1 & Ave Siega

Direction	EB	WB	NB	SB	All
Volume (vph)	1777	1600	230	9	3616
Control Delay / Veh (s/v)	0	0	9695	223	617
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	0	0	9695	223	617
Total Delay (hr)	0	0	619	1	620
Stops / Veh	0.00	0.03	1.00	1.00	0.08
Stops (#)	6	54	230	9	299
Average Speed (mph)	30	30	0	2	3
Total Travel Time (hr)	19	47	620	1	686
Distance Traveled (mi)	555	1400	16	1	1973
Fuel Consumed (gal)	23	58	456	1	537
Fuel Economy (mpg)	24.3	24.1	0.0	NA	3.7
CO Emissions (kg)	1.60	4.05	31.87	0.04	37.56
NOx Emissions (kg)	0.31	0.79	6.20	0.01	7.31
VOC Emissions (kg)	0.37	0.94	7.39	0.01	8.70
Unserved Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

4: SR-74 #1 & Antonio

Direction	EB	WB	NB	SB	All
Volume (vph)	1770	490	1460	1970	5690
Control Delay / Veh (s/v)	100	9	10	60	55
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	100	9	10	60	55
Total Delay (hr)	49	1	4	33	87
Stops / Veh	0.71	0.57	0.62	0.44	0.58
Stops (#)	1250	279	907	859	3295
Average Speed (mph)	15	25	21	6	14
Total Travel Time (hr)	101	8	14	41	164
Distance Traveled (mi)	1549	192	296	261	2298
Fuel Consumed (gal)	107	10	20	39	177
Fuel Economy (mpg)	14.5	18.6	14.7	6.6	13.0
CO Emissions (kg)	7.45	0.72	1.41	2.75	12.34
NOx Emissions (kg)	1.45	0.14	0.28	0.54	2.40
VOC Emissions (kg)	1.73	0.17	0.33	0.64	2.86
Unserved Vehicles (#)	243	0	0	123	367
Vehicles in dilemma zone (#)	0	0	0	0	0

SR-74 #1

Direction	EB	WB	All
Control Delay / Veh (s/v)	24	1	14
Queue Delay / Veh (s/v)	0	0	0
Total Delay / Veh (s/v)	24	1	14
Total Delay (hr)	50	1	51
Stops / Veh	0.24	0.07	0.16
Stops (#)	1738	404	2142
Average Speed (mph)	20	30	23
Total Travel Time (hr)	143	84	227
Distance Traveled (mi)	2794	2474	5268
Fuel Consumed (gal)	161	105	266
Fuel Economy (mpg)	17.3	23.5	19.8
CO Emissions (kg)	11.26	7.34	18.60
NOx Emissions (kg)	2.19	1.43	3.62
VOC Emissions (kg)	2.61	1.70	4.31
Unserved Vehicles (#)	243	0	243
Vehicles in dilemma zone (#)	0	0	0
Performance Index	54.6	2.5	57.1

Network Totals

Number of Intersections	4
Control Delay / Veh (s/v)	194
Queue Delay / Veh (s/v)	0
Total Delay / Veh (s/v)	194
Total Delay (hr)	906
Stops / Veh	0.25
Stops (#)	4245
Average Speed (mph)	5
Total Travel Time (hr)	1101
Distance Traveled (mi)	5849
Fuel Consumed (gal)	928
Fuel Economy (mpg)	6.3
CO Emissions (kg)	64.88
NOx Emissions (kg)	12.62
VOC Emissions (kg)	15.04
Unserved Vehicles (#)	367
Vehicles in dilemma zone (#)	0
Performance Index	917.7

1: SR-74 #1 & Via Cordova Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	SBL	SBT	SBR	All
Total Delay (hr)	0.3	1.5	0.1	0.0	0.9	0.0	0.7	0.8	0.2	1.1	5.7
Delay / Veh (s)	24.8	5.7	7.7	19.3	4.2	0.6	384.3	357.8	395.6	318.0	11.4
Stop Delay (hr)	0.3	0.6	0.0	0.0	0.0	0.0	0.7	0.8	0.2	1.2	3.9
St Del/Veh (s)	20.8	2.4	4.7	16.2	0.0	0.2	384.4	357.0	392.6	319.8	7.8
Total Stops	38	69	1	5	1	1	7	9	2	13	146
Stop/Veh	0.86	0.07	0.04	1.00	0.00	0.17	1.00	1.12	1.00	1.00	0.08
Travel Dist (mi)	8.2	175.9	5.1	0.9	125.6	1.0	0.3	0.6	0.1	0.9	318.7
Travel Time (hr)	0.6	7.6	0.3	0.1	5.2	0.0	0.8	0.8	0.2	1.2	16.8
Avg Speed (mph)	15	24	23	15	24	26	0	1	1	1	20
Vehicles Entered	46	963	28	5	730	6	7	9	2	13	1809

2: SR-74 #1 & Via Crystal Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Total Delay (hr)	4.3	0.1	0.0	1.7	0.1	0.0	6.2
Delay / Veh (s)	17.2	21.0	23.1	8.4	26.4	14.7	13.4
Stop Delay (hr)	3.0	0.1	0.0	0.0	0.1	0.0	3.2
St Del/Veh (s)	12.0	16.2	15.4	0.0	25.4	14.8	6.9
Total Stops	251	7	2	0	12	3	275
Stop/Veh	0.28	0.44	1.00	0.00	1.00	1.00	0.16
Travel Dist (mi)	158.0	2.8	0.6	230.2	0.4	0.1	392.3
Travel Time (hr)	9.7	0.2	0.0	9.7	0.1	0.0	19.8
Avg Speed (mph)	16	14	17	24	4	6	20
Vehicles Entered	935	17	2	728	12	3	1697

3: SR-74 #1 & Ave Siega Performance by movement

Movement	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Total Delay (hr)	23.4	0.1	0.0	2.2	0.0	19.8	0.8	0.1	0.0	46.5
Delay / Veh (s)	104.8	29.7	14.4	11.8	3.7	1272.3	936.0		6.1	106.9
Stop Delay (hr)	20.3	0.1	0.0	0.0	0.0	19.8	0.8	0.2	0.0	41.1
St Del/Veh (s)	90.6	24.9	7.2	0.2	0.4	1274.1	938.7		6.4	94.5
Total Stops	1074	5	4	2	0	63	6	1	2	1157
Stop/Veh	1.33	0.62	0.50	0.00	0.00	1.12	2.00		1.00	0.74
Travel Dist (mi)	252.8	2.5	7.3	586.7	4.0	3.3	0.2	0.1	0.2	857.2
Travel Time (hr)	32.0	0.2	0.3	23.1	0.2	19.9	0.8	0.2	0.0	76.6
Avg Speed (mph)	8	16	24	25	26	0	1	1	18	14
Vehicles Entered	864	8	7	680	5	63	4	1	2	1634

4: SR-74 #1 & Antonio Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	66.3	17.8	5.1	0.2	0.4	0.2	5.1	1.6	0.2	16.6	13.1	21.3
Delay / Veh (s)	657.0	359.1	250.4	20.4	13.0	9.2	101.8	13.6	5.0	581.1	174.6	184.8
Stop Delay (hr)	58.5	15.0	4.2	0.2	0.3	0.2	4.7	1.1	0.1	16.5	12.8	21.0
St Del/Veh (s)	580.0	303.4	203.6	16.8	9.1	8.4	94.0	9.2	4.1	575.2	170.0	182.0
Total Stops	3715	1064	361	33	66	52	284	278	65	174	195	227
Stop/Veh	10.23	5.98	4.88	0.92	0.65	0.69	1.58	0.65	0.59	1.69	0.72	0.55
Travel Dist (mi)	322.5	148.0	61.1	13.3	39.3	28.5	34.5	82.2	21.5	12.2	32.7	50.0
Travel Time (hr)	77.4	22.8	7.3	0.7	1.7	1.3	6.4	4.5	1.0	17.1	14.3	23.4
Avg Speed (mph)	4	7	8	20	23	23	6	19	23	1	14	19
Vehicles Entered	455	208	85	35	106	74	178	424	111	111	269	418

4: SR-74 #1 & Antonio Performance by movement

Movement	All
Total Delay (hr)	147.8
Delay / Veh (s)	228.0
Stop Delay (hr)	134.4
St Del/Veh (s)	207.3
Total Stops	6514
Stop/Veh	2.79
Travel Dist (mi)	845.8
Travel Time (hr)	177.6
Avg Speed (mph)	6
Vehicles Entered	2474

Total Network Performance

Total Delay (hr)	207.9
Delay / Veh (s)	285.6
Stop Delay (hr)	182.7
St Del/Veh (s)	251.0
Total Stops	8092
Stop/Veh	3.09
Travel Dist (mi)	2897.3
Travel Time (hr)	309.8
Avg Speed (mph)	11
Vehicles Entered	2879

Arterial Level of Service: EB SR-74 #1

Cross Street	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Via Cordova	5.7	28.7	0.2	25
Via Crystal	17.3	38.7	0.2	16
Ave Siega	104.7	143.2	0.3	8
La Pata	359.1	460.2	0.9	7
Total	486.8	670.7	1.6	8

Arterial Level of Service: WB SR-74 #1

Cross Street	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Antonio	13.0	60.3	0.4	23
Ave Siega	13.1	122.0	0.9	26
Via Crystal	8.6	47.7	0.3	24
Via Cordova	4.3	25.7	0.2	24
Total	38.9	255.7	1.8	25

Intersection: 1: SR-74 #1 & Via Cordova

Movement	EB	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	T	T	L	R	LR	L	TR
Maximum Queue (ft)	92	348	352	32	22	87	89	194
Average Queue (ft)	42	27	27	10	1	35	43	80
95th Queue (ft)	85	170	172	34	11	91	91	202
Link Distance (ft)		966	966		856	241	342	342
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	160			250				
Storage Blk Time (%)		2	2					
Queuing Penalty (veh)		2	1					

Intersection: 2: SR-74 #1 & Via Crystal

Movement	EB	EB	EB	WB	NB
Directions Served	T	T	R	L	LR
Maximum Queue (ft)	871	918	116	32	53
Average Queue (ft)	140	141	8	4	23
95th Queue (ft)	634	649	55	22	48
Link Distance (ft)	856	856			197
Upstream Blk Time (%)	4	4			
Queuing Penalty (veh)	33	38			
Storage Bay Dist (ft)			90	90	
Storage Blk Time (%)		11			
Queuing Penalty (veh)		4			

Intersection: 3: SR-74 #1 & Ave Siega

Movement	EB	EB	EB	WB	NB	NB	SB	SB
Directions Served	T	T	R	L	L	TR	L	TR
Maximum Queue (ft)	1614	1609	1037	31	327	327	24	19
Average Queue (ft)	614	607	382	7	307	154	4	2
95th Queue (ft)	1737	1722	1078	28	403	412	15	12
Link Distance (ft)	1591	1591	1591		312	312	603	603
Upstream Blk Time (%)	13	10			86	18		
Queuing Penalty (veh)	75	60			0	0		
Storage Bay Dist (ft)				150				
Storage Blk Time (%)	41							
Queuing Penalty (veh)	1							

Intersection: 4: SR-74 #1 & Antonio

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	L	T
Maximum Queue (ft)	387	400	4522	4522	55	88	88	88	85	190	200	694
Average Queue (ft)	357	369	3391	3205	20	39	42	31	44	115	131	239
95th Queue (ft)	467	477	6049	5933	45	71	70	66	79	226	231	597
Link Distance (ft)			4497	4497			1993	1993	1993			1008
Upstream Blk Time (%)			41	20								
Queuing Penalty (veh)			366	176								
Storage Bay Dist (ft)	350	350			350	180				150	150	
Storage Blk Time (%)	32	67	0	0						20	38	
Queuing Penalty (veh)	84	173	1	0						62	116	

Intersection: 4: SR-74 #1 & Antonio

Movement	NB	NB	NB	SB	SB	SB	SB	SB	SB
Directions Served	T	T	R	L	T	T	T	R	R
Maximum Queue (ft)	579	86	82	216	670	651	638	138	94
Average Queue (ft)	170	54	34	215	603	401	98	74	65
95th Queue (ft)	458	82	62	216	745	768	339	111	87
Link Distance (ft)	1008	1008	1008		636	636	636	636	636
Upstream Blk Time (%)					57	1	0		
Queuing Penalty (veh)					0	0	0		
Storage Bay Dist (ft)				190					
Storage Blk Time (%)				94					
Queuing Penalty (veh)				197					

Nework Summary

Network wide Queuing Penalty: 1388