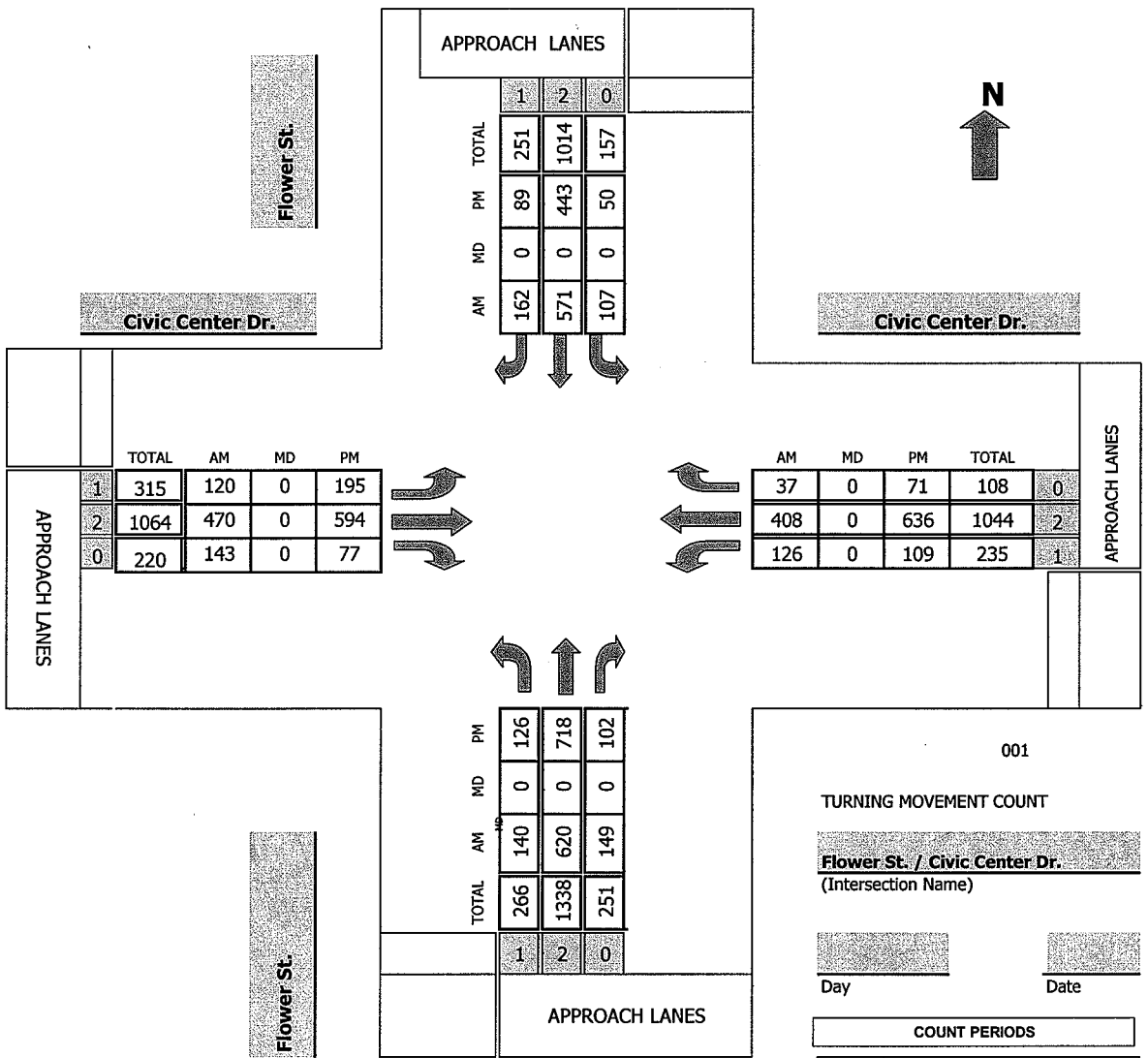
APPENDIX A
Existing Intersection Counts

01

TMC Summary of Flower St./Civic Center Dr.

Project #: 04-1551-001



001

TURNING MOVEMENT COUNT

Flower St. / Civic Center Dr.
(Intersection Name)

Day

Date

COUNT PERIODS		
am	7:00 AM	9:00 AM
noon	3:30 PM	5:30 PM
pm	4:00 PM	6:00 PM

AM PEAK HOUR	715 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	430 PM

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Flower St. DATE: 9/14/2004 LOCATION: City of Santa Ana

E-W STREET: Civic Center Dr. DAY: TUESDAY PROJECT# 04-1551-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	1	2	0	1	2	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	29	115	23	14	108	26	17	76	29	23	46	5	511
7:15 AM	32	153	27	22	118	32	17	84	31	28	90	5	639
7:30 AM	24	180	36	32	176	47	37	106	30	37	106	2	813
7:45 AM	40	162	43	22	165	48	28	129	43	40	114	9	843
8:00 AM	44	125	43	31	112	35	38	151	39	21	98	21	758
8:15 AM	20	94	44	38	112	24	20	109	19	32	77	16	605
8:30 AM	12	74	39	20	86	27	24	102	31	38	90	9	552
8:45 AM	10	68	33	15	91	26	23	86	26	21	94	7	500
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	NL 211	NT 971	NR 288	SL 194	ST 968	SR 265	EL 204	ET 843	ER 248	WL 240	WT 715	WR 74	TOTAL 5221

AM Peak Hr Begins at: 715 AM

PEAK VOLUMES =	140	620	149	107	571	162	120	470	143	126	408	37	3053
PEAK HR. FACTOR:		0.928			0.824			0.804			0.876		0.905

CONTROL: SIGNALIZED

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Flower St. DATE: 9/14/2004 LOCATION: City of Santa Ana

E-W STREET: Civic Center Dr. DAY: TUESDAY PROJECT# 04-1551-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	1	2	0	1	2	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM	32	171	30	17	88	19	32	118	23	16	73	10	629
3:45 PM	25	144	25	9	99	19	26	102	21	23	92	14	599
4:00 PM	18	151	26	16	108	16	23	111	20	23	104	13	629
4:15 PM	28	156	29	7	100	23	28	109	10	21	100	13	624
4:30 PM	26	175	24	15	104	19	48	141	19	19	120	24	734
4:45 PM	30	153	31	17	123	20	61	200	33	32	152	12	864
5:00 PM	32	177	32	8	116	23	36	130	9	29	164	15	771
5:15 PM	38	213	15	10	100	27	50	123	16	29	200	20	841
5:30 PM													
5:45 PM													
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 229	NT 1340	NR 212	SL 99	ST 838	SR 166	EL 304	ET 1034	ER 151	WL 192	WT 1005	WR 121	TOTAL 5691

PM Peak Hr Begins at: 430 PM

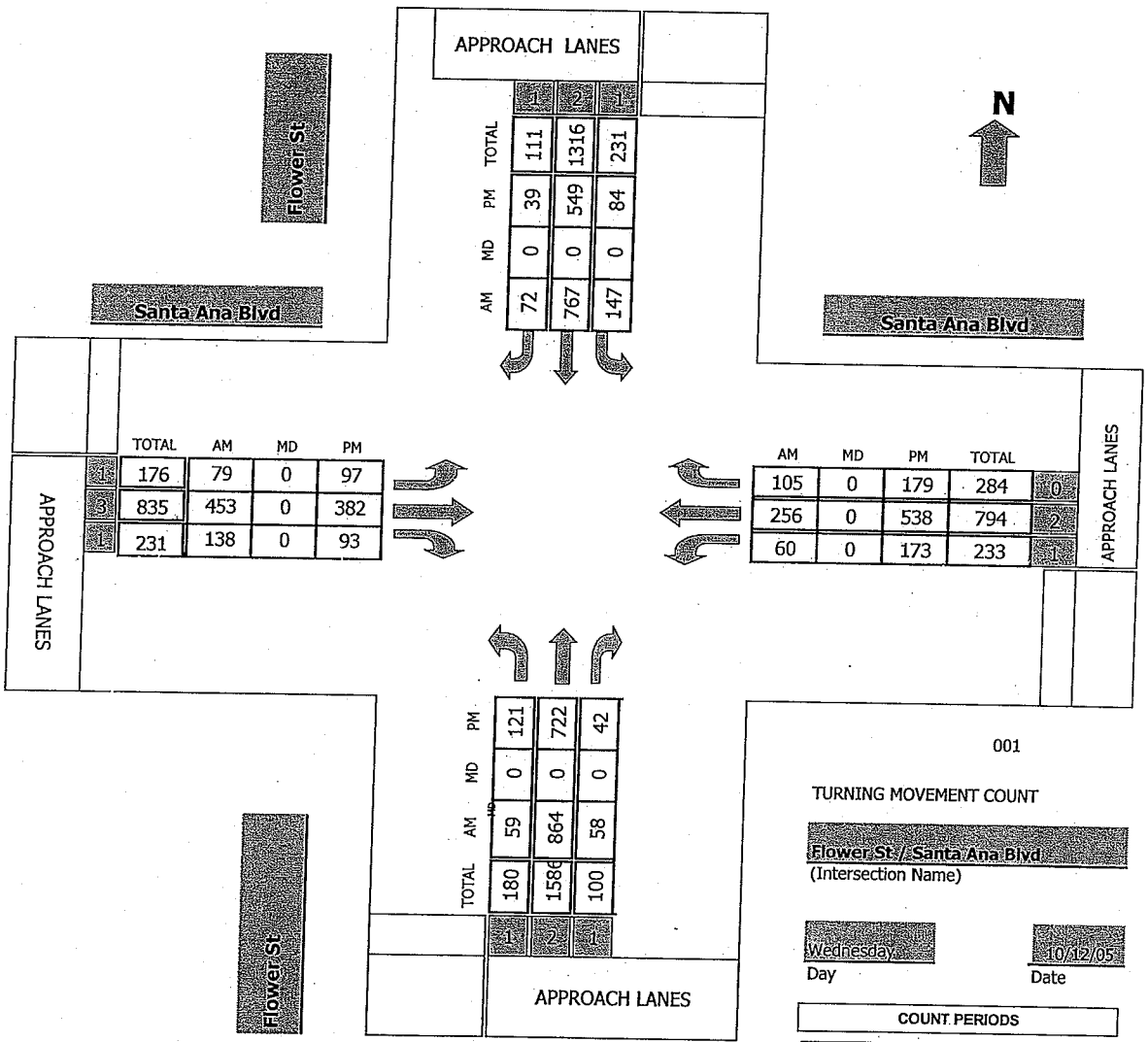
PEAK VOLUMES =	126	718	102	50	443	89	195	594	77	109	636	71	3210
PEAK HR. FACTOR:		0.889			0.909			0.736			0.819		0.929

CONTROL: SIGNALIZED

(2)

TMC Summary of Flower St/Santa Ana Blvd

Project #: 05-1230-003



001

TURNING MOVEMENT COUNT

Flower St / Santa Ana Blvd
(Intersection Name)

Wednesday
Day

10/12/05
Date

COUNT PERIODS		
am	7:00 AM	9:00 AM
noon	4:00 PM	6:00 PM
pm	4:00 PM	6:00 PM

AM PEAK HOUR	715 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	445 PM

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Flower St DATE: 10/12/2005 LOCATION: City of Santa Ana

E-W STREET: Santa Ana Blvd DAY: WEDNESDAY PROJECT# 05-1230-003

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 3	ER 1	WL 1	WT 2	WR 0	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	12	175	13	27	169	10	15	82	40	11	48	21	623
7:15 AM	10	181	12	24	174	12	17	86	45	10	59	24	654
7:30 AM	13	225	12	47	191	18	19	108	27	10	72	30	772
7:45 AM	17	233	13	42	218	22	22	134	36	24	71	25	857
8:00 AM	19	225	21	34	184	20	21	125	30	16	54	26	775
8:15 AM	23	209	15	24	102	18	20	82	17	21	79	25	635
8:30 AM	9	113	18	31	81	12	16	63	9	17	56	54	479
8:45 AM	10	87	10	26	81	8	11	60	15	8	53	33	402
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL VOLUMES =	NL 113	NT 1448	NR 114	SL 255	ST 1200	SR 120	EL 141	ET 740	ER 219	WL 117	WT 492	WR 238	TOTAL 5197

AM Peak Hr Begins at: 715 AM

PEAK VOLUMES =	59	864	58	147	767	72	79	453	138	60	256	105	3058
PEAK HR. FACTOR:		0.925			0.874			0.872			0.877		0.892

CONTROL: Signalized

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Flower St DATE: 10/12/2005 LOCATION: City of Santa Ana

E-W STREET: Santa Ana Blvd DAY: WEDNESDAY PROJECT# 05-1230-003

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 3	ER 1	WL 1	WT 2	WR 0	TOTAL
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	21	140	11	21	114	9	18	86	15	31	88	24	578
4:15 PM	32	159	15	20	124	15	16	56	24	30	77	19	587
4:30 PM	25	141	7	23	115	15	25	82	13	39	88	18	591
4:45 PM	35	161	10	22	140	9	20	73	27	27	108	30	662
5:00 PM	33	167	8	19	137	10	31	117	22	56	171	61	832
5:15 PM	32	197	10	23	141	14	30	99	20	53	150	51	820
5:30 PM	21	197	14	20	131	6	16	93	24	37	109	37	705
5:45 PM	27	191	11	12	122	7	16	58	17	28	108	19	616
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL VOLUMES =	NL 226	NT 1353	NR 86	SL 160	ST 1024	SR 85	EL 172	ET 664	ER 162	WL 301	WT 899	WR 259	TOTAL 5391

PM Peak Hr Begins at: 445 PM

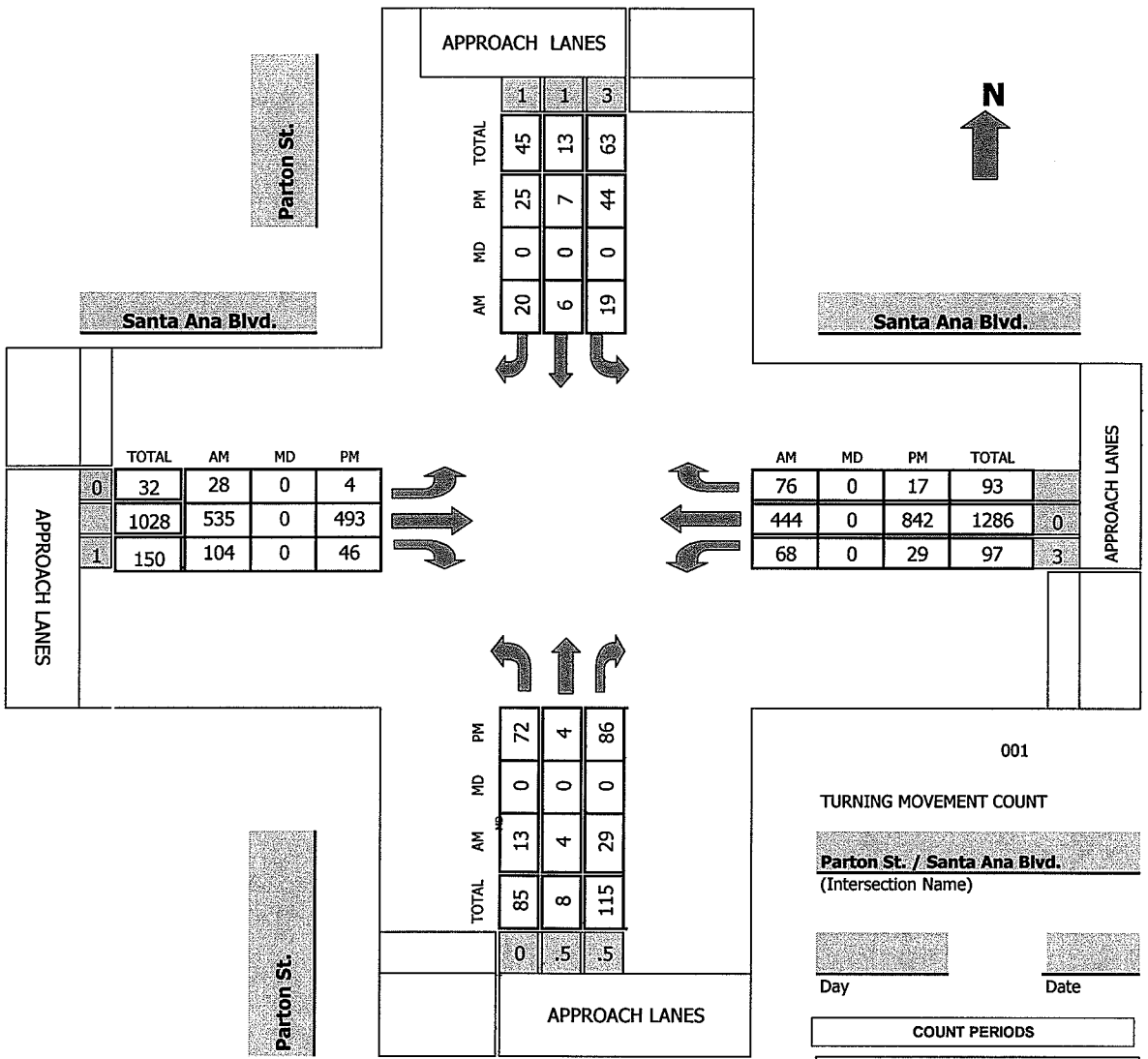
PEAK VOLUMES =	121	722	42	84	549	39	97	382	93	173	538	179	3019
PEAK HR. FACTOR:		0.926			0.944			0.841			0.773		0.907

CONTROL: Signalized

3

TMC Summary of Parton St./Santa Ana Blvd.

Project #: 04-1551-003



001

TURNING MOVEMENT COUNT

Parton St. / Santa Ana Blvd.
(Intersection Name)

Day

Date

COUNT PERIODS		
am	7:00 AM -	9:00 AM
noon	3:30 PM -	5:30 PM
pm	4:00 PM -	6:00 PM

AM PEAK HOUR	730 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	430 PM

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Parton St. DATE: 9/14/2004 LOCATION: City of Santa Ana

E-W STREET: Santa Ana Blvd. DAY: TUESDAY PROJECT# 04-1551-003

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	.5	.5	1	1	3	0		1	3	0		
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	3	0	3	0	1	1	3	91	16	16	72	9	215
7:15 AM	2	1	3	0	0	2	0	111	9	16	93	12	249
7:30 AM	4	2	12	5	0	4	7	132	21	18	119	10	334
7:45 AM	3	0	8	2	2	8	10	177	29	13	112	26	390
8:00 AM	5	1	5	10	2	2	6	131	28	18	106	17	331
8:15 AM	1	1	4	2	2	6	5	95	26	19	107	23	291
8:30 AM	3	1	5	4	2	3	1	82	20	21	114	28	284
8:45 AM	2	3	3	8	2	6	13	81	15	23	83	32	271
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	23	9	43	31	11	32	45	900	164	144	806	157	2365

AM Peak Hr Begins at: 730 AM

PEAK VOLUMES =	13	4	29	19	6	20	28	535	104	68	444	76	1346
PEAK HR. FACTOR:		0.639			0.804			0.772			0.974		0.863

CONTROL: SIGNALIZED, 0, 1

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Parton St. DATE: 9/14/2004 LOCATION: City of Santa Ana

E-W STREET: Santa Ana Blvd. DAY: TUESDAY PROJECT# 04-1551-003

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	.5	.5	1	1	3	0		1	3	0		
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM	3	1	5	20	1	13	5	57	2	6	88	9	210
3:45 PM	4	3	12	13	1	12	6	92	13	9	114	16	295
4:00 PM	10	1	12	15	3	12	8	110	17	10	150	14	362
4:15 PM	8	2	13	16	2	8	2	95	17	6	150	4	323
4:30 PM	12	1	20	20	2	9	1	112	5	6	174	10	372
4:45 PM	12	1	24	9	2	3	3	123	15	11	167	3	373
5:00 PM	25	1	25	6	1	8	0	146	15	7	208	2	444
5:15 PM	23	1	17	9	2	5	0	112	11	5	293	2	480
5:30 PM													
5:45 PM													
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 97	NT 11	NR 128	SL 108	ST 14	SR 70	EL 25	ET 847	ER 95	WL 60	WT 1344	WR 60	TOTAL 2859

PM Peak Hr Begins at: 430 PM

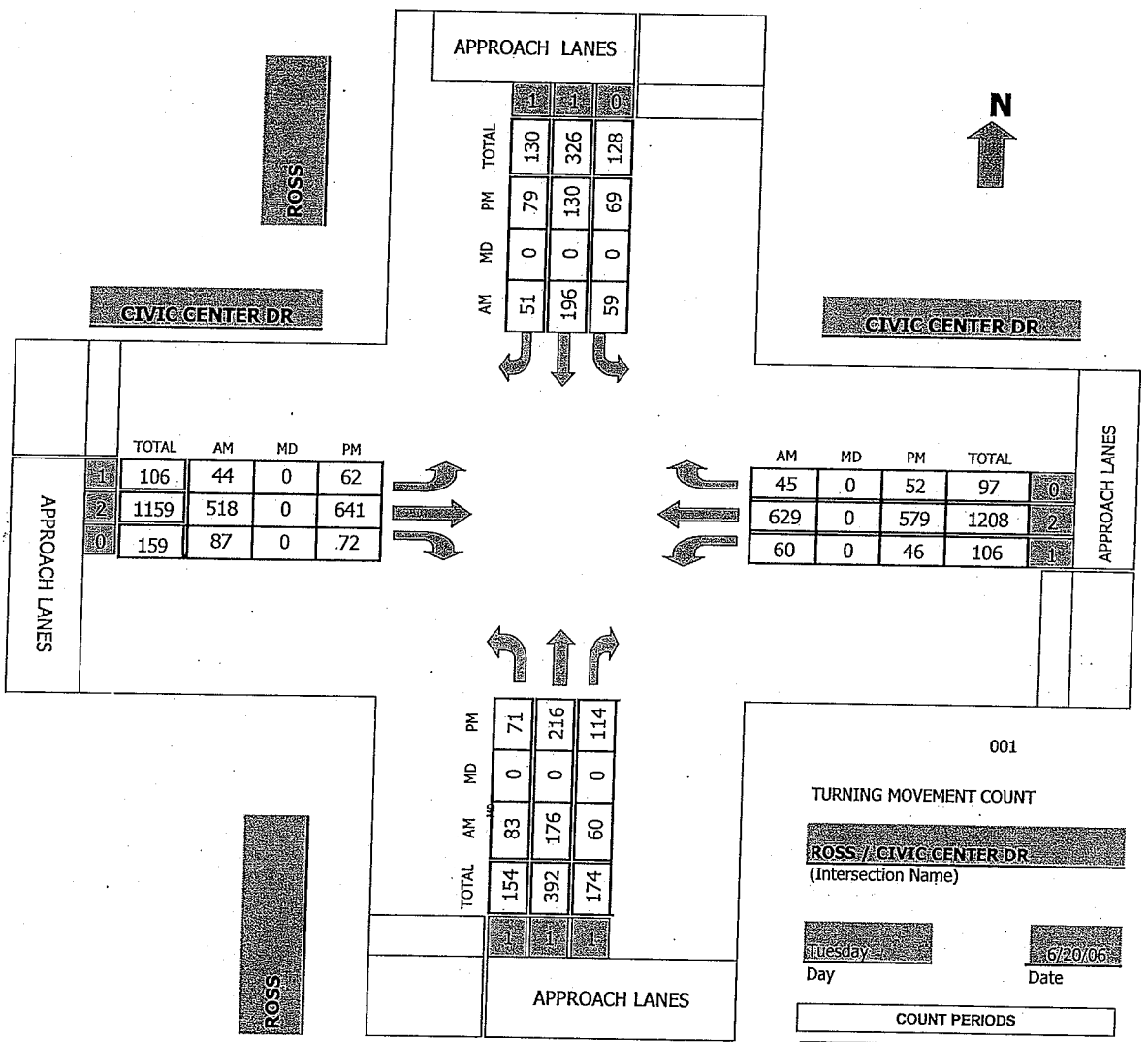
PEAK VOLUMES =	72	4	86	44	7	25	4	493	46	29	842	17	1669
PEAK HR. FACTOR:		0.794			0.613			0.843			0.740		0.869

CONTROL: SIGNALIZED, 0, 1

(4)

TMC Summary of ROSS/CIVIC CENTER DR

Project #: 06-1192-024



001

TURNING MOVEMENT COUNT

ROSS / CIVIC CENTER DR
(Intersection Name)

Tuesday
Day

6/20/06
Date

COUNT PERIODS		
am	7:00 AM	9:00 AM
noon	11:00 AM	1:00 PM
pm	4:00 PM	6:00 PM

AM PEAK HOUR	715 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	430 PM

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: ROSS | DATE: 6/20/2006 | LOCATION: City of Santa Ana

E-W STREET: CIVIC CENTER DR | DAY: TUESDAY | PROJECT# 06-1192-024

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 1	NR 1	SL 1	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	15	35	13	11	36	16	9	92	11	9	125	11	383
7:15 AM	16	48	15	14	57	10	7	145	12	14	152	13	503
7:30 AM	19	49	9	13	49	17	13	128	23	16	141	11	488
7:45 AM	21	37	17	16	55	11	11	139	25	13	159	9	513
8:00 AM	27	42	19	16	35	13	13	106	27	17	177	12	504
8:15 AM	25	31	14	17	30	14	15	96	14	18	161	10	445
8:30 AM	16	29	16	19	27	10	9	81	11	15	159	13	405
8:45 AM	11	19	7	11	23	9	7	95	19	8	145	4	358
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	150	290	110	117	312	100	84	882	142	110	1219	83	3599

AM Peak Hr Begins at: 715 AM

PEAK VOLUMES =													
	83	176	60	59	196	51	44	518	87	60	629	45	2008
PEAK HR. FACTOR:		0.906			0.933			0.927			0.891		0.979

CONTROL: Signalized

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: ROSS DATE: 6/20/2006 LOCATION: City of Santa Ana

E-W STREET: CIVIC CENTER DR DAY: TUESDAY PROJECT# 06-1192-024

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 1	NR 1	SL 1	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	9	36	22	11	21	17	13	91	7	11	94	16	348
4:15 PM	8	40	31	14	19	10	16	106	11	8	101	8	372
4:30 PM	17	48	31	16	24	29	19	178	15	14	145	22	558
4:45 PM	17	46	25	12	32	15	12	176	22	5	112	6	480
5:00 PM	20	71	30	21	41	16	16	159	21	20	163	15	593
5:15 PM	17	51	28	20	33	19	15	128	14	7	159	9	500
5:30 PM	37	43	25	7	37	14	9	103	15	12	153	14	469
5:45 PM	41	37	17	9	20	13	13	107	15	10	161	8	451
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL VOLUMES =	NL 166	NT 372	NR 209	SL 110	ST 227	SR 133	EL 113	ET 1048	ER 120	WL 87	WT 1088	WR 98	TOTAL 3771

PM Peak Hr Begins at: 430 PM

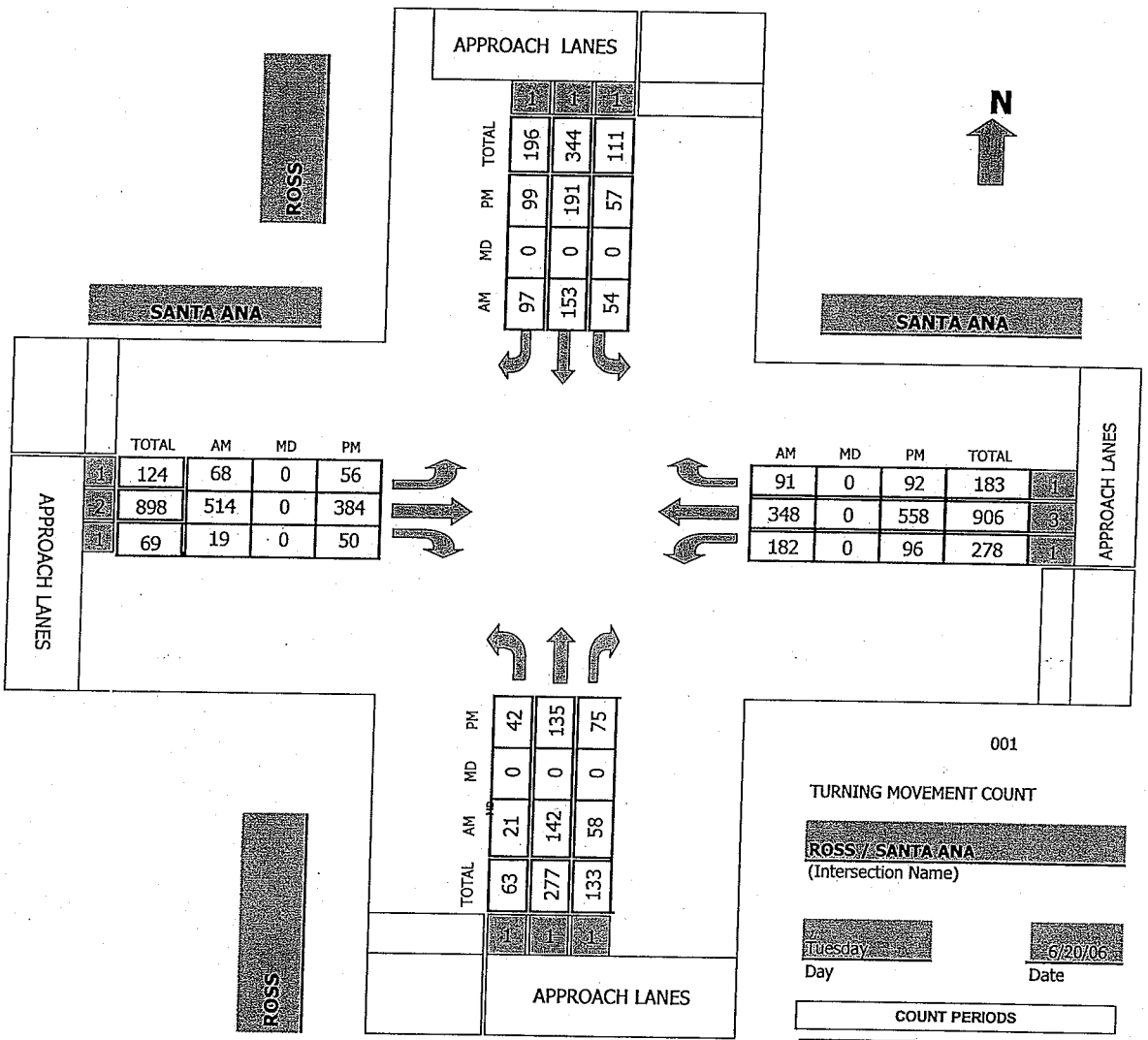
PEAK VOLUMES =	71	216	114	69	130	79	62	641	72	46	579	52	2131
PEAK HR. FACTOR:		0.829			0.891			0.914			0.855		0.898

CONTROL: Signalized

(5) 36

TMC Summary of ROSS/SANTA ANA

Project #: 06-1192-026



001

TURNING MOVEMENT COUNT

ROSS / SANTA ANA
(Intersection Name)

Tuesday
Day

6/20/06
Date

COUNT PERIODS		
am	7:00 AM -	9:00 AM
noon	11:00 AM -	1:00 PM
pm	4:00 PM -	6:00 PM

AM PEAK HOUR	715 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	415 PM

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: ROSS | DATE: 6/20/2006 | LOCATION: City of Santa Ana

E-W STREET: SANTA ANA | DAY: TUESDAY | PROJECT# 06-1192-026

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 1	NR 1	SL 1	ST 1	SR 1	EL 1	ET 2	ER 1	WL 1	WT 3	WR 1	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	2	38	11	9	29	12	9	119	1	41	79	19	369
7:15 AM	4	34	15	8	31	25	17	121	4	59	81	15	414
7:30 AM	6	31	11	17	38	23	18	131	6	41	83	23	428
7:45 AM	4	35	13	10	41	25	16	137	5	45	91	24	446
8:00 AM	7	42	19	19	43	24	17	125	4	37	93	29	459
8:15 AM	8	29	14	17	35	19	18	121	3	35	79	18	396
8:30 AM	7	25	7	8	24	17	21	119	2	33	74	19	356
8:45 AM	5	17	9	7	19	11	20	107	2	41	86	17	341
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL VOLUMES =	NL 43	NT 251	NR 99	SL 95	ST 260	SR 156	EL 136	ET 980	ER 27	WL 332	WT 666	WR 164	TOTAL 3209

AM Peak Hr Begins at: 715 AM

PEAK VOLUMES =	21	142	58	54	153	97	68	514	19	182	348	91	1747
PEAK HR. FACTOR:		0.813			0.884			0.951			0.970		0.952

CONTROL: Signalized

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: ROSS DATE: 6/20/2006 LOCATION: City of Santa Ana

E-W STREET: SANTA ANA DAY: TUESDAY PROJECT# 06-1192-026

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 1	NR 1	SL 1	ST 1	SR 1	EL 1	ET 2	ER 1	WL 1	WT 3	WR 1	TOTAL
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	8	28	18	12	41	19	14	87	9	26	137	11	410
4:15 PM	11	31	19	14	44	25	15	91	13	22	141	12	438
4:30 PM	15	33	16	15	47	24	13	92	13	24	146	17	455
4:45 PM	11	34	18	18	52	28	11	97	14	23	133	28	467
5:00 PM	5	37	22	10	48	22	17	104	10	27	138	35	475
5:15 PM	6	32	23	8	35	18	16	91	8	25	127	28	417
5:30 PM	7	29	20	3	16	12	3	86	6	11	123	12	328
5:45 PM	4	24	17	4	22	7	9	76	4	9	112	13	301
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL VOLUMES =	NL 67	NT 248	NR 153	SL 84	ST 305	SR 155	EL 98	ET 724	ER 77	WL 167	WT 1057	WR 156	TOTAL 3291

PM Peak Hr Begins at: 415 PM

PEAK VOLUMES =	42	135	75	57	191	99	56	384	50	96	558	92	1835
PEAK HR. FACTOR:		0.984			0.885			0.935			0.933		0.966

CONTROL: Signalized

Intersection Turning Movement

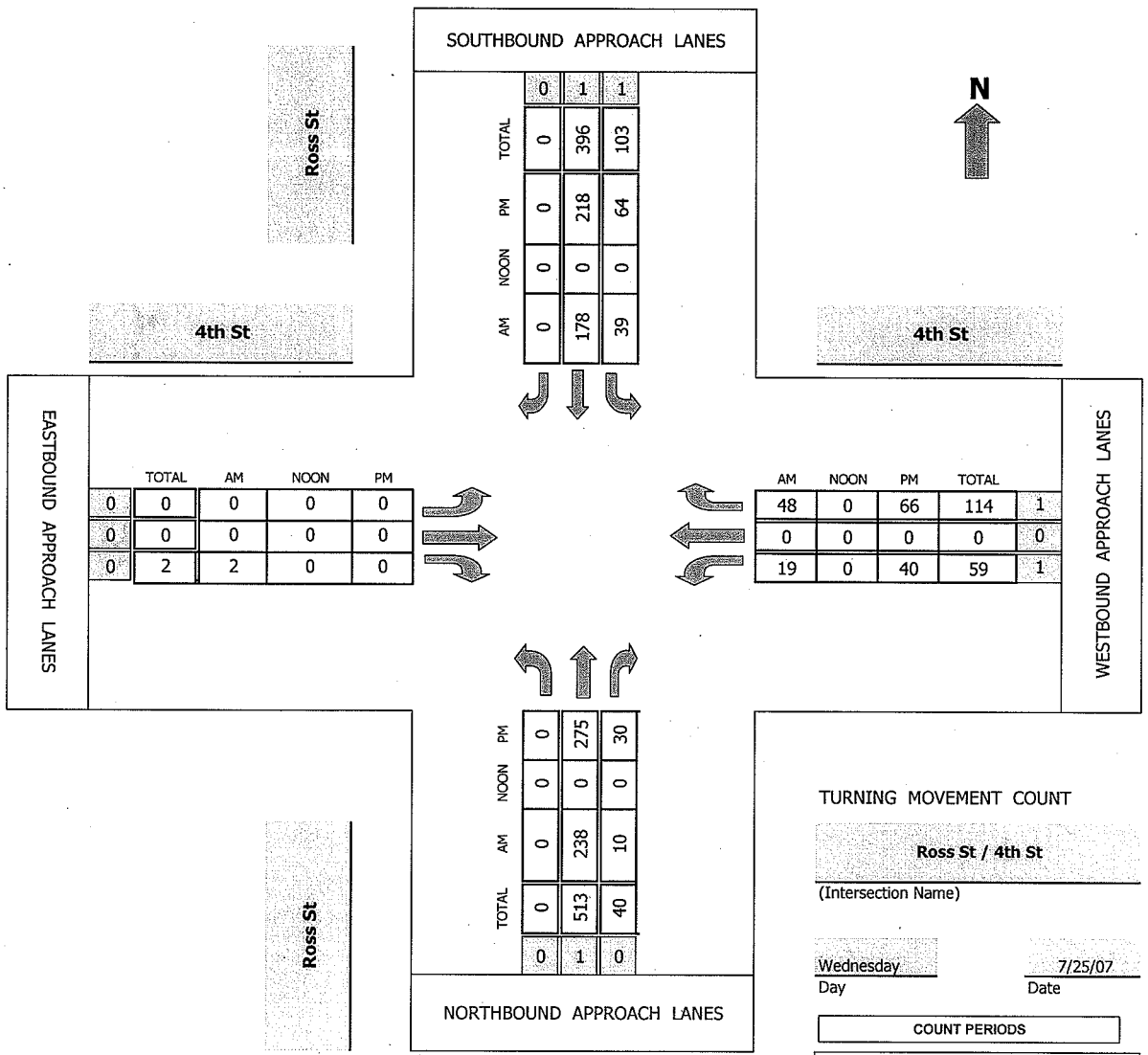
Prepared by:

National Data & Surveying Services

6

TMC Summary of Ross St/4th St

Project #: 07-1213-001



TURNING MOVEMENT COUNT

Ross St / 4th St

(Intersection Name)

Wednesday — Day

7/25/07 — Date

COUNT PERIODS		
am	7:00 AM -	9:00 AM
noon	11:00 AM -	1:00 PM
pm	4:00 PM -	6:00 PM

AM PEAK HOUR	715 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	415 PM

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Ross St | DATE: 7/25/2007 | LOCATION: City of Santa Ana

E-W STREET: 4th St | DAY: WEDNESDAY | PROJECT# 07-1213-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	1	1	0	0	0	0	1	0	1	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM		49	2	7	41				0	4		8	111
7:15 AM		57	2	8	48				0	10		17	142
7:30 AM		68	5	15	50				2	2		8	150
7:45 AM		55	1	12	46				0	4		8	126
8:00 AM		58	2	4	34				0	3		15	116
8:15 AM		66	5	11	36				0	4		11	133
8:30 AM		50	2	7	29				0	2		10	100
8:45 AM		43	0	11	26				0	2		7	89
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	0	446	19	75	310	0	0	0	2	31	0	84	967

AM Peak Hr Begins at: 715 AM

PEAK													
VOLUMES =	0	238	10	39	178	0	0	0	2	19	0	48	534
PEAK HR. FACTOR:		0.849			0.835			0.250			0.620		0.890

CONTROL: 1-Way Stop W

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Ross St DATE: 7/25/2007 LOCATION: City of Santa Ana

E-W STREET: 4th St DAY: WEDNESDAY PROJECT# 07-1213-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	1	1	0	0	0	0	1	0	1	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM		53	5	11	46					9		16	140
4:15 PM		61	9	15	52					11		13	161
4:30 PM		74	7	19	56					10		19	185
4:45 PM		68	9	18	52					13		21	181
5:00 PM		72	5	12	58					6		13	166
5:15 PM		52	7	7	50					4		15	135
5:30 PM		47	8	15	43					7		14	134
5:45 PM		48	9	16	25					18		8	124
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 0	NT 475	NR 59	SL 113	ST 382	SR 0	EL 0	ET 0	ER 0	WL 78	WT 0	WR 119	TOTAL 1226

PM Peak Hr Begins at: 415 PM

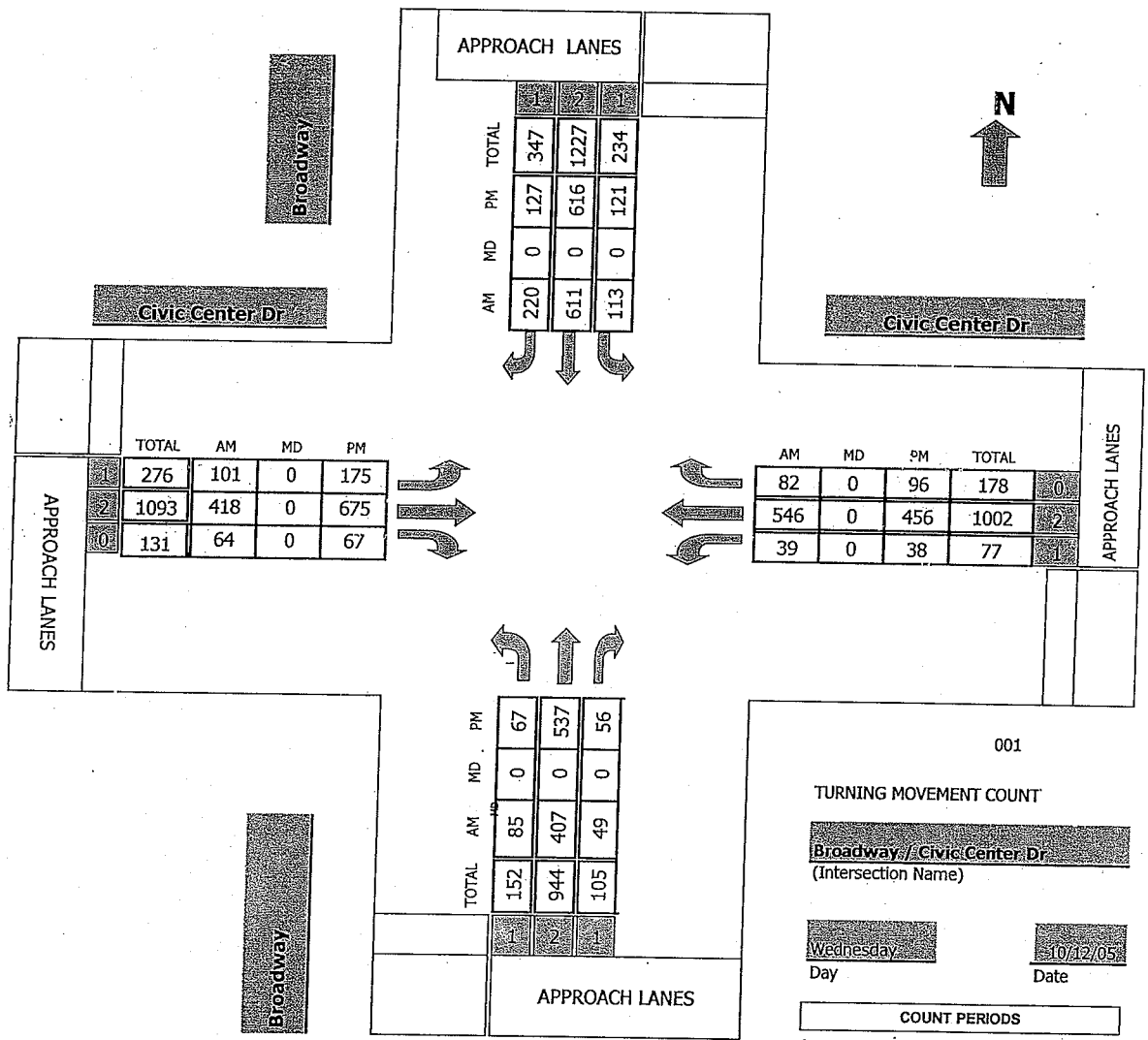
PEAK VOLUMES =	0	275	30	64	218	0	0	0	0	40	0	66	693
PEAK HR. FACTOR:		0.941			0.940			0.000			0.779		0.936

CONTROL: 1-Way Stop W

(7) 6

TMC Summary of Broadway/Civic Center Dr

Project #: 05-1230-008



001

TURNING MOVEMENT COUNT

Broadway / Civic Center Dr
(Intersection Name)

Wednesday
Day

10/12/05
Date

COUNT PERIODS			
am	7:00 AM	-	9:00 AM
noon	4:00 PM	-	6:00 PM
pm	4:00 PM	-	6:00 PM

AM PEAK HOUR	745 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	430 PM

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Broadway DATE: 10/12/2005 LOCATION: City of Santa Ana

E-W STREET: Civic Center Dr DAY: WEDNESDAY PROJECT# 05-1230-008

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	1	1	2	1	1	2	0	1	2	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	8	57	10	19	109	55	5	72	9	3	80	5	432
7:15 AM	14	58	10	16	144	74	12	77	8	7	115	2	537
7:30 AM	16	82	12	26	122	56	15	134	14	8	97	3	585
7:45 AM	20	113	15	30	167	51	34	132	16	15	145	10	748
8:00 AM	18	125	12	28	157	52	25	109	16	11	127	34	714
8:15 AM	16	92	14	27	144	61	23	89	13	8	144	25	656
8:30 AM	31	77	8	28	143	56	19	88	19	5	130	13	617
8:45 AM	26	72	18	18	123	66	12	81	10	10	114	8	558
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	NL 149	NT 676	NR 99	SL 192	ST 1109	SR 471	EL 145	ET 782	ER 105	WL 67	WT 952	WR 100	TOTAL 4847

AM Peak Hr Begins at: 745 AM

PEAK VOLUMES =	85	407	49	113	611	220	101	418	64	39	546	82	2735
PEAK HR. FACTOR:		0.873			0.952			0.801			0.942		0.914

CONTROL: Signalized

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Broadway DATE: 10/12/2005 LOCATION: City of Santa Ana

E-W STREET: Civic Center Dr DAY: WEDNESDAY PROJECT# 05-1230-008

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	21	136	9	22	139	28	41	135	31	9	80	17	668
4:15 PM	17	126	15	12	140	32	35	124	10	14	115	8	648
4:30 PM	15	127	12	18	126	37	44	176	17	12	81	16	681
4:45 PM	14	123	13	27	154	23	34	171	21	9	111	20	720
5:00 PM	15	124	15	45	189	33	36	172	20	9	150	37	845
5:15 PM	23	163	16	31	147	34	61	156	9	8	114	23	785
5:30 PM	14	141	10	27	130	25	46	141	16	6	106	8	670
5:45 PM	22	166	15	20	135	25	35	104	11	11	121	13	678
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL VOLUMES =	NL 141	NT 1106	NR 105	SL 202	ST 1160	SR 237	EL 332	ET 1179	ER 135	WL 78	WT 878	WR 142	TOTAL 5695

PM Peak Hr Begins at: 430 PM

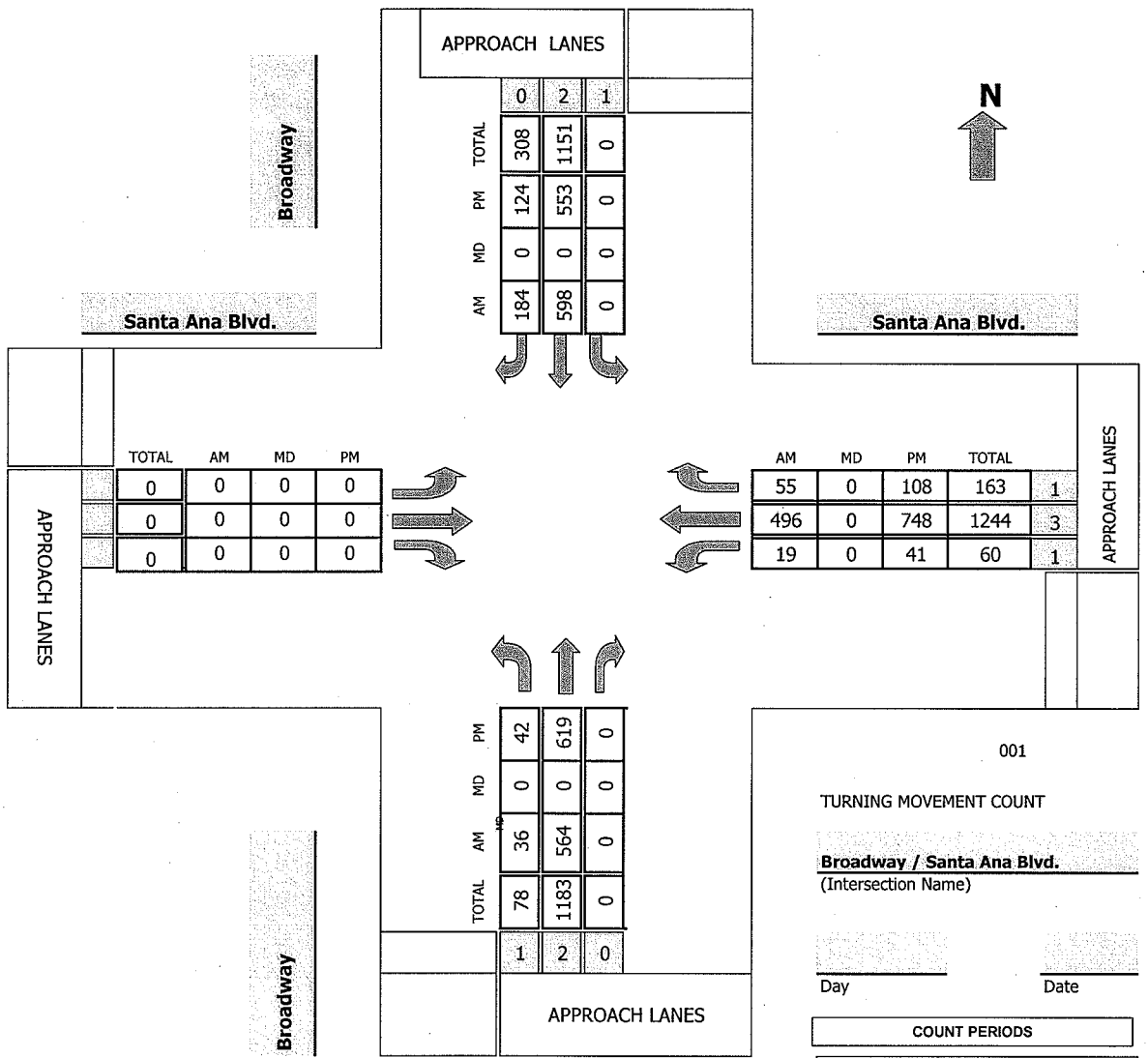
PEAK VOLUMES =	67	537	56	121	616	127	175	675	67	38	456	96	3031
PEAK HR. FACTOR:		0.817			0.809			0.967			0.753		0.897

CONTROL: Signalized

(8)

TMC Summary of Broadway/Santa Ana Blvd.

Project #: 04-1551-007



001

TURNING MOVEMENT COUNT

Broadway / Santa Ana Blvd.
(Intersection Name)

Day

Date

COUNT PERIODS			
am	7:00 AM	-	9:00 AM
noon	3:30 PM	-	5:30 PM
pm	4:00 PM	-	6:00 PM

AM PEAK HOUR	700 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	430 PM

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Broadway DATE: 9/14/2004 LOCATION: City of Santa Ana

E-W STREET: Santa Ana Blvd. DAY: TUESDAY PROJECT# 04-1551-007

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	0	2	1				1	3	1	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	10	142			158	42				5	124	9	490
7:15 AM	7	147			153	45				6	125	10	493
7:30 AM	4	148			171	54				4	132	10	523
7:45 AM	15	127			116	43				4	115	26	446
8:00 AM	12	104			112	64				9	124	20	445
8:15 AM	17	87			86	44				12	139	18	403
8:30 AM	20	94			104	44				9	112	15	398
8:45 AM	16	100			101	36				10	118	14	395
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	101	949	0	0	1001	372	0	0	0	59	989	122	3593

AM Peak Hr Begins at: 700 AM

PEAK VOLUMES =	36	564	0	0	598	184	0	0	0	19	496	55	1952
PEAK HR. FACTOR:		0.974			0.869			0.000			0.976		0.933

CONTROL: Signalized

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Broadway DATE: 9/14/2004 LOCATION: City of Santa Ana

E-W STREET: Santa Ana Blvd. DAY: TUESDAY PROJECT# 04-1551-007

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	0	2	1				1	3	1	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM	15	122			129	25				12	155	18	476
3:45 PM	19	128			156	31				14	150	23	521
4:00 PM	20	135			115	31				7	150	19	477
4:15 PM	7	159			134	12				13	138	25	488
4:30 PM	13	165			148	20				15	169	27	557
4:45 PM	10	150			118	43				10	175	15	521
5:00 PM	10	144			149	37				11	207	33	591
5:15 PM	9	160			138	24				5	197	33	566
5:30 PM													
5:45 PM													
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	103	1163	0	0	1087	223	0	0	0	87	1341	193	4197
PEAK VOLUMES =	42	619	0	0	553	124	0	0	0	41	748	108	2235
PEAK HR. FACTOR:		0.928			0.910			0.000			0.893		0.945

PM Peak Hr Begins at: 430 PM

CONTROL: Signalized

+40

Per flow conservation

(9)

Transportation Studies, Inc

1350 Reynolds Avenue, Suite 115
Irvine, CA. 92614

File Name: H0505109
Site Code: 00000924
Start Date: 5/24/2005
Page No: 1
City: SANTA ANA
N-S Direction: BROADWAY
E-W Direction: 5TH STREET

Groups Printed- Turning Movements

	BROADWAY Southbound			5TH STREET Westbound			BROADWAY Northbound			5TH STREET Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
7:00 AM	0	93	7	0	0	0	5	47	0	2	49	17	220
7:15 AM	0	106	13	0	0	0	8	79	0	0	73	26	305
7:30 AM	0	117	13	0	0	0	6	114	0	4	91	15	360
7:45 AM	0	136	25	0	0	0	9	128	0	1	93	29	421
Total	0	452	58	0	0	0	28	368	0	7	306	87	1306
8:00 AM	0	106	15	0	0	0	11	101	0	1	72	28	334
8:15 AM	0	82	15	0	0	0	5	110	0	3	61	15	291
8:30 AM	0	95	17	0	0	0	13	68	0	2	76	22	293
8:45 AM	0	113	22	0	0	0	2	78	0	2	42	20	279
Total	0	396	69	0	0	0	31	357	0	8	251	85	1197
*** BREAK ***													
4:00 PM	0	122	12	0	0	0	17	118	0	3	114	33	419
4:15 PM	0	100	9	0	0	0	18	124	0	8	108	45	412
4:30 PM	0	150	11	0	0	0	21	138	0	4	136	42	502
4:45 PM	0	139	17	0	0	0	17	114	0	6	138	38	469
Total	0	511	49	0	0	0	73	494	0	21	496	158	1802
5:00 PM	0	169	20	0	0	0	21	131	0	4	166	54	565
5:15 PM	0	146	21	0	0	0	16	110	0	6	116	34	449
5:30 PM	0	159	19	0	0	0	13	152	0	2	126	44	515
5:45 PM	0	144	20	0	0	0	28	131	0	6	95	32	456
Total	0	618	80	0	0	0	78	524	0	18	503	164	1985
Grand Total	0	1977	256	0	0	0	210	1743	0	54	1556	494	6290
Apprch %	0	88.5	11.5	0	0	0	10.8	89.2	0	2.6	74	23.5	
Total %	0	31.4	4.1	0	0	0	3.3	27.7	0	0.9	24.7	7.9	

Transportation Studies, Inc

1350 Reynolds Avenue, Suite 115
Irvine, CA. 92614

File Name: H0505109
Site Code: 00000924
Start Date: 5/24/2005
Page No: 2

	BROADWAY Southbound				5TH STREET Westbound				BROADWAY Northbound				5TH STREET Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
7:15 AM	0	106	13	119	0	0	0	0	8	79	0	87	0	73	26	99	305
7:30 AM	0	117	13	130	0	0	0	0	6	114	0	120	4	91	15	110	360
7:45 AM	0	136	25	161	0	0	0	0	9	128	0	137	1	93	29	123	421
8:00 AM	0	106	15	121	0	0	0	0	11	101	0	112	1	72	28	101	334
Total Volume	0	465	66	531	0	0	0	0	34	422	0	456	6	329	98	433	1420
% App. Total	0	87.6	12.4		0	0	0		7.5	92.5	0		1.4	76	22.6		
PHF	0	0.855	0.66	0.825	0	0	0	0	0.773	0.824	0	0.832	0.375	0.884	0.845	0.88	0.843

Transportation Studies, Inc

1350 Reynolds Avenue, Suite 115
Irvine, CA. 92614

File Name: H0505109
Site Code: 00000924
Start Date: 5/24/2005
Page No: 3

	BROADWAY Southbound				5TH STREET Westbound				BROADWAY Northbound				5TH STREET Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
4:45 PM	0	139	17	156	0	0	0	0	17	114	0	131	6	138	38	182	469
5:00 PM	0	169	20	189	0	0	0	0	21	131	0	152	4	166	54	224	565
5:15 PM	0	146	21	167	0	0	0	0	16	110	0	126	6	116	34	156	449
5:30 PM	0	159	19	178	0	0	0	0	13	152	0	165	2	126	44	172	515
Total Volume	0	613	77	690	0	0	0	0	67	507	0	574	18	546	170	734	1998
% App. Total	0	88.8	11.2		0	0	0		11.7	88.3	0		2.5	74.4	23.2		
PHF	0	0.907	0.917	0.913	0	0	0	0	0.798	0.834	0	0.87	0.75	0.822	0.787	0.819	0.884

(10)

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Broadway DATE: 9/26/2005 LOCATION: City of Santa Ana

E-W STREET: 4th St DAY: MONDAY PROJECT# H0509044

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	3	56	6	3	67	11	7	4	2	7	13	1	180
7:15 AM	4	82	8	4	82	11	2	5	6	5	11	1	221
7:30 AM	2	108	2	1	112	14	1	17	3	4	11	1	276
7:45 AM	3	123	8	4	104	12	5	11	4	5	16	7	302
8:00 AM	3	105	5	6	102	20	5	11	5	7	26	3	298
8:15 AM	1	87	7	4	89	22	4	12	3	4	31	0	264
8:30 AM	9	83	5	2	76	19	2	10	1	10	20	2	239
8:45 AM	5	58	7	3	87	14	2	14	2	5	19	7	223
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	NL 30	NT 702	NR 48	SL 27	ST 719	SR 123	EL 28	ET 84	ER 26	WL 47	WT 147	WR 22	TOTAL 2003

AM Peak Hr Begins at: 730 AM

PEAK VOLUMES =	9	423	22	15	407	68	15	51	15	20	84	11	1140
PEAK HR. FACTOR:		0.847			0.957			0.964			0.799		0.944

CONTROL:

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Broadway DATE: 9/26/2005 LOCATION: City of Santa Ana

E-W STREET: 4th St DAY: MONDAY PROJECT# H0509044

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	4	92	10	6	118	6	10	20	12	9	29	9	325
4:15 PM	3	100	13	7	124	2	12	25	8	13	25	7	339
4:30 PM	3	116	16	8	117	4	14	25	8	6	30	5	352
4:45 PM	4	116	18	5	111	7	8	23	5	14	32	5	348
5:00 PM	1	105	23	1	142	9	11	24	4	12	31	5	368
5:15 PM	5	110	18	6	124	5	14	20	9	10	31	9	361
5:30 PM	4	119	15	9	119	4	11	27	7	15	35	9	374
5:45 PM	8	126	31	8	98	3	9	26	8	9	21	14	361
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 32	NT 884	NR 144	SL 50	ST 953	SR 40	EL 89	ET 190	ER 61	WL 88	WT 234	WR 63	TOTAL 2828

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	18	460	87	24	483	21	45	97	28	46	118	37	1464
PEAK HR. FACTOR:		0.856			0.868			0.944			0.852		0.979

CONTROL:

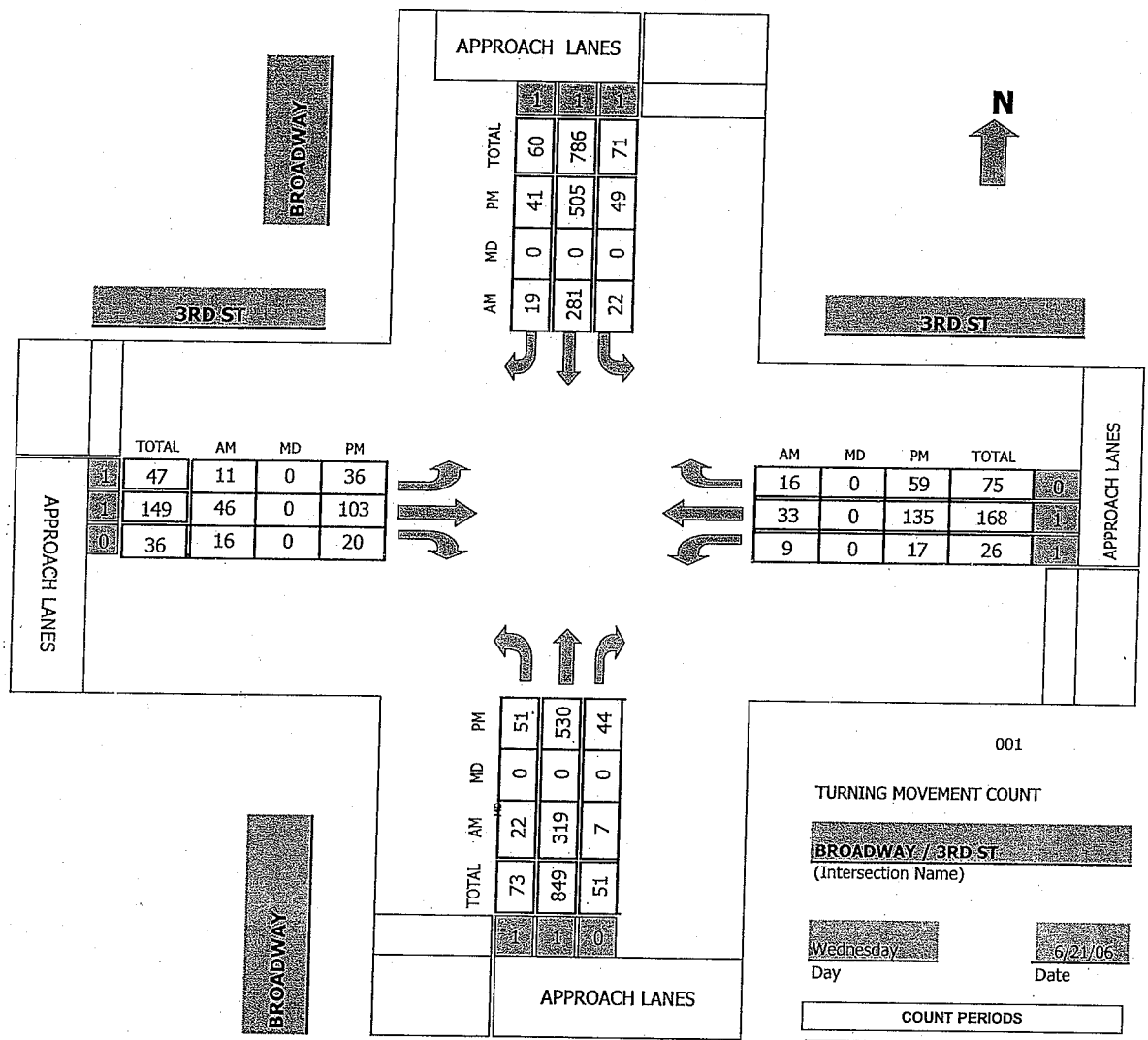
+50

flow conservation

(11)

TMC Summary of BROADWAY/3RD ST

Project #: 06-1192-003



001

TURNING MOVEMENT COUNT

BROADWAY / 3RD ST
(Intersection Name)

Wednesday
Day

6/21/06
Date

COUNT PERIODS		
am	7:00 AM -	9:00 AM
noon	11:00 AM -	1:00 PM
pm	4:00 PM -	6:00 PM

AM PEAK HOUR	730 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	500 PM

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: BROADWAY DATE: 6/21/2006 LOCATION: City of Santa Ana

E-W STREET: 3RD ST DAY: WEDNESDAY PROJECT# 06-1192-003

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	0	1	1	1	1	1	0	1	1	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	3	44	4	2	47	4	0	6	4	2	8	1	125
7:15 AM	9	74	2	5	62	4	0	11	4	0	6	4	181
7:30 AM	7	75	0	8	63	1	1	11	4	2	4	5	181
7:45 AM	4	97	2	2	76	3	5	15	4	4	11	6	229
8:00 AM	5	68	3	6	66	8	1	15	2	2	9	3	188
8:15 AM	6	79	2	6	76	7	4	5	6	1	9	2	203
8:30 AM	3	56	1	5	58	4	4	7	6	1	10	4	159
8:45 AM	8	69	6	5	67	7	9	11	3	2	12	7	206
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	45	562	20	39	515	38	24	81	33	14	69	32	1472

AM Peak Hr Begins at: 730 AM

PEAK VOLUMES =	22	319	7	22	281	19	11	46	16	9	33	16	801
PEAK HR. FACTOR:		0.845			0.904			0.760			0.690		0.874

CONTROL: Signalized

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: BROADWAY DATE: 6/21/2006 LOCATION: City of Santa Ana

E-W STREET: 3RD ST DAY: WEDNESDAY PROJECT# 06-1192-003

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	0	1	1	1	1	1	0	1	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	7	100	6	5	105	10	6	22	5	7	11	13	297
4:15 PM	12	97	10	9	118	14	8	17	5	1	28	13	332
4:30 PM	7	116	13	18	142	11	9	26	5	6	28	16	397
4:45 PM	8	111	14	10	118	5	10	23	5	4	28	15	351
5:00 PM	9	126	13	9	135	11	10	44	7	5	30	15	414
5:15 PM	15	124	8	12	130	10	8	27	7	1	37	8	387
5:30 PM	14	145	10	15	134	11	10	16	2	9	38	23	427
5:45 PM	13	135	13	13	106	9	8	16	4	2	30	13	362
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 85	NT 954	NR 87	SL 91	ST 988	SR 81	EL 69	ET 191	ER 40	WL 35	WT 230	WR 116	TOTAL 2967

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	51	530	44	49	505	41	36	103	20	17	135	59	1590
PEAK HR. FACTOR:		0.925			0.930			0.652			0.754		0.931

CONTROL: Signalized

(12) 11

Transportation Studies, Inc

1350 Reynolds Avenue, Suite 115
Irvine, CA. 92614

File Name: H0505110
Site Code: 00000977
Start Date: 5/24/2005
Page No: 1
City: SANTA ANA
N-S Direction: BROADWAY
E-W Direction: 1ST STREET

298 in traffic

Groups Printed- Turning Movements

	BROADWAY Southbound			1ST STREET Westbound			BROADWAY Northbound			1ST STREET Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
7:00 AM	5	73	11	16	174	18	12	44	12	19	228	32	644
7:15 AM	10	66	13	12	201	25	18	74	13	17	285	27	761
7:30 AM	12	84	15	14	184	12	20	69	16	16	317	36	795
7:45 AM	18	82	13	14	191	30	21	93	12	13	281	41	809
Total	45	305	52	56	750	85	71	280	53	65	1111	136	3009
8:00 AM	12	64	11	15	197	23	11	76	13	17	307	40	786
8:15 AM	16	55	10	25	202	13	18	62	12	19	224	32	688
8:30 AM	11	61	15	11	181	18	10	46	17	14	229	19	632
8:45 AM	7	41	11	19	136	7	8	50	14	7	230	36	566
Total	46	221	47	70	716	61	47	234	56	57	990	127	2672

*** BREAK ***

4:00 PM	31	72	16	10	272	25	22	85	21	13	259	32	858
4:15 PM	20	67	20	14	296	18	10	84	20	12	245	33	839
4:30 PM	29	87	17	14	321	15	9	89	27	16	289	30	943
4:45 PM	30	79	14	18	318	19	10	79	19	14	238	26	864
Total	110	305	67	56	1207	77	51	337	87	55	1031	121	3504
5:00 PM	27	93	16	16	293	19	9	67	12	15	243	29	839
5:15 PM	30	101	13	16	296	13	15	95	25	18	239	37	898
5:30 PM	27	95	24	16	274	12	11	88	25	15	245	33	865
5:45 PM	27	77	22	8	289	13	16	79	19	15	242	40	847
Total	111	366	75	56	1152	57	51	329	81	63	969	139	3449
Grand Total	312	1197	241	238	3825	280	220	1180	277	240	4101	523	12634
Apprch %	17.8	68.4	13.8	5.5	88.1	6.4	13.1	70.4	16.5	4.9	84.3	10.8	
Total %	2.5	9.5	1.9	1.9	30.3	2.2	1.7	9.3	2.2	1.9	32.5	4.1	

Transportation Studies, Inc

1350 Reynolds Avenue, Suite 115
Irvine, CA. 92614

File Name: H0505110
Site Code: 00000977
Start Date: 5/24/2005
Page No: 2

	BROADWAY Southbound				1ST STREET Westbound				BROADWAY Northbound				1ST STREET Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
7:15 AM	10	66	13	89	12	201	25	238	18	74	13	105	17	285	27	329	761
7:30 AM	12	84	15	111	14	184	12	210	20	69	16	105	16	317	36	369	795
7:45 AM	18	82	13	113	14	191	30	235	21	93	12	126	13	281	41	335	809
8:00 AM	12	64	11	87	15	197	23	235	11	76	13	100	17	307	40	364	786
Total Volume	52	296	52	400	55	773	90	918	70	312	54	436	63	1190	144	1397	3151
% App. Total	13	74	13		6	84.2	9.8		16.1	71.6	12.4		4.5	85.2	10.3		
PHF	0.722	0.881	0.867	0.885	0.917	0.961	0.75	0.964	0.833	0.839	0.844	0.865	0.926	0.938	0.878	0.946	0.974

Transportation Studies, Inc

1350 Reynolds Avenue, Suite 115
Irvine, CA. 92614

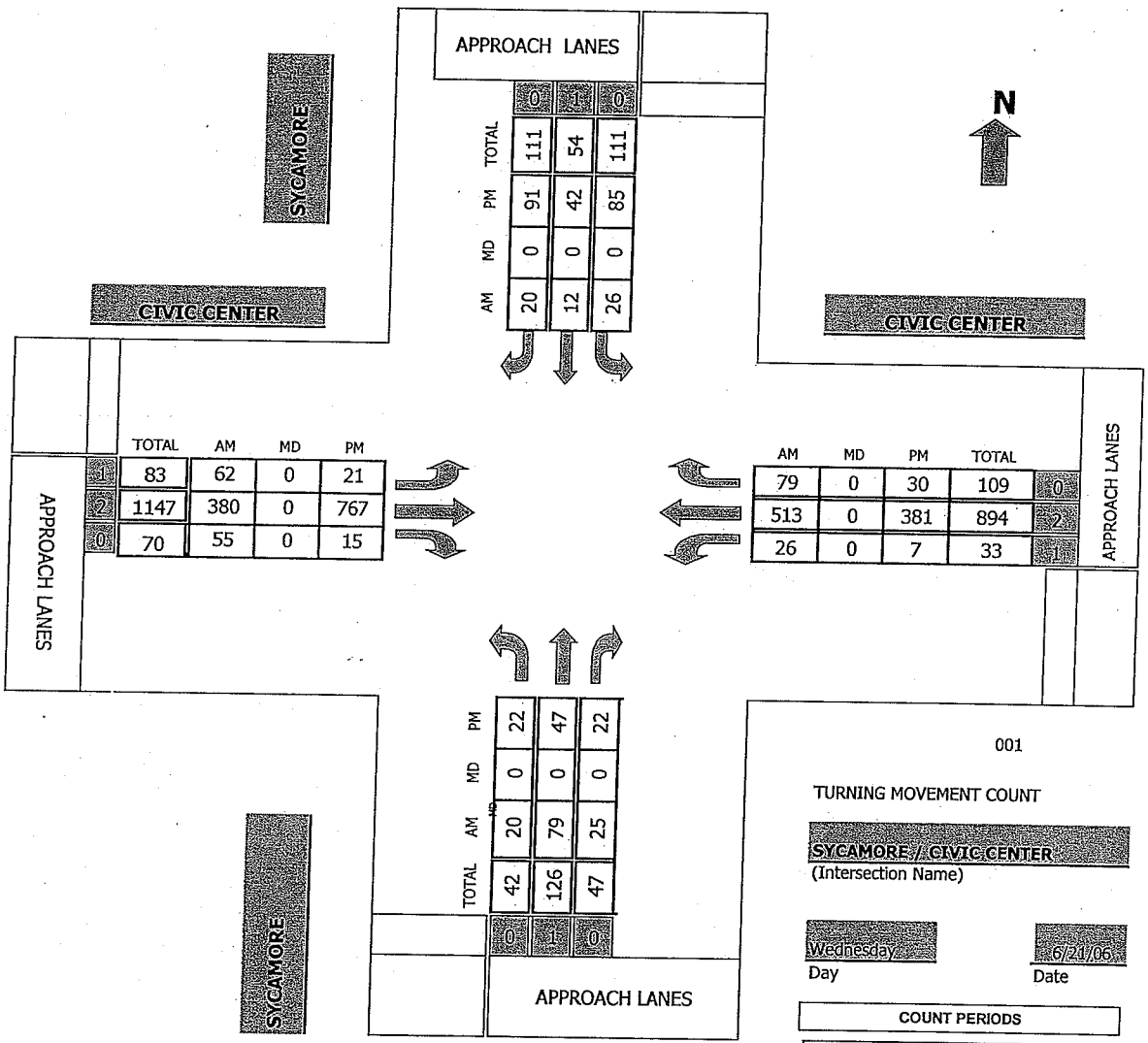
File Name: H0505110
Site Code: 00000977
Start Date: 5/24/2005
Page No: 3

	BROADWAY Southbound				1ST STREET Westbound				BROADWAY Northbound				1ST STREET Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
4:30 PM	29	87	17	133	14	321	15	350	9	89	27	125	16	289	30	335	943
4:45 PM	30	79	14	123	18	318	19	355	10	79	19	108	14	238	26	278	864
5:00 PM	27	93	16	136	16	293	19	328	9	67	12	88	15	243	29	287	839
5:15 PM	30	101	13	144	16	296	13	325	15	95	25	135	18	239	37	294	898
Total Volume	116	360	60	536	64	1228	66	1358	43	330	83	456	63	1009	122	1194	3544
% App. Total	21.6	67.2	11.2		4.7	90.4	4.9		9.4	72.4	18.2		5.3	84.5	10.2		
PHF	0.967	0.891	0.882	0.931	0.889	0.956	0.868	0.956	0.717	0.868	0.769	0.844	0.875	0.873	0.824	0.891	0.94

13

TMC Summary of SYCAMORE/CIVIC CENTER

Project #: 06-1192-011



001

TURNING MOVEMENT COUNT

SYCAMORE / CIVIC CENTER
(Intersection Name)

Wednesday
Day

6/21/06
Date

COUNT PERIODS		
am	7:00 AM -	9:00 AM
noon	11:00 AM -	1:00 PM
pm	4:00 PM -	6:00 PM

AM PEAK HOUR	715 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	430 PM

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: SYCAMORE DATE: 6/21/2006 LOCATION: City of Santa Ana

E-W STREET: CIVIC CENTER DAY: WEDNESDAY PROJECT# 06-1192-011

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	7	18	7	6	2	4	13	81	18	9	111	19	295
7:15 AM	10	22	10	6	2	2	15	98	22	10	123	28	348
7:30 AM	5	20	1	9	3	2	20	101	19	6	117	29	332
7:45 AM	3	16	7	1	4	8	16	92	6	4	132	11	300
8:00 AM	2	21	7	10	3	8	11	89	8	6	141	11	317
8:15 AM	4	20	6	2	2	7	12	72	7	2	119	8	261
8:30 AM	6	11	5	4	4	9	13	77	6	8	101	7	251
8:45 AM	7	9	4	0	5	1	12	63	4	1	113	6	225
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	NL 44	NT 137	NR 47	SL 38	ST 25	SR 41	EL 112	ET 673	ER 90	WL 46	WT 957	WR 119	TOTAL 2329
AM Peak Hr Begins at:		715 AM											
PEAK VOLUMES =	20	79	25	26	12	20	62	380	55	26	513	79	1297
PEAK HR. FACTOR:		0.738			0.690			0.888			0.960		0.932
CONTROL:	SIGNALIZED												

per flow conservation & comparison w/ old counts

+30

+100

Per flow conservation and comparison w/ old counts.

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: SYCAMORE DATE: 6/21/2006 LOCATION: City of Santa Ana

E-W STREET: CIVIC CENTER DAY: WEDNESDAY PROJECT# 06-1192-011

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	2	2	6	11	6	19	7	111	1	2	44	8	219
4:15 PM	9	5	5	13	9	13	6	127	3	1	73	5	269
4:30 PM	6	14	9	27	10	29	7	174	5	2	104	10	397
4:45 PM	5	11	6	15	12	18	4	197	3	2	91	8	372
5:00 PM	4	9	3	24	9	23	6	201	3	2	101	7	392
5:15 PM	7	13	4	19	11	21	4	195	4	1	85	5	369
5:30 PM	6	7	6	21	7	17	6	184	5	0	91	5	355
5:45 PM	3	5	5	15	3	13	2	177	1	1	72	2	299
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL VOLUMES =	NL 42	NT 66	NR 44	SL 145	ST 67	SR 153	EL 42	ET 1366	ER 25	WL 11	WT 661	WR 50	TOTAL 2672

PM Peak Hr Begins at: 430 PM

PEAK VOLUMES =	22	47	22	85	42	91	21	767	15	7	381	30	1530
					+10						+40		
PEAK HR. FACTOR:		0.784			0.826			0.956			0.901		0.963

CONTROL: SIGNALIZED

Per flow conservation check

Intersection Turning Movement

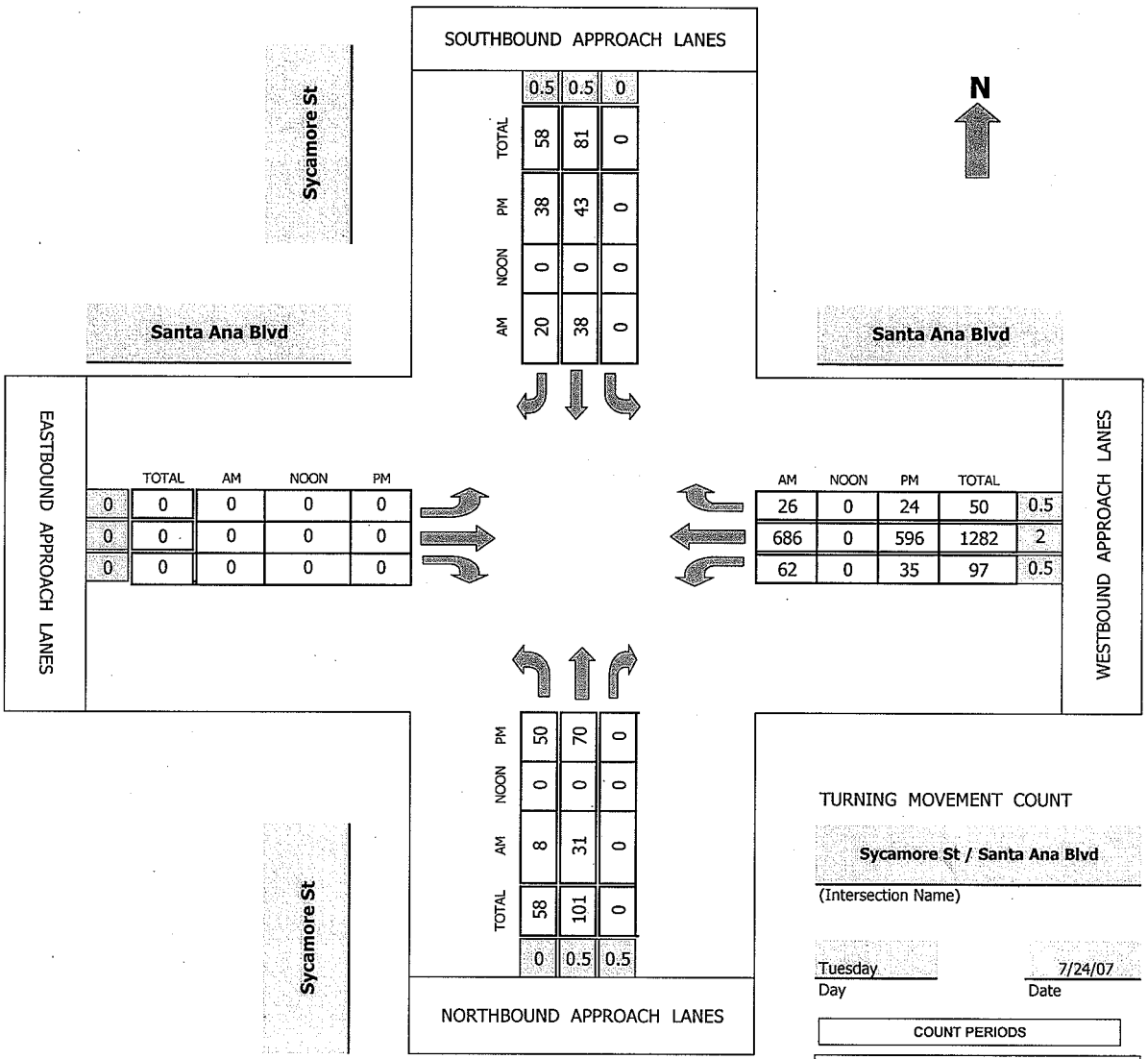
Prepared by:

National Data & Surveying Services

14

TMC Summary of Sycamore St/Santa Ana Blvd

Project #: 07-1213-002



TURNING MOVEMENT COUNT

Sycamore St / Santa Ana Blvd

(Intersection Name)

Tuesday — Day

7/24/07 — Date

COUNT PERIODS		
am	7:00 AM -	9:00 AM
noon	11:00 AM -	1:00 PM
pm	4:00 PM -	6:00 PM

AM PEAK HOUR	730 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	430 PM

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Sycamore St | DATE: 7/24/2007 | LOCATION: City of Santa Ana

E-W STREET: Santa Ana Blvd | DAY: TUESDAY | PROJECT# 07-1213-002

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0.5	0.5			0.5	0.5	0	0	0	0.5	2	0.5	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	1			12	0				7	139	1	160
7:15 AM	1	8			14	1				13	130	7	174
7:30 AM	2	4			10	6				18	172	10	222
7:45 AM	2	15			9	3				19	191	10	249
8:00 AM	2	3			5	5				12	168	2	197
8:15 AM	2	9			14	6				13	155	4	203
8:30 AM	0	9			12	7				13	160	5	206
8:45 AM	4	4			11	4				10	153	5	191
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	NL 13	NT 53	NR 0	SL 0	ST 87	SR 32	EL 0	ET 0	ER 0	WL 105	WT 1268	WR 44	TOTAL 1602

AM Peak Hr Begins at: 730 AM

PEAK VOLUMES =	8	31	0	0	38	20	0	0	0	62	686	26	871
PEAK HR. FACTOR:		0.574			0.725			0.000			0.880		0.874

CONTROL: 2-Way stop N/S

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Sycamore St DATE: 7/24/2007 LOCATION: City of Santa Ana

E-W STREET: Santa Ana Blvd DAY: TUESDAY PROJECT# 07-1213-002

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0.5	0.5			0.5	0.5	0	0	0	0.5	2	0.5	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	6	11			10	7				5	123	7	169
4:15 PM	3	8			13	3				10	129	6	172
4:30 PM	8	21			10	10				6	151	6	212
4:45 PM	7	13			14	13				13	130	11	201
5:00 PM	24	26			11	9				10	157	5	242
5:15 PM	11	10			8	6				6	158	2	201
5:30 PM	7	16			11	8				5	126	2	175
5:45 PM	2	9			5	4				7	110	2	139
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	68	114	0	0	82	60	0	0	0	62	1084	41	1511

PM Peak Hr Begins at: 430 PM

PEAK VOLUMES =	50	70	0	0	43	38	0	0	0	35	596	24	856
PEAK HR. FACTOR:		0.600			0.750			0.000			0.952		0.884

CONTROL: 2-Way stop N/S

Intersection Turning Movement

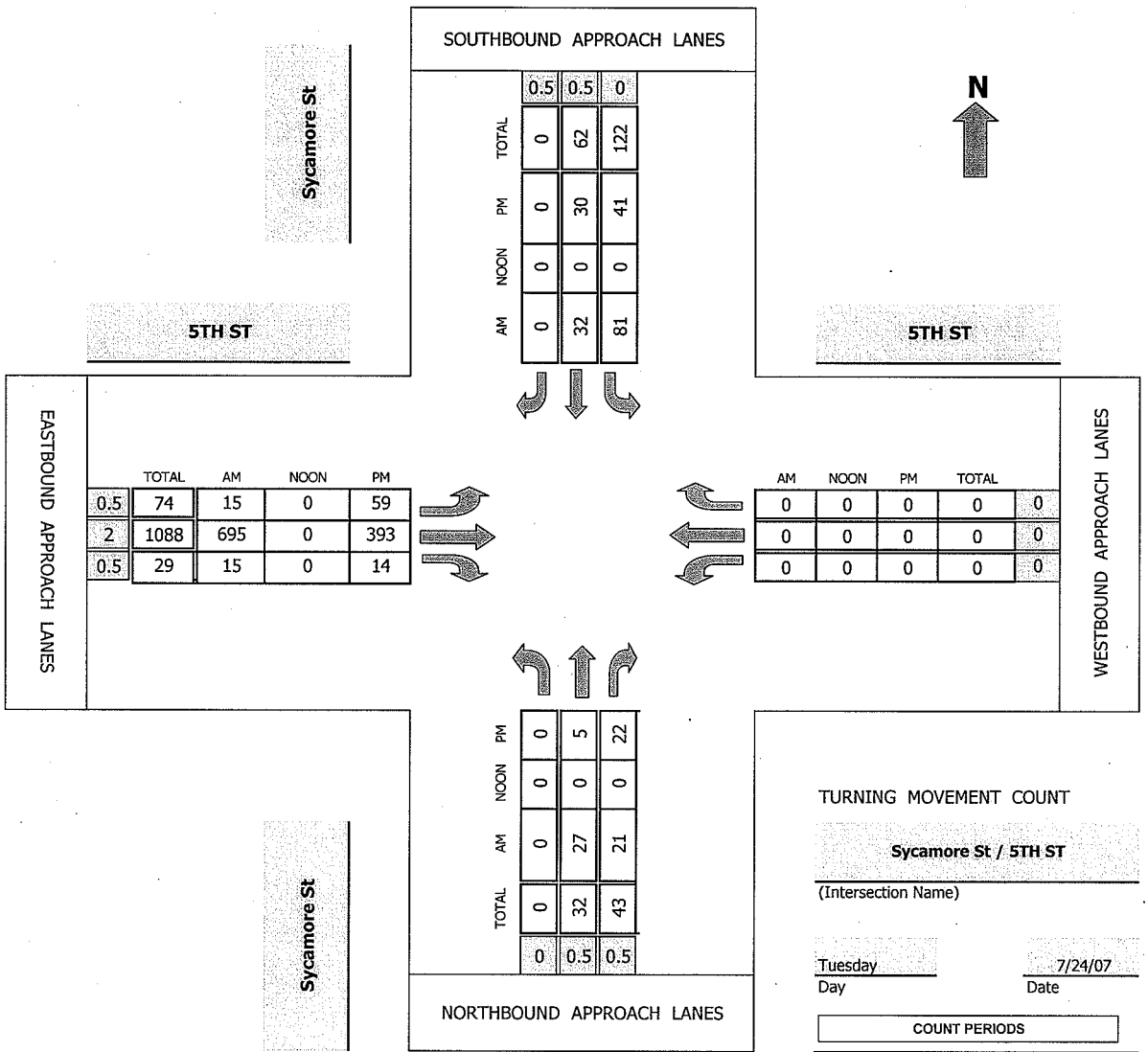
Prepared by:

National Data & Surveying Services

15

TMC Summary of Sycamore St/5TH ST

Project #: 07-1213-003



TURNING MOVEMENT COUNT

Sycamore St / 5TH ST

(Intersection Name)

Tuesday — Day

7/24/07 — Date

COUNT PERIODS		
am	7:00 AM -	9:00 AM
noon	11:00 AM -	1:00 PM
pm	4:00 PM -	6:00 PM

AM PEAK HOUR	730 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	415 PM

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Sycamore St | DATE: 7/24/2007 | LOCATION: City of Santa Ana

E-W STREET: 5TH ST | DAY: TUESDAY | PROJECT# 07-1213-003

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0.5	0.5	0.5	0.5	0	0.5	2	0.5	0	0	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM		4	4	13	4		3	113	3				144
7:15 AM		3	8	10	9		5	112	3				150
7:30 AM		11	10	11	5		4	155	3				199
7:45 AM		5	6	18	15		2	173	4				223
8:00 AM		6	2	34	6		5	213	6				272
8:15 AM		5	3	18	6		4	154	2				192
8:30 AM		2	4	17	6		3	120	3				155
8:45 AM		4	8	12	6		2	128	6				166
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	NL 0	NT 40	NR 45	SL 133	ST 57	SR 0	EL 28	ET 1168	ER 30	WL 0	WT 0	WR 0	TOTAL 1501

AM Peak Hr Begins at: 730 AM

PEAK VOLUMES =	0	27	21	81	32	0	15	695	15	0	0	0	886
PEAK HR. FACTOR:		0.571			0.706			0.809			0.000		0.814

CONTROL: 2-Way Stop N & S

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Sycamore St DATE: 7/24/2007 LOCATION: City of Santa Ana

E-W STREET: 5TH ST DAY: TUESDAY PROJECT# 07-1213-003

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0.5	0.5	0.5	0.5	0	0.5	2	0.5	0	0	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM		0	5	9	7		4	64	3				92
4:15 PM		0	4	9	10		9	86	3				121
4:30 PM		1	7	12	8		20	97	4				149
4:45 PM		3	4	8	5		14	115	6				155
5:00 PM		1	7	12	7		16	95	1				139
5:15 PM		1	7	4	10		10	58	2				92
5:30 PM		2	6	7	7		9	61	3				95
5:45 PM		2	5	8	6		9	77	3				110
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 0	NT 10	NR 45	SL 69	ST 60	SR 0	EL 91	ET 653	ER 25	WL 0	WT 0	WR 0	TOTAL 953

PM Peak Hr Begins at: 415 PM

PEAK VOLUMES =	0	5	22	41	30	0	59	393	14	0	0	0	564
PEAK HR. FACTOR:		0.844			0.888			0.863			0.000		0.910

CONTROL: 2-Way Stop N & S

Intersection Turning Movement

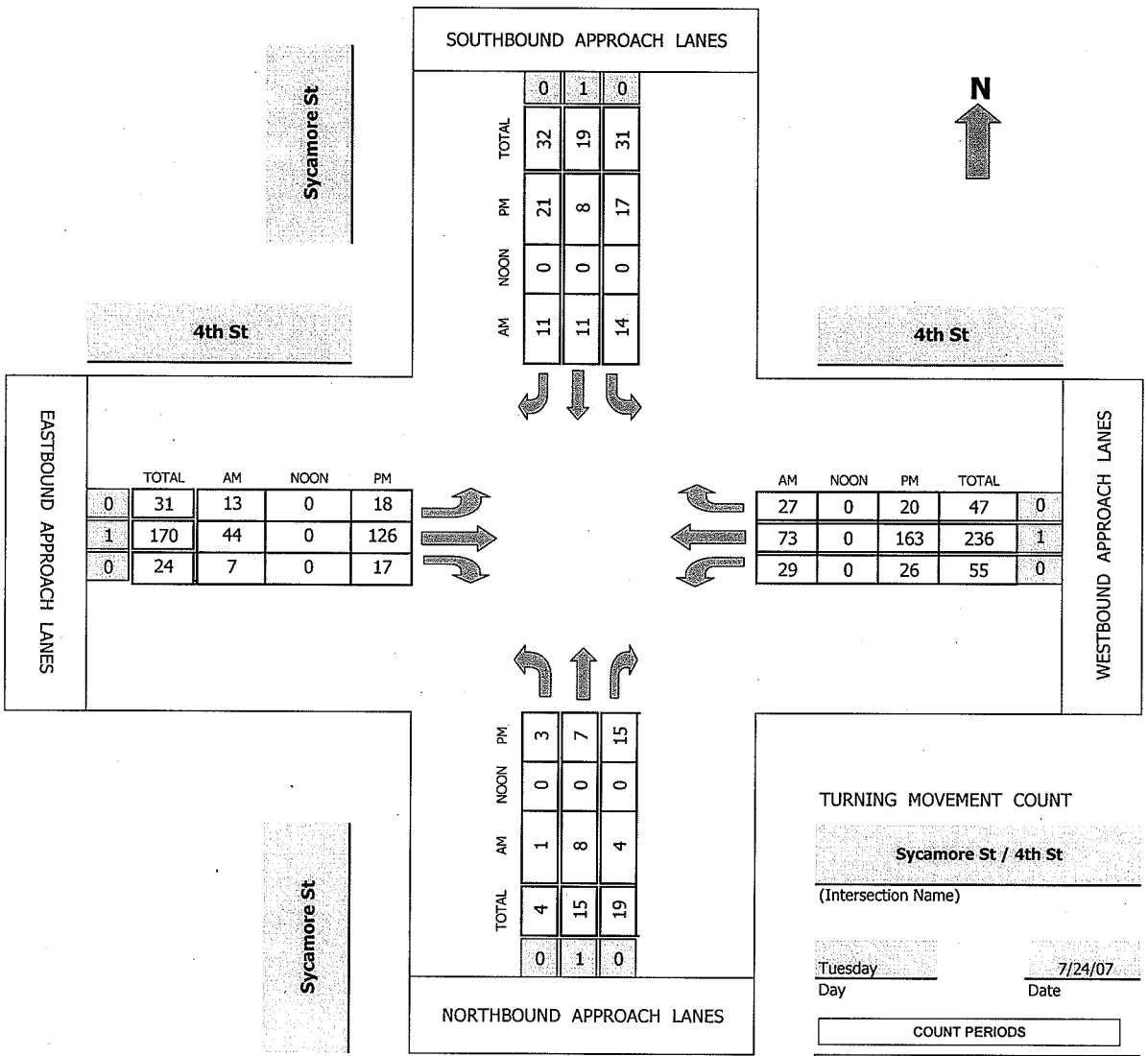
Prepared by:

National Data & Surveying Services

16

TMC Summary of Sycamore St/4th St

Project #: 07-1213-004



TURNING MOVEMENT COUNT

Sycamore St / 4th St

(Intersection Name)

Tuesday — Day

7/24/07 — Date

COUNT PERIODS		
am	7:00 AM -	9:00 AM
noon	11:00 AM -	1:00 PM
pm	4:00 PM -	6:00 PM

AM PEAK HOUR	800 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	400 PM

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Sycamore St | DATE: 7/24/2007 | LOCATION: City of Santa Ana

E-W STREET: 4th St | DAY: TUESDAY | PROJECT# 07-1213-004

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	1	0	0	1	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	1	0	2	3	2	1	8	0	2	16	3	38
7:15 AM	1	1	1	1	2	6	1	6	0	3	17	6	45
7:30 AM	0	2	1	4	2	4	1	13	1	1	10	6	45
7:45 AM	0	0	2	2	1	4	3	6	2	4	23	5	52
8:00 AM	1	2	0	5	2	4	3	7	0	2	23	5	54
8:15 AM	0	1	2	4	2	2	3	10	1	4	23	7	59
8:30 AM	0	1	0	1	3	3	4	13	3	14	18	8	68
8:45 AM	0	4	2	4	4	2	3	14	3	9	9	7	61
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	2	12	8	23	19	27	19	77	10	39	139	47	422

AM Peak Hr Begins at: 800 AM

PEAK VOLUMES =	1	8	4	14	11	11	13	44	7	29	73	27	242
PEAK HR. FACTOR:		0.542			0.818			0.800			0.806		0.890

CONTROL: 4-Way Stop

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Sycamore St DATE: 7/24/2007 LOCATION: City of Santa Ana

E-W STREET: 4th St DAY: TUESDAY PROJECT# 07-1213-004

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	1	0	0	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	1	3	3	2	1	5	3	32	4	5	43	4	106
4:15 PM	1	1	4	6	3	6	7	30	5	1	42	2	108
4:30 PM	0	1	4	3	1	7	4	36	5	11	37	8	117
4:45 PM	1	2	4	6	3	3	4	28	3	9	41	6	110
5:00 PM	0	1	3	2	2	6	2	22	0	6	31	6	81
5:15 PM	1	0	2	5	1	4	2	28	3	2	42	5	95
5:30 PM	0	1	3	4	1	7	5	27	1	3	37	4	93
5:45 PM	1	3	3	4	1	8	2	37	3	3	40	6	111
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 5	NT 12	NR 26	SL 32	ST 13	SR 46	EL 29	ET 240	ER 24	WL 40	WT 313	WR 41	TOTAL 821

PM Peak Hr Begins at: 400 PM

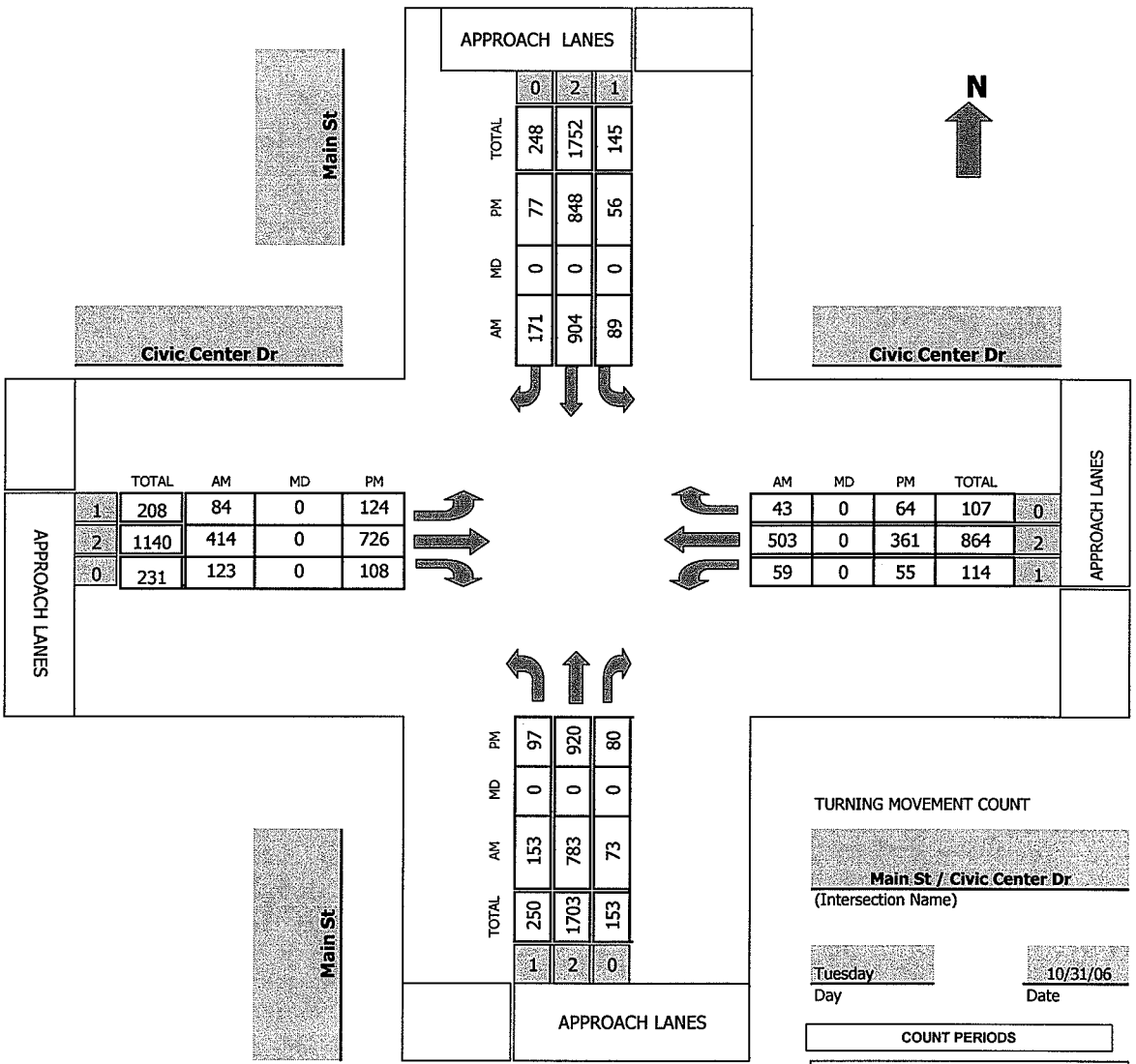
PEAK VOLUMES =	3	7	15	17	8	21	18	126	17	26	163	20	441
PEAK HR. FACTOR:		0.893			0.767			0.894			0.933		0.942

CONTROL: 4-Way Stop

17

TMC Summary of Main St/Civic Center Dr

Project #: 06-1313-022



	TOTAL	AM	MD	PM
0	248	171	0	77
2	1752	904	0	848
1	145	89	0	56

	TOTAL	AM	MD	PM
1	208	84	0	124
2	1140	414	0	726
0	231	123	0	108

	AM	MD	PM	TOTAL
0	43	0	64	107
2	503	0	361	864
1	59	0	55	114

	TOTAL	AM	MD	PM
1	250	153	0	97
2	1703	783	0	920
0	153	73	0	80

TURNING MOVEMENT COUNT

Main St / Civic Center Dr
(Intersection Name)

Tuesday — Day

10/31/06 — Date

COUNT PERIODS		
am	7:00 AM -	9:00 AM
noon	11:00 AM -	1:00 PM
pm	2:00 PM -	6:00 PM

AM PEAK HOUR	715 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	445 PM

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Main St DATE: 10/31/2006 LOCATION: City of Santa Ana

E-W STREET: Civic Center Dr DAY: TUESDAY PROJECT# 06-1313-022

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	1	2	0	1	2	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	31	171	14	6	213	29	11	76	15	12	78	5	661
7:15 AM	40	183	19	19	227	36	14	106	22	15	109	7	797
7:30 AM	43	199	17	19	218	37	19	117	34	16	117	12	848
7:45 AM	36	212	21	23	240	43	23	102	36	16	136	11	899
8:00 AM	34	189	16	28	219	55	28	89	31	12	141	13	855
8:15 AM	29	174	11	20	231	71	20	77	28	11	105	9	786
8:30 AM	30	163	9	16	198	58	24	69	21	8	89	7	692
8:45 AM	23	168	7	10	180	43	18	63	18	9	77	6	622
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	NL 266	NT 1459	NR 114	SL 141	ST 1726	SR 372	EL 157	ET 699	ER 205	WL 99	WT 852	WR 70	TOTAL 6160

AM Peak Hr Begins at: 715 AM

PEAK VOLUMES =	153	783	73	89	904	171	84	414	123	59	503	43	3399
PEAK HR. FACTOR:		0.938			0.951			0.913			0.911		0.945

CONTROL: Signalized

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Main St DATE: 10/31/2006 LOCATION: City of Santa Ana

E-W STREET: Civic Center Dr DAY: TUESDAY PROJECT# 06-1313-022

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	1	2	0	1	2	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	19	243	21	9	176	12	28	112	21	7	58	4	710
4:15 PM	23	277	19	8	184	17	31	123	29	10	61	7	789
4:30 PM	21	299	23	7	186	23	40	139	32	8	70	6	854
4:45 PM	29	228	29	5	167	18	48	153	21	5	75	9	787
5:00 PM	20	231	16	27	216	33	30	212	39	14	112	20	970
5:15 PM	20	225	18	14	226	12	24	188	27	22	91	21	888
5:30 PM	28	236	17	10	239	14	22	173	21	14	83	14	871
5:45 PM	26	219	14	8	218	15	19	149	23	10	76	9	786
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 186	NT 1958	NR 157	SL 88	ST 1612	SR 144	EL 242	ET 1249	ER 213	WL 90	WT 626	WR 90	TOTAL 6655

PM Peak Hr Begins at: 445 PM

PEAK VOLUMES =	97	920	80	56	848	77	124	726	108	55	361	64	3516
PEAK HR. FACTOR:		0.959			0.889			0.852			0.822		0.906

CONTROL: Signalized

Intersection Turning Movement

Prepared by: Southland Car Counters

(18)

N-S STREET: Main St DATE: 10/11/2005 LOCATION: City of Santa Ana

E-W STREET: Santa Ana Blvd DAY: TUESDAY PROJECT# H0509073

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	18	200			199	17				14	155	23	626
7:15 AM	13	204			215	20				16	166	12	646
7:30 AM	14	189			265	17				15	170	9	679
7:45 AM	14	243			265	22				11	184	15	754
8:00 AM	17	212			238	19				12	213	30	741
8:15 AM	12	187			246	21				19	201	13	699
8:30 AM	25	163			190	20				10	192	12	612
8:45 AM	21	193			191	18				9	129	18	579
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	NL 134	NT 1591	NR 0	SL 0	ST 1809	SR 154	EL 0	ET 0	ER 0	WL 106	WT 1410	WR 132	TOTAL 5336

AM Peak Hr Begins at: 730 AM

PEAK VOLUMES =	57	831	0	0	1014	79	0	0	0	57	768	67	2873
PEAK HR. FACTOR:		0.864			0.952			0.000			0.875		0.953

CONTROL:

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Main St DATE: 10/11/2005 LOCATION: City of Santa Ana

E-W STREET: Santa Ana Blvd DAY: TUESDAY PROJECT# H0509073

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	25	286			214	13				18	145	19	720
4:15 PM	14	276			204	15				20	150	32	711
4:30 PM	19	283			205	10				21	126	21	685
4:45 PM	24	266			229	13				19	153	19	723
5:00 PM	18	293			274	22				16	174	32	829
5:15 PM	15	255			274	12				29	206	25	816
5:30 PM	25	295			274	11				8	182	15	810
5:45 PM	14	284			253	16				22	172	25	786
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	154	2238	0	0	1927	112	0	0	0	153	1308	188	6080
PEAK VOLUMES =	72	1127	0	0	1075	61	0	0	0	75	734	97	3241
PEAK HR. FACTOR:		0.937			0.959			0.000			0.871		0.977

PM Peak Hr Begins at: 500 PM

CONTROL:

(19)

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Main St DATE: 10/05/2005 LOCATION: City of Santa Ana

E-W STREET: 5th St DAY: WEDNESDAY PROJECT# H0509074

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM		167	4	8	204		7	58	7				455
7:15 AM		222	9	8	220		7	76	4				546
7:30 AM		211	11	17	240		18	112	7				616
7:45 AM		217	12	17	258		11	126	7				648
8:00 AM		187	10	12	219		13	94	2				537
8:15 AM		194	8	16	223		17	75	13				546
8:30 AM		159	6	19	198		16	68	11				477
8:45 AM		197	3	14	192		18	56	12				492
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1554	63	111	1754	0	107	665	63	0	0	0	4317

AM Peak Hr Begins at: 730 AM

PEAK VOLUMES =	0	809	41	62	940	0	59	407	29	0	0	0	2347
PEAK HR. FACTOR:		0.928			0.911			0.859			0.000		0.905

CONTROL:

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Main St DATE: 10/05/2005 LOCATION: City of Santa Ana

E-W STREET: 5th St DAY: WEDNESDAY PROJECT# H0509074

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM		313	5	13	218		21	112	12				694
4:15 PM		271	10	11	217		33	119	7				668
4:30 PM		253	7	5	193		26	134	14				632
4:45 PM		264	4	8	232		19	104	11				642
5:00 PM		263	3	17	263		37	170	21				774
5:15 PM		286	7	19	271		24	127	15				749
5:30 PM		281	6	14	255		18	119	17				710
5:45 PM		277	8	23	252		19	96	10				685
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	2208	50	110	1901	0	197	981	107	0	0	0	5554

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	0	1107	24	73	1041	0	98	512	63	0	0	0	2918
PEAK HR. FACTOR:		0.965			0.960			0.738			0.000		0.943

CONTROL:

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Main St DATE: 10/05/2005 LOCATION: City of Santa Ana

E-W STREET: 4th St DAY: WEDNESDAY PROJECT# H0509075

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM		225	6		211	3		12	2		23	9	491
7:15 AM		208	5		253	3		19	1		21	6	516
7:30 AM		198	10		277	3		26	6		31	7	558
7:45 AM		182	3		239	8		24	7		29	17	509
8:00 AM		224	4		230	2		14	4		33	8	519
8:15 AM		175	5		202	9		14	2		26	5	438
8:30 AM		195	3		192	11		14	2		39	9	465
8:45 AM		171	10		199	19		10	4		60	7	480
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1578	46	0	1803	58	0	133	28	0	262	68	3976

AM Peak Hr Begins at: 715 AM

PEAK VOLUMES =	0	812	22	0	999	16	0	83	18	0	114	38	2102
PEAK HR. FACTOR:		0.914			0.906			0.789			0.826		0.942

CONTROL:

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Main St DATE: 10/05/2005 LOCATION: City of Santa Ana

E-W STREET: 4th St DAY: WEDNESDAY PROJECT# H0509075

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM		273	8		205	7		21	10		93	16	633
4:15 PM		285	21		247	7		30	13		74	18	695
4:30 PM		253	22		217	8		32	9		54	20	615
4:45 PM		259	14		241	9		18	12		50	17	620
5:00 PM		260	7		275	16		26	10		62	15	671
5:15 PM		271	17		286	11		27	11		47	21	691
5:30 PM		303	11		268	10		32	9		61	13	707
5:45 PM		282	15		235	9		40	15		50	11	657
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 0	NT 2186	NR 115	SL 0	ST 1974	SR 77	EL 0	ET 226	ER 89	WL 0	WT 491	WR 131	TOTAL 5289

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	0	1116	50	0	1064	46	0	125	45	0	220	60	2726
PEAK HR. FACTOR:		0.928			0.934			0.773			0.909		0.964

CONTROL:

Intersection Turning Movement

Prepared by: Southland Car Counters

(21)

N-S STREET: Main St

DATE: 10/05/2005

LOCATION: City of Santa Ana

E-W STREET: 3rd St

DAY: WEDNESDAY

PROJECT# H0509076

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM		119	1		161	2	7	21	2	4	7	1	325
7:15 AM		220	4		235	2	7	20	8	0	17	5	518
7:30 AM		178	2		249	5	12	25	8	4	16	3	502
7:45 AM		240	3		261	9	6	24	9	7	15	2	576
8:00 AM		178	5		240	4	10	16	4	1	18	2	478
8:15 AM		211	4		226	5	6	17	3	4	16	6	498
8:30 AM		167	0		173	2	5	16	2	3	16	3	387
8:45 AM		171	4		178	4	8	13	2	1	11	2	394
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1484	23	0	1723	33	61	152	38	24	116	24	3678

AM Peak Hr Begins at: 715 AM

PEAK VOLUMES =	0	816	14	0	985	20	35	85	29	12	66	12	2074
PEAK HR. FACTOR:		0.854			0.931			0.828			0.938		0.900

CONTROL:

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Main St DATE: 10/05/2005 LOCATION: City of Santa Ana

E-W STREET: 3rd St DAY: WEDNESDAY PROJECT# H0509076

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM		249	17		209	5	14	25	12	13	39	10	593
4:15 PM		270	13		243	12	11	29	9	9	40	10	646
4:30 PM		255	12		243	7	12	32	7	8	52	13	641
4:45 PM		258	13		239	4	19	40	12	10	48	3	646
5:00 PM		235	16		272	22	13	36	7	13	41	6	661
5:15 PM		280	9		291	8	12	47	9	8	59	11	734
5:30 PM		272	7		262	14	6	31	13	9	35	3	652
5:45 PM		301	8		247	8	11	34	10	7	41	16	683
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 0	NT 2120	NR 95	SL 0	ST 2006	SR 80	EL 98	ET 274	ER 79	WL 77	WT 355	WR 72	TOTAL 5256

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	0	1088	40	0	1072	52	42	148	39	37	176	36	2730
PEAK HR. FACTOR:		0.913			0.940			0.842			0.798		0.930

CONTROL:

(22)

Transportation Studies, Inc.
1350 Reynolds Avenue
Suite 115
Irvine, CA. 92614

City: SANTA ANA
N-S Direction: MAIN STREET
E-W Direction: 1ST STREET

File Name : H0509077
Site Code : 00000112
Start Date : 10/5/2005
Page No : 1

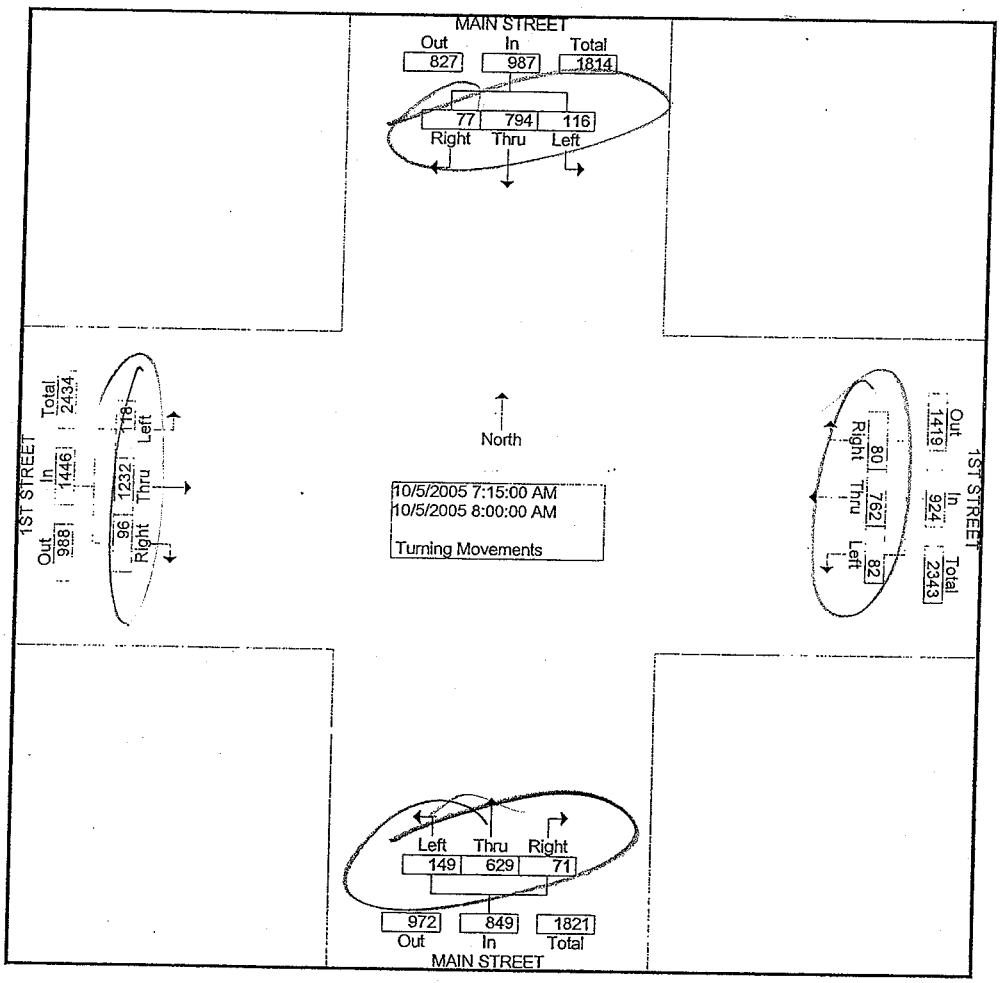
Groups Printed- Turning Movements

	MAIN STREET Southbound			1ST STREET Westbound			MAIN STREET Northbound			1ST STREET Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
07:00 AM	15	160	13	11	165	16	15	108	28	19	301	33	884
07:15 AM	24	190	24	24	186	18	17	167	34	26	301	21	1032
07:30 AM	22	202	28	19	185	16	23	155	43	21	312	29	1055
07:45 AM	16	220	30	18	204	22	20	174	34	25	313	32	1108
Total	77	772	95	72	740	72	75	604	139	91	1227	115	4079
08:00 AM	15	182	34	19	187	26	11	133	38	24	306	36	1011
08:15 AM	31	185	29	25	177	10	29	160	37	15	291	26	1015
08:30 AM	18	144	21	18	170	19	18	131	41	22	252	31	885
08:45 AM	16	142	23	17	174	22	16	131	47	16	279	24	907
Total	80	653	107	79	708	77	74	555	163	77	1128	117	3818
*** BREAK ***													
04:00 PM	40	157	30	27	279	33	25	214	38	21	229	31	1124
04:15 PM	34	193	47	13	232	23	25	222	32	27	215	37	1100
04:30 PM	35	161	31	22	272	30	24	199	50	12	223	33	1092
04:45 PM	36	193	49	19	226	30	19	227	47	18	228	39	1131
Total	145	704	157	81	1009	116	93	862	167	78	895	140	4447
05:00 PM	33	197	33	15	299	23	22	210	47	25	256	44	1204
05:15 PM	38	234	47	20	233	30	24	243	56	20	217	41	1203
05:30 PM	33	178	42	15	273	20	14	226	43	22	236	31	1133
05:45 PM	26	204	42	21	214	39	21	252	56	16	193	39	1123
Total	130	813	164	71	1019	112	81	931	202	83	902	155	4663
Grand Total	432	2942	523	303	3476	377	323	2952	671	329	4152	527	17007
Apprch %	11.1	75.5	13.4	7.3	83.6	9.1	8.2	74.8	17.0	6.6	82.9	10.5	
Total %	2.5	17.3	3.1	1.8	20.4	2.2	1.9	17.4	3.9	1.9	24.4	3.1	

Transportation Studies, Inc.
1350 Reynolds Avenue
Suite 115
Irvine, CA. 92614

File Name : H0509077
Site Code : 00000112
Start Date : 10/5/2005
Page No : 2

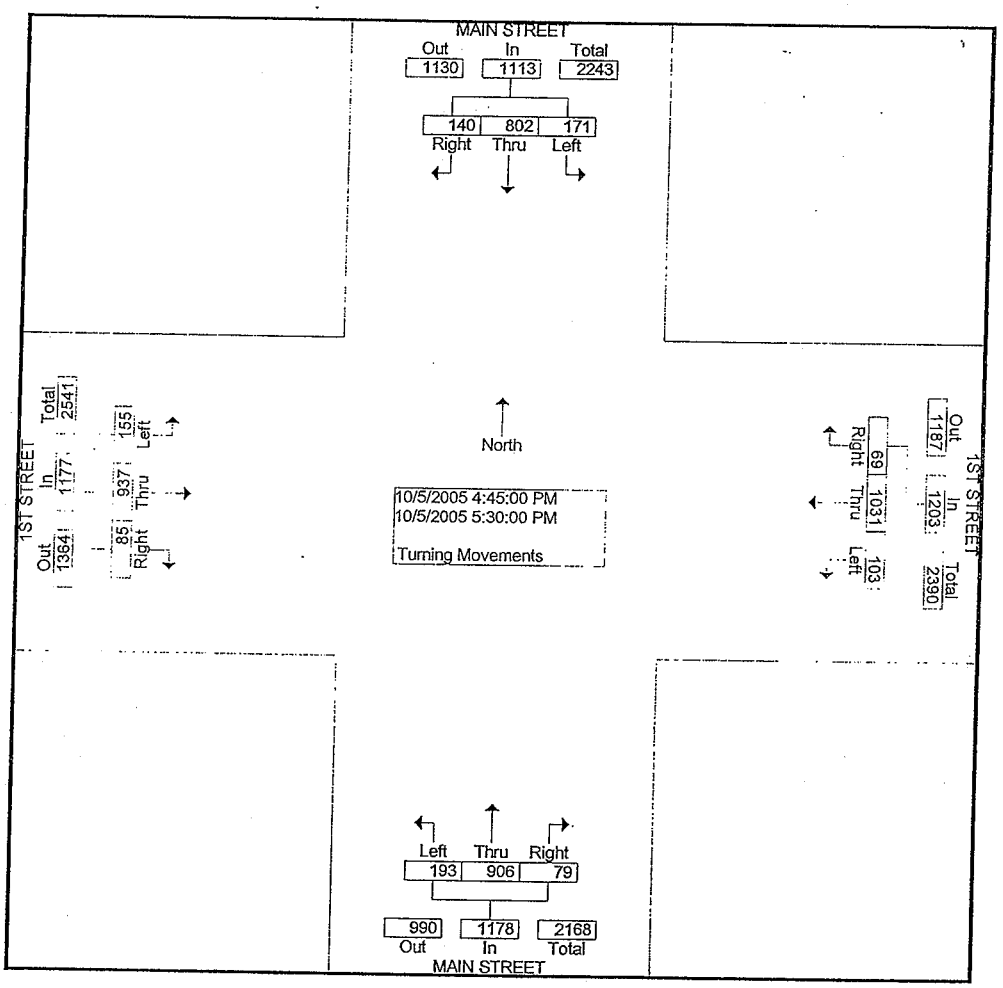
	MAIN STREET Southbound				1ST STREET Westbound				MAIN STREET Northbound				1ST STREET Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Intersection 07:15 AM																	
Volume	77	794	116	987	80	762	82	924	71	629	149	849	96	1232	118	1446	4206
Percent	7.8	80.4	11.8		8.7	82.5	8.9		8.4	74.1	17.6		6.6	85.2	8.2		
07:45 Volume	16	220	30	266	18	204	22	244	20	174	34	228	25	313	32	370	1108
Peak Factor																	0.949
High Int. 07:45 AM					07:45 AM				07:45 AM				07:45 AM				
Volume	16	220	30	266	18	204	22	244	20	174	34	228	25	313	32	370	
Peak Factor				0.928				0.947				0.931				0.977	



Transportation Studies, Inc.
1350 Reynolds Avenue
Suite 115
Irvine, CA. 92614

File Name : H0509077
Site Code : 00000112
Start Date : 10/5/2005
Page No : 3

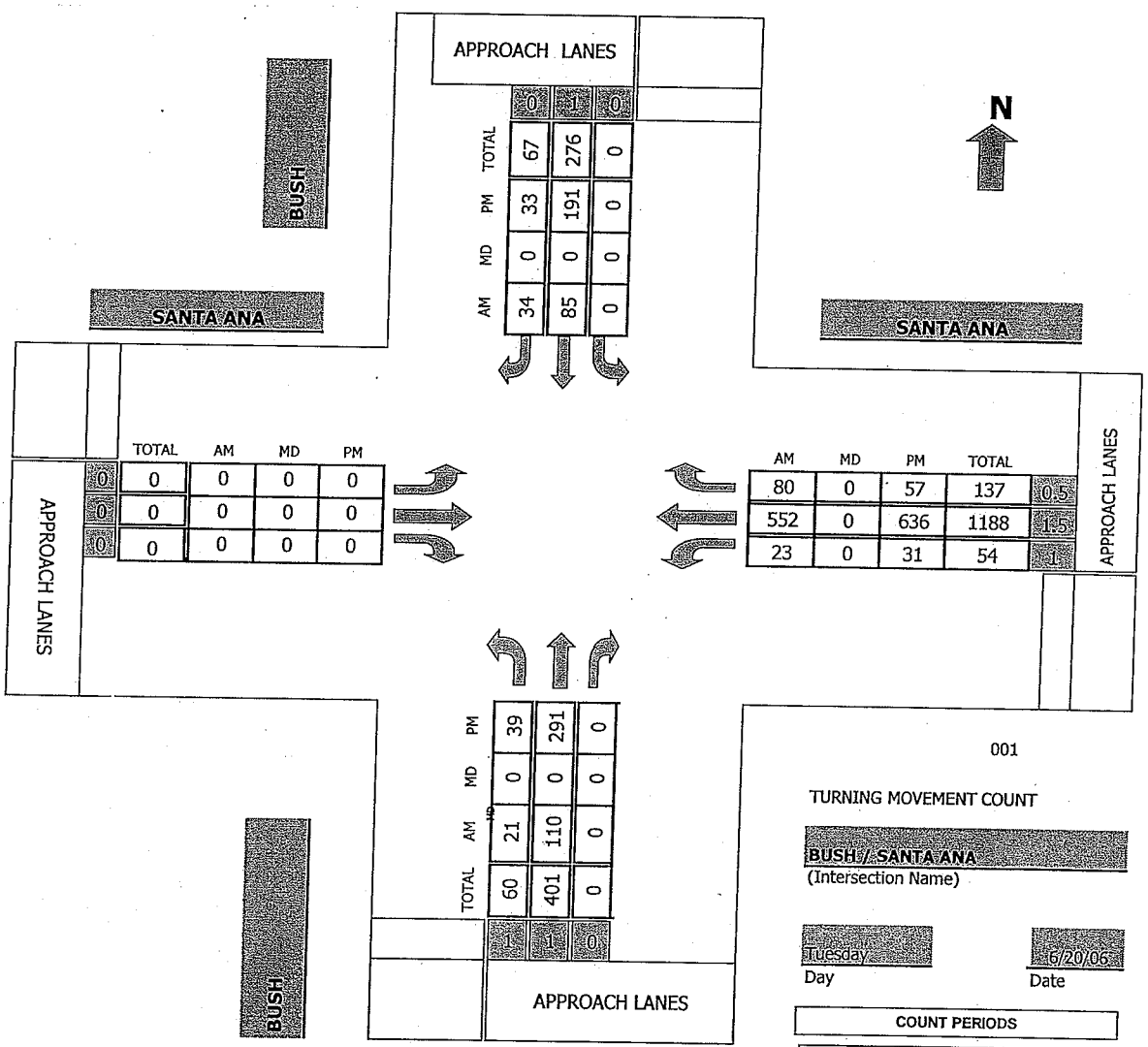
	MAIN STREET Southbound				1ST STREET Westbound				MAIN STREET Northbound				1ST STREET Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Intersection 04:45 PM																	
Volume	140	802	171	1113	69	1031	103	1203	79	906	193	1178	85	937	155	1177	4671
Percent	12.6	72.1	15.4		5.7	85.7	8.6		6.7	76.9	16.4		7.2	79.6	13.2		
05:00 Volume	33	197	33	263	15	299	23	337	22	210	47	279	25	256	44	325	1204
Peak Factor																	0.970
High Int.	05:15 PM				05:00 PM				05:15 PM				05:00 PM				
Volume	38	234	47	319	15	299	23	337	24	243	56	323	25	256	44	325	
Peak Factor				0.872				0.892				0.912				0.905	



23

TMC Summary of BUSH/SANTA ANA

Project #: 06-1192-008



001

TURNING MOVEMENT COUNT

BUSH / SANTA ANA
(Intersection Name)

Tuesday
Day

6/20/06
Date

COUNT PERIODS		
am	7:00 AM -	9:00 AM
noon	11:00 AM -	1:00 PM
pm	4:00 PM -	6:00 PM

AM PEAK HOUR	715 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	430 PM

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: BUSH DATE: 6/20/2006 LOCATION: City of Santa Ana

E-W STREET: SANTA ANA DAY: TUESDAY PROJECT# 06-1192-008

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	0	0	1	0	0	0	0	1	1.5	0.5	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	2	26			21	7				4	127	11	198
7:15 AM	3	28			19	10				5	135	25	225
7:30 AM	5	29			22	9				3	157	15	240
7:45 AM	4	38			23	8				7	129	19	228
8:00 AM	9	15			21	7				8	131	21	212
8:15 AM	8	18			19	10				9	123	20	207
8:30 AM	10	16			16	10				4	123	25	204
8:45 AM	7	22			28	7				6	136	18	224
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	48	192	0	0	169	68	0	0	0	46	1061	154	1738

AM Peak Hr Begins at: 715 AM

PEAK													
VOLUMES =	21	110	0	0	85	34	0	0	0	23	552	80	905
PEAK HR. FACTOR:		0.780			0.960			0.000			0.936		0.943

CONTROL: Signalized

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: BUSH DATE: 6/20/2006 LOCATION: City of Santa Ana

E-W STREET: SANTA ANA DAY: TUESDAY PROJECT# 06-1192-008

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	0	0	1	0	0	0	0	1	1.5	0.5	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	10	74			41	6				12	129	18	290
4:15 PM	7	54			39	10				9	147	17	283
4:30 PM	10	73			43	6				5	150	11	298
4:45 PM	11	65			44	13				9	138	16	296
5:00 PM	12	71			59	10				7	188	18	365
5:15 PM	6	82			45	4				10	160	12	319
5:30 PM	8	60			52	5				5	127	17	274
5:45 PM	14	63			31	1				6	122	18	255
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	78	542	0	0	354	55	0	0	0	63	1161	127	2380

PM Peak Hr Begins at: 430 PM

PEAK VOLUMES =	39	291	0	0	191	33	0	0	0	31	636	57	1278
PEAK HR. FACTOR:		0.938			0.812			0.000			0.850		0.875

CONTROL: Signalized

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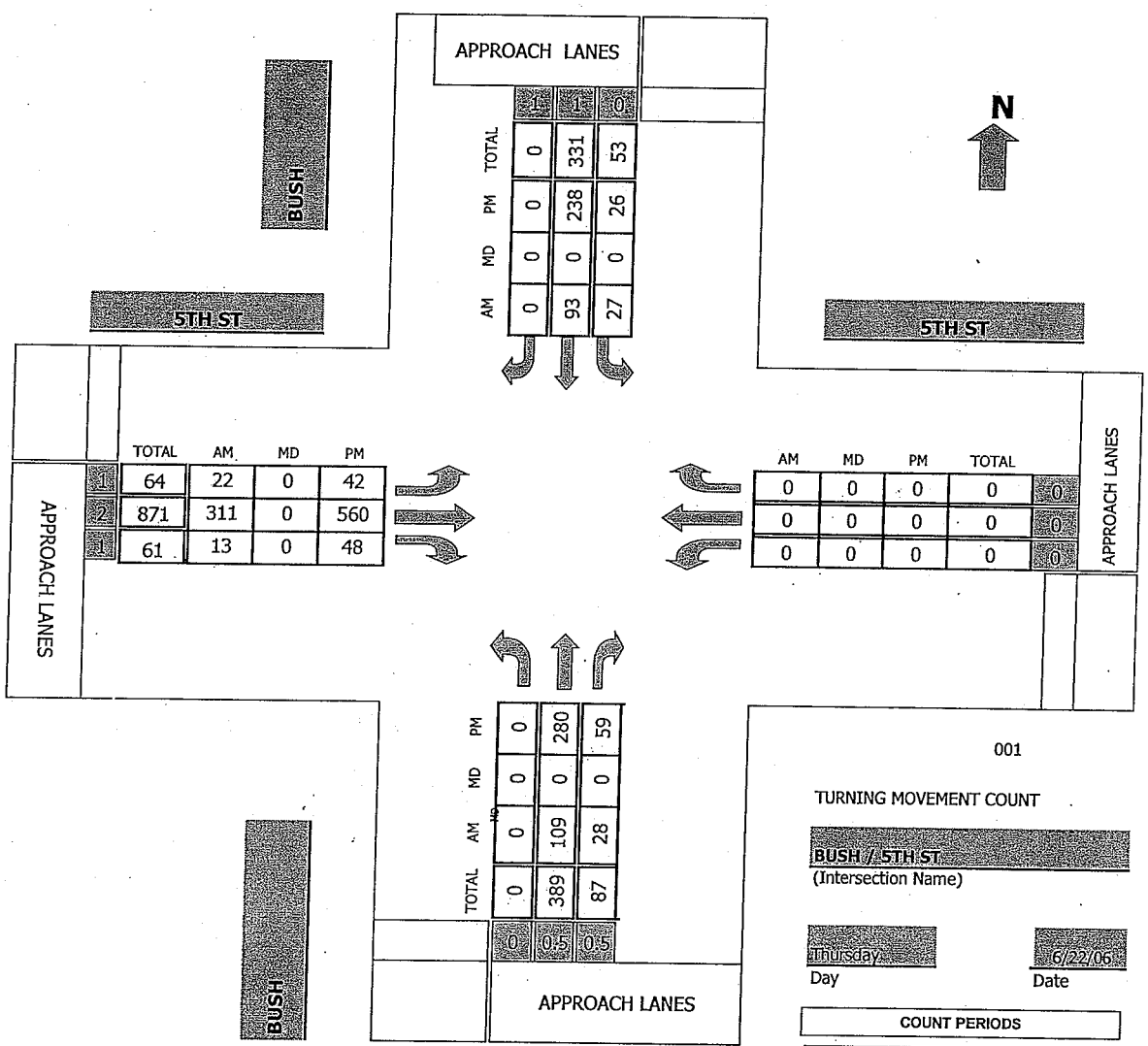
TMC Summary of BUSH/5TH ST

Project #: 06-1192-005



001

TURNING MOVEMENT COUNT

BUSH / 5TH ST.
(Intersection Name)

Thursday
Day

6/22/06
Date

COUNT PERIODS		
am	7:00 AM -	9:00 AM
noon	11:00 AM -	1:00 PM
pm	4:00 PM -	6:00 PM

AM PEAK HOUR	715 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	500 PM

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: BUSH
E-W STREET: 5TH ST

DATE: 6/22/2006
DAY: THURSDAY

LOCATION: City of Santa Ana
PROJECT# 06-1192-005

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0.5	0.5	1	1	0	1	2	1	0	0	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM		19	2	3	11		6	52	3				96
7:15 AM		15	3	7	26		6	76	4				137
7:30 AM		26	6	6	21		6	85	4				154
7:45 AM		46	13	8	25		2	96	3				193
8:00 AM		22	6	6	21		8	54	2				119
8:15 AM		24	6	8	21		7	45	7				118
8:30 AM		13	4	3	16		10	52	2				100
8:45 AM		25	4	5	17		5	39	8				103
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	190	44	46	158	0	50	499	33	0	0	0	1020

AM Peak Hr Begins at: 715 AM

PEAK VOLUMES =	0	109	28	27	93	0	22	311	13	0	0	0	603
PEAK HR. FACTOR:		0.581			0.909			0.856			0.000		0.781

CONTROL: Signalized

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: BUSH DATE: 6/22/2006 LOCATION: City of Santa Ana

E-W STREET: 5TH ST DAY: THURSDAY PROJECT# 06-1192-005

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0.5	0.5	1	1	0	1	2	1	0	0	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM		56	4	5	32		15	111	7				230
4:15 PM		63	5	3	41		14	86	8				220
4:30 PM		50	5	8	30		19	157	5				274
4:45 PM		74	7	8	38		10	127	7				271
5:00 PM		61	5	6	72		15	193	18				370
5:15 PM		74	6	7	82		10	133	16				328
5:30 PM		87	19	4	37		10	120	7				284
5:45 PM		58	29	9	47		7	114	7				271
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	523	80	50	379	0	100	1041	75	0	0	0	2248

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	0	280	59	26	238	0	42	560	48	0	0	0	1253
PEAK HR. FACTOR:		0.800			0.742			0.719			0.000		0.847

CONTROL: Signalized

(25)

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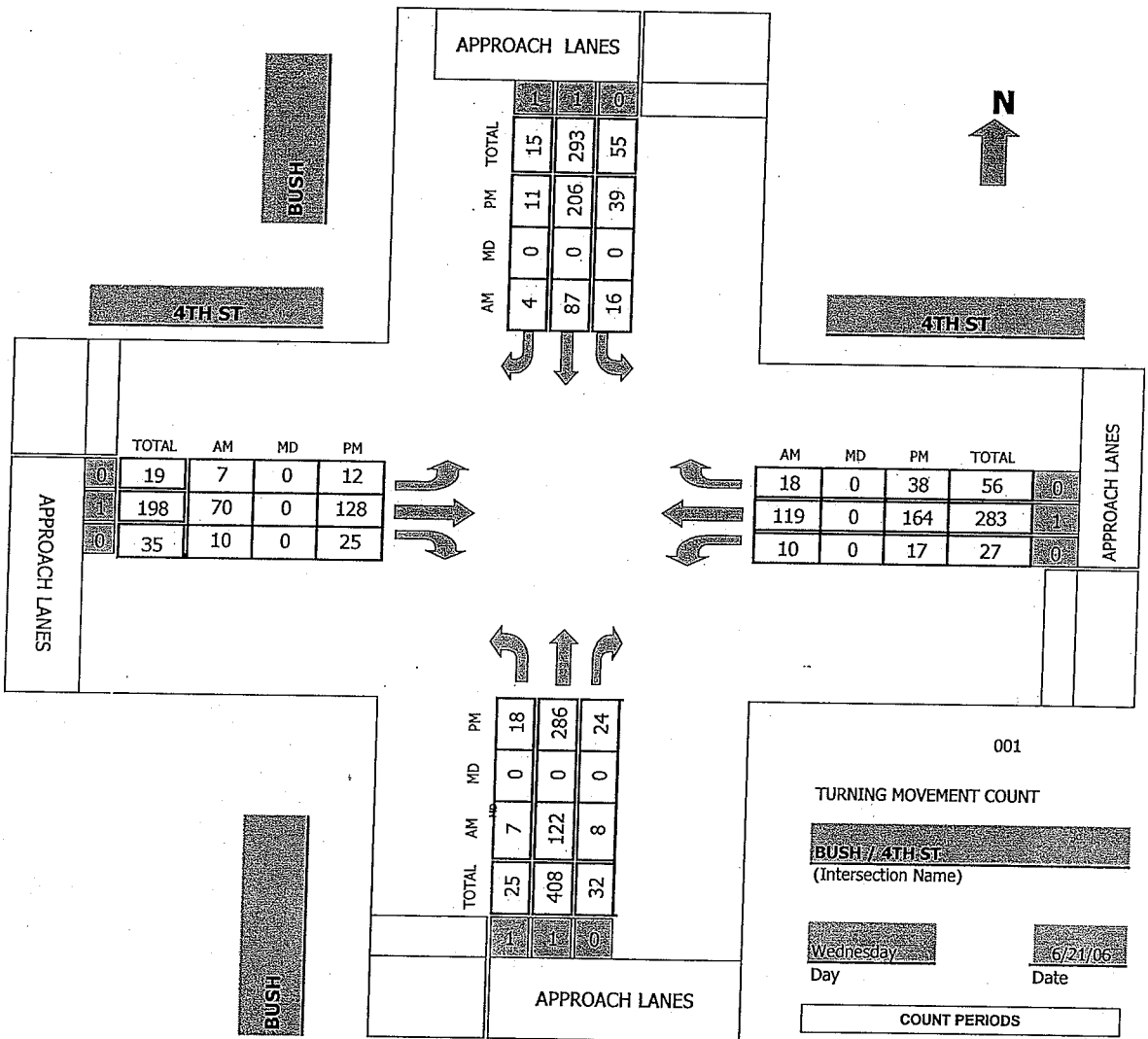
TMC Summary of BUSH/4TH ST

Project #: 06-1192-007



001

TURNING MOVEMENT COUNT

BUSH / 4TH ST
(Intersection Name)

Wednesday
Day

6/21/06
Date

COUNT PERIODS	
am	7:00 AM - 9:00 AM
noon	11:00 AM - 1:00 PM
pm	4:00 PM - 6:00 PM

AM PEAK HOUR	730 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	445 PM

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: BUSH DATE: 6/21/2006 LOCATION: City of Santa Ana

E-W STREET: 4TH ST DAY: WEDNESDAY PROJECT# 06-1192-007

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	0	1	1	0	0	1	0	0	1	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	17	4	1	9	1	0	10	1	4	17	2	66
7:15 AM	0	18	2	4	28	0	1	14	0	2	25	2	96
7:30 AM	1	25	1	3	20	2	1	16	2	4	26	7	108
7:45 AM	1	48	4	8	22	1	2	22	3	4	33	5	153
8:00 AM	2	25	0	1	20	0	2	13	3	2	26	5	99
8:15 AM	3	24	3	4	25	1	2	19	2	0	34	1	118
8:30 AM	3	16	2	4	15	1	1	18	1	2	42	1	106
8:45 AM	3	27	3	1	21	2	1	18	2	5	45	2	130
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	NL 13	NT 200	NR 19	SL 26	ST 160	SR 8	EL 10	ET 130	ER 14	WL 23	WT 248	WR 25	TOTAL 876

AM Peak Hr Begins at: 730 AM

PEAK VOLUMES =	7	122	8	16	87	4	7	70	10	10	119	18	478
PEAK HR. FACTOR:		0.646			0.863			0.806			0.875		0.781

CONTROL: Signalized

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: BUSH DATE: 6/21/2006 LOCATION: City of Santa Ana

E-W STREET: 4TH ST DAY: WEDNESDAY PROJECT# 06-1192-007

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	0	1	1	0	0	1	0	0	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	8	52	10	8	41	1	3	42	2	8	41	3	219
4:15 PM	5	58	10	5	47	3	2	30	8	8	43	8	227
4:30 PM	3	42	6	2	43	4	7	25	1	5	45	5	188
4:45 PM	7	85	5	4	41	3	4	41	9	6	42	7	254
5:00 PM	4	57	5	15	70	2	2	22	6	6	46	4	239
5:15 PM	4	60	6	11	58	5	3	34	5	3	38	12	239
5:30 PM	3	84	8	9	37	1	3	31	5	2	38	15	236
5:45 PM	7	72	7	8	40	7	1	31	3	7	43	11	237
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	41	510	57	62	377	26	25	256	39	45	336	65	1839

PM Peak Hr Begins at: 445 PM

PEAK VOLUMES =	18	286	24	39	206	11	12	128	25	17	164	38	968
PEAK HR. FACTOR:		0.845			0.736			0.764			0.978		0.953

CONTROL: Signalized

Intersection Turning Movement

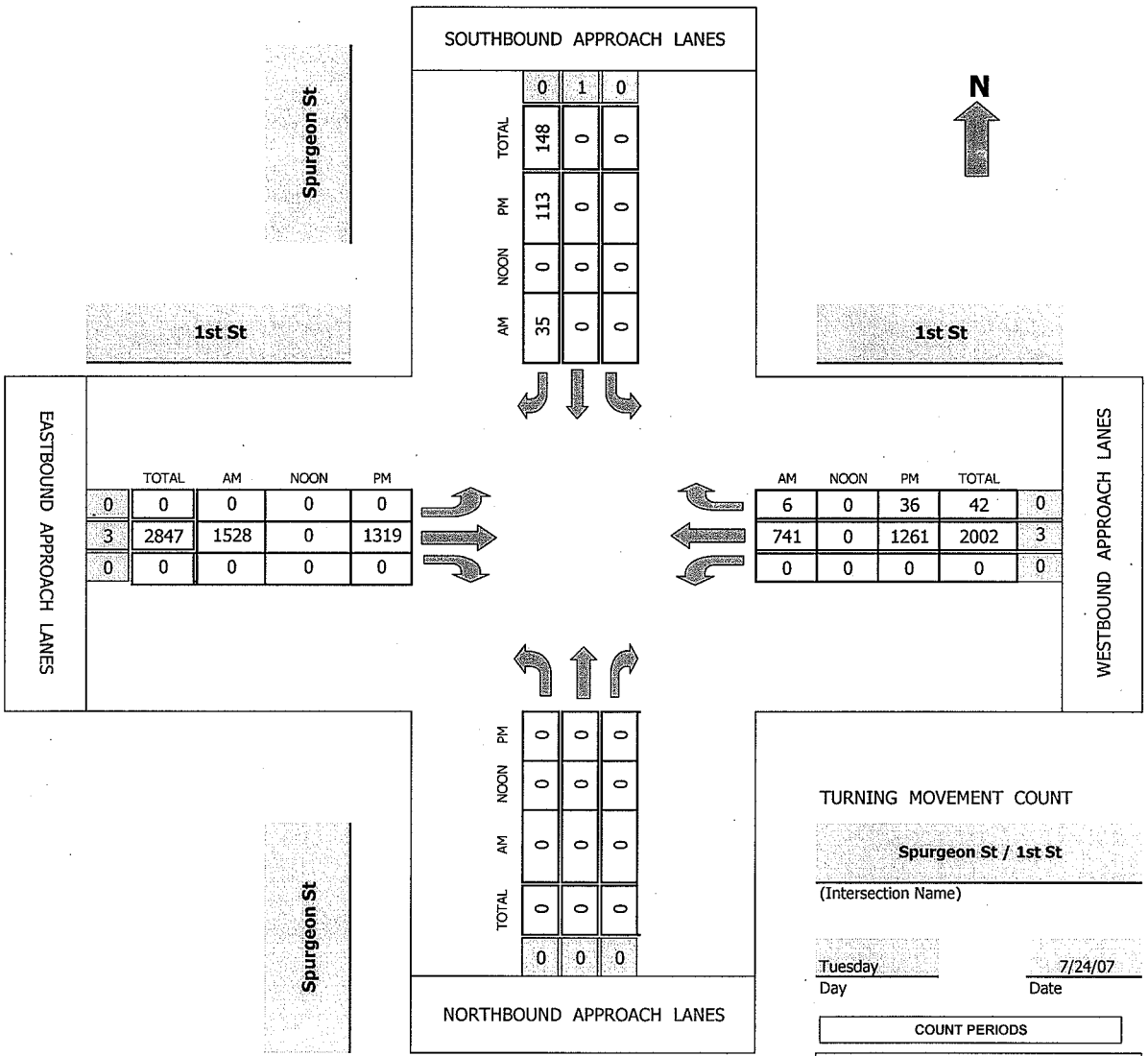
Prepared by:

National Data & Surveying Services

26

TMC Summary of Spurgeon St/1st St

Project #: 07-1213-006



TURNING MOVEMENT COUNT

Spurgeon St / 1st St

(Intersection Name)

Tuesday — Day

7/24/07 — Date

COUNT PERIODS		
am	7:00 AM -	9:00 AM
noon	11:00 AM -	1:00 PM
pm	4:00 PM -	6:00 PM

AM PEAK HOUR	715 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	430 PM

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Spurgeon St | DATE: 7/24/2007 | LOCATION: City of Santa Ana

E-W STREET: 1st St | DAY: TUESDAY | PROJECT# 07-1213-006

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	1	0	0	3	0	0	3	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM						14		327			163	2	506
7:15 AM						8		395			202	1	606
7:30 AM						10		397			180	1	588
7:45 AM						6		419			180	1	606
8:00 AM						11		317			179	3	510
8:15 AM						10		345			181	3	539
8:30 AM						10		296			178	4	488
8:45 AM						9		316			208	5	538
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	NL 0	NT 0	NR 0	SL 0	ST 0	SR 78	EL 0	ET 2812	ER 0	WL 0	WT 1471	WR 20	TOTAL 4381

AM Peak Hr Begins at: 715 AM

PEAK VOLUMES =	0	0	0	0	0	35	0	1528	0	0	741	6	2310
PEAK HR. FACTOR:		0.000			0.795			0.912			0.920		0.953

CONTROL: 1-Way Stop S

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Spurgeon St DATE: 7/24/2007 LOCATION: City of Santa Ana

E-W STREET: 1st St DAY: TUESDAY PROJECT# 07-1213-006

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	1	0	0	3	0	0	3	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM						17		271			335	11	634
4:15 PM						17		340			330	12	699
4:30 PM						26		336			295	15	672
4:45 PM						24		327			340	6	697
5:00 PM						30		309			305	6	650
5:15 PM						33		347			321	9	710
5:30 PM						27		323			285	14	649
5:45 PM						30		349			296	12	687
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	0	0	0	0	0	204	0	2602	0	0	2507	85	5398

PM Peak Hr Begins at: 430 PM

PEAK VOLUMES =	0	0	0	0	0	113	0	1319	0	0	1261	36	2729
PEAK HR. FACTOR:		0.000			0.856			0.950			0.937		0.961

CONTROL: 1-Way Stop S

Intersection Turning Movement

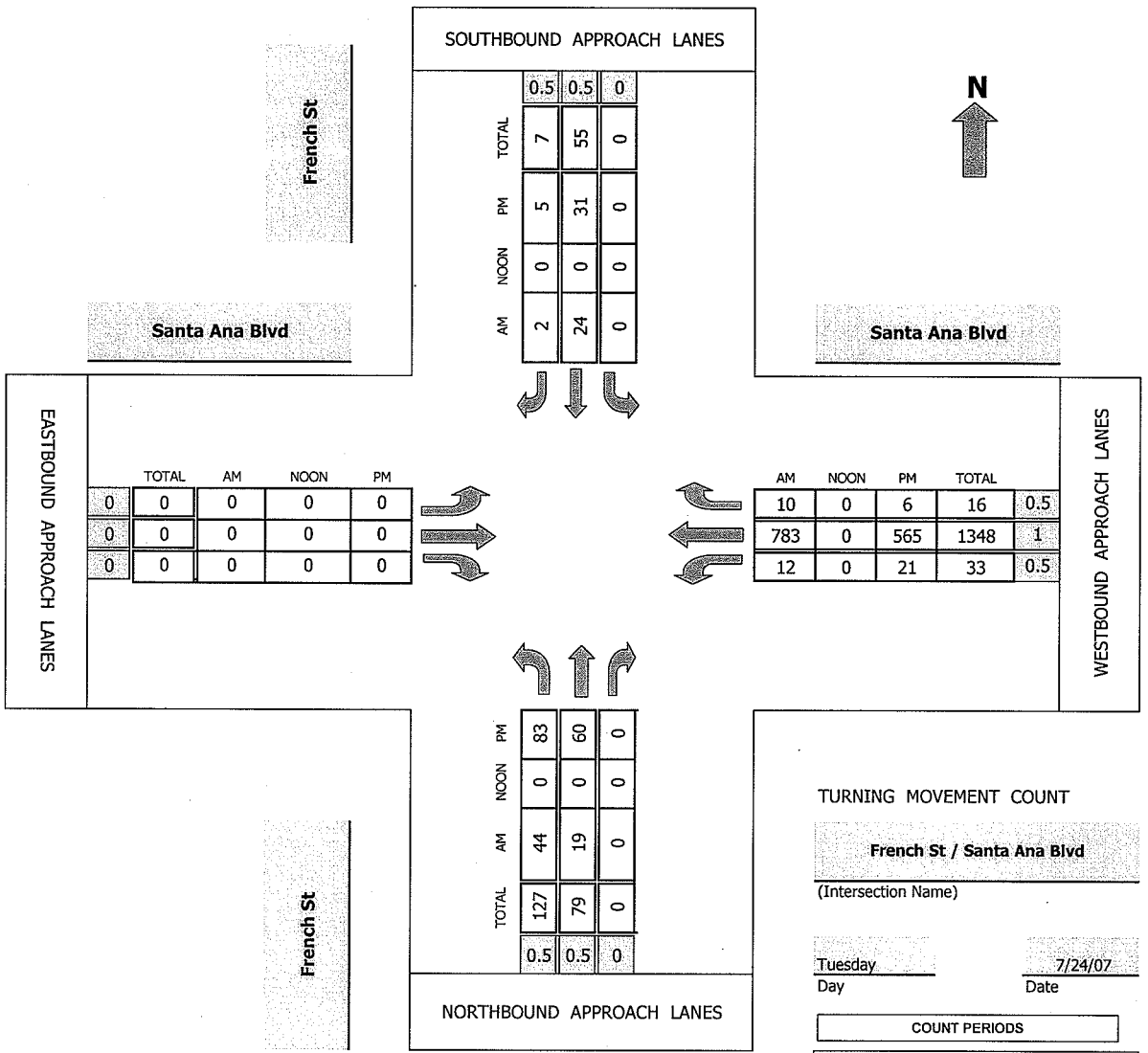
Prepared by:

National Data & Surveying Services

27

TMC Summary of French St/Santa Ana Blvd

Project #: 07-1213-005



TURNING MOVEMENT COUNT

French St / Santa Ana Blvd

(Intersection Name)

Tuesday — Day

7/24/07 — Date

COUNT PERIODS		
am	7:00 AM -	9:00 AM
noon	11:00 AM -	1:00 PM
pm	4:00 PM -	6:00 PM

AM PEAK HOUR	730 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	430 PM

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: French St | DATE: 7/24/2007 | LOCATION: City of Santa Ana

E-W STREET: Santa Ana Blvd | DAY: TUESDAY | PROJECT# 07-1213-005

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0.5	0.5	0	0	0.5	0.5	0	0	0	0.5	1	0.5	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	2	10			1	2				1	126	0	142
7:15 AM	5	6			2	0				3	166	1	183
7:30 AM	15	4			8	0				5	207	1	240
7:45 AM	9	9			4	1				1	212	0	236
8:00 AM	8	4			7	1				3	186	5	214
8:15 AM	12	2			5	0				3	178	4	204
8:30 AM	14	8			4	0				3	159	3	191
8:45 AM	18	6			5	1				4	165	3	202
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	83	49	0	0	36	5	0	0	0	23	1399	17	1612

AM Peak Hr Begins at: 730 AM

PEAK VOLUMES =	44	19	0	0	24	2	0	0	0	12	783	10	894
PEAK HR. FACTOR:		0.829			0.813			0.000			0.945		0.931

CONTROL: 2-way stop n/s

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: French St DATE: 7/24/2007 LOCATION: City of Santa Ana

E-W STREET: Santa Ana Blvd DAY: TUESDAY PROJECT# 07-1213-005

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0.5	0.5	0	0	0.5	0.5	0	0	0	0.5	1	0.5	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	16	16			10	2				9	136	3	192
4:15 PM	23	21			11	0				3	128	1	187
4:30 PM	32	11			11	2				6	149	1	212
4:45 PM	18	17			4	0				6	119	3	167
5:00 PM	16	13			7	2				3	160	1	202
5:15 PM	17	19			9	1				6	137	1	190
5:30 PM	13	27			12	0				3	138	1	194
5:45 PM	14	15			8	1				0	123	3	164
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 149	NT 139	NR 0	SL 0	ST 72	SR 8	EL 0	ET 0	ER 0	WL 36	WT 1090	WR 14	TOTAL 1508

PM Peak Hr Begins at: 430 PM

PEAK VOLUMES =	83	60	0	0	31	5	0	0	0	21	565	6	771
PEAK HR. FACTOR:		0.831			0.692			0.000			0.902		0.909

CONTROL: 2-way stop n/s

Intersection Turning Movement

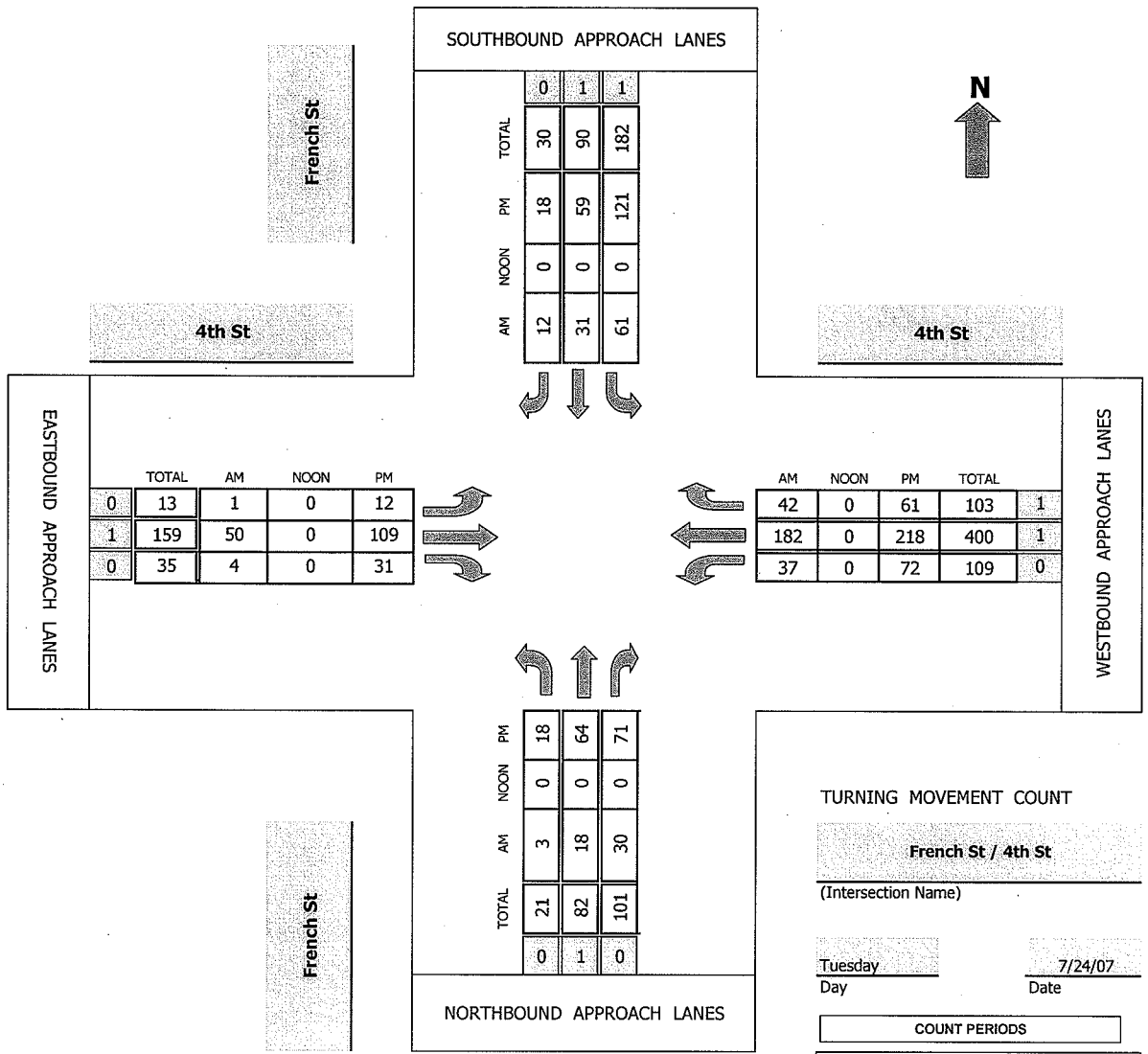
Prepared by:

National Data & Surveying Services

28

TMC Summary of French St/4th St

Project #: 07-1213-007



TURNING MOVEMENT COUNT

French St / 4th St
(Intersection Name)

Tuesday
Day

7/24/07
Date

COUNT PERIODS		
am	7:00 AM -	9:00 AM
noon	11:00 AM -	1:00 PM
pm	4:00 PM -	6:00 PM

AM PEAK HOUR	730 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	500 PM

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: French St | DATE: 7/24/2007 | LOCATION: City of Santa Ana

E-W STREET: 4th St | DAY: TUESDAY | PROJECT# 07-1213-007

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	1	1	0	0	1	0	0	1	1	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	1	11	7	2	2	2	7	1	6	23	11	73
7:15 AM	0	1	9	20	8	0	0	10	1	4	31	5	89
7:30 AM	0	7	12	21	9	1	0	16	2	9	37	11	125
7:45 AM	0	7	12	16	7	4	1	20	0	6	59	8	140
8:00 AM	0	1	3	15	7	4	0	4	1	12	42	11	100
8:15 AM	3	3	3	9	8	3	0	10	1	10	44	12	106
8:30 AM	1	6	5	7	6	2	0	7	2	7	50	13	106
8:45 AM	4	5	5	9	6	4	2	14	1	5	42	17	114
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	8	31	60	104	53	20	5	88	9	59	328	88	853

AM Peak Hr Begins at: 730 AM

PEAK VOLUMES =	3	18	30	61	31	12	1	50	4	37	182	42	471
PEAK HR. FACTOR:		0.671			0.839			0.655			0.894		0.841

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: French St DATE: 7/24/2007 LOCATION: City of Santa Ana

E-W STREET: 4th St DAY: TUESDAY PROJECT# 07-1213-007

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	1	1	0	0	1	0	0	1	1	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	5	10	12	13	11	5	4	21	8	19	38	16	162
4:15 PM	4	16	11	29	13	8	2	30	7	21	47	13	201
4:30 PM	2	6	16	18	14	7	3	33	21	18	48	34	220
4:45 PM	2	8	19	37	21	4	3	22	8	12	45	19	200
5:00 PM	4	10	24	38	17	4	3	31	10	13	58	14	226
5:15 PM	1	18	16	33	13	5	2	26	5	14	41	10	184
5:30 PM	5	21	15	25	18	4	4	32	8	26	61	20	239
5:45 PM	8	15	16	25	11	5	3	20	8	19	58	17	205
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	31	104	129	218	118	42	24	215	75	142	396	143	1637

PM Peak Hr Begins at: 500 PM

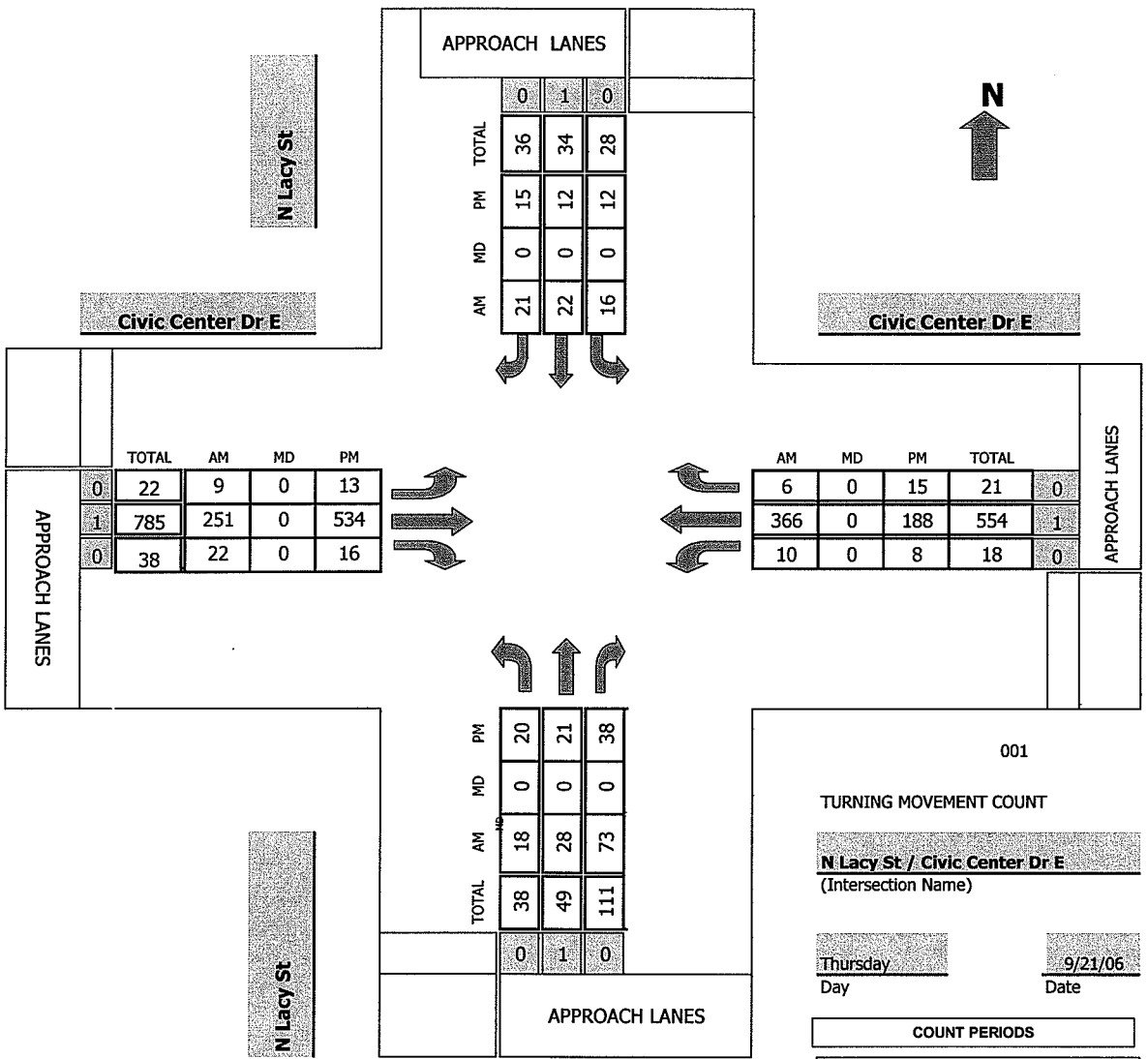
PEAK VOLUMES =	18	64	71	121	59	18	12	109	31	72	218	61	854
PEAK HR. FACTOR:		0.933			0.839			0.864			0.820		0.893

CONTROL: Signalized

29

TMC Summary of N Lacy St/Civic Center Dr E

Project #: 06-1211-029



001

TURNING MOVEMENT COUNT

N Lacy St / Civic Center Dr E
(Intersection Name)

Thursday
Day

9/21/06
Date

COUNT PERIODS		
am	7:00 AM -	9:00 AM
noon	11:00 AM -	1:00 PM
pm	4:00 PM -	6:00 PM

AM PEAK HOUR	730 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	430 PM

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: N Lacy St DATE: 9/21/2006 LOCATION: City of Santa Ana

E-W STREET: Civic Center Dr E DAY: THURSDAY PROJECT# 06-1211-029

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	1	0	0	1	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	2	3	3	0	5	1	3	55	9	1	46	2	130
7:15 AM	4	4	3	0	2	3	0	41	4	2	47	2	112
7:30 AM	9	9	10	0	11	8	2	48	5	4	66	3	175
7:45 AM	2	5	11	1	7	5	3	55	5	3	99	2	198
8:00 AM	4	11	41	12	3	8	3	86	9	1	103	0	281
8:15 AM	3	3	11	3	1	0	1	62	3	2	98	1	188
8:30 AM	1	5	11	2	4	0	0	40	3	2	50	2	120
8:45 AM	5	8	10	2	6	1	0	37	3	0	50	2	124
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	30	48	100	20	39	26	12	424	41	15	559	14	1328

AM Peak Hr Begins at: 730 AM

PEAK VOLUMES =	18	28	73	16	22	21	9	251	22	10	366	6	842
PEAK HR. FACTOR:		0.531			0.641			0.719			0.918		0.749

CONTROL: 2-Way Stop N & S

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: N Lacy St DATE: 9/21/2006 LOCATION: City of Santa Ana

E-W STREET: Civic Center Dr E DAY: THURSDAY PROJECT# 06-1211-029

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	1	0	0	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	1	6	3	1	2	3	2	76	1	1	46	1	143
4:15 PM	2	4	6	2	1	2	1	79	0	0	35	2	134
4:30 PM	3	6	9	1	3	3	1	101	4	2	53	4	190
4:45 PM	5	7	12	3	4	4	4	106	6	1	46	3	201
5:00 PM	8	3	9	5	3	6	5	180	3	3	39	5	269
5:15 PM	4	5	8	3	2	2	3	147	3	2	50	3	232
5:30 PM	1	7	9	2	1	0	2	90	2	1	45	1	161
5:45 PM	2	4	6	1	2	1	1	72	2	0	43	0	134
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 26	NT 42	NR 62	SL 18	ST 18	SR 21	EL 19	ET 851	ER 21	WL 10	WT 357	WR 19	TOTAL 1464

PM Peak Hr Begins at: 430 PM

PEAK VOLUMES =	20	21	38	12	12	15	13	534	16	8	188	15	892
PEAK HR. FACTOR:		0.823			0.696			0.749			0.894		0.829

CONTROL: 2-Way Stop N & S

30

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Lacy St. DATE: 10/22/2003 LOCATION: City of Santa Ana

E-W STREET: Santa Ana Blvd. DAY: WEDNESDAY PROJECT# 03-1564-002

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	1	5	6	4	7	0	2	60	3	2	117	4	211
7:15 AM	0	7	8	3	12	2	3	77	0	3	157	6	278
7:30 AM	0	6	10	3	11	6	3	92	1	2	154	4	292
7:45 AM	1	7	4	2	3	4	2	98	1	4	170	11	307
8:00 AM	2	6	0	2	6	4	1	65	3	1	190	10	290
8:15 AM	2	2	1	4	3	0	1	56	0	2	164	2	237
8:30 AM	0	3	1	2	4	1	1	48	0	3	149	1	213
8:45 AM	1	4	2	1	5	1	2	49	0	2	140	2	209
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	7	40	32	21	51	18	15	545	8	19	1241	40	2037

AM Peak Hr Begins at: 715 AM

PEAK VOLUMES =	3	26	22	10	32	16	9	332	5	10	671	31	1167
PEAK HR. FACTOR:		0.797			0.725			0.856			0.886		0.950

CONTROL: Signalized

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Lacy St. DATE: 10/22/2003 LOCATION: City of Santa Ana

E-W STREET: Santa Ana Blvd. DAY: WEDNESDAY PROJECT# 03-1564-002

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	2	6	3	4	7	4	1	106	1	3	89	5	231
4:15 PM	1	4	2	3	8	3	2	102	2	3	94	3	227
4:30 PM	1	10	5	5	9	5	2	127	0	2	124	7	297
4:45 PM	0	5	1	3	2	1	0	121	3	9	142	2	289
5:00 PM	2	5	6	6	4	6	0	188	1	5	158	4	385
5:15 PM	5	11	3	6	3	4	2	143	0	3	140	4	324
5:30 PM	5	16	3	4	7	2	1	116	1	3	140	8	306
5:45 PM	0	9	3	4	7	1	2	76	1	5	139	3	250
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 16	NT 66	NR 26	SL 35	ST 47	SR 26	EL 10	ET 979	ER 9	WL 33	WT 1026	WR 36	TOTAL 2309

PM Peak Hr Begins at: 445 PM

PEAK VOLUMES =	12	37	13	19	16	13	3	568	5	20	580	18	1304
PEAK HR. FACTOR:		0.646			0.750			0.762			0.925		0.847

CONTROL: Signalized

Intersection Turning Movement

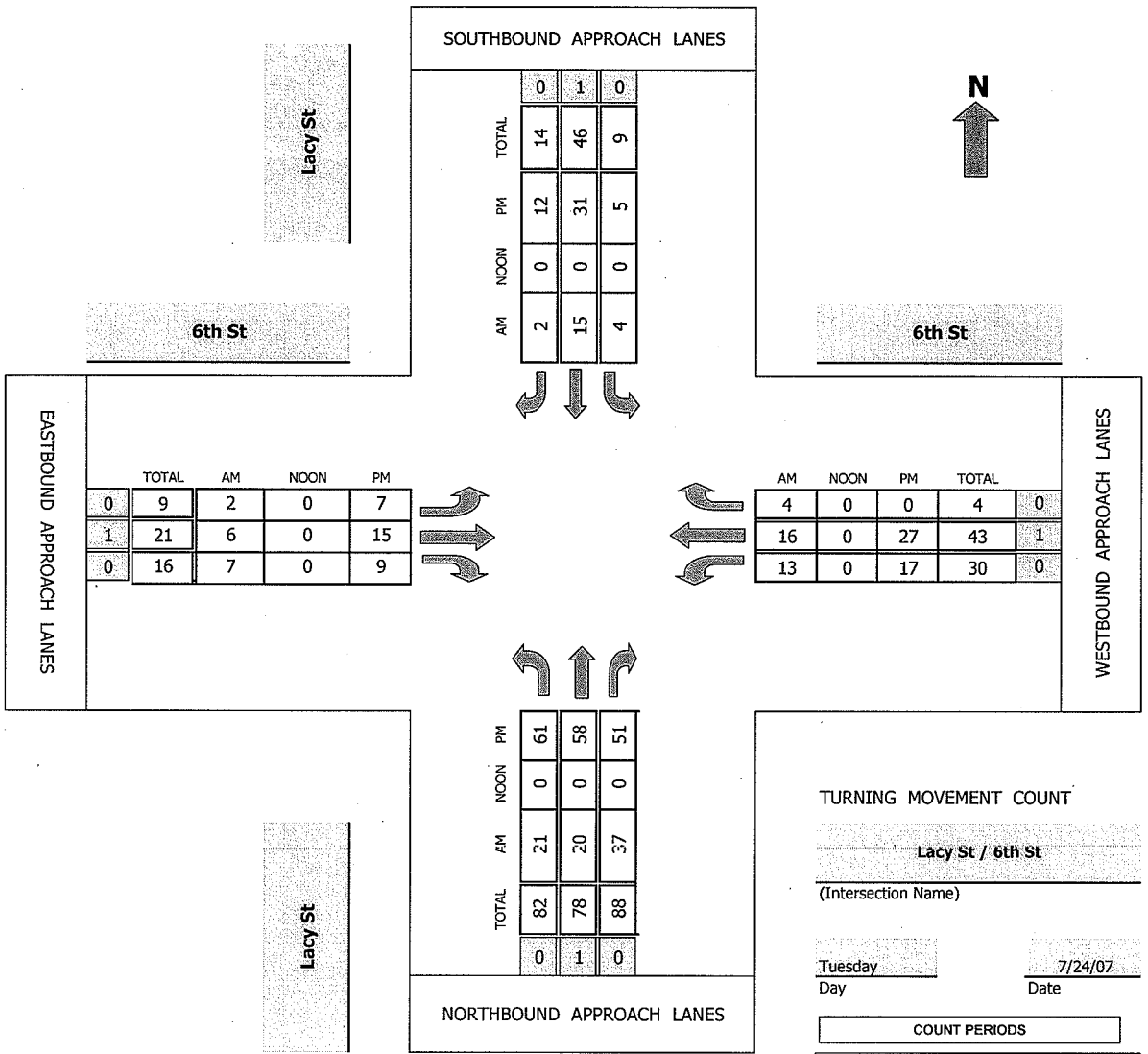
Prepared by:

National Data & Surveying Services

31

TMC Summary of Lacy St/6th St

Project #: 07-1213-009



TURNING MOVEMENT COUNT

Lacy St / 6th St

(Intersection Name)

Tuesday — Day

7/24/07 — Date

COUNT PERIODS		
am	7:00 AM -	9:00 AM
noon	11:00 AM -	1:00 PM
pm	4:00 PM -	6:00 PM

AM PEAK HOUR	745 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	430 PM

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Lacy St | DATE: 7/24/2007 | LOCATION: City of Santa Ana

E-W STREET: 6th St | DAY: TUESDAY | PROJECT# 07-1213-009

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	1	0	0	1	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	1	5	5	0	4	1	0	0	1	1	1	1	20
7:15 AM	4	3	4	1	2	1	0	2	2	3	3	0	25
7:30 AM	5	2	3	2	1	2	2	7	2	1	5	1	33
7:45 AM	5	6	12	2	7	1	2	4	2	7	6	2	56
8:00 AM	5	5	8	2	1	0	0	1	0	3	3	1	29
8:15 AM	6	5	7	0	5	1	0	0	2	0	3	0	29
8:30 AM	5	4	10	0	2	0	0	1	3	3	4	1	33
8:45 AM	7	5	6	0	5	0	1	3	0	0	3	0	30
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	38	35	55	7	27	6	5	18	12	18	28	6	255

AM Peak Hr Begins at: 745 AM

PEAK VOLUMES =	21	20	37	4	15	2	2	6	7	13	16	4	147
PEAK HR. FACTOR:		0.848			0.525			0.469			0.550		0.656

CONTROL: 4-Way Stop

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Lacy St | DATE: 7/24/2007 | LOCATION: City of Santa Ana

E-W STREET: 6th St | DAY: TUESDAY | PROJECT# 07-1213-009

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	1	0	0	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	4	12	13	1	0	2	2	1	2	4	1	0	42
4:15 PM	9	18	19	0	3	1	2	2	3	3	3	0	63
4:30 PM	21	15	8	1	5	5	1	2	6	3	6	0	73
4:45 PM	7	12	18	0	11	4	0	6	0	3	5	0	66
5:00 PM	14	16	16	2	9	2	3	4	0	4	4	0	74
5:15 PM	19	15	9	2	6	1	3	3	3	7	12	0	80
5:30 PM	21	7	8	0	7	2	2	5	3	9	5	3	72
5:45 PM	7	11	9	2	8	0	1	1	1	2	3	1	46
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 102	NT 106	NR 100	SL 8	ST 49	SR 17	EL 14	ET 24	ER 18	WL 35	WT 39	WR 4	TOTAL 516

PM Peak Hr Begins at: 430 PM

PEAK VOLUMES =	61	58	51	5	31	12	7	15	9	17	27	0	293
PEAK HR. FACTOR:		0.924			0.800			0.861			0.579		0.916

CONTROL: 4-Way Stop

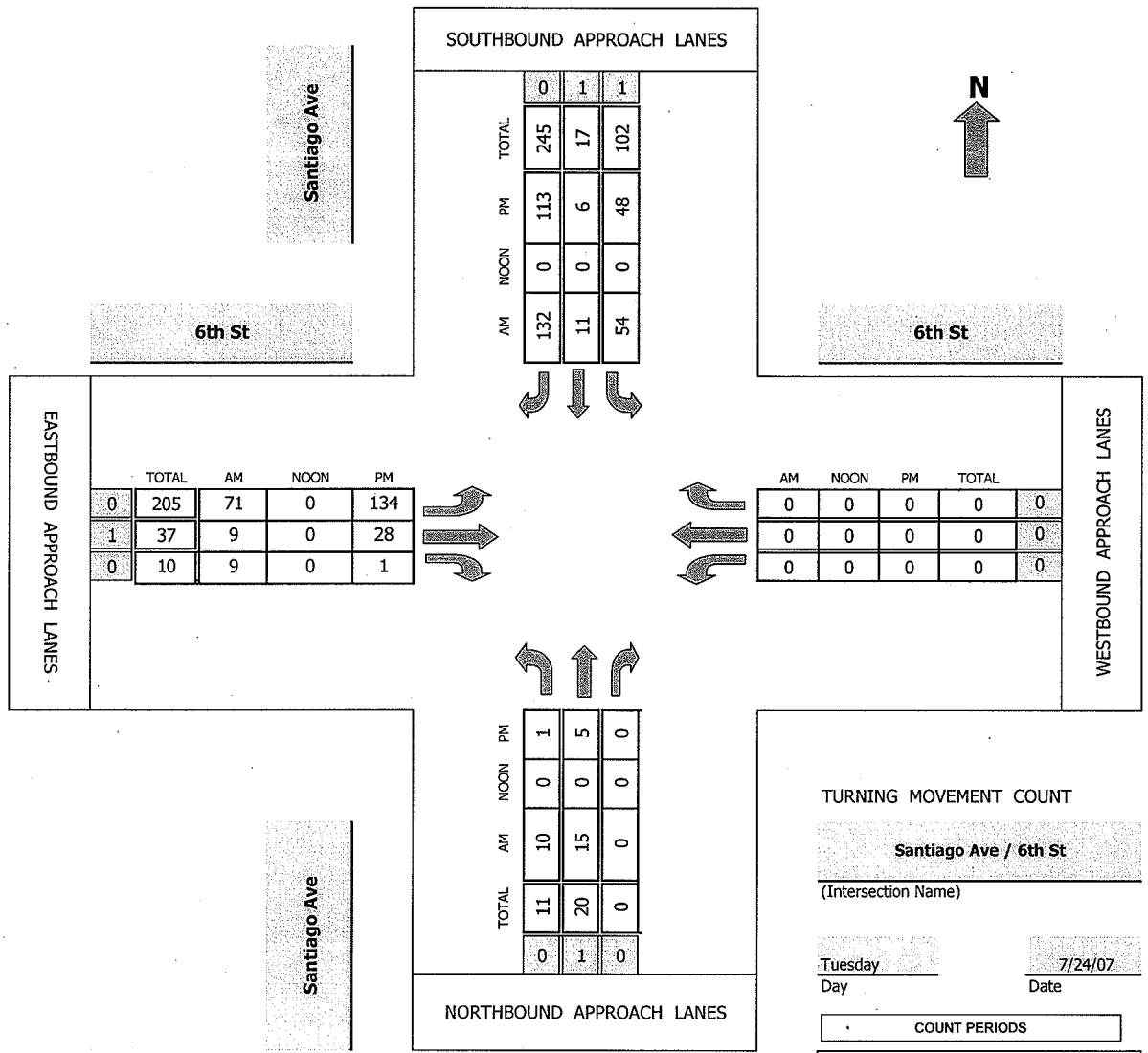
Intersection Turning Movement

Prepared by:

National Data & Surveying Services

TMC Summary of Santiago Ave/6th St

Project #: 07-1213-010



TURNING MOVEMENT COUNT

Santiago Ave / 6th St

(Intersection Name)

Tuesday — Day

7/24/07 — Date

COUNT PERIODS		
am	7:00 AM -	9:00 AM
noon	11:00 AM -	1:00 PM
pm	4:00 PM -	6:00 PM

AM PEAK HOUR	715 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	445 PM

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Santiago Ave | DATE: 7/24/2007 | LOCATION: City of Santa Ana

E-W STREET: 6th St | DAY: TUESDAY | PROJECT# 07-1213-010

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	1	1	0	0	1	0	0	0	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	1	1		18	2	17	13	0	6	0			58
7:15 AM	5	4		17	4	32	19	1	3	0			85
7:30 AM	2	4		12	3	38	13	3	2	0			77
7:45 AM	2	4		16	2	34	24	3	2	0			87
8:00 AM	1	3		9	2	28	15	2	2	0			62
8:15 AM	0	0		7	3	29	14	1	3	0			57
8:30 AM	4	5		12	6	19	12	2	0	1			61
8:45 AM	4	5		8	1	22	21	3	2	0			66
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	NL 19	NT 26	NR 0	SL 99	ST 23	SR 219	EL 131	ET 15	ER 20	WL 1	WT 0	WR 0	TOTAL 553

AM Peak Hr Begins at: 715 AM

PEAK VOLUMES =	10	15	0	54	11	132	71	9	9	0	0	0	311
PEAK HR. FACTOR:		0.694			0.929			0.767			0.000		0.894

CONTROL: 1-Way Stop E

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Santiago Ave | DATE: 7/24/2007 | LOCATION: City of Santa Ana

E-W STREET: 6th St | DAY: TUESDAY | PROJECT# 07-1213-010

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	1	1	0	0	1	0	0	0	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	0	1		11	1	27	27	6	0				73
4:15 PM	0	3		5	1	33	22	7	0				71
4:30 PM	1	0		5	1	27	30	6	1				71
4:45 PM	1	1		21	1	37	26	7	1				95
5:00 PM	0	2		8	1	25	23	8	0				67
5:15 PM	0	0		11	2	31	37	8	0				89
5:30 PM	0	2		8	2	20	48	5	0				85
5:45 PM	1	1		5	1	18	15	1	1				43
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 3	NT 10	NR 0	SL 74	ST 10	SR 218	EL 228	ET 48	ER 3	WL 0	WT 0	WR 0	TOTAL 594

PM Peak Hr Begins at: 445 PM

PEAK VOLUMES =	1	5	0	48	6	113	134	28	1	0	0	0	336
PEAK HR. FACTOR:		0.750			0.708			0.769			0.000		0.884

CONTROL: 1-Way Stop E

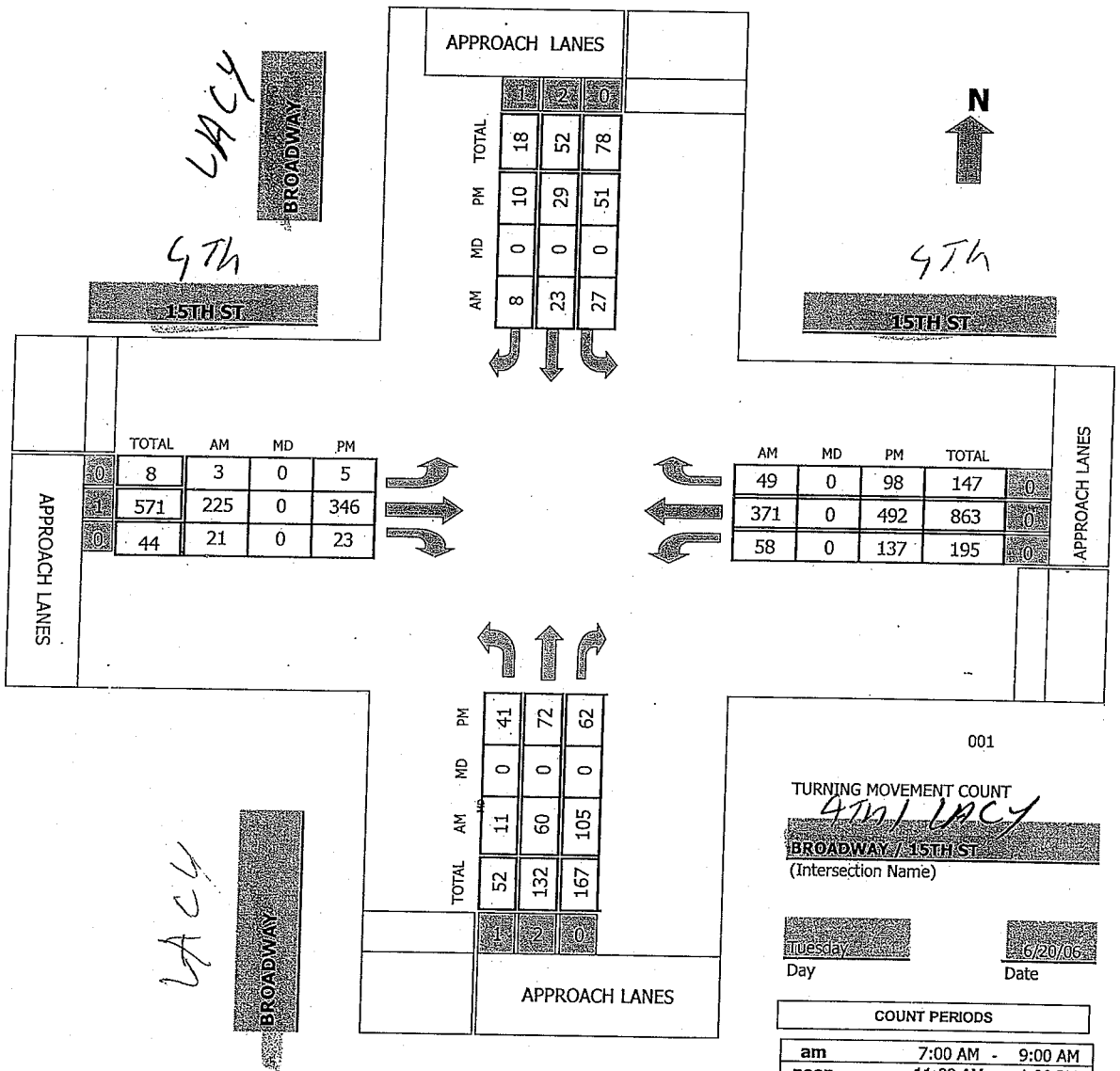
(32)

28

LACY / 4TH

TMC Summary of BROADWAY / 15TH ST

Project #: 06-1192-001



001

TURNING MOVEMENT COUNT

4TH / LACY

BROADWAY / 15TH ST

(Intersection Name)

Tuesday — Day

6/20/06 — Date

COUNT PERIODS		
am	7:00 AM	- 9:00 AM
noon	11:00 AM	- 1:00 PM
pm	4:00 PM	- 6:00 PM

AM PEAK HOUR	730 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	430 PM

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: LACY ST. DATE: 6/20/2006 LOCATION: City of Santa Ana

E-W STREET: FOURTH ST. DAY: TUESDAY PROJECT# 06-1192-044

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	3	6	14	7	2	0	2	32	3	11	70	9	159
7:15 AM	0	15	17	12	1	2	1	47	6	14	86	6	207
7:30 AM	3	17	28	11	7	1	0	61	9	16	66	15	234
7:45 AM	3	21	23	7	7	0	1	72	6	11	108	15	274
8:00 AM	3	15	29	7	9	4	0	43	4	17	96	7	234
8:15 AM	2	7	25	2	0	3	2	49	2	14	101	12	219
8:30 AM	5	5	11	5	4	3	3	33	2	18	89	12	190
8:45 AM	5	5	19	5	1	2	0	33	1	11	56	8	146
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	NL 24	NT 91	NR 166	SL 56	ST 31	SR 15	EL 9	ET 370	ER 33	WL 112	WT 672	WR 84	TOTAL 1663

AM Peak Hr Begins at: 730 AM

PEAK VOLUMES =	11	60	105	27	23	8	3	225	21	58	371	49	961
PEAK HR. FACTOR:		0.917			0.725			0.788			0.892		0.877

CONTROL:

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: LACY ST. DATE: 6/20/2006 LOCATION: City of Santa Ana

E-W STREET: FOURTH ST. DAY: TUESDAY PROJECT# 06-1192-044

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	10	15	16	16	5	0	1	66	9	27	123	26	314
4:15 PM	17	21	9	13	5	5	2	71	4	36	106	12	301
4:30 PM	9	26	11	7	7	2	3	88	4	48	132	27	364
4:45 PM	8	15	12	11	3	2	0	85	6	41	113	21	317
5:00 PM	11	12	20	17	7	2	2	101	4	27	122	23	348
5:15 PM	13	19	19	16	12	4	0	72	9	21	125	27	337
5:30 PM	15	21	17	20	6	3	1	73	10	27	115	23	331
5:45 PM	7	21	8	9	4	2	2	61	8	18	128	16	284
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 90	NT 150	NR 112	SL 109	ST 49	SR 20	EL 11	ET 617	ER 54	WL 245	WT 964	WR 175	TOTAL 2596

PM Peak Hr Begins at: 430 PM

PEAK VOLUMES =	41	72	62	51	29	10	5	346	23	137	492	98	1366
PEAK HR. FACTOR:		0.858			0.703			0.874			0.878		0.938

CONTROL:

Intersection Turning Movement

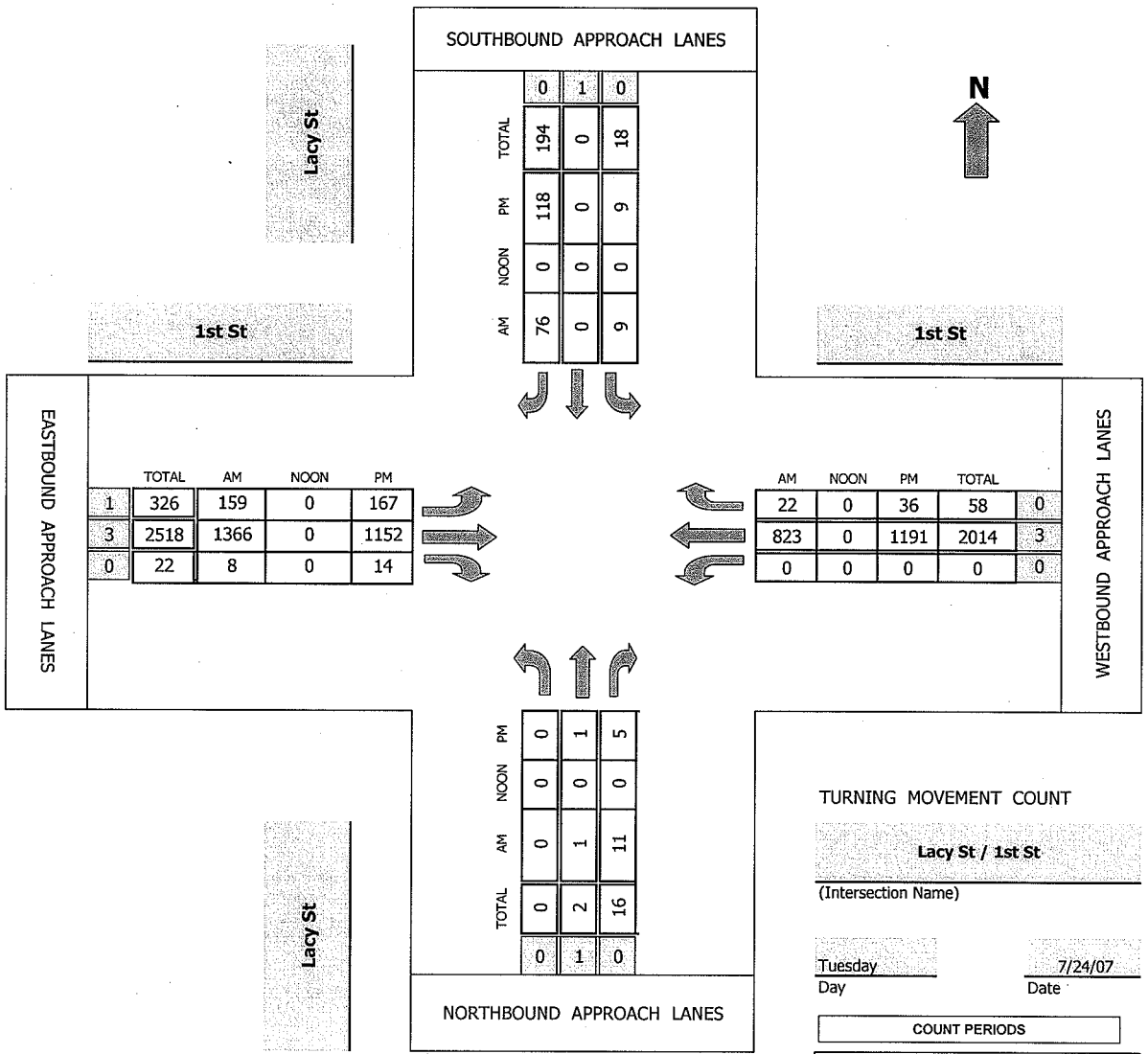
Prepared by:

National Data & Surveying Services

33

TMC Summary of Lacy St/1st St

Project #: 07-1213-008



TURNING MOVEMENT COUNT

Lacy St / 1st St
(Intersection Name)

Tuesday
Day

7/24/07
Date

COUNT PERIODS		
am	7:00 AM -	9:00 AM
noon	11:00 AM -	1:00 PM
pm	4:00 PM -	6:00 PM

AM PEAK HOUR	715 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	500 PM

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Lacy St DATE: 7/24/2007 LOCATION: City of Santa Ana

E-W STREET: 1st St DAY: TUESDAY PROJECT# 07-1213-008

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	1	3	0	0	3	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM		0	0	1	1	27	42	249	0		298	12	630
4:15 PM		0	1	2	0	38	35	295	0		307	1	679
4:30 PM		0	1	5	0	30	35	307	2		277	8	665
4:45 PM		0	2	1	0	29	37	289	2		295	11	666
5:00 PM		1	2	2	0	26	43	259	1		319	4	657
5:15 PM		0	2	2	0	37	41	303	4		291	12	692
5:30 PM		0	0	2	0	22	42	299	5		298	7	675
5:45 PM		0	1	3	0	33	41	291	4		283	13	669
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES =	0	1	9	18	1	242	316	2292	18	0	2368	68	5333

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	0	1	5	9	0	118	167	1152	14	0	1191	36	2693
PEAK HR. FACTOR:		0.500			0.814			0.958			0.950		0.973

CONTROL: 1-Way Stop S

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Lacy St | DATE: 7/24/2007 | LOCATION: City of Santa Ana

E-W STREET: 1st St | DAY: TUESDAY | PROJECT# 07-1213-008

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	1	3	0	0	3	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	0	0	2		16	26	308	0		189	4	545
7:15 AM	0	1	4	3		25	38	341	4		215	3	634
7:30 AM	0	0	2	2		21	46	368	2		185	8	634
7:45 AM	0	0	5	2		15	44	353	1		207	6	633
8:00 AM	0	0	0	2		15	31	304	1		216	5	574
8:15 AM	1	0	4	2		12	32	312	0		217	2	582
8:30 AM	2	0	5	2		15	31	307	0		222	9	593
8:45 AM	0	0	0	4		16	29	273	1		238	2	563
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	3	1	20	19	0	135	277	2566	9	0	1689	39	4758

AM Peak Hr Begins at: 715 AM

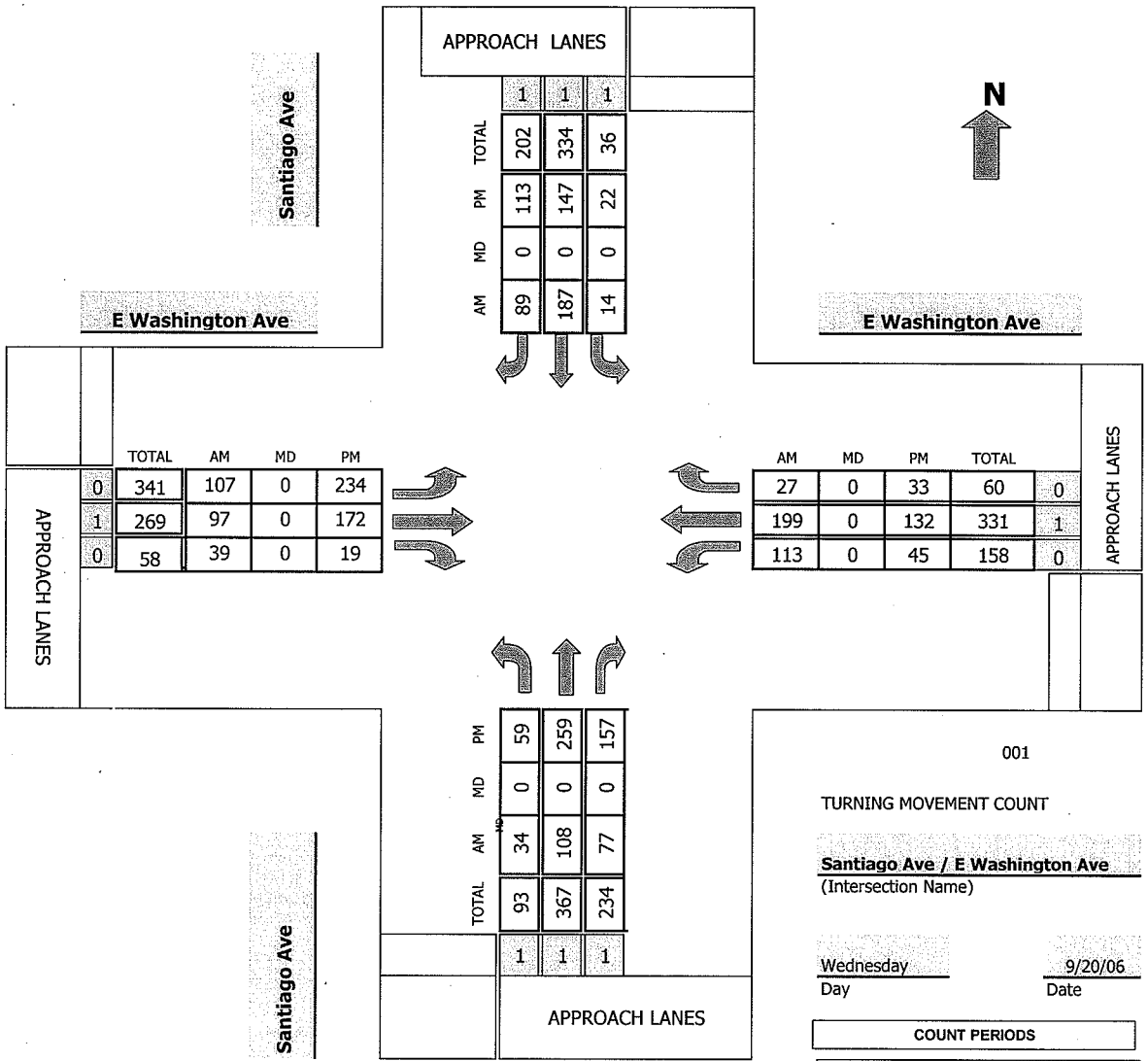
PEAK VOLUMES =	0	1	11	9	0	76	159	1366	8	0	823	22	2475
PEAK HR. FACTOR:		0.600			0.759			0.921			0.956		0.976

CONTROL: 1-Way Stop S

34

TMC Summary of Santiago Ave/E Washington Ave

Project #: 06-1211-015



001

TURNING MOVEMENT COUNT

Santiago Ave / E Washington Ave
(Intersection Name)

Wednesday — Day

9/20/06 — Date

COUNT PERIODS		
am	7:00 AM -	9:00 AM
noon	11:00 AM -	1:00 PM
pm	4:00 PM -	6:00 PM

AM PEAK HOUR	715 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	430 PM

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Santiago Ave DATE: 9/20/2006 LOCATION: City of Santa Ana

E-W STREET: E Washington Ave DAY: WEDNESDAY PROJECT# 06-1211-015

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	1	1	1	1	0	1	0	0	1	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	3	14	8	1	28	24	18	17	20	14	28	7	182
7:15 AM	8	23	15	6	48	28	43	31	6	24	51	11	294
7:30 AM	13	33	32	2	53	32	25	24	20	39	67	9	349
7:45 AM	7	20	18	3	35	11	13	19	11	26	33	2	198
8:00 AM	6	32	12	3	51	18	26	23	2	24	48	5	250
8:15 AM	4	26	14	2	29	13	18	22	8	22	28	3	189
8:30 AM	6	29	2	1	24	7	19	8	4	13	15	2	130
8:45 AM	2	14	6	2	24	13	9	11	3	9	21	5	119
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	49	191	107	20	292	146	171	155	74	171	291	44	1711

AM Peak Hr Begins at: 715 AM

PEAK VOLUMES =	34	108	77	14	187	89	107	97	39	113	199	27	1091
PEAK HR. FACTOR:		0.702			0.833			0.759			0.737		0.782

CONTROL: 4-Way Stop

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Santiago Ave DATE: 9/20/2006 LOCATION: City of Santa Ana

E-W STREET: E Washington Ave DAY: WEDNESDAY PROJECT# 06-1211-015

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	1	1	1	1	0	1	0	0	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	12	34	32	6	35	25	35	35	7	18	22	10	271
4:15 PM	6	47	26	3	36	23	48	30	10	19	26	7	281
4:30 PM	9	68	35	8	41	25	63	33	7	10	31	3	333
4:45 PM	23	46	39	7	34	28	48	43	2	11	39	8	328
5:00 PM	11	85	39	3	44	29	63	34	6	10	33	10	367
5:15 PM	16	60	44	4	28	31	60	62	4	14	29	12	364
5:30 PM	18	54	43	7	28	14	48	38	5	18	28	7	308
5:45 PM	19	48	37	6	30	16	43	34	6	14	31	8	292
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 114	NT 442	NR 295	SL 44	ST 276	SR 191	EL 408	ET 309	ER 47	WL 114	WT 239	WR 65	TOTAL 2544

PM Peak Hr Begins at: 430 PM

PEAK VOLUMES =	59	259	157	22	147	113	234	172	19	45	132	33	1392
PEAK HR. FACTOR:		0.880			0.928			0.843			0.905		0.948

CONTROL: 4-Way Stop

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Santiago Ave. DATE: 1/7/2003 LOCATION: City of Santa Ana

E-W STREET: Civic Center DAY: TUESDAY PROJECT# 03-0054-014 A

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	0	1	1	0	0	1	0	0	1	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	43	30	3	1	35	20	14	4	31	5	13	0	199
7:15 AM	40	33	4	2	38	28	26	9	37	8	19	1	245
7:30 AM	52	35	2	1	49	25	38	15	46	10	11	2	286
7:45 AM	55	28	3	0	64	20	23	7	28	11	12	1	252
8:00 AM	96	39	4	4	71	38	32	13	56	9	20	2	384
8:15 AM	61	23	2	3	47	22	18	9	49	6	10	3	253
8:30 AM	39	21	1	2	33	24	15	8	35	8	14	2	202
8:45 AM	48	27	3	1	42	13	9	12	30	6	10	1	202
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	NL 434	NT 236	NR 22	SL 14	ST 379	SR 190	EL 175	ET 77	ER 312	WL 63	WT 109	WR 12	TOTAL 2023
AM Peak Hr Begins at:	730 AM												
PEAK VOLUMES =	264	125	11	8	231	105	111	44	179	36	53	8	1175

CONTROL: 4-Way Stop

35

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Santiago Ave. DATE: 1/7/2003 LOCATION: City of Santa Ana

E-W STREET: Civic Center DAY: TUESDAY PROJECT# 03-0054-014 P

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	0	1	1	0	0	1	0	0	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	35	29	5	1	48	20	54	12	65	7	7	2	285
4:15 PM	43	51	9	4	43	14	58	14	61	5	8	3	313
4:30 PM	38	42	5	2	49	28	51	6	76	10	5	4	316
4:45 PM	40	48	6	3	62	23	69	18	84	6	12	2	373
5:00 PM	46	74	11	5	57	30	78	13	92	8	6	3	423
5:15 PM	32	35	8	1	45	22	57	15	67	4	4	2	292
5:30 PM	29	46	7	2	51	19	45	17	70	5	7	1	299
5:45 PM	37	34	10	1	36	13	36	9	48	3	10	1	238
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 300	NT 359	NR 61	SL 19	ST 391	SR 169	EL 448	ET 104	ER 563	WL 48	WT 59	WR 18	TOTAL 2539
PM Peak Hr Begins at:	415 PM												
PEAK VOLUMES =	167	215	31	14	211	95	256	51	313	29	31	12	1425
CONTROL:	4-Way Stop												

(36)

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Santiago Ave. DATE: 1/7/2003 LOCATION: City of Santa Ana

E-W STREET: Santa Ana Blvd. DAY: TUESDAY PROJECT# 03-0054-015 A

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	1	1	1	0	1	2	0	1	2	1	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	6	15	17	52	34	17	6	112	5	35	178	62	539
7:15 AM	7	17	12	56	38	22	8	111	10	26	209	75	591
7:30 AM	3	14	14	49	43	25	7	85	5	22	215	83	565
7:45 AM	6	9	15	47	31	19	9	77	8	32	221	94	568
8:00 AM	4	12	13	54	22	24	5	59	7	38	214	70	522
8:15 AM	5	13	11	41	20	17	6	56	6	21	166	65	427
8:30 AM	7	9	18	38	17	15	7	59	7	23	152	56	408
8:45 AM	4	8	12	29	19	18	4	63	2	22	144	41	366
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	42	97	112	366	224	157	52	622	50	219	1499	546	3986

AM Peak Hr Begins at: 700 AM

PEAK													
VOLUMES =	22	55	58	204	146	83	30	385	28	115	823	314	2263

CONTROL: Signalized;

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Santiago Ave. DATE: 1/7/2003 LOCATION: City of Santa Ana

E-W STREET: Santa Ana Blvd. DAY: TUESDAY PROJECT# 03-0054-015 P

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	1	1	1	0	1	2	0	1	2	1	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	6	17	22	53	34	21	11	169	10	33	198	59	633
4:15 PM	3	19	15	61	29	15	14	141	6	29	166	43	541
4:30 PM	5	23	19	74	31	19	13	148	7	23	147	48	557
4:45 PM	8	21	14	68	37	28	16	167	10	35	159	77	640
5:00 PM	11	26	17	76	53	26	19	195	13	31	172	91	730
5:15 PM	7	20	20	70	55	27	15	153	13	20	129	54	583
5:30 PM	6	22	18	87	31	17	8	162	11	21	132	52	567
5:45 PM	4	13	16	66	24	12	9	127	8	26	85	36	426
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 50	NT 161	NR 141	SL 555	ST 294	SR 165	EL 105	ET 1262	ER 78	WL 218	WT 1188	WR 460	TOTAL 4677

PM Peak Hr Begins at: 445 PM

PEAK VOLUMES =	32	89	69	301	176	98	58	677	47	107	592	274	2520

CONTROL: Signalized;

Intersection Turning Movement

(40)

Prepared by: Southland Car Counters

N-S STREET: Standard Ave DATE: 10/12/2005 LOCATION: City of Santa Ana

E-W STREET: 1st Ave DAY: WEDNESDAY PROJECT# H0509088

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	14	19	21	5	48	2	2	299	34	8	153	1	606
7:15 AM	13	43	31	11	45	0	15	379	27	10	208	3	785
7:30 AM	21	47	24	17	78	1	19	340	45	21	218	4	835
7:45 AM	19	48	29	4	73	3	39	260	22	20	211	1	729
8:00 AM	14	24	25	5	51	2	9	307	33	12	216	3	701
8:15 AM	15	19	21	4	29	1	10	324	17	17	182	7	646
8:30 AM	20	30	20	6	30	6	7	303	19	10	188	3	642
8:45 AM	21	25	29	6	16	5	5	289	17	11	182	3	609
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	NL 137	NT 255	NR 200	SL 58	ST 370	SR 20	EL 106	ET 2501	ER 214	WL 109	WT 1558	WR 25	TOTAL 5553

AM Peak Hr Begins at: 715 AM

PEAK VOLUMES =	67	162	109	37	247	6	82	1286	127	63	853	11	3050
PEAK HR. FACTOR:		0.880			0.755			0.888			0.954		0.913

CONTROL:

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Standard Ave DATE: 10/12/2005 LOCATION: City of Santa Ana

E-W STREET: 1st Ave DAY: WEDNESDAY PROJECT# H0509088

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	43	54	26	2	39	4	12	249	14	22	240	5	710
4:15 PM	35	73	18	8	44	8	23	315	26	22	255	1	828
4:30 PM	37	68	26	8	47	8	17	235	23	22	299	4	794
4:45 PM	42	71	31	5	65	10	20	294	12	29	276	4	859
5:00 PM	49	72	30	4	52	2	16	248	22	17	266	6	784
5:15 PM	39	58	40	4	53	6	20	258	23	27	288	0	816
5:30 PM	53	82	33	4	52	7	21	268	18	19	268	1	826
5:45 PM	42	56	27	6	56	5	18	288	25	24	266	5	818
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 340	NT 534	NR 231	SL 41	ST 408	SR 50	EL 147	ET 2155	ER 163	WL 182	WT 2158	WR 26	TOTAL 6435

PM Peak Hr Begins at: 445 PM

PEAK VOLUMES =	183	283	134	17	222	25	77	1068	75	92	1098	11	3285
PEAK HR. FACTOR:		0.893			0.825			0.936			0.953		0.956

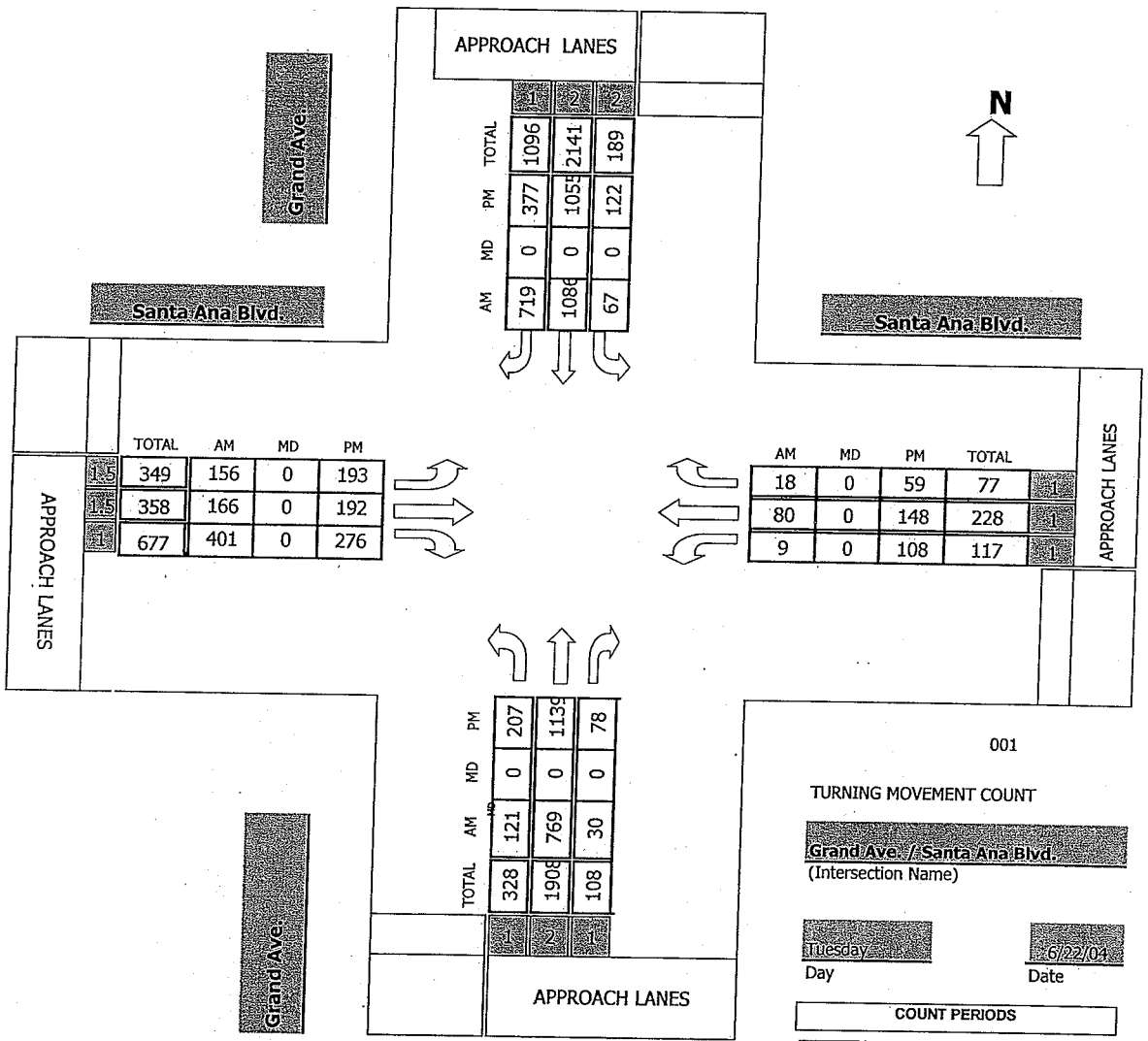
CONTROL:

(42)

Not used. See counts from One Broadway Plaza Exh. bbf.

TMC Summary of Grand Ave./Santa Ana Blvd.

Project #: 04-1414-001



	TOTAL	AM	MD	PM
1.5	349	156	0	193
1.5	358	166	0	192
1	677	401	0	276

	TOTAL	AM	MD	PM
1	77	18	0	59
1	228	80	0	148
1	117	9	0	108

	1	2	2
TOTAL	1096	2141	189
PM	377	1055	122
MD	0	0	0
AM	719	1086	67

	1	2	1
TOTAL	328	1908	108
AM	121	769	30
MD	0	0	0
PM	207	1139	78

TURNING MOVEMENT COUNT

Grand Ave./Santa Ana Blvd.
(Intersection Name)

Tuesday
Day

6/22/04
Date

COUNT PERIODS		
am	7:00 AM	9:00 AM
noon	4:00 PM	6:00 PM
pm	4:00 PM	6:00 PM

AM PEAK HOUR	715 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	430 PM

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Grand Ave. DATE: 6/24/2004 LOCATION: City of Santa Ana

E-W STREET: Santa Ana Blvd. DAY: THURSDAY PROJECT# 04-1414-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 2	EL 1.5	ET 1.5	ER 1	WL 1	WT 1	WR 1	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	16	182	7	18	271	169	33	40	98	0	19	5	858
7:15 AM	20	191	8	19	285	180	41	48	104	1	21	6	924
7:30 AM	27	195	6	18	284	175	36	45	94	2	19	5	906
7:45 AM	35	196	9	16	268	188	40	38	99	4	22	4	919
8:00 AM	39	187	7	14	249	176	39	35	104	2	18	3	873
8:15 AM	39	176	5	12	234	182	36	21	113	2	18	5	843
8:30 AM	37	157	3	9	226	171	40	16	109	1	15	4	788
8:45 AM	19	126	3	7	209	166	28	9	86	0	6	2	661
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL VOLUMES =	NL 232	NT 1410	NR 48	SL 113	ST 2026	SR 1407	EL 293	ET 252	ER 807	WL 12	WT 138	WR 34	TOTAL 6772

AM Peak Hr Begins at: 715 AM

PEAK VOLUMES =	121	769	30	67	1086	719	156	166	401	9	80	18	3622
PEAK HR. FACTOR:		0.958			0.967			0.937			0.892		0.980

CONTROL: Signalized

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Grand Ave. DATE: 6/24/2004 LOCATION: City of Santa Ana

E-W STREET: Santa Ana Blvd. DAY: THURSDAY PROJECT# 04-1414-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 2	EL 1.5	ET 1.5	ER 1	WL 1	WT 1	WR 1	TOTAL
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	20	241	16	20	226	68	36	32	62	19	26	12	778
4:15 PM	27	264	17	26	241	72	41	29	54	22	39	14	846
4:30 PM	26	270	19	29	261	96	48	46	60	26	41	10	932
4:45 PM	44	292	17	33	256	103	44	52	77	29	35	18	1000
5:00 PM	97	290	22	31	266	96	49	45	62	26	32	15	1031
5:15 PM	40	287	20	29	272	82	52	49	77	27	40	16	991
5:30 PM	39	261	18	26	250	84	61	46	55	22	39	19	920
5:45 PM	26	256	15	24	361	71	51	30	41	18	41	19	953
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 319	NT 2161	NR 144	SL 218	ST 2133	SR 672	EL 382	ET 329	ER 488	WL 189	WT 293	WR 123	TOTAL 7451

PM Peak Hr Begins at: 430 PM

PEAK VOLUMES =	207	1139	78	122	1055	377	193	192	276	108	148	59	3954
PEAK HR. FACTOR:		0.870			0.989			0.928			0.949		0.959

CONTROL:

Signalized

Transportation Studies, Inc

1350 Reynolds Avenue, Suite 115
Irvine, CA. 92614

(43)

File Name: H0505126
Site Code: 00000916
Start Date: 5/18/2005
Page No: 1
City: SANTA ANA
N-S Direction: GRAND AVENUE
E-W Direction: 4TH STREET

Groups Printed- Turning Movements

	GRAND AVENUE Southbound			4TH STREET Westbound			GRAND AVENUE Northbound			4TH STREET Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
7:00 AM	12	116	26	18	145	19	16	48	22	12	214	10	658
7:15 AM	20	94	27	25	197	29	21	59	15	22	277	28	814
7:30 AM	23	110	21	32	169	16	34	78	33	29	233	15	793
7:45 AM	27	114	33	35	208	40	23	84	19	30	227	45	885
Total	82	434	107	110	719	104	94	269	89	93	951	98	3150
8:00 AM	11	124	17	24	153	14	13	86	19	22	148	15	646
8:15 AM	7	136	14	10	109	16	19	96	19	19	136	19	600
8:30 AM	10	156	18	21	85	25	13	124	22	18	54	20	566
8:45 AM	19	170	16	16	87	13	13	132	14	24	41	16	561
Total	47	586	65	71	434	68	58	438	74	83	379	70	2373

*** BREAK ***

4:00 PM	28	185	25	24	145	45	13	235	25	18	85	43	871
4:15 PM	26	162	15	29	195	40	18	227	29	21	88	30	880
4:30 PM	22	203	26	27	151	43	17	257	38	19	121	36	960
4:45 PM	24	180	24	37	197	49	17	239	32	19	115	38	971
Total	100	730	90	117	688	177	65	958	124	77	409	147	3682
5:00 PM	17	194	21	38	143	48	6	298	24	22	126	38	975
5:15 PM	16	170	26	28	170	62	7	249	51	19	129	49	976
5:30 PM	30	190	33	24	126	39	7	233	30	19	93	30	854
5:45 PM	31	193	32	21	171	40	12	213	25	11	94	49	892
Total	94	747	112	111	610	189	32	993	130	71	442	166	3697
Grand Total	323	2497	374	409	2451	538	249	2658	417	324	2181	481	12902
Apprch %	10.1	78.2	11.7	12	72.1	15.8	7.5	80	12.5	10.9	73	16.1	
Total %	2.5	19.4	2.9	3.2	19	4.2	1.9	20.6	3.2	2.5	16.9	3.7	

Transportation Studies, Inc

1350 Reynolds Avenue, Suite 115
Irvine, CA. 92614

File Name: H0505126
Site Code: 00000916
Start Date: 5/18/2005
Page No: 2

	GRAND AVENUE Southbound				4TH STREET Westbound				GRAND AVENUE Northbound				4TH STREET Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
7:00 AM	12	116	26	154	18	145	19	182	16	48	22	86	12	214	10	236	658
7:15 AM	20	94	27	141	25	197	29	251	21	59	15	95	22	277	28	327	814
7:30 AM	23	110	21	154	32	169	16	217	34	78	33	145	29	233	15	277	793
7:45 AM	27	114	33	174	35	208	40	283	23	84	19	126	30	227	45	302	885
Total Volume	82	434	107	623	110	719	104	933	94	269	89	452	93	951	98	1142	3150
% App. Total	13.2	69.7	17.2		11.8	77.1	11.1		20.8	59.5	19.7		8.1	83.3	8.6		
PHF	0.759	0.935	0.811	0.895	0.786	0.864	0.65	0.824	0.691	0.801	0.674	0.779	0.775	0.858	0.544	0.873	0.89

Transportation Studies, Inc

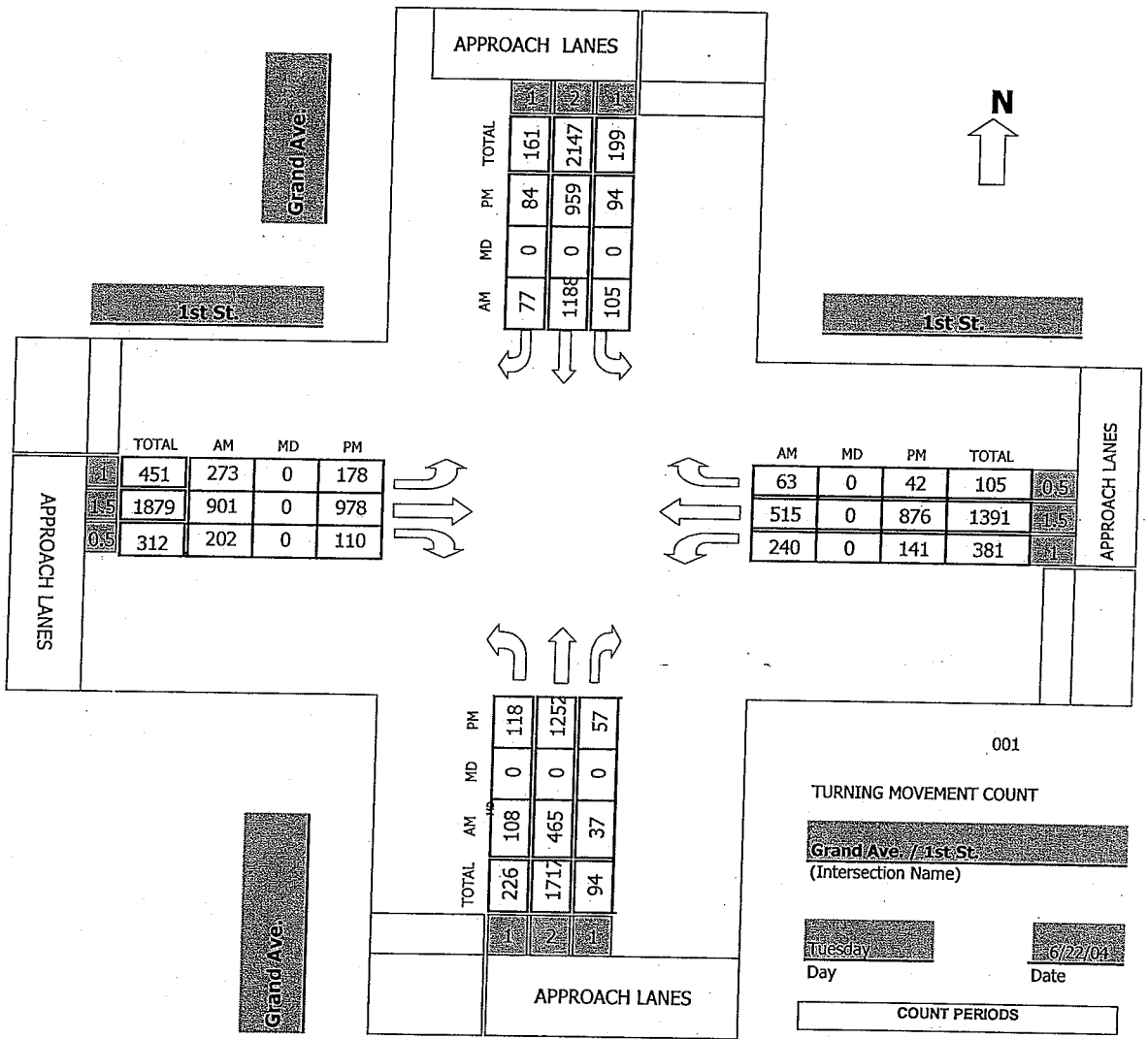
1350 Reynolds Avenue, Suite 115
Irvine, CA. 92614

File Name: H0505126
Site Code: 00000916
Start Date: 5/18/2005
Page No: 3

	GRAND AVENUE Southbound				4TH STREET Westbound				GRAND AVENUE Northbound				4TH STREET Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
4:30 PM	22	203	26	251	27	151	43	221	17	257	38	312	19	121	36	176	960
4:45 PM	24	180	24	228	37	197	49	283	17	239	32	288	19	115	38	172	971
5:00 PM	17	194	21	232	38	143	48	229	6	298	24	328	22	126	38	186	975
5:15 PM	16	170	26	212	28	170	62	260	7	249	51	307	19	129	49	197	976
Total Volume	79	747	97	923	130	661	202	993	47	1043	145	1235	79	491	161	731	3882
% App. Total	8.6	80.9	10.5		13.1	66.6	20.3		3.8	84.5	11.7		10.8	67.2	22		
PHF	0.823	0.92	0.933	0.919	0.855	0.839	0.815	0.877	0.691	0.875	0.711	0.941	0.898	0.952	0.821	0.928	0.994

TMC Summary of Grand Ave./1st St.

Project #: 04-1414-004



001

TURNING MOVEMENT COUNT

Grand Ave. / 1st St.
(Intersection Name)

Tuesday
Day

6/22/04
Date

COUNT PERIODS		
am	7:00 AM -	9:00 AM
noon	4:00 PM -	6:00 PM
pm	4:00 PM -	6:00 PM

AM PEAK HOUR	730 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	445 PM

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Grand Ave. DATE: 6/24/2004 LOCATION: City of Santa Ana

E-W STREET: 1st St. DAY: THURSDAY PROJECT# 04-1414-004

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	1	1	2	1	1	1.5	0.5	1	1.5	0.5	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	16	90	7	15	286	12	44	190	36	38	109	10	853
7:15 AM	28	96	5	22	303	16	62	206	44	47	114	12	955
7:30 AM	30	108	7	17	309	24	70	218	50	59	130	18	1040
7:45 AM	33	109	8	21	312	27	75	225	52	68	135	20	1085
8:00 AM	20	125	13	37	288	11	72	237	51	61	122	14	1051
8:15 AM	25	123	9	30	279	15	56	221	49	52	128	11	998
8:30 AM	16	118	10	20	255	10	49	216	40	41	116	8	899
8:45 AM	14	110	6	18	220	7	44	194	33	28	102	5	781
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	NL 182	NT 879	NR 65	SL 180	ST 2252	SR 122	EL 472	ET 1707	ER 355	WL 394	WT 956	WR 98	TOTAL 7662

AM Peak Hr Begins at: 730 AM

PEAK VOLUMES =	108	465	37	105	1188	77	273	901	202	240	515	63	4174
PEAK HR. FACTOR:		0.965			0.951			0.956			0.917		0.962

CONTROL: Signalized;

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Grand Ave. DATE: 6/24/2004 LOCATION: City of Santa Ana

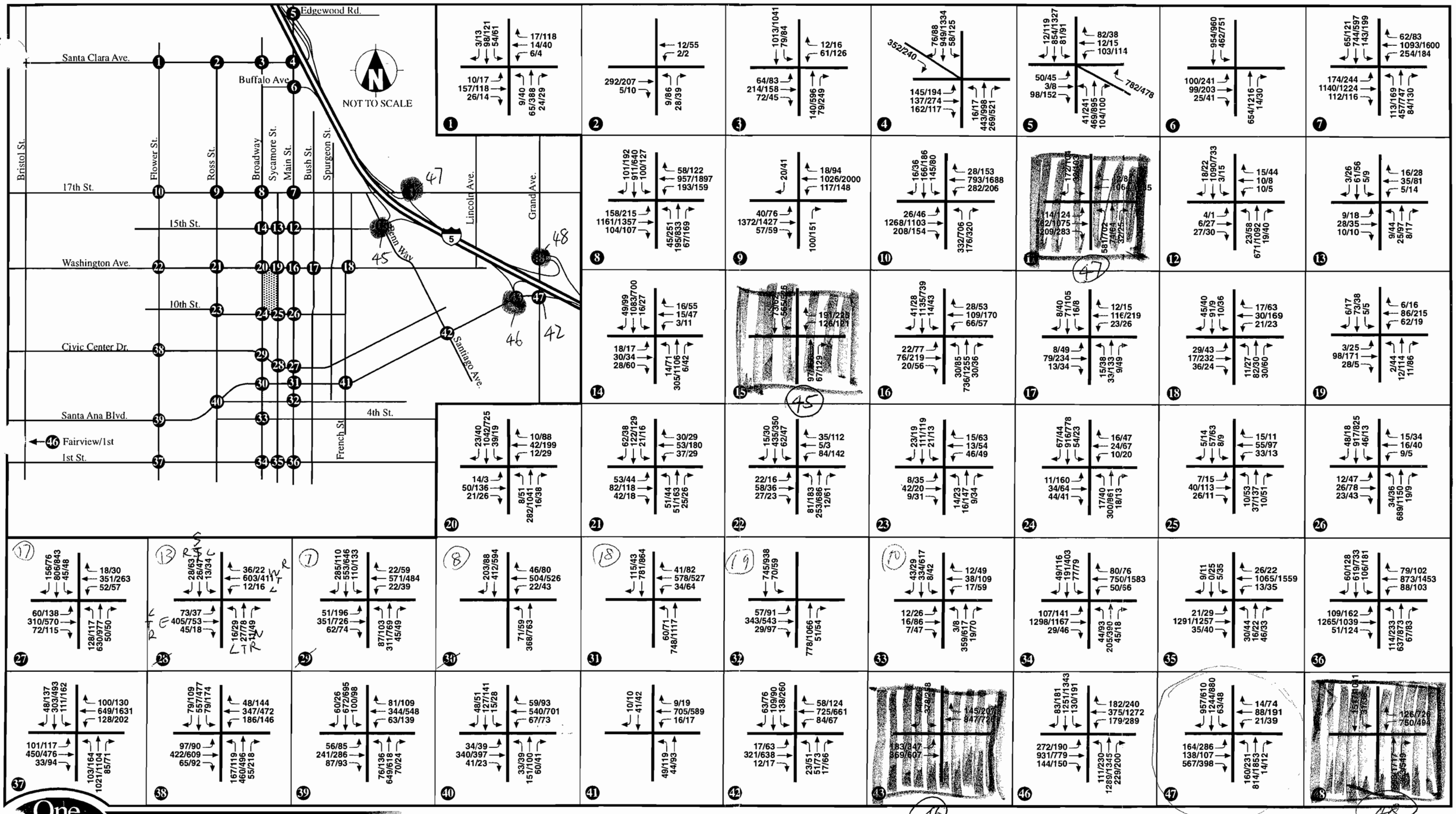
E-W STREET: 1st St. DAY: THURSDAY PROJECT# 04-1414-004

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	1	1	2	1	1	1.5	0.5	1	1.5	0.5	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	38	286	12	15	213	15	29	219	26	24	176	6	1059
4:15 PM	35	294	19	26	228	15	32	236	42	25	194	6	1152
4:30 PM	30	301	15	20	226	18	36	256	31	29	189	8	1159
4:45 PM	36	296	19	19	252	19	48	250	29	44	210	11	1233
5:00 PM	25	319	13	22	241	17	52	234	30	39	216	10	1218
5:15 PM	31	321	12	29	244	22	42	248	26	36	226	12	1249
5:30 PM	26	316	13	24	222	26	36	246	25	22	224	9	1189
5:45 PM	27	298	15	18	209	18	28	221	22	20	219	7	1102
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 248	NT 2431	NR 118	SL 173	ST 1835	SR 150	EL 303	ET 1910	ER 231	WL 239	WT 1654	WR 69	TOTAL 9361
PEAK VOLUMES =	118	1252	57	94	959	84	178	978	110	141	876	42	4889
PEAK HR. FACTOR:		0.980			0.964			0.968			0.966		0.979

PM Peak Hr Begins at: 445 PM

CONTROL:

Signalized;



One Broadway Plaza

EIR Traffic Impact Study

LEGEND: XXX/XXX
AM/PM

Source: P&D Consultants/LPA Architects

EXISTING PEAK HOUR INTERSECTION TURNING VOLUMES

for 42

FIGURE T-8

TRAFFIC DATA SERVICES, INC
SUMMARY OF VEHICULAR TURNING MOVEMENTS

N/S ST : MORTIMER ST
E/W ST: SANTA ANA BLVD
CITY: SANTA ANA

FILENAME: 1070801
DATE: 10/4/2007
DAY: THURSDAY

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	Total
LANES:			1	0	1	0				0	1	0	
7:00 AM			42	2	0	0				1	128	4	177
15 AM			44	1	1	1				1	150	1	199
30 AM			52	1	2	0				6	161	0	222
45 AM			47	1	1	0				6	189	1	245
8:00 AM			38	1	1	0				12	201	1	254
15 AM			32	0	0	1				4	176	1	214
30 AM			22	0	1	0				9	142	1	175
45 AM			18	0	0	0				3	138	0	159
PEAK HOUR BEGINS AT: 730 AM													PHF: 0.92
VOLUMES =	0	0	169	3	4	1	0	0	0	28	727	3	935

FILENAME: 1070801P
DATE: 10/4/2007
DAY: THURSDAY

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	Total
4:00 PM	2		79	0	0	0				11	90	1	183
15 PM			60	0	1	1				9	83	4	158
30 PM			92	0	0	1				10	93	0	196
45 PM			70	0	0	2				11	112	2	197
5:00 PM			118	0	0	0				12	109	0	239
15 PM			102	1	0	1				14	103	3	224
30 PM	1		145	0	0	0				2	115	0	263
45 PM			142	0	0	1				13	108	3	267
PEAK HOUR BEGINS AT: 1700 PM													PHF: 0.93
VOLUMES =	1	0	507	1	0	2	0	0	0	41	435	6	993

COMMENTS:

(50)

TRAFFIC DATA SERVICES, INC.
(714) 541-2228
Summary of Vehicular Turning Movements

N/S ST : MORTIMER ST
E/W ST: 5TH ST
CITY: SANTA ANA

FILENAME: 0652305
DATE: 6/29/2005
DAY: WEDNESDAY

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	Total
LANES:		1	0	0	1		1	0.5	0.5	0.5		0.5	
7:00 AM		25	0	0	4		41	4	9	2		0	85
15 AM		33	1	1	6		48	9	11	0		1	110
30 AM		27	1	0	4		39	3	7	1		1	83
45 AM		32	2	2	3		38	9	7	2		7	102
8:00 AM		34	0	0	3		27	8	6	1		3	82
15 AM		32	1	1	5		21	6	9	1		2	78
30 AM		27	0	1	2		23	7	8	1		4	73
45 AM		15	3	0	4		18	6	9	0		1	56

PEAK HOUR BEGINS AT: 700 AM — PHF: 0.86

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	Total
VOLUMES =	0	117	4	3	17	0	166	25	34	5	0	9	380

FILENAME: 0652305P
DATE: 6/29/2005
DAY: WEDNESDAY

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	Total
4:00 PM		42	7	1	3		87	16	10	1		5	172
15 PM		33	1	0	3		53	12	11	2		4	119
30 PM		37	1	2	7		122	16	6	2		13	206
45 PM		18	1	0	4		83	21	8	1		5	141
5:00 PM		51	0	1	9		137	23	14	2		14	251
15 PM		47	3	1	7		108	25	10	4		15	220
30 PM		41	2	2	7		133	18	13	3		8	227
45 PM		31	0	1	4		76	15	11	1		6	145

PEAK HOUR BEGINS AT: 1700 PM — PHF: 0.84

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	Total
VOLUMES =	0	170	5	5	27	0	454	81	48	10	0	43	843

COMMENTS:

2007 ADT Data Provided by City of Santa Ana

E-W St	Boundary Streets	2007 volume
Civic Center Dr	from Ross St to Broadway	15,487
Civic Center Dr	from Broadway to Main St	15,215
Civic Center Dr	from Main St to Santiago	12,032
Santa Ana Blvd	from Flower St to Ross St	12,677
Santa Ana Blvd	from Ross St to Broadway	12,396
Santa Ana Blvd	from Broadway to Main St	10,401
Santa Ana Blvd	from Main St to French St	10,420
Santa Ana Blvd	from French St to Santiago St	14,716
Santa Ana Blvd	from Santiago St to Grand Ave	20,054
Fifth St	from Ross St to Main St	8,736
Fifth St	from Main St to French St	5,878
First St	from Flower St to Broadway	40,012
First St	from Broadway to Main St	38,578
First St	from Main St to Standard Ave	39,076
First St	from Standard Ave to Grand Ave	40,796
Fourth St	from Ross St to Main St	6,737
Fourth St	from Main St to French St	11,974
Fourth St	from French St to Grand Ave	18,423
Third St	from Flower St to Ross St	3,637
Third St	from Ross St to Broadway	4,996
Third St	from Broadway to Main St	5,775
Third St	from Main St to French St	4,913

ADT Data Provided by City of Santa Ana

N-S Streets	Boundary Streets	2007 volume
Flower St	from First St to Santa Ana Blvd	18,792
Flower St	from Santa Ana Blvd to Civic Center Dr	18,722
Flower St	from Civic Center Dr to Washington Ave	17,518
Flower St	from Washington Ave to 17th St	16,681
Ross St	from First St to Santa Ana Blvd	6,233
Ross St	from Santa Ana Blvd to Civic Center Dr	6,054
Ross St	from Civic Center Dr to Washington Ave	6,260
Ross St	from Washington Ave to 17th St	6,426
Broadway	from First St to Santa Ana Blvd	15,994
Broadway	from Santa Ana Blvd to Civic Center Dr	18,621
Broadway	from Civic Center Dr to 17th St	23,651
Main St	from First St to Fourth St	28,886
Main St	from Fourth St to Civic Center Dr	33,148
Main St	from Civic Center Dr to Washington Ave	32,580
Main St	from Washington Ave to 17th St	34,214
Grand Ave	from First St to Fourth St	31,391
Grand Ave	from Fourth St to Santa Ana Blvd	37,935
Grand Ave	from Santa Ana Bl to Seventeenth St	32,682

APPENDIX B
Existing Conditions Analysis Worksheets

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Scenario Report

Scenario:	Exist AM
Command:	AM Peak
Volume:	Exist AM
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Flower St (NS)/ Civic Center D	B	xxxxx	0.617	B	xxxxx	0.617	+ 0.000 V/C
# 2 Flower St (N/S) / Santa Ana Bl	A	xxxxx	0.524	A	xxxxx	0.524	+ 0.000 V/C
# 3 Parton St (E/W) / Santa Ana Bl	A	xxxxx	0.256	A	xxxxx	0.256	+ 0.000 V/C
# 4 Ross St (N/S) / Civic Center D	A	xxxxx	0.476	A	xxxxx	0.476	+ 0.000 V/C
# 5 Ross St (N/S) / Santa Ana Bl (	A	xxxxx	0.435	A	xxxxx	0.435	+ 0.000 V/C
# 6 Ross St (N/S) / 4th St (E/W)	B	10.5	0.000	B	10.5	0.000	+ 0.000 D/V
# 7 Broadway (N/S) / Civic Center	A	xxxxx	0.535	A	xxxxx	0.535	+ 0.000 V/C
# 8 Broadway (N/S) / Santa Ana Bl	A	xxxxx	0.417	A	xxxxx	0.417	+ 0.000 V/C
# 9 Broadway (N/S) / 5th St (E/W)	A	xxxxx	0.314	A	xxxxx	0.314	+ 0.000 V/C
# 10 Broadway (N/S) / 4th St (E/W)	A	xxxxx	0.274	A	xxxxx	0.274	+ 0.000 V/C
# 11 Broadway (N/S)/ 3rd st (E/W)	A	xxxxx	0.299	A	xxxxx	0.299	+ 0.000 V/C
# 12 Broadway (N/S) / 1st St (E/W)	A	xxxxx	0.568	A	xxxxx	0.568	+ 0.000 V/C
# 13 Sycamore St (N/S) / Civic Cent	A	xxxxx	0.383	A	xxxxx	0.383	+ 0.000 V/C
# 14 Sycamore St (N/S) / Santa Ana	C	18.3	0.000	C	18.3	0.000	+ 0.000 D/V
# 15 Sycamore St (N/S) / 5th St (E/	B	14.3	0.000	B	14.3	0.000	+ 0.000 D/V
# 16 Sycamore St (N/S) / 4th St (E/	A	7.5	0.145	A	7.5	0.145	+ 0.000 V/C
# 17 Main St (N/S) / Civic Center D	B	xxxxx	0.680	B	xxxxx	0.680	+ 0.000 V/C
# 18 Main St (N/S) / Santa Ana Dr (	A	xxxxx	0.586	A	xxxxx	0.586	+ 0.000 V/C
# 19 Main St (N/S) / 5th St (E/W)	A	xxxxx	0.438	A	xxxxx	0.438	+ 0.000 V/C
# 20 Main St (N/S) / 4th St (E/W)	A	xxxxx	0.441	A	xxxxx	0.441	+ 0.000 V/C
# 21 Main St (N/S) / 3rd St (E/W)	A	xxxxx	0.423	A	xxxxx	0.423	+ 0.000 V/C
# 22 Main St (N/S) / 1st St (E/W)	B	xxxxx	0.693	B	xxxxx	0.693	+ 0.000 V/C
# 23 Bush St (N/S) / Santa Ana Bl (	A	xxxxx	0.263	A	xxxxx	0.263	+ 0.000 V/C
# 24 Bush St (N/S) / 5th St (E/W)	A	xxxxx	0.216	A	xxxxx	0.216	+ 0.000 V/C

Traffix 7.9.0415 (c) 2007 Dowling Assoc. Licensed to KATZ OKITSU, TUSTIN, CA

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 25 Bush St (N/S) / 4th St (E/W)	A	xxxxx	0.228	A	xxxxx	0.228	+ 0.000 V/C
# 26 Spurgeon St (N/S) / 1st St (E/	A	10.0	0.000	A	10.0	0.000	+ 0.000 D/V
# 27 French St (N/S) / Santa Ana Bl	C	17.1	0.000	C	17.1	0.000	+ 0.000 D/V
# 28 French St (N/S) / 4th St (E/W)	A	xxxxx	0.248	A	xxxxx	0.248	+ 0.000 V/C
# 29 Lacy St (N/S) / Civic Center D	C	15.8	0.000	C	15.8	0.000	+ 0.000 D/V
# 30 Lacy st (N/S) / Santa Ana Bl (	D	25.3	0.000	D	25.3	0.000	+ 0.000 D/V
# 31 Lacy St (N/S) / Brown St (E/W)	A	7.1	0.083	A	7.1	0.083	+ 0.000 V/C
# 32 Lacy St (N/S) / 4th St (E/W)	A	xxxxx	0.353	A	xxxxx	0.353	+ 0.000 V/C
# 33 Lacy St (N/S) / 1st St (E/W)	C	16.6	0.000	C	16.6	0.000	+ 0.000 D/V
# 34 Santiago St (N/S) / Washington	B	12.7	0.568	B	12.7	0.568	+ 0.000 V/C
# 35 Santiago St (N/S) / Civic Cent	B	14.5	0.609	B	14.5	0.609	+ 0.000 V/C
# 36 Santiago St (N/S) / Santa Ana	A	xxxxx	0.481	A	xxxxx	0.481	+ 0.000 V/C
# 40 Standard Av (N/S) / 1st St (E/	C	xxxxx	0.723	C	xxxxx	0.723	+ 0.000 V/C
# 42 Grand Av (N/S) / Santa Ana Bl	C	xxxxx	0.792	C	xxxxx	0.792	+ 0.000 V/C
# 43 Grand Av (N/S) / 4th St (E/W)	B	xxxxx	0.601	B	xxxxx	0.601	+ 0.000 V/C
# 44 Grand Av (N/S) / 1st St (E/W)	C	xxxxx	0.764	C	xxxxx	0.764	+ 0.000 V/C
# 45 Penn Way (NS) at I-5 SB Ramps	B	18.6	0.342	B	18.6	0.342	+ 0.000 D/V
# 46 I-5 SB Ramps (NS) / Santa Ana	C	26.7	0.443	C	26.7	0.443	+ 0.000 D/V
# 47 I-5 NB Ramps (NS) / 17th St. (	C	31.3	0.699	C	31.3	0.699	+ 0.000 D/V
# 48 I-5 NB Ramps (NS) / Grand Ave	B	19.8	0.576	B	19.8	0.576	+ 0.000 D/V
# 49 Mortimer St. / Santa Ana Blvd	C	17.5	0.000	C	17.5	0.000	+ 0.000 D/V
# 50 Mortimer St. / 5th St.	A	8.7	0.250	A	8.7	0.250	+ 0.000 V/C

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Flower St (NS)/ Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.617
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 30 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	141	625	150	108	575	163	121	474	144	127	411	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	141	625	150	108	575	163	121	474	144	127	411	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	141	625	150	108	575	163	121	474	144	127	411	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	141	625	150	108	575	163	121	474	144	127	411	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	141	625	150	108	575	163	121	474	144	127	411	37
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.61	0.39	1.00	1.56	0.44	1.00	1.53	0.47	1.00	1.83	0.17
Final Sat.:	1598	2742	658	1598	2649	751	1598	2608	792	1598	3119	281
Capacity Analysis Module:												
Vol/Sat:	0.09	0.23	0.23	0.07	0.22	0.22	0.08	0.18	0.18	0.08	0.13	0.13
Crit Moves:	****				****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Flower St (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.524
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	0 1	1 0	2	0 1	1 0	3	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	59	870	58	148	773	73	80	456	139	60	258	106
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	59	870	58	148	773	73	80	456	139	60	258	106
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	59	870	58	148	773	73	80	456	139	60	258	106
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	870	58	148	773	73	80	456	139	60	258	106
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	59	870	58	148	773	73	80	456	139	60	258	106
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00
Final Sat.:	1598	3400	1598	1598	3400	1598	1598	5100	1598	1598	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.04	0.26	0.04	0.09	0.23	0.05	0.05	0.09	0.09	0.04	0.08	0.07
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Parton St (E/W) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.256
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	16	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0 0	0	1	0 0 1	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	13	4	29	19	6	20	28	535	104	68	444	76
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	13	4	29	19	6	20	28	535	104	68	444	76
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	13	4	29	19	6	20	28	535	104	68	444	76
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	4	29	19	6	20	28	535	104	68	444	76
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	13	4	29	19	6	20	28	535	104	68	444	76
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.28	0.09	0.63	0.76	0.24	1.00	1.00	2.51	0.49	1.00	2.56	0.44
Final Sat.:	480	148	1072	1292	408	1598	1598	4270	830	1598	4355	745
Capacity Analysis Module:												
Vol/Sat:	0.01	0.03	0.03	0.01	0.01	0.01	0.02	0.13	0.13	0.04	0.10	0.10
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Ross St (N/S) / Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.476
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 23 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	0 1	1	0 0	1 0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	84	177	60	59	197	51	44	522	88	60	634	45
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	84	177	60	59	197	51	44	522	88	60	634	45
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	84	177	60	59	197	51	44	522	88	60	634	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	84	177	60	59	197	51	44	522	88	60	634	45
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	84	177	60	59	197	51	44	522	88	60	634	45
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.79	0.21	1.00	1.71	0.29	1.00	1.87	0.13
Final Sat.:	1598	1700	1598	1598	1350	350	1598	2910	490	1598	3175	225
Capacity Analysis Module:												
Vol/Sat:	0.05	0.10	0.04	0.04	0.15	0.15	0.03	0.18	0.18	0.04	0.20	0.20
Crit Moves:	****				****		****				****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Ross St (N/S) / Santa Ana Bl (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.435
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 21 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	0 1	1	0 1	0 1	1	0 2	0 1	1	0 3	0 1
Volume Module:												
Base Vol:	21	143	58	54	154	98	69	518	19	183	351	92
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	143	58	54	154	98	69	518	19	183	351	92
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	21	143	58	54	154	98	69	518	0	183	351	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	21	143	58	54	154	98	69	518	0	183	351	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	21	143	58	54	154	98	69	518	0	183	351	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00
Final Sat.:	1598	1700	1598	1598	1700	1598	1598	3400	1598	1598	5100	1598
Capacity Analysis Module:												
Vol/Sat:	0.01	0.08	0.04	0.03	0.09	0.06	0.04	0.15	0.00	0.11	0.07	0.00
Crit Moves:		****		****				****		****		

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #6 Ross St (N/S) / 4th St (E/W)

Average Delay (sec/veh): 1.9 Worst Case Level Of Service: B[10.5]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	1 0	1	0	1	0 0	0	0	0	0 0	1	0	0	0 1
Volume Module:																
Base Vol:	0	238		10	39	178		0	0	0		0	19	0		48
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	238		10	39	178		0	0	0		0	19	0		48
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	0	238		10	39	178		0	0	0		0	19	0		48
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
FinalVolume:	0	238		10	39	178		0	0	0		0	19	0		48
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.4	xxxx		6.2
FollowUpTim:	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5	xxxx		3.3
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		248	xxxx	xxxxx		xxxx	xxxx	xxxxx		499	xxxx		243
Potent Cap.:	xxxx	xxxx	xxxxx		1330	xxxx	xxxxx		xxxx	xxxx	xxxxx		535	xxxx		801
Move Cap.:	xxxx	xxxx	xxxxx		1330	xxxx	xxxxx		xxxx	xxxx	xxxxx		523	xxxx		801
Volume/Cap:	xxxx	xxxx	xxxx		0.03	xxxx	xxxx		xxxx	xxxx	xxxx		0.04	xxxx		0.06
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		0.1	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.1	xxxx		0.2
Control Del:	xxxxx	xxxx	xxxxx		7.8	xxxx	xxxxx		xxxxx	xxxx	xxxxx		12.1	xxxx		9.8
LOS by Move:	*	*	*		A	*	*		*	*	*		B	*		A
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				10.5			
ApproachLOS:	*				*				*				B			

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Broadway (N/S) / Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.535
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 25 Level Of Service: A

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Permitted					Permitted					Permitted					Permitted				
Rights:	Ignore					Ignore					Include					Include				
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Lanes:	1	0	2	0	1	1	0	2	0	1	1	0	1	1	0	1	0	1	1	0
Volume Module:																				
Base Vol:	86	410		49		114	616		222		102	421		64		39	550		83	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	86	410		49		114	616		222		102	421		64		39	550		83	
User Adj:	1.00	1.00		0.00		1.00	1.00		0.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	1.00	1.00		0.00		1.00	1.00		0.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Volume:	86	410		0		114	616		0		102	421		64		39	550		83	
Reduct Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
Reduced Vol:	86	410		0		114	616		0		102	421		64		39	550		83	
PCE Adj:	1.00	1.00		0.00		1.00	1.00		0.00		1.00	1.00		1.00		1.00	1.00		1.00	
MLF Adj:	1.00	1.00		0.00		1.00	1.00		0.00		1.00	1.00		1.00		1.00	1.00		1.00	
FinalVolume:	86	410		0		114	616		0		102	421		64		39	550		83	
Saturation Flow Module:																				
Sat/Lane:	1700	1700		1700		1700	1700		1700		1700	1700		1700		1700	1700		1700	
Adjustment:	0.94	1.00		0.94		0.94	1.00		0.94		0.94	1.00		1.00		0.94	1.00		1.00	
Lanes:	1.00	2.00		1.00		1.00	2.00		1.00		1.00	1.74		0.26		1.00	1.74		0.26	
Final Sat.:	1598	3400		1598		1598	3400		1598		1598	2951		449		1598	2954		446	
Capacity Analysis Module:																				
Vol/Sat:	0.05	0.12		0.00		0.07	0.18		0.00		0.06	0.14		0.14		0.02	0.19		0.19	
Crit Moves:	****						****				****						****			

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Broadway (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.417
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	21	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	1 1	0
Volume Module:												
Base Vol:	36	568	0	0	602	185	0	0	0	19	500	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	36	568	0	0	602	185	0	0	0	19	500	55
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	36	568	0	0	602	185	0	0	0	19	500	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	568	0	0	602	185	0	0	0	19	500	55
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	36	568	0	0	602	185	0	0	0	19	500	55
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.53	0.47	0.00	0.00	0.00	0.10	2.61	0.29
Final Sat.:	1598	3400	0	0	2601	799	0	0	0	169	4443	489
Capacity Analysis Module:												
Vol/Sat:	0.02	0.17	0.00	0.00	0.23	0.23	0.00	0.00	0.00	0.01	0.11	0.11
Crit Moves:	****				****						****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Broadway (N/S) / 5th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.314
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	18	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1 1	0	1 0	2 0	0	0 1	1 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	428	35	67	472	0	99	334	6	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	428	35	67	472	0	99	334	6	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	428	35	67	472	0	99	334	6	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	428	35	67	472	0	99	334	6	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	428	35	67	472	0	99	334	6	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00	0.94	1.00	0.94
Lanes:	0.00	1.85	0.15	1.00	2.00	0.00	0.68	2.28	0.04	0.00	0.00	0.00
Final Sat.:	0	3143	257	1598	3400	0	1150	3880	70	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.14	0.14	0.04	0.14	0.00	0.06	0.09	0.09	0.00	0.00	0.00
Crit Moves:		****		****				****				

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Broadway (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.274
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	17	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	9	426	22	15	410	69	15	51	15	20	85	11
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	9	426	22	15	410	69	15	51	15	20	85	11
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Volume:	9	426	22	15	410	69	15	51	15	20	85	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	426	22	15	410	69	15	51	15	20	85	11
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	9	426	22	15	410	69	15	51	15	20	85	11
Saturation Flow Module:												
Sat/Lane:	1700 1700	1700		1700 1700	1700		1700 1700	1700		1700 1700	1700	
Adjustment:	0.94 1.00	1.00		0.94 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Lanes:	1.00 1.90	0.10		1.00 1.71	0.29		0.18 0.63	0.19		0.17 0.74	0.09	
Final Sat.:	1598 3233	167		1598 2910	490		315 1070	315		293 1246	161	
Capacity Analysis Module:												
Vol/Sat:	0.01 0.13	0.13		0.01 0.14	0.14		0.01 0.05	0.05		0.01 0.07	0.07	
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Broadway (N/S)/ 3rd st (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.299
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	17	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	1 0	1 0	1	0 1	1 0	1	0 1	1 0	0	1 0
Volume Module:												
Base Vol:	22	321	7	22	283	19	11	46	16	9	33	16
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	22	321	7	22	283	19	11	46	16	9	33	16
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Volume:	22	321	7	22	283	19	11	46	16	9	33	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	321	7	22	283	19	11	46	16	9	33	16
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	22	321	7	22	283	19	11	46	16	9	33	16
Saturation Flow Module:												
Sat/Lane:	1700 1700	1700		1700 1700	1700		1700 1700	1700		1700 1700	1700	
Adjustment:	0.94 1.00	1.00		0.94 1.00	0.94		0.94 1.00	1.00		0.94 1.00	1.00	
Lanes:	1.00 0.98	0.02		1.00 1.00	1.00		1.00 0.74	0.26		1.00 0.67	0.33	
Final Sat.:	1598 1664	36		1598 1700	1598		1598 1261	439		1598 1145	555	
Capacity Analysis Module:												
Vol/Sat:	0.01 0.19	0.19		0.01 0.17	0.01		0.01 0.04	0.04		0.01 0.03	0.03	
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Broadway (N/S) / 1st St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.568
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 27 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	0 1	1	0	1	0 1	1	0	2	1 0	1	0	2	1 0
Volume Module:																
Base Vol:	54	314	71		52	305	45		145	1199	63		91	779	55	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	54	314	71		52	305	45		145	1199	63		91	779	55	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	54	314	71		52	305	45		145	1199	63		91	779	55	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	54	314	71		52	305	45		145	1199	63		91	779	55	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	54	314	71		52	305	45		145	1199	63		91	779	55	
Saturation Flow Module:																
Sat/Lane:	1700	1700	1700		1700	1700	1700		1700	1700	1700		1700	1700	1700	
Adjustment:	0.94	1.00	0.94		0.94	1.00	0.94		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	2.85	0.15		1.00	2.80	0.20	
Final Sat.:	1598	1700	1598		1598	1700	1598		1598	4845	255		1598	4764	336	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.18	0.04		0.03	0.18	0.03		0.09	0.25	0.25		0.06	0.16	0.16	
Crit Moves:	****					****				****			****			

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Sycamore St (N/S) / Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.383
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 19 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1!	0 0	0	0	1!	0 0	1	0	1	1 0	1	0	1	1 0
Volume Module:																
Base Vol:	20	80	25		26	12	20		62	413	55		26	617	80	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	20	80	25		26	12	20		62	413	55		26	617	80	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	20	80	25		26	12	20		62	413	55		26	617	80	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	20	80	25		26	12	20		62	413	55		26	617	80	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	20	80	25		26	12	20		62	413	55		26	617	80	
Saturation Flow Module:																
Sat/Lane:	1700	1700	1700		1700	1700	1700		1700	1700	1700		1700	1700	1700	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	0.16	0.64	0.20		0.45	0.21	0.34		1.00	1.76	0.24		1.00	1.77	0.23	
Final Sat.:	272	1088	340		762	352	586		1598	3000	400		1598	3010	390	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.07	0.07		0.02	0.03	0.03		0.04	0.14	0.14		0.02	0.20	0.21	
Crit Moves:		****				****				****						****

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #14 Sycamore St (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 2.6 Worst Case Level Of Service: C[18.3]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0 0	0	0	0	1 0	0	0	0	0 0	0	1	1	1 0
Volume Module:																
Base Vol:	8	31	0	0	38	20	0	0	0	62	686	26				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	8	31	0	0	38	20	0	0	0	62	686	26				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	8	31	0	0	38	20	0	0	0	62	686	26				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	8	31	0	0	38	20	0	0	0	62	686	26				
Critical Gap Module:																
Critical Gp:	7.1	6.5	xxxxx	xxxxx	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx				
FollowUpTim:	3.5	4.0	xxxxx	xxxxx	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	372	836	xxxxx	xxxx	823	242	xxxx	xxxx	xxxxx	0	xxxx	xxxxx				
Potent Cap.:	589	305	xxxxx	xxxx	311	802	xxxx	xxxx	xxxxx	900	xxxx	xxxxx				
Move Cap.:	488	283	xxxxx	xxxx	288	802	xxxx	xxxx	xxxxx	900	xxxx	xxxxx				
Volume/Cap:	0.02	0.11	xxxx	xxxx	0.13	0.02	xxxx	xxxx	xxxx	0.07	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.3	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	310	xxxx	xxxxx	xxxx	xxxx	370	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	0.4	xxxx	xxxxx	xxxxx	xxxx	0.5	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx				
Shrd ConDel:	18.3	xxxx	xxxxx	xxxxx	xxxx	16.5	xxxxx	xxxx	xxxxx	9.3	xxxx	xxxxx				
Shared LOS:	C	*	*	*	*	C	*	*	*	A	*	*				
ApproachDel:	18.3			16.5			xxxxx			xxxxx						
ApproachLOS:	C			C			*			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #15 Sycamore St (N/S) / 5th St (E/W)

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: B[14.3]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	1 0	0	1	0	0 0	0	1	1	1 0	0	0	0	0 0
Volume Module:																
Base Vol:	0	27	21	81	32	0	15	695	15	0	0	0				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	0	27	21	81	32	0	15	695	15	0	0	0				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	0	27	21	81	32	0	15	695	15	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	0	27	21	81	32	0	15	695	15	0	0	0				
Critical Gap Module:																
Critical Gp:	xxxxx	6.5	6.2	7.1	6.5	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	4.0	3.3	3.5	4.0	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	xxxx	733	239	275	740	xxxxx	0	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	350	805	681	347	xxxxx	900	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	345	805	616	341	xxxxx	900	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	0.08	0.03	0.13	0.09	xxxx	0.02	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	xxxx	xxxx	460	501	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	0.3	0.9	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	13.7	14.3	xxxx	xxxxx	9.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	B	B	*	*	A	*	*	*	*	*				
ApproachDel:	13.7			14.3			xxxxx			xxxxx						
ApproachLOS:	B			B			*			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #16 Sycamore St (N/S) / 4th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.145
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): 7.5
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0
Volume Module:																
Base Vol:	1	8	4		14	11	11		13	44	7		29	73	27	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	1	8	4		14	11	11		13	44	7		29	73	27	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	1	8	4		14	11	11		13	44	7		29	73	27	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	1	8	4		14	11	11		13	44	7		29	73	27	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	1	8	4		14	11	11		13	44	7		29	73	27	
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.08	0.61	0.31		0.39	0.30	0.31		0.20	0.69	0.11		0.22	0.57	0.21	
Final Sat.:	64	509	255		320	251	251		176	594	95		200	505	187	
Capacity Analysis Module:																
Vol/Sat:	0.02	0.02	0.02		0.04	0.04	0.04		0.07	0.07	0.07		0.14	0.14	0.14	
Crit Moves:		****				****				****				****		
Delay/Veh:	7.2	7.2	7.2		7.4	7.4	7.4		7.4	7.4	7.4		7.6	7.6	7.6	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	7.2	7.2	7.2		7.4	7.4	7.4		7.4	7.4	7.4		7.6	7.6	7.6	
LOS by Move:	A	A	A		A	A	A		A	A	A		A	A	A	
ApproachDel:		7.2				7.4				7.4				7.6		
Delay Adj:		1.00				1.00				1.00				1.00		
ApprAdjDel:		7.2				7.4				7.4				7.6		
LOS by Appr:		A				A				A				A		
AllWayAvgQ:	0.0	0.0	0.0		0.0	0.0	0.0		0.1	0.1	0.1		0.2	0.2	0.2	

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St (N/S) / Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.680
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 35 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0	1	1 0	1	0	1	1 0	1	0	1	1 0	1	0	1	1 0
Volume Module:																
Base Vol:	154	789	74		90	911	172		85	417	124		59	507	43	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	154	789	74		90	911	172		85	417	124		59	507	43	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	154	789	74		90	911	172		85	417	124		59	507	43	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	154	789	74		90	911	172		85	417	124		59	507	43	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	154	789	74		90	911	172		85	417	124		59	507	43	
Saturation Flow Module:																
Sat/Lane:	1700	1700	1700		1700	1700	1700		1700	1700	1700		1700	1700	1700	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	1.83	0.17		1.00	1.68	0.32		1.00	1.54	0.46		1.00	1.84	0.16	
Final Sat.:	1598	3108	292		1598	2860	540		1598	2621	779		1598	3134	266	
Capacity Analysis Module:																
Vol/Sat:	0.10	0.25	0.25		0.06	0.32	0.32		0.05	0.16	0.16		0.04	0.16	0.16	
Crit Moves:	****					****			****					****		

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St (N/S) / Santa Ana Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.586
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	1 1	0
Volume Module:												
Base Vol:	57	837	0	0	1022	80	0	0	0	57	774	68
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	57	837	0	0	1022	80	0	0	0	57	774	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	57	837	0	0	1022	80	0	0	0	57	774	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	57	837	0	0	1022	80	0	0	0	57	774	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	57	837	0	0	1022	80	0	0	0	57	774	68
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.85	0.15	0.00	0.00	0.00	0.19	2.58	0.23
Final Sat.:	1598	3400	0	0	3153	247	0	0	0	323	4391	386
Capacity Analysis Module:												
Vol/Sat:	0.04	0.25	0.00	0.00	0.32	0.32	0.00	0.00	0.00	0.03	0.18	0.18
Crit Moves:	****				****						****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Main St (N/S) / 5th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.438
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	21	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1 1	0	1 0	2 0	0	0 1	1 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	815	41	62	947	0	59	410	29	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	815	41	62	947	0	59	410	29	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	815	41	62	947	0	59	410	29	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	815	41	62	947	0	59	410	29	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	815	41	62	947	0	59	410	29	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00	0.94	1.00	0.94
Lanes:	0.00	1.90	0.10	1.00	2.00	0.00	0.36	2.47	0.17	0.00	0.00	0.00
Final Sat.:	0	3237	163	1598	3400	0	604	4199	297	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.25	0.04	0.28	0.00	0.03	0.10	0.10	0.00	0.00	0.00
Crit Moves:		****		****				****				

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 Main St (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.441
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	21	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	1 0	0 0	1	1 0	0 0	0	1 0	0 0	0	1 0
Volume Module:												
Base Vol:	0	818	22	0	1006	16	0	84	18	0	115	38
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	818	22	0	1006	16	0	84	18	0	115	38
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	818	22	0	1006	16	0	84	18	0	115	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	818	22	0	1006	16	0	84	18	0	115	38
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	818	22	0	1006	16	0	84	18	0	115	38
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.00	1.95	0.05	0.00	1.97	0.03	0.00	0.82	0.18	0.00	0.75	0.25
Final Sat.:	0	3311	89	0	3347	53	0	1400	300	0	1278	422
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.25	0.00	0.30	0.30	0.00	0.06	0.06	0.00	0.09	0.09
Crit Moves:	****				****		****				****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 Main St (N/S) / 3rd St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.423
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	21	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	1 0	0 0	1	1 0	1	0	0 1	0	1	0 1 0
Volume Module:												
Base Vol:	0	822	14	0	992	20	35	86	29	12	66	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	822	14	0	992	20	35	86	29	12	66	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	822	14	0	992	20	35	86	29	12	66	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	822	14	0	992	20	35	86	29	12	66	12
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	822	14	0	992	20	35	86	29	12	66	12
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.00	1.97	0.03	0.00	1.96	0.04	1.00	0.75	0.25	1.00	0.85	0.15
Final Sat.:	0	3343	57	0	3333	67	1598	1271	429	1598	1438	262
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.25	0.00	0.30	0.30	0.02	0.07	0.07	0.01	0.05	0.05
Crit Moves:	****				****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 Main St (N/S) / 1st St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.693
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	150	634	72	117	800	78	119	1241	97	83	768	81
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	634	72	117	800	78	119	1241	97	83	768	81
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	634	72	117	800	78	119	1241	97	83	768	81
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	634	72	117	800	78	119	1241	97	83	768	81
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	634	72	117	800	78	119	1241	97	83	768	81
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.80	0.20	1.00	2.00	1.00	1.00	2.78	0.22	1.00	2.71	0.29
Final Sat.:	1598	3053	347	1598	3400	1598	1598	4730	370	1598	4613	487
Capacity Analysis Module:												
Vol/Sat:	0.09	0.21	0.21	0.07	0.24	0.05	0.07	0.26	0.26	0.05	0.17	0.17
Crit Moves:	****				****			****		****		

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 Bush St (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.263
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	17	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	0 0	0 0	0	1 0	0 0	0	0 0	0 1	1	1 0
Volume Module:												
Base Vol:	21	111	0	0	86	34	0	0	0	23	556	81
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	111	0	0	86	34	0	0	0	23	556	81
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	21	111	0	0	86	34	0	0	0	23	556	81
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	21	111	0	0	86	34	0	0	0	23	556	81
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	21	111	0	0	86	34	0	0	0	23	556	81
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	0.72	0.28	0.00	0.00	0.00	0.10	2.53	0.37
Final Sat.:	1598	1700	0	0	1218	482	0	0	0	178	4296	626
Capacity Analysis Module:												
Vol/Sat:	0.01	0.07	0.00	0.00	0.07	0.07	0.00	0.00	0.00	0.01	0.13	0.13
Crit Moves:	****				****						****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 Bush St (N/S) / 5th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.216
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	16	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 1	0	1 0	1 0	0	0 1	1 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	110	28	27	94	0	22	313	13	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	110	28	27	94	0	22	313	13	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	110	28	27	94	0	22	313	13	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	110	28	27	94	0	22	313	13	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	110	28	27	94	0	22	313	13	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00	0.94	1.00	0.94
Lanes:	0.00	0.80	0.20	1.00	1.00	0.00	0.19	2.70	0.11	0.00	0.00	0.00
Final Sat.:	0	1355	345	1598	1700	0	322	4587	191	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.08	0.08	0.02	0.06	0.00	0.01	0.07	0.07	0.00	0.00	0.00
Crit Moves:		****		****				****				

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #25 Bush St (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.228
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	16	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	7	123	8	16	88	4	7	71	10	10	120	18
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	7	123	8	16	88	4	7	71	10	10	120	18
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	7	123	8	16	88	4	7	71	10	10	120	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	123	8	16	88	4	7	71	10	10	120	18
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	7	123	8	16	88	4	7	71	10	10	120	18
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.94	0.06	1.00	0.96	0.04	0.08	0.81	0.11	0.07	0.81	0.12
Final Sat.:	1598	1596	104	1598	1626	74	135	1372	193	115	1378	207
Capacity Analysis Module:												
Vol/Sat:	0.00	0.08	0.08	0.01	0.05	0.05	0.00	0.05	0.05	0.01	0.09	0.09
Crit Moves:		****		****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #26 Spurgeon St (N/S) / 1st St (E/W)

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: A[10.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	0	0	0 1	0	0	3	0 0	0	0	2	1 0
Volume Module:																
Base Vol:	0	0	0	0	0	35	0	1528	0	0	741	6				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	0	0	0	0	0	35	0	1528	0	0	741	6				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	0	0	0	0	0	35	0	1528	0	0	741	6				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	0	0	0	0	0	35	0	1528	0	0	741	6				
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	250	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	756	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	756	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.1	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	10.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	A	*	*	*	*	*	*				
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*				
ApproachDel:	xxxxxx				10.0				xxxxxx				xxxxxx			
ApproachLOS:	*				A				*				*			

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #27 French St (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: C[17.1]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0 0	0	0	0	1 0	0	0	0	0 0	0	1	0	1 0
Volume Module:																
Base Vol:	44	19	0	0	24	2	0	0	0	12	783	10				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	44	19	0	0	24	2	0	0	0	12	783	10				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	44	19	0	0	24	2	0	0	0	12	783	10				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	44	19	0	0	24	2	0	0	0	12	783	10				
Critical Gap Module:																
Critical Gp:	7.1	6.5	xxxxx	xxxxx	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx				
FollowUpTim:	3.5	4.0	xxxxx	xxxxx	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	428	817	xxxxx	xxxx	812	397	xxxx	xxxx	xxxxx	0	xxxx	xxxxx				
Potent Cap.:	541	313	xxxxx	xxxx	315	657	xxxx	xxxx	xxxxx	900	xxxx	xxxxx				
Move Cap.:	502	309	xxxxx	xxxx	311	657	xxxx	xxxx	xxxxx	900	xxxx	xxxxx				
Volume/Cap:	0.09	0.06	xxxx	xxxx	0.08	0.00	xxxx	xxxx	xxxx	0.01	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*				
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	423	xxxx	xxxxx	xxxx	xxxx	324	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	0.5	xxxx	xxxxx	xxxxx	xxxx	0.3	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx				
Shrd ConDel:	15.0	xxxx	xxxxx	xxxxx	xxxx	17.1	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx				
Shared LOS:	C	*	*	*	*	C	*	*	*	A	*	*				
ApproachDel:	15.0				17.1				xxxxxx				xxxxxx			
ApproachLOS:	C				C				*				*			

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 French St (N/S) / 4th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.248
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 16 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	1 0	0 0	1 0	0 0	1! 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	3	18	30	61	31	12	1	50	4	37	182	42
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	18	30	61	31	12	1	50	4	37	182	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	18	30	61	31	12	1	50	4	37	182	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	18	30	61	31	12	1	50	4	37	182	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	3	18	30	61	31	12	1	50	4	37	182	42
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.94
Lanes:	0.06	0.35	0.59	1.00	0.72	0.28	0.02	0.91	0.07	0.17	0.83	1.00
Final Sat.:	100	600	1000	1598	1226	474	31	1545	124	287	1413	1598
Capacity Analysis Module:												
Vol/Sat:	0.00	0.03	0.03	0.04	0.03	0.03	0.00	0.03	0.03	0.02	0.13	0.03
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #29 Lacy St (N/S) / Civic Center Dr (E/W)

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: C[15.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	23	15	29	8	21	28	3	348	27	6	377	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	23	15	29	8	21	28	3	348	27	6	377	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	23	15	29	8	21	28	3	348	27	6	377	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	23	15	29	8	21	28	3	348	27	6	377	3
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	783	760	362	780	772	379	380	xxxx	xxxxx	375	xxxx	xxxxx
Potent Cap.:	314	338	688	315	333	673	1190	xxxx	xxxxx	1195	xxxx	xxxxx
Move Cap.:	285	336	688	290	330	673	1190	xxxx	xxxxx	1195	xxxx	xxxxx
Volume/Cap:	0.08	0.04	0.04	0.03	0.06	0.04	0.00	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.0	xxxx	xxxxx	8.0	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	400	xxxxx	xxxx	429	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.6	xxxxx	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	15.8	xxxxx	xxxxx	14.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	B	*	*	*	*	*	*	*
ApproachDel:		15.8			14.7			xxxxx			xxxxx	
ApproachLOS:		C			B			*			*	

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #30 Lacy st (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: D[25.3]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	1	0	0	1 0	1	0	0	1 0
Volume Module:																
Base Vol:	3	27	22		10	33	16		9	339	5		10	684	32	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	3	27	22		10	33	16		9	339	5		10	684	32	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	3	27	22		10	33	16		9	339	5		10	684	32	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	3	27	22		10	33	16		9	339	5		10	684	32	
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1104	1096	342		1104	1082	700		716	xxxx	xxxxx		344	xxxx	xxxxx	
Potent Cap.:	190	215	706		190	219	443		894	xxxx	xxxxx		1226	xxxx	xxxxx	
Move Cap.:	160	211	706		164	215	443		894	xxxx	xxxxx		1226	xxxx	xxxxx	
Volume/Cap:	0.02	0.13	0.03		0.06	0.15	0.04		0.01	xxxx	xxxx		0.01	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		0.0	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.1	xxxx	xxxxx		8.0	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		A	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	293	xxxxx		xxxx	236	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.6	xxxxx		xxxxx	1.0	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	19.9	xxxxx		xxxxx	25.3	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*		*	D	*		*	*	*		*	*	*	
ApproachDel:	19.9				25.3				xxxxx				xxxxx			
ApproachLOS:	C				D				*				*			

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #31 Lacy St (N/S) / Brown St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.083
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): 7.1
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	0	1! 0	0	0	0	1! 0	0	0	0	1! 0	0	0	0	1! 0	0
Volume Module:																
Base Vol:	21	20	37		4	15	2		2	6	7		13	16	4	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	21	20	37		4	15	2		2	6	7		13	16	4	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	21	20	37		4	15	2		2	6	7		13	16	4	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	21	20	37		4	15	2		2	6	7		13	16	4	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	21	20	37		4	15	2		2	6	7		13	16	4	
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.27	0.26	0.47		0.19	0.71	0.10		0.13	0.40	0.47		0.39	0.49	0.12	
Final Sat.:	253	241	445		167	626	83		121	363	423		337	415	104	
Capacity Analysis Module:																
Vol/Sat:	0.08	0.08	0.08		0.02	0.02	0.02		0.02	0.02	0.02		0.04	0.04	0.04	
Crit Moves:		****				****					****				****	
Delay/Veh:	7.1	7.1	7.1		7.1	7.1	7.1		6.9	6.9	6.9		7.3	7.3	7.3	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	7.1	7.1	7.1		7.1	7.1	7.1		6.9	6.9	6.9		7.3	7.3	7.3	
LOS by Move:	A	A	A		A	A	A		A	A	A		A	A	A	
ApproachDel:	7.1				7.1				6.9				7.3			
Delay Adj:	1.00				1.00				1.00				1.00			
ApprAdjDel:	7.1				7.1				6.9				7.3			
LOS by Appr:	A				A				A				A			
AllWayAvgQ:	0.1	0.1	0.1		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #32 Lacy St (N/S) / 4th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.353
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 19 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	18	28	74	16	22	21	9	253	22	10	369	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	18	28	74	16	22	21	9	253	22	10	369	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	18	28	74	16	22	21	9	253	22	10	369	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	28	74	16	22	21	9	253	22	10	369	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	18	28	74	16	22	21	9	253	22	10	369	6
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	0.15	0.23	0.62	0.27	0.37	0.36	1.00	0.92	0.08	1.00	1.00	1.00
Final Sat.:	255	397	1048	461	634	605	1598	1564	136	1598	1700	1598
Capacity Analysis Module:												
Vol/Sat:	0.01	0.07	0.07	0.01	0.03	0.03	0.01	0.16	0.16	0.01	0.22	0.00
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #33 Lacy St (N/S) / 1st St (E/W)

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C[16.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	0 0	1! 0	0	1 0	3 0	0	0 0	2 1	0
Volume Module:												
Base Vol:	0	0	0	9	0	76	159	1366	0	0	823	22
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	9	0	76	159	1366	0	0	823	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	9	0	76	159	1366	0	0	823	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	9	0	76	159	1366	0	0	823	22
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1607	2518	285	845	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	98	28	718	800	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	83	23	718	800	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.11	0.00	0.11	0.20	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.7	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	396	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	16.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	C	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			16.6			xxxxxx			xxxxxx		
ApproachLOS:	*			C			*			*		

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #34 Santiago St (N/S) / Washington Av (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.568
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	12.7
Optimal Cycle:	0	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	1 0	1	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	34	109	78	14	188	90	108	98	39	114	200	27
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	34	109	78	14	188	90	108	98	39	114	200	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	34	109	78	14	188	90	108	98	39	114	200	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	109	78	14	188	90	108	98	39	114	200	27
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	34	109	78	14	188	90	108	98	39	114	200	27
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.44	0.40	0.16	0.33	0.59	0.08
Final Sat.:	471	505	559	486	522	581	254	230	92	201	352	48
Capacity Analysis Module:												
Vol/Sat:	0.07	0.22	0.14	0.03	0.36	0.15	0.43	0.43	0.43	0.57	0.57	0.57
Crit Moves:		****			****				****		****	
Delay/Veh:	10.3	10.9	9.5	9.9	12.5	9.5	12.8	12.8	12.8	15.4	15.4	15.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.3	10.9	9.5	9.9	12.5	9.5	12.8	12.8	12.8	15.4	15.4	15.4
LOS by Move:	B	B	A	A	B	A	B	B	B	C	C	C
ApproachDel:	10.3			11.4			12.8			15.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	10.3			11.4			12.8			15.4		
LOS by Appr:	B			B			B			C		
AllWayAvgQ:	0.1	0.2	0.1	0.0	0.5	0.2	0.6	0.6	0.6	1.1	1.1	1.1

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #35 Santiago St (N/S) / Civic Center Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.609
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	14.5
Optimal Cycle:	0	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	268	127	11	8	234	107	113	45	182	37	54	8
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	268	127	11	8	234	107	113	45	182	37	54	8
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	268	127	11	8	234	107	113	45	182	37	54	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	268	127	11	8	234	107	113	45	182	37	54	8
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	268	127	11	8	234	107	113	45	182	37	54	8
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.92	0.08	1.00	0.69	0.31	0.72	0.28	1.00	0.37	0.55	0.08
Final Sat.:	510	507	44	498	384	176	344	137	559	168	246	36
Capacity Analysis Module:												
Vol/Sat:	0.53	0.25	0.25	0.02	0.61	0.61	0.33	0.33	0.33	0.22	0.22	0.22
Crit Moves:	****					****		****			****	
Delay/Veh:	16.5	11.0	11.0	9.8	17.6	17.6	13.1	13.1	11.5	12.1	12.1	12.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.5	11.0	11.0	9.8	17.6	17.6	13.1	13.1	11.5	12.1	12.1	12.1
LOS by Move:	C	B	B	A	C	C	B	B	B	B	B	B
ApproachDel:	14.6			17.4			12.2			12.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	14.6			17.4			12.2			12.1		
LOS by Appr:	B			C			B			B		
AllWayAvgQ:	1.0	0.3	0.3	0.0	1.3	1.3	0.4	0.4	0.4	0.2	0.2	0.2

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #36 Santiago St (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.481
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	23	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	22	56	59	207	148	84	30	391	28	117	835	319
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	22	56	59	207	148	84	30	391	28	117	835	319
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	22	56	59	207	148	84	30	391	28	117	835	319
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	56	59	207	148	84	30	391	28	117	835	319
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	22	56	59	207	148	84	30	391	28	117	835	319
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.87	0.13	1.00	2.00	1.00
Final Sat.:	1598	1700	1598	1598	1700	1598	1598	3173	227	1598	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.01	0.03	0.04	0.13	0.09	0.05	0.02	0.12	0.12	0.07	0.25	0.20
Crit Moves:			****	****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #40 Standard Av (N/S) / 1st St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.723
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	0 0	1! 0	0	1 0	1 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	68	163	110	37	249	6	83	1296	128	63	859	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	68	163	110	37	249	6	83	1296	128	63	859	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	68	163	110	37	249	6	83	1296	128	63	859	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	68	163	110	37	249	6	83	1296	128	63	859	11
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	68	163	110	37	249	6	83	1296	128	63	859	11
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.60	0.40	0.13	0.85	0.02	1.00	1.82	0.18	1.00	1.97	0.03
Final Sat.:	1598	1015	685	215	1450	35	1598	3094	306	1598	3357	43
Capacity Analysis Module:												
Vol/Sat:	0.04	0.16	0.16	0.02	0.17	0.17	0.05	0.42	0.42	0.04	0.26	0.26
Crit Moves:	****				****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #42 Grand Av (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.792
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	1 0	1 0	2	0 2	2 0	1	0 2	0 1	0	1 0
Volume Module:												
Base Vol:	160	814	14	63	1244	957	164	138	567	21	88	14
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	814	14	63	1244	957	164	138	567	21	88	14
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	814	14	63	1244	957	164	138	567	21	88	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	814	14	63	1244	957	164	138	567	21	88	14
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	160	814	14	63	1244	957	164	138	567	21	88	14
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	2.95	0.05	1.00	2.00	2.00	2.00	1.00	2.00	0.34	1.43	0.23
Final Sat.:	1598	5014	86	1598	3400	3196	3196	1700	3196	580	2433	387
Capacity Analysis Module:												
Vol/Sat:	0.10	0.16	0.16	0.04	0.37	0.30	0.05	0.08	0.18	0.04	0.04	0.04
Crit Moves:			****		****				****	****		

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #43 Grand Av (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.601
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	0 1	1 0	2	0 1	1 0	1	1 0	1 0	2	0 1
Volume Module:												
Base Vol:	90	271	95	108	437	83	99	958	94	90	271	95
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	271	95	108	437	83	99	958	94	90	271	95
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	271	95	108	437	83	99	958	94	90	271	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	271	95	108	437	83	99	958	94	90	271	95
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	271	95	108	437	83	99	958	94	90	271	95
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.82	0.18	1.00	2.00	1.00
Final Sat.:	1598	3400	1598	1598	3400	1598	1598	3096	304	1598	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.06	0.08	0.06	0.07	0.13	0.05	0.06	0.31	0.31	0.06	0.08	0.06
Crit Moves:	****				****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #44 Grand Av (N/S) / 1st St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.764
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	0 1	1 0	2	0 1	2 0	2	1 0	2 0	1	1 0
Volume Module:												
Base Vol:	109	468	37	106	1197	78	275	908	204	242	519	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	109	468	37	106	1197	78	275	908	204	242	519	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	109	468	37	106	1197	78	275	908	204	242	519	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	109	468	37	106	1197	78	275	908	204	242	519	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	109	468	37	106	1197	78	275	908	204	242	519	63
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	2.00	2.45	0.55	2.00	1.78	0.22
Final Sat.:	1598	3400	1598	1598	3400	1598	3196	4164	936	3196	3032	368
Capacity Analysis Module:												
Vol/Sat:	0.07	0.14	0.02	0.07	0.35	0.05	0.09	0.22	0.22	0.08	0.17	0.17
Crit Moves:	****				****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #45 Penn Way (NS) at I-5 SB Ramps (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.342
Loss Time (sec):	12 (Y+R=4.0 sec)	Average Delay (sec/veh):	18.6
Optimal Cycle:	33	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	2	0 1	2 0	2	0 0	0 0	0	0 0	1 0	0	0 2
Volume Module:AM Existing												
Base Vol:	0	101	70	588	76	0	0	0	0	131	0	199
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	101	70	588	76	0	0	0	0	131	0	199
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	101	70	588	76	0	0	0	0	131	0	199
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	101	70	588	76	0	0	0	0	131	0	199
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	101	70	588	76	0	0	0	0	131	0	199
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.92	0.95	1.00	1.00	1.00	1.00	0.77	1.00	0.75
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	2.00
Final Sat.:	0	3610	1615	3502	3610	0	0	0	0	1461	0	2842
Capacity Analysis Module:												
Vol/Sat:	0.00	0.03	0.04	0.17	0.02	0.00	0.00	0.00	0.00	0.09	0.00	0.07
Crit Moves:			****	****						****		
Green/Cycle:	0.00	0.13	0.13	0.49	0.49	0.00	0.00	0.00	0.00	0.26	0.00	0.75
Volume/Cap:	0.00	0.22	0.34	0.34	0.04	0.00	0.00	0.00	0.00	0.34	0.00	0.09
Delay/Veh:	0.0	39.5	40.9	15.7	13.2	0.0	0.0	0.0	0.0	30.4	0.0	3.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	39.5	40.9	15.7	13.2	0.0	0.0	0.0	0.0	30.4	0.0	3.3
LOS by Move:	A	D	D	B	B	A	A	A	A	C	A	A
HCM2kAvgQ:	0	2	2	6	1	0	0	0	0	3	0	1

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #46 I-5 SB Ramps (NS) / Santa Ana Bl (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.443
Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh): 26.7
Optimal Cycle: 37 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2	0 0	0 1	2	0 3	0 0	0	0 2	1 0
Volume Module:	AM Peak											
Base Vol:	0	0	0	393	0	77	190	384	0	0	881	151
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	393	0	77	190	384	0	0	881	151
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	393	0	77	190	384	0	0	881	151
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	393	0	77	190	384	0	0	881	151
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	393	0	77	190	384	0	0	881	151
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.85	0.92	0.91	1.00	1.00	0.89	0.89
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	2.00	3.00	0.00	0.00	2.56	0.44
Final Sat.:	0	0	0	3502	0	1615	3502	5187	0	0	4331	742
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.11	0.00	0.05	0.05	0.07	0.00	0.00	0.20	0.20
Crit Moves:				****				****			****	
Green/Cycle:	0.00	0.00	0.00	0.25	0.00	0.25	0.17	0.17	0.00	0.00	0.46	0.46
Volume/Cap:	0.00	0.00	0.00	0.44	0.00	0.19	0.32	0.44	0.00	0.00	0.44	0.44
Delay/Veh:	0.0	0.0	0.0	31.7	0.0	29.5	37.0	37.8	0.0	0.0	18.5	18.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	31.7	0.0	29.5	37.0	37.8	0.0	0.0	18.5	18.5
LOS by Move:	A	A	A	C	A	C	D	D	A	A	B	B
HCM2kAvgQ:	0	0	0	6	0	2	3	4	0	0	8	8

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #47 I-5 NB Ramps (NS) / 17th St. (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.699
Loss Time (sec): 16 (Y+R=4.0 sec) Average Delay (sec/veh): 31.3
Optimal Cycle: 69 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 1	0	0 1	1	0 0	0 1	1	0 3	0 1	0	0 2	1 0
Volume Module:	AM Peak											
Base Vol:	604	77	33	33	0	179	119	792	217	0	1107	44
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	604	77	33	33	0	179	119	792	217	0	1107	44
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	604	77	33	33	0	179	119	792	0	0	1107	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	604	77	33	33	0	179	119	792	0	0	1107	44
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	604	77	33	33	0	179	119	792	0	0	1107	44
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.96	0.96	0.85	0.95	1.00	0.85	0.95	0.91	1.00	1.00	0.90	0.90
Lanes:	1.77	0.23	1.00	1.00	0.00	1.00	1.00	3.00	1.00	0.00	2.89	0.11
Final Sat.:	3229	412	1615	1805	0	1615	1805	5187	1900	0	4959	197
Capacity Analysis Module:												
Vol/Sat:	0.19	0.19	0.02	0.02	0.00	0.11	0.07	0.15	0.00	0.00	0.22	0.22
Crit Moves:	****					****	****				****	
Green/Cycle:	0.27	0.27	0.27	0.16	0.00	0.16	0.09	0.41	0.00	0.00	0.32	0.32
Volume/Cap:	0.70	0.70	0.08	0.12	0.00	0.70	0.70	0.37	0.00	0.00	0.70	0.70
Delay/Veh:	35.3	35.3	27.5	36.2	0.0	48.1	56.0	20.4	0.0	0.0	31.2	31.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.3	35.3	27.5	36.2	0.0	48.1	56.0	20.4	0.0	0.0	31.2	31.2
LOS by Move:	D	D	C	D	A	D	E	C	A	A	C	C
HCM2kAvgQ:	11	11	1	1	0	7	5	6	0	0	12	12

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #48 I-5 NB Ramps (NS) / Grand Ave (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.576
Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh): 19.8
Optimal Cycle: 46 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	0 2	0	1	1	0 3	0	0	0	0 0	0	0	2	0 0	0	1
Volume Module:	AM Peak															
Base Vol:	0	693	363		31	1517	0		0	0	0		750	0	126	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	693	363		31	1517	0		0	0	0		750	0	126	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	693	363		31	1517	0		0	0	0		750	0	126	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	693	363		31	1517	0		0	0	0		750	0	126	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	0	693	363		31	1517	0		0	0	0		750	0	126	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	0.95	0.85		0.95	0.91	1.00		1.00	1.00	1.00		0.92	1.00	0.85	
Lanes:	0.00	2.00	1.00		1.00	3.00	0.00		0.00	0.00	0.00		2.00	0.00	1.00	
Final Sat.:	0	3610	1615		1805	5187	0		0	0	0		3502	0	1615	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.19	0.22		0.02	0.29	0.00		0.00	0.00	0.00		0.21	0.00	0.08	
Crit Moves:	****					****							****			
Green/Cycle:	0.00	0.47	0.47		0.04	0.51	0.00		0.00	0.00	0.00		0.37	0.00	0.37	
Volume/Cap:	0.00	0.41	0.48		0.48	0.58	0.00		0.00	0.00	0.00		0.58	0.00	0.21	
Delay/Veh:	0.0	17.4	18.5		52.7	17.4	0.0		0.0	0.0	0.0		25.7	0.0	21.6	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	17.4	18.5		52.7	17.4	0.0		0.0	0.0	0.0		25.7	0.0	21.6	
LOS by Move:	A	B	B		D	B	A		A	A	A		C	A	C	
HCM2kAvgQ:	0	7	8		2	12	0		0	0	0		10	0	3	

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #49 Mortimer St. / Santa Ana Blvd

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: C[17.5]

Street Name:	Mortimer St.								Santa Ana Blvd							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0 0	0	1	0	0 1!	0	0	0	0 0	0	0	1	0 0	1	0
Volume Module:																
Base Vol:	0	0	169		3	4	1		0	0	0		28	727	3	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	169		3	4	1		0	0	0		28	727	3	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	0	169		3	4	1		0	0	0		28	727	3	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	0	169		3	4	1		0	0	0		28	727	3	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	6.2		7.1	6.5	6.2		xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	xxxxx	xxxx	3.3		3.5	4.0	3.3		xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	0		785	785	729		xxxx	xxxx	xxxxx		0	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	900		313	327	426		xxxx	xxxx	xxxxx		900	xxxx	xxxxx	
Move Cap.:	xxxx	xxxx	900		248	317	426		xxxx	xxxx	xxxxx		900	xxxx	xxxxx	
Volume/Cap:	xxxx	xxxx	0.19		0.01	0.01	0.00		xxxx	xxxx	xxxx		0.03	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	0.7		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	9.9		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.1	xxxx	xxxxx	
LOS by Move:	*	*	A		*	*	*		*	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	296	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	0.1	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	17.5	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	C	*		*	*	*		*	*	*	
ApproachDel:	9.9				17.5				xxxxx				xxxxx			
ApproachLOS:	A				C				*				*			

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing AM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #50 Mortimer St. / 5th St.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.250
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	8.7
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Mortimer St.						5th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 1	0		0 1	0 0	0	1 0	0 1	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	117	4	3	17	0	166	25	34	5	0	9
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	117	4	3	17	0	166	25	34	5	0	9
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	117	4	3	17	0	166	25	34	5	0	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	117	4	3	17	0	166	25	34	5	0	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	117	4	3	17	0	166	25	34	5	0	9
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.97	0.03	0.15	0.85	0.00	1.00	0.42	0.58	0.36	0.00	0.64
Final Sat.:	0	748	26	111	628	0	663	337	458	290	0	523
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.16	0.16	0.03	0.03	xxxx	0.25	0.07	0.07	0.02	xxxx	0.02
Crit Moves:		****		****			****			****		
Delay/Veh:	0.0	8.3	8.3	7.8	7.8	0.0	9.8	7.5	7.5	7.3	0.0	7.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	8.3	8.3	7.8	7.8	0.0	9.8	7.5	7.5	7.3	0.0	7.3
LOS by Move:	*	A	A	A	A	*	A	A	A	A	*	A
ApproachDel:		8.3			7.8			9.2			7.3	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		8.3			7.8			9.2			7.3	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.2	0.2	0.2	0.0	0.0	0.0	0.3	0.1	0.1	0.0	0.0	0.0

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Scenario Report

Scenario:	Exist PM
Command:	PM Peak
Volume:	Exist PM
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Del/ Veh	V/ C	Future LOS	Del/ Veh	V/ C	Change in
# 1 Flower St (NS)/ Civic Center D	B	xxxxx	0.662	B	xxxxx	0.662	+ 0.000 V/C
# 2 Flower St (N/S) / Santa Ana Bl	A	xxxxx	0.538	A	xxxxx	0.538	+ 0.000 V/C
# 3 Parton St (E/W) / Santa Ana Bl	A	xxxxx	0.342	A	xxxxx	0.342	+ 0.000 V/C
# 4 Ross St (N/S) / Civic Center D	A	xxxxx	0.436	A	xxxxx	0.436	+ 0.000 V/C
# 5 Ross St (N/S) / Santa Ana Bl (	A	xxxxx	0.363	A	xxxxx	0.363	+ 0.000 V/C
# 6 Ross St (N/S) / 4th St (E/W)	B	11.8	0.000	B	11.8	0.000	+ 0.000 D/V
# 7 Broadway (N/S) / Civic Center	A	xxxxx	0.559	A	xxxxx	0.559	+ 0.000 V/C
# 8 Broadway (N/S) / Santa Ana Bl	A	xxxxx	0.466	A	xxxxx	0.466	+ 0.000 V/C
# 9 Broadway (N/S) / 5th St (E/W)	A	xxxxx	0.416	A	xxxxx	0.416	+ 0.000 V/C
# 10 Broadway (N/S) / 4th St (E/W)	A	xxxxx	0.372	A	xxxxx	0.372	+ 0.000 V/C
# 11 Broadway (N/S)/ 3rd st (E/W)	A	xxxxx	0.558	A	xxxxx	0.558	+ 0.000 V/C
# 12 Broadway (N/S) / 1st St (E/W)	B	xxxxx	0.648	B	xxxxx	0.648	+ 0.000 V/C
# 13 Sycamore St (N/S) / Civic Cent	A	xxxxx	0.434	A	xxxxx	0.434	+ 0.000 V/C
# 14 Sycamore St (N/S) / Santa Ana	C	17.0	0.000	C	17.0	0.000	+ 0.000 D/V
# 15 Sycamore St (N/S) / 5th St (E/	B	12.8	0.000	B	12.8	0.000	+ 0.000 D/V
# 16 Sycamore St (N/S) / 4th St (E/	A	8.3	0.247	A	8.3	0.247	+ 0.000 V/C
# 17 Main St (N/S) / Civic Center D	B	xxxxx	0.663	B	xxxxx	0.663	+ 0.000 V/C
# 18 Main St (N/S) / Santa Ana Dr (	B	xxxxx	0.611	B	xxxxx	0.611	+ 0.000 V/C
# 19 Main St (N/S) / 5th St (E/W)	A	xxxxx	0.564	A	xxxxx	0.564	+ 0.000 V/C
# 20 Main St (N/S) / 4th St (E/W)	A	xxxxx	0.561	A	xxxxx	0.561	+ 0.000 V/C
# 21 Main St (N/S) / 3rd St (E/W)	A	xxxxx	0.535	A	xxxxx	0.535	+ 0.000 V/C
# 22 Main St (N/S) / 1st St (E/W)	C	xxxxx	0.765	C	xxxxx	0.765	+ 0.000 V/C
# 23 Bush St (N/S) / Santa Ana Bl (	A	xxxxx	0.365	A	xxxxx	0.365	+ 0.000 V/C
# 24 Bush St (N/S) / 5th St (E/W)	A	xxxxx	0.395	A	xxxxx	0.395	+ 0.000 V/C

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Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 25 Bush St (N/S) / 4th St (E/W)	A	xxxxx	0.394	A	xxxxx	0.394	+ 0.000 V/C
# 26 Spurgeon St (N/S) / 1st St (E/	B	12.8	0.000	B	12.8	0.000	+ 0.000 D/V
# 27 French St (N/S) / Santa Ana Bl	C	15.6	0.000	C	15.6	0.000	+ 0.000 D/V
# 28 French St (N/S) / 4th St (E/W)	A	xxxxx	0.393	A	xxxxx	0.393	+ 0.000 V/C
# 29 Lacy St (N/S) / Civic Center D	C	16.8	0.000	C	16.8	0.000	+ 0.000 D/V
# 30 Lacy st (N/S) / Santa Ana Bl (	D	33.4	0.000	D	33.4	0.000	+ 0.000 D/V
# 31 Lacy St (N/S) / Brown St (E/W)	A	7.7	0.192	A	7.7	0.192	+ 0.000 V/C
# 32 Lacy St (N/S) / 4th St (E/W)	A	xxxxx	0.486	A	xxxxx	0.486	+ 0.000 V/C
# 33 Lacy St (N/S) / 1st St (E/W)	C	23.2	0.000	C	23.2	0.000	+ 0.000 D/V
# 34 Santiago St (N/S) / Washington	C	18.1	0.788	C	18.1	0.788	+ 0.000 V/C
# 35 Santiago St (N/S) / Civic Cent	C	17.4	0.639	C	17.4	0.639	+ 0.000 V/C
# 36 Santiago St (N/S) / Santa Ana	A	xxxxx	0.579	A	xxxxx	0.579	+ 0.000 V/C
# 40 Standard Av (N/S) / 1st St (E/	C	xxxxx	0.719	C	xxxxx	0.719	+ 0.000 V/C
# 42 Grand Av (N/S) / Santa Ana Bl	D	xxxxx	0.888	D	xxxxx	0.888	+ 0.000 V/C
# 43 Grand Av (N/S) / 4th St (E/W)	C	xxxxx	0.717	C	xxxxx	0.717	+ 0.000 V/C
# 44 Grand Av (N/S) / 1st St (E/W)	D	xxxxx	0.808	D	xxxxx	0.808	+ 0.000 V/C
# 45 Penn Way (NS) at I-5 SB Ramps	C	21.6	0.370	C	21.6	0.370	+ 0.000 D/V
# 46 I-5 SB Ramps (NS) / Santa Ana	C	27.4	0.450	C	27.4	0.450	+ 0.000 D/V
# 47 I-5 NB Ramps (NS) / 17th St. (	C	32.3	0.851	C	32.3	0.851	+ 0.000 D/V
# 48 I-5 NB Ramps (NS) / Grand Ave	E	62.3	1.119	E	62.3	1.119	+ 0.000 D/V
# 49 Mortimer St. / Santa Ana Blvd	B	15.0	0.000	B	15.0	0.000	+ 0.000 D/V
# 50 Mortimer St. / 5th St.	C	15.5	0.715	C	15.5	0.715	+ 0.000 V/C

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Flower St (NS)/ Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.662
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 34 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	130	725	105	52	450	92	200	600	80	111	640	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	725	105	52	450	92	200	600	80	111	640	75
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	725	105	52	450	92	200	600	80	111	640	75
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	725	105	52	450	92	200	600	80	111	640	75
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	725	105	52	450	92	200	600	80	111	640	75
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.75	0.25	1.00	1.66	0.34	1.00	1.76	0.24	1.00	1.79	0.21
Final Sat.:	1598	2970	430	1598	2823	577	1598	3000	400	1598	3043	357
Capacity Analysis Module:												
Vol/Sat:	0.08	0.24	0.24	0.03	0.16	0.16	0.13	0.20	0.20	0.07	0.21	0.21
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Flower St (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.538
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	0 1	1 0	2	0 1	1 0	3	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	122	727	42	85	553	39	98	385	94	174	542	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	122	727	42	85	553	39	98	385	94	174	542	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	122	727	42	85	553	39	98	385	94	174	542	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	122	727	42	85	553	39	98	385	94	174	542	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	122	727	42	85	553	39	98	385	94	174	542	180
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00
Final Sat.:	1598	3400	1598	1598	3400	1598	1598	5100	1598	1598	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.08	0.21	0.03	0.05	0.16	0.02	0.06	0.08	0.06	0.11	0.16	0.11
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Parton St (E/W) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.342
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	18	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0 0	0	1	0 0	1	0	2 1	0	2	1 0
Volume Module:												
Base Vol:	72	4	86	44	7	25	4	493	46	29	842	17
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	72	4	86	44	7	25	4	493	46	29	842	17
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	72	4	86	44	7	25	4	493	46	29	842	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	72	4	86	44	7	25	4	493	46	29	842	17
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	72	4	86	44	7	25	4	493	46	29	842	17
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.44	0.02	0.54	0.86	0.14	1.00	1.00	2.74	0.26	1.00	2.94	0.06
Final Sat.:	756	42	902	1467	233	1598	1598	4665	435	1598	4999	101
Capacity Analysis Module:												
Vol/Sat:	0.04	0.10	0.10	0.03	0.03	0.02	0.00	0.11	0.11	0.02	0.17	0.17
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Ross St (N/S) / Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.436
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 21 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	0 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	72	218	115	70	131	80	46	583	52	44	522	88
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	72	218	115	70	131	80	46	583	52	44	522	88
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	72	218	115	70	131	80	46	583	52	44	522	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	72	218	115	70	131	80	46	583	52	44	522	88
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	72	218	115	70	131	80	46	583	52	44	522	88
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.62	0.38	1.00	1.84	0.16	1.00	1.71	0.29
Final Sat.:	1598	1700	1598	1598	1055	645	1598	3122	278	1598	2910	490
Capacity Analysis Module:												
Vol/Sat:	0.05	0.13	0.07	0.04	0.12	0.12	0.03	0.19	0.19	0.03	0.18	0.18
Crit Moves:		****		****				****		****		

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Ross St (N/S) / Santa Ana Bl (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.363
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 19 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	2 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	42	135	75	57	192	99	56	385	51	96	560	92
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	42	135	75	57	192	99	56	385	51	96	560	92
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	42	135	75	57	192	99	56	385	0	96	560	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	135	75	57	192	99	56	385	0	96	560	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	42	135	75	57	192	99	56	385	0	96	560	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00
Final Sat.:	1598	1700	1598	1598	1700	1598	1598	3400	1598	1598	5100	1598
Capacity Analysis Module:												
Vol/Sat:	0.03	0.08	0.05	0.04	0.11	0.06	0.04	0.11	0.00	0.06	0.11	0.00
Crit Moves:	****				****			****		****		

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #6 Ross St (N/S) / 4th St (E/W)

Average Delay (sec/veh): 2.5 Worst Case Level Of Service: B[11.8]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	1 0	1	0	1	0 0	0	0	0	0 0	1	0	0	0 1
Volume Module:																
Base Vol:	0	275	30		64	218	0		0	0	0		40	0	66	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	275	30		64	218	0		0	0	0		40	0	66	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	275	30		64	218	0		0	0	0		40	0	66	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	275	30		64	218	0		0	0	0		40	0	66	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	xxxxx xxxx xxxxx					6.4	xxxx	6.2	
FollowUpTim:	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	xxxxx xxxx xxxxx					3.5	xxxx	3.3	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		305	xxxx	xxxxx	xxxx xxxx xxxxx					636	xxxx	290	
Potent Cap.:	xxxx	xxxx	xxxxx		1267	xxxx	xxxxx	xxxx xxxx xxxxx					445	xxxx	754	
Move Cap.:	xxxx	xxxx	xxxxx		1267	xxxx	xxxxx	xxxx xxxx xxxxx					428	xxxx	754	
Volume/Cap:	xxxx	xxxx	xxxx		0.05	xxxx	xxxx	xxxx xxxx xxxx					0.09	xxxx	0.09	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		0.2	xxxx	xxxxx	xxxx xxxx xxxxx					0.3	xxxx	0.3	
Control Del:	xxxxx	xxxx	xxxxx		8.0	xxxx	xxxxx	xxxxx xxxx xxxxx					14.3	xxxx	10.2	
LOS by Move:	*	*	*		A	*	*	* * *					B	*	B	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT	LT - LTR - RT					LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx xxxx xxxxx					xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx xxxx xxxxx					xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx xxxx xxxxx					xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*	* * *					*	*	*	
ApproachDel:	xxxxxx				xxxxxx			xxxxxx					11.8			
ApproachLOS:	*				*			*					B			

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Broadway (N/S) / Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.559
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 26 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Ignore				Ignore				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0	2	0 1	1	0	2	0 1	1	0	1	1 0	1	0	1	1 0
Volume Module:																
Base Vol:	68	541	56		122	621	128		176	680	68		38	459	97	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	68	541	56		122	621	128		176	680	68		38	459	97	
User Adj:	1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	68	541	0		122	621	0		176	680	68		38	459	97	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	68	541	0		122	621	0		176	680	68		38	459	97	
PCE Adj:	1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	68	541	0		122	621	0		176	680	68		38	459	97	
Saturation Flow Module:																
Sat/Lane:	1700	1700	1700		1700	1700	1700		1700	1700	1700		1700	1700	1700	
Adjustment:	0.94	1.00	0.94		0.94	1.00	0.94		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	1.82	0.18		1.00	1.65	0.35	
Final Sat.:	1598	3400	1598		1598	3400	1598		1598	3091	309		1598	2807	593	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.16	0.00		0.08	0.18	0.00		0.11	0.22	0.22		0.02	0.16	0.16	
Crit Moves:		****				****				****				****		

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Broadway (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.466
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	22	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	1 1	0
Volume Module:												
Base Vol:	42	624	0	0	597	125	0	0	0	41	754	109
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	42	624	0	0	597	125	0	0	0	41	754	109
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	42	624	0	0	597	125	0	0	0	41	754	109
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	624	0	0	597	125	0	0	0	41	754	109
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	42	624	0	0	597	125	0	0	0	41	754	109
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.65	0.35	0.00	0.00	0.00	0.14	2.50	0.36
Final Sat.:	1598	3400	0	0	2811	589	0	0	0	231	4254	615
Capacity Analysis Module:												
Vol/Sat:	0.03	0.18	0.00	0.00	0.21	0.21	0.00	0.00	0.00	0.02	0.18	0.18
Crit Moves:	****				****						****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Broadway (N/S) / 5th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.416
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	21	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1 1	0	1 0	2 0	0	0 1	1 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	515	68	78	622	0	173	554	18	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	515	68	78	622	0	173	554	18	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	515	68	78	622	0	173	554	18	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	515	68	78	622	0	173	554	18	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	515	68	78	622	0	173	554	18	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00	0.94	1.00	0.94
Lanes:	0.00	1.77	0.23	1.00	2.00	0.00	0.70	2.23	0.07	0.00	0.00	0.00
Final Sat.:	0	3003	397	1598	3400	0	1184	3792	123	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.17	0.05	0.18	0.00	0.10	0.15	0.15	0.00	0.00	0.00
Crit Moves:		****		****				****				

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Broadway (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.372
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	19	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	18	463	88	24	537	21	45	98	28	46	119	37
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	18	463	88	24	537	21	45	98	28	46	119	37
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Volume:	18	463	88	24	537	21	45	98	28	46	119	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	463	88	24	537	21	45	98	28	46	119	37
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	18	463	88	24	537	21	45	98	28	46	119	37
Saturation Flow Module:												
Sat/Lane:	1700 1700	1700		1700 1700	1700		1700 1700	1700		1700 1700	1700	
Adjustment:	0.94 1.00	1.00		0.94 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Lanes:	1.00 1.68	0.32		1.00 1.92	0.08		0.26 0.58	0.16		0.23 0.59	0.18	
Final Sat.:	1598 2857	543		1598 3272	128		447 974	278		387 1001	311	
Capacity Analysis Module:												
Vol/Sat:	0.01 0.16	0.16		0.02 0.16	0.16		0.03 0.10	0.10		0.03 0.12	0.12	
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Broadway (N/S)/ 3rd st (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.558
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	1 0	1 0	1	0 1	1 0	1	0 1	1 0	0	1 0
Volume Module:												
Base Vol:	51	534	44	49	509	41	36	104	20	17	136	59
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	51	534	44	49	509	41	36	104	20	17	136	59
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Volume:	51	534	44	49	509	41	36	104	20	17	136	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	534	44	49	509	41	36	104	20	17	136	59
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	51	534	44	49	509	41	36	104	20	17	136	59
Saturation Flow Module:												
Sat/Lane:	1700 1700	1700		1700 1700	1700		1700 1700	1700		1700 1700	1700	
Adjustment:	0.94 1.00	1.00		0.94 1.00	0.94		0.94 1.00	1.00		0.94 1.00	1.00	
Lanes:	1.00 0.92	0.08		1.00 1.00	1.00		1.00 0.84	0.16		1.00 0.70	0.30	
Final Sat.:	1598 1571	129		1598 1700	1598		1598 1426	274		1598 1186	514	
Capacity Analysis Module:												
Vol/Sat:	0.03 0.34	0.34		0.03 0.30	0.03		0.02 0.07	0.07		0.01 0.11	0.11	
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Broadway (N/S) / 1st St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.648
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 32 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	84	332	43	60	363	117	123	1017	63	66	1237	64
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	84	332	43	60	363	117	123	1017	63	66	1237	64
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	84	332	43	60	363	117	123	1017	63	66	1237	64
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	84	332	43	60	363	117	123	1017	63	66	1237	64
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	84	332	43	60	363	117	123	1017	63	66	1237	64
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.82	0.18	1.00	2.85	0.15
Final Sat.:	1598	1700	1598	1598	1700	1598	1598	4803	298	1598	4849	251
Capacity Analysis Module:												
Vol/Sat:	0.05	0.20	0.03	0.04	0.21	0.07	0.08	0.21	0.21	0.04	0.26	0.26
Crit Moves:	****				****		****				****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Sycamore St (N/S) / Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.434
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 21 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	22	47	22	86	52	92	21	773	15	7	424	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	22	47	22	86	52	92	21	773	15	7	424	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	22	47	22	86	52	92	21	773	15	7	424	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	47	22	86	52	92	21	773	15	7	424	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	22	47	22	86	52	92	21	773	15	7	424	30
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.24	0.52	0.24	0.37	0.23	0.40	1.00	1.96	0.04	1.00	1.87	0.13
Final Sat.:	411	878	411	636	384	680	1598	3335	65	1598	3175	225
Capacity Analysis Module:												
Vol/Sat:	0.01	0.05	0.05	0.05	0.14	0.14	0.01	0.23	0.23	0.00	0.13	0.13
Crit Moves:	****				****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #14 Sycamore St (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 4.1 Worst Case Level Of Service: C[17.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0 0	0	0	0	1 0	0	0	0	0 0	0	1	1	1 0
Volume Module:																
Base Vol:	50	70	0	0	43	38	0	0	0	35	596	24				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	50	70	0	0	43	38	0	0	0	35	596	24				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	50	70	0	0	43	38	0	0	0	35	596	24				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	50	70	0	0	43	38	0	0	0	35	596	24				
Critical Gap Module:																
Critical Gp:	7.1	6.5	xxxxx	xxxxx	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx				
FollowUpTim:	3.5	4.0	xxxxx	xxxxx	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	290	690	xxxxx	xxxx	678	211	xxxx	xxxx	xxxxx	0	xxxx	xxxxx				
Potent Cap.:	666	371	xxxxx	xxxx	377	835	xxxx	xxxx	xxxxx	900	xxxx	xxxxx				
Move Cap.:	560	356	xxxxx	xxxx	362	835	xxxx	xxxx	xxxxx	900	xxxx	xxxxx				
Volume/Cap:	0.09	0.20	xxxx	xxxx	0.12	0.05	xxxx	xxxx	xxxx	0.04	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	420	xxxx	xxxxx	xxxx	xxxx	492	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	1.2	xxxx	xxxxx	xxxxx	xxxx	0.6	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx				
Shrd ConDel:	17.0	xxxx	xxxxx	xxxxx	xxxx	13.7	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx				
Shared LOS:	C	*	*	*	*	B	*	*	*	A	*	*				
ApproachDel:	17.0			13.7			xxxxx			xxxxx						
ApproachLOS:	C			B			*			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #15 Sycamore St (N/S) / 5th St (E/W)

Average Delay (sec/veh): 3.1 Worst Case Level Of Service: B[12.8]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	1 0	0	1	0	0 0	0	1	1	1 0	0	0	0	0 0
Volume Module:																
Base Vol:	0	5	22	41	30	0	59	393	14	0	0	0				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	0	5	22	41	30	0	59	393	14	0	0	0				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	0	5	22	41	30	0	59	393	14	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	0	5	22	41	30	0	59	393	14	0	0	0				
Critical Gap Module:																
Critical Gp:	xxxxx	6.5	6.2	7.1	6.5	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	4.0	3.3	3.5	4.0	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	xxxx	518	138	252	525	xxxxx	0	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	465	916	706	460	xxxxx	900	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	433	916	647	429	xxxxx	900	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	0.01	0.02	0.06	0.07	xxxx	0.07	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	xxxx	xxxx	759	533	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	0.1	0.5	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	9.9	12.8	xxxx	xxxxx	9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	A	B	*	*	A	*	*	*	*	*				
ApproachDel:	9.9			12.8			xxxxx			xxxxx						
ApproachLOS:	A			B			*			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #16 Sycamore St (N/S) / 4th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.247
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): 8.3
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1! 0	0	0	1! 0	0	0	1! 0
Volume Module:												
Base Vol:	3	7	15	17	8	21	18	126	17	26	163	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	7	15	17	8	21	18	126	17	26	163	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	7	15	17	8	21	18	126	17	26	163	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	7	15	17	8	21	18	126	17	26	163	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	3	7	15	17	8	21	18	126	17	26	163	20
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.12	0.28	0.60	0.37	0.17	0.46	0.11	0.78	0.11	0.12	0.78	0.10
Final Sat.:	91	213	455	275	130	340	93	654	88	105	659	81
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.03	0.06	0.06	0.06	0.19	0.19	0.19	0.25	0.25	0.25
Crit Moves:			****	****				****			****	
Delay/Veh:	7.5	7.5	7.5	7.8	7.8	7.8	8.2	8.2	8.2	8.5	8.5	8.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.5	7.5	7.5	7.8	7.8	7.8	8.2	8.2	8.2	8.5	8.5	8.5
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:		7.5			7.8			8.2			8.5	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		7.5			7.8			8.2			8.5	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St (N/S) / Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.663
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 34 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1 1 0	1	0	1 1 0	1	0	1 1 0	1	0	1 1 0
Volume Module:												
Base Vol:	98	927	81	56	850	78	125	731	108	55	364	64
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	98	927	81	56	850	78	125	731	108	55	364	64
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	98	927	81	56	850	78	125	731	108	55	364	64
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	98	927	81	56	850	78	125	731	108	55	364	64
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	98	927	81	56	850	78	125	731	108	55	364	64
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.84	0.16	1.00	1.83	0.17	1.00	1.74	0.26	1.00	1.70	0.30
Final Sat.:	1598	3127	273	1598	3114	286	1598	2962	438	1598	2892	508
Capacity Analysis Module:												
Vol/Sat:	0.06	0.30	0.30	0.04	0.27	0.27	0.08	0.25	0.25	0.03	0.13	0.13
Crit Moves:		****			****				****		****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St (N/S) / Santa Ana Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.611
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 30 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	1 1	0
Volume Module:												
Base Vol:	73	1135	0	0	1083	61	0	0	0	76	740	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	73	1135	0	0	1083	61	0	0	0	76	740	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	73	1135	0	0	1083	61	0	0	0	76	740	98
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	73	1135	0	0	1083	61	0	0	0	76	740	98
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	73	1135	0	0	1083	61	0	0	0	76	740	98
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.89	0.11	0.00	0.00	0.00	0.25	2.43	0.32
Final Sat.:	1598	3400	0	0	3219	181	0	0	0	424	4129	547
Capacity Analysis Module:												
Vol/Sat:	0.05	0.33	0.00	0.00	0.34	0.34	0.00	0.00	0.00	0.04	0.18	0.18
Crit Moves:	****				****						****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Main St (N/S) / 5th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.564
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 27 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1 1	0	1 0	2 0	0	0 1	1 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	1115	24	74	1049	0	99	516	63	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1115	24	74	1049	0	99	516	63	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1115	24	74	1049	0	99	516	63	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1115	24	74	1049	0	99	516	63	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1115	24	74	1049	0	99	516	63	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00	0.94	1.00	0.94
Lanes:	0.00	1.96	0.04	1.00	2.00	0.00	0.44	2.28	0.28	0.00	0.00	0.00
Final Sat.:	0	3328	72	1598	3400	0	745	3881	474	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.33	0.34	0.05	0.31	0.00	0.06	0.13	0.13	0.00	0.00	0.00
Crit Moves:			****	****				****				

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 Main St (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.561
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	1 0	0 0	1	1 0	0 0	0	1 0	0 0	0	1 0
Volume Module:												
Base Vol:	0	1124	50	0	1072	46	0	126	45	0	222	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1124	50	0	1072	46	0	126	45	0	222	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1124	50	0	1072	46	0	126	45	0	222	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1124	50	0	1072	46	0	126	45	0	222	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1124	50	0	1072	46	0	126	45	0	222	60
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.00	1.91	0.09	0.00	1.92	0.08	0.00	0.74	0.26	0.00	0.79	0.21
Final Sat.:	0	3255	145	0	3260	140	0	1253	447	0	1338	362
Capacity Analysis Module:												
Vol/Sat:	0.00	0.35	0.35	0.00	0.33	0.33	0.00	0.10	0.10	0.00	0.17	0.17
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 Main St (N/S) / 3rd St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.535
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	1 0	0 0	1	1 0	1	0	0 1 0	1	0	0 1 0
Volume Module:												
Base Vol:	0	1096	40	0	1080	52	42	149	39	37	177	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1096	40	0	1080	52	42	149	39	37	177	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1096	40	0	1080	52	42	149	39	37	177	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1096	40	0	1080	52	42	149	39	37	177	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1096	40	0	1080	52	42	149	39	37	177	36
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.00	1.93	0.07	0.00	1.91	0.09	1.00	0.79	0.21	1.00	0.83	0.17
Final Sat.:	0	3280	120	0	3244	156	1598	1347	353	1598	1413	287
Capacity Analysis Module:												
Vol/Sat:	0.00	0.33	0.33	0.00	0.33	0.33	0.03	0.11	0.11	0.02	0.13	0.13
Crit Moves:	****				****		****				****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 Main St (N/S) / 1st St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.765
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 46 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	194	913	80	172	808	141	156	944	86	104	1039	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	194	913	80	172	808	141	156	944	86	104	1039	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	194	913	80	172	808	141	156	944	86	104	1039	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	194	913	80	172	808	141	156	944	86	104	1039	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	194	913	80	172	808	141	156	944	86	104	1039	70
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.84	0.16	1.00	2.00	1.00	1.00	2.75	0.25	1.00	2.81	0.19
Final Sat.:	1598	3126	274	1598	3400	1598	1598	4674	426	1598	4778	322
Capacity Analysis Module:												
Vol/Sat:	0.12	0.29	0.29	0.11	0.24	0.09	0.10	0.20	0.20	0.07	0.22	0.22
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 Bush St (N/S) / Santa Ana Bl (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.365
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 19 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	0 0	0 0	0	1 0	0 0	0	0 0	0 1	1	1 0
Volume Module:												
Base Vol:	39	293	0	0	192	33	0	0	0	31	641	57
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	39	293	0	0	192	33	0	0	0	31	641	57
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	39	293	0	0	192	33	0	0	0	31	641	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	293	0	0	192	33	0	0	0	31	641	57
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	39	293	0	0	192	33	0	0	0	31	641	57
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	0.85	0.15	0.00	0.00	0.00	0.13	2.64	0.23
Final Sat.:	1598	1700	0	0	1451	249	0	0	0	217	4484	399
Capacity Analysis Module:												
Vol/Sat:	0.02	0.17	0.00	0.00	0.13	0.13	0.00	0.00	0.00	0.02	0.14	0.14
Crit Moves:		****			****						****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 Bush St (N/S) / 5th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.395
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	20	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	1 0	1	0	1	0 0	0	1	1	1 0	0	0	0	0 0
Volume Module:																
Base Vol:	0	282		59	26	240		0	42	564		48	0	0		0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	282		59	26	240		0	42	564		48	0	0		0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	0	282		59	26	240		0	42	564		48	0	0		0
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	0	282		59	26	240		0	42	564		48	0	0		0
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	0	282		59	26	240		0	42	564		48	0	0		0
Saturation Flow Module:																
Sat/Lane:	1700	1700		1700	1700	1700		1700	1700	1700		1700	1700	1700		1700
Adjustment:	0.94	1.00		1.00	0.94	1.00		0.94	1.00	1.00		1.00	0.94	1.00		0.94
Lanes:	0.00	0.83		0.17	1.00	1.00		0.00	0.19	2.59		0.22	0.00	0.00		0.00
Final Sat.:	0	1406		294	1598	1700		0	328	4398		374	0	0		0
Capacity Analysis Module:																
Vol/Sat:	0.00	0.20	0.20		0.02	0.14	0.00		0.02	0.13	0.13		0.00	0.00		0.00
Crit Moves:		****			****					****						

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #25 Bush St (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.394
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	20	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0	1 0	1	0	0	1 0	0	0	1!	0 0	0	0	1!	0 0
Volume Module:																
Base Vol:	18	288		24	39	208		11	12	129		25	17	165		38
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	18	288		24	39	208		11	12	129		25	17	165		38
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	18	288		24	39	208		11	12	129		25	17	165		38
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	18	288		24	39	208		11	12	129		25	17	165		38
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	18	288		24	39	208		11	12	129		25	17	165		38
Saturation Flow Module:																
Sat/Lane:	1700	1700		1700	1700	1700		1700	1700	1700		1700	1700	1700		1700
Adjustment:	0.94	1.00		1.00	0.94	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Lanes:	1.00	0.92		0.08	1.00	0.95		0.05	0.07	0.78		0.15	0.08	0.75		0.17
Final Sat.:	1598	1569		131	1598	1615		85	123	1321		256	131	1275		294
Capacity Analysis Module:																
Vol/Sat:	0.01	0.18	0.18		0.02	0.13	0.13		0.01	0.10	0.10		0.01	0.13	0.13	
Crit Moves:		****			****				****					****		

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #26 Spurgeon St (N/S) / 1st St (E/W)

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[12.8]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	0	0	0 1	0	0	3	0 0	0	0	2	1 0
Volume Module:																
Base Vol:	0	0	0	0	0	113	0	1319	0	0	1261	36				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	0	0	0	0	0	113	0	1319	0	0	1261	36				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	0	0	0	0	0	113	0	1319	0	0	1261	36				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	0	0	0	0	0	113	0	1319	0	0	1261	36				
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	438	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	572	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	572	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.20	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.7	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	12.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	B	*	*	*	*	*	*				
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*				
ApproachDel:	xxxxxx				12.8				xxxxxx				xxxxxx			
ApproachLOS:	*				B				*				*			

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #27 French St (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 3.8 Worst Case Level Of Service: C[15.6]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0 0	0	0	0	1 0	0	0	0	0 0	0	1	0	1 0
Volume Module:																
Base Vol:	83	60	0	0	31	5	0	0	0	21	565	6				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	83	60	0	0	31	5	0	0	0	21	565	6				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	83	60	0	0	31	5	0	0	0	21	565	6				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	83	60	0	0	31	5	0	0	0	21	565	6				
Critical Gap Module:																
Critical Gp:	7.1	6.5	xxxxx	xxxxx	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx				
FollowUpTim:	3.5	4.0	xxxxx	xxxxx	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	340	613	xxxxx	xxxx	610	286	xxxx	xxxx	xxxxx	0	xxxx	xxxxx				
Potent Cap.:	618	410	xxxxx	xxxx	412	758	xxxx	xxxx	xxxxx	900	xxxx	xxxxx				
Move Cap.:	567	401	xxxxx	xxxx	402	758	xxxx	xxxx	xxxxx	900	xxxx	xxxxx				
Volume/Cap:	0.15	0.15	xxxx	xxxx	0.08	0.01	xxxx	xxxx	xxxx	0.02	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*				
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	483	xxxx	xxxxx	xxxx	xxxx	430	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	1.2	xxxx	xxxxx	xxxxx	xxxx	0.3	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx				
Shrd ConDel:	15.6	xxxx	xxxxx	xxxxx	xxxx	14.1	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx				
Shared LOS:	C	*	*	*	*	B	*	*	*	A	*	*				
ApproachDel:	15.6				14.1				xxxxxx				xxxxxx			
ApproachLOS:	C				B				*				*			

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 French St (N/S) / 4th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.393
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 20 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	1 0	0 1	0	0 0	1! 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	18	64	71	121	59	18	12	109	31	72	218	61
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	18	64	71	121	59	18	12	109	31	72	218	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	18	64	71	121	59	18	12	109	31	72	218	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	64	71	121	59	18	12	109	31	72	218	61
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	18	64	71	121	59	18	12	109	31	72	218	61
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.94
Lanes:	0.12	0.42	0.46	1.00	0.77	0.23	0.08	0.72	0.20	0.25	0.75	1.00
Final Sat.:	200	711	789	1598	1303	397	134	1219	347	422	1278	1598
Capacity Analysis Module:												
Vol/Sat:	0.01	0.09	0.09	0.08	0.05	0.05	0.01	0.09	0.09	0.04	0.17	0.04
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #29 Lacy St (N/S) / Civic Center Dr (E/W)

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: C[16.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	20	21	38	12	12	15	13	538	16	8	189	15
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	21	38	12	12	15	13	538	16	8	189	15
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	21	38	12	12	15	13	538	16	8	189	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	20	21	38	12	12	15	13	538	16	8	189	15
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	798	792	546	814	793	197	204	xxxx	xxxxx	554	xxxx	xxxxx
Potent Cap.:	306	324	541	299	324	850	1380	xxxx	xxxxx	1026	xxxx	xxxxx
Move Cap.:	289	318	541	261	318	850	1380	xxxx	xxxxx	1026	xxxx	xxxxx
Volume/Cap:	0.07	0.07	0.07	0.05	0.04	0.02	0.01	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	8.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	384	xxxxx	xxxx	384	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.8	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	16.8	xxxxx	xxxxx	15.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	C	*	*	*	*	*	*	*
ApproachDel:		16.8			15.4			xxxxx			xxxxx	
ApproachLOS:		C			C			*			*	

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #30 Lacy st (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 2.9 Worst Case Level Of Service: D[33.4]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 1! 0 0			1 0 0 1 0			1 0 0 1 0		
Volume Module:												
Base Vol:	12	38	13	19	16	13	3	579	5	20	592	18
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	38	13	19	16	13	3	579	5	20	592	18
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	12	38	13	19	16	13	3	579	5	20	592	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	12	38	13	19	16	13	3	579	5	20	592	18
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1243	1238	582	1254	1231	601	610	xxxx	xxxxx	584	xxxx	xxxxx
Potent Cap.:	153	177	517	150	179	504	979	xxxx	xxxxx	1001	xxxx	xxxxx
Move Cap.:	136	173	517	120	175	504	979	xxxx	xxxxx	1001	xxxx	xxxxx
Volume/Cap:	0.09	0.22	0.03	0.16	0.09	0.03	0.00	xxxx	xxxx	0.02	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.7	xxxx	xxxxx	8.7	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	189	xxxxx	xxxx	174	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	1.4	xxxxx	xxxxx	1.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	33.2	xxxxx	xxxxx	33.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	D	*	*	D	*	*	*	*	*	*	*
ApproachDel:		33.2			33.4			xxxxx			xxxxx	
ApproachLOS:		D			D			*			*	

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #31 Lacy St (N/S) / Brown St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.192
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): 7.7
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 1! 0 0			0 0 1! 0 0			0 0 1! 0 0			0 1 0 0 0		
Volume Module:												
Base Vol:	61	58	51	5	31	12	7	15	9	17	27	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	61	58	51	5	31	12	7	15	9	17	27	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	61	58	51	5	31	12	7	15	9	17	27	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	58	51	5	31	12	7	15	9	17	27	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	61	58	51	5	31	12	7	15	9	17	27	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.36	0.34	0.30	0.10	0.65	0.25	0.23	0.48	0.29	0.39	0.61	0.00
Final Sat.:	318	302	265	89	554	215	182	390	234	299	474	0
Capacity Analysis Module:												
Vol/Sat:	0.19	0.19	0.19	0.06	0.06	0.06	0.04	0.04	0.04	0.06	0.06	xxxx
Crit Moves:		****			****			****			****	
Delay/Veh:	7.9	7.9	7.9	7.3	7.3	7.3	7.4	7.4	7.4	7.7	7.7	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.9	7.9	7.9	7.3	7.3	7.3	7.4	7.4	7.4	7.7	7.7	0.0
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	*
ApproachDel:		7.9			7.3			7.4			7.7	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		7.9			7.3			7.4			7.7	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #32 Lacy St (N/S) / 4th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.486
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 23 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	41	72	62	51	29	10	5	347	23	137	494	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	72	62	51	29	10	5	347	23	137	494	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	41	72	62	51	29	10	5	347	23	137	494	98
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	72	62	51	29	10	5	347	23	137	494	98
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	41	72	62	51	29	10	5	347	23	137	494	98
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	0.23	0.42	0.35	0.57	0.32	0.11	1.00	0.94	0.06	1.00	1.00	1.00
Final Sat.:	398	699	602	963	548	189	1598	1594	106	1598	1700	1598
Capacity Analysis Module:												
Vol/Sat:	0.02	0.10	0.10	0.03	0.05	0.05	0.00	0.22	0.22	0.09	0.29	0.06
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #33 Lacy St (N/S) / 1st St (E/W)

Average Delay (sec/veh): 2.0 Worst Case Level Of Service: C[23.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	0 0	1! 0	0	1 0	3 0	0	0 0	2 1	0
Volume Module:												
Base Vol:	0	0	0	9	0	118	167	1152	0	0	1191	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	9	0	118	167	1152	0	0	1191	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	9	0	118	167	1152	0	0	1191	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	9	0	118	167	1152	0	0	1191	36
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1927	2695	415	1227	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	60	22	592	575	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	46	16	592	575	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.19	0.00	0.20	0.29	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.2	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	13.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	323	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	1.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	23.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	C	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			23.2			xxxxxx			xxxxxx		
ApproachLOS:	*			C			*			*		

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #34 Santiago St (N/S) / Washington Av (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.788
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): 18.1
Optimal Cycle: 0 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	1 0	1	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	59	261	158	22	148	114	236	173	19	45	133	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	59	261	158	22	148	114	236	173	19	45	133	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	59	261	158	22	148	114	236	173	19	45	133	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	261	158	22	148	114	236	173	19	45	133	33
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	59	261	158	22	148	114	236	173	19	45	133	33
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.56	0.40	0.04	0.21	0.63	0.16
Final Sat.:	459	491	542	429	457	501	300	220	24	104	306	76
Capacity Analysis Module:												
Vol/Sat:	0.13	0.53	0.29	0.05	0.32	0.23	0.79	0.79	0.79	0.43	0.43	0.43
Crit Moves:		****			****		****				****	
Delay/Veh:	11.3	16.9	11.5	11.0	13.2	11.1	27.8	27.8	27.8	14.4	14.4	14.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.3	16.9	11.5	11.0	13.2	11.1	27.8	27.8	27.8	14.4	14.4	14.4
LOS by Move:	B	C	B	B	B	B	D	D	D	B	B	B
ApproachDel:	14.4			12.2			27.8			14.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	14.4			12.2			27.8			14.4		
LOS by Appr:	B			B			D			B		
AllWayAvgQ:	0.1	1.0	0.4	0.0	0.4	0.2	2.8	2.8	2.8	0.6	0.6	0.6

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #35 Santiago St (N/S) / Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.639
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): 17.4
Optimal Cycle: 0 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	170	218	31	14	214	96	260	52	318	29	31	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	218	31	14	214	96	260	52	318	29	31	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	218	31	14	214	96	260	52	318	29	31	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	218	31	14	214	96	260	52	318	29	31	12
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	170	218	31	14	214	96	260	52	318	29	31	12
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.88	0.12	1.00	0.69	0.31	0.83	0.17	1.00	0.40	0.43	0.17
Final Sat.:	464	442	63	451	347	156	407	81	575	171	183	71
Capacity Analysis Module:												
Vol/Sat:	0.37	0.49	0.49	0.03	0.62	0.62	0.64	0.64	0.55	0.17	0.17	0.17
Crit Moves:			****		****			****				****
Delay/Veh:	14.3	15.9	15.9	10.6	19.6	19.6	21.4	21.4	15.8	12.3	12.3	12.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.3	15.9	15.9	10.6	19.6	19.6	21.4	21.4	15.8	12.3	12.3	12.3
LOS by Move:	B	C	C	B	C	C	C	C	C	B	B	B
ApproachDel:	15.3			19.2			18.6			12.3		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	15.3			19.2			18.6			12.3		
LOS by Appr:	C			C			C			B		
AllWayAvgQ:	0.5	0.9	0.9	0.0	1.4	1.4	1.6	1.6	1.1	0.2	0.2	0.2

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #36 Santiago St (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.579
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	32	90	70	306	179	99	59	687	48	109	601	278
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	32	90	70	306	179	99	59	687	48	109	601	278
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	32	90	70	306	179	99	59	687	48	109	601	278
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	90	70	306	179	99	59	687	48	109	601	278
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	32	90	70	306	179	99	59	687	48	109	601	278
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.87	0.13	1.00	2.00	1.00
Final Sat.:	1598	1700	1598	1598	1700	1598	1598	3178	222	1598	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.02	0.05	0.04	0.19	0.11	0.06	0.04	0.22	0.22	0.07	0.18	0.17
Crit Moves:		****		****				****		****		

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #40 Standard Av (N/S) / 1st St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.719
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	0 0	1! 0	0	1 0	1 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	184	285	135	17	224	25	78	1076	76	93	1106	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	184	285	135	17	224	25	78	1076	76	93	1106	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	184	285	135	17	224	25	78	1076	76	93	1106	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	184	285	135	17	224	25	78	1076	76	93	1106	11
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	184	285	135	17	224	25	78	1076	76	93	1106	11
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.68	0.32	0.06	0.85	0.09	1.00	1.87	0.13	1.00	1.98	0.02
Final Sat.:	1598	1154	546	109	1432	160	1598	3176	224	1598	3367	33
Capacity Analysis Module:												
Vol/Sat:	0.12	0.25	0.25	0.01	0.16	0.16	0.05	0.34	0.34	0.06	0.33	0.33
Crit Moves:	****				****			****		****		

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #42 Grand Av (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.888
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	80	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	1	0	1 0 2	0	2	2 0 1	0	2	0 1 0	1	0
Volume Module:												
Base Vol:	231	1853	12	48	880	610	286	107	398	39	191	74
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	231	1853	12	48	880	610	286	107	398	39	191	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	231	1853	12	48	880	610	286	107	398	39	191	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	231	1853	12	48	880	610	286	107	398	39	191	74
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	231	1853	12	48	880	610	286	107	398	39	191	74
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	2.98	0.02	1.00	2.00	2.00	2.00	1.00	2.00	0.26	1.25	0.49
Final Sat.:	1598	5067	33	1598	3400	3196	3196	1700	3196	436	2136	828
Capacity Analysis Module:												
Vol/Sat:	0.14	0.37	0.37	0.03	0.26	0.19	0.09	0.06	0.12	0.09	0.09	0.09
Crit Moves:			****		****				****	****		

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #43 Grand Av (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.717
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0	1 0 2	0	1
Volume Module:												
Base Vol:	146	1051	47	98	753	80	162	495	80	204	666	131
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	146	1051	47	98	753	80	162	495	80	204	666	131
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	146	1051	47	98	753	80	162	495	80	204	666	131
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	146	1051	47	98	753	80	162	495	80	204	666	131
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	146	1051	47	98	753	80	162	495	80	204	666	131
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.72	0.28	1.00	2.00	1.00
Final Sat.:	1598	3400	1598	1598	3400	1598	1598	2927	473	1598	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.09	0.31	0.03	0.06	0.22	0.05	0.10	0.17	0.17	0.13	0.20	0.08
Crit Moves:		****			****				****		****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #44 Grand Av (N/S) / 1st St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.808
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	0 1	1 0	2	0 1	2 0	2	1 0	2 0	1	1 0
Volume Module:												
Base Vol:	119	1261	57	95	966	85	179	985	111	142	883	42
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	119	1261	57	95	966	85	179	985	111	142	883	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	119	1261	57	95	966	85	179	985	111	142	883	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	119	1261	57	95	966	85	179	985	111	142	883	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	119	1261	57	95	966	85	179	985	111	142	883	42
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	2.00	2.70	0.30	2.00	1.91	0.09
Final Sat.:	1598	3400	1598	1598	3400	1598	3196	4583	517	3196	3246	154
Capacity Analysis Module:												
Vol/Sat:	0.07	0.37	0.04	0.06	0.28	0.05	0.06	0.21	0.21	0.04	0.27	0.27
Crit Moves:		****		****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #45 Penn Way (NS) at I-5 SB Ramps (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.370
Loss Time (sec):	12 (Y+R=4.0 sec)	Average Delay (sec/veh):	21.6
Optimal Cycle:	34	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	2	0 1	2	0 2	0 0	0	0	0 0 0	1	0	0 2
Volume Module:	PM Peak											
Base Vol:	0	173	134	547	64	0	0	0	0	126	0	234
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	173	134	547	64	0	0	0	0	126	0	234
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	173	134	547	64	0	0	0	0	126	0	234
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	173	134	547	64	0	0	0	0	126	0	234
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	173	134	547	64	0	0	0	0	126	0	234
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.92	0.95	1.00	1.00	1.00	1.00	0.77	1.00	0.75
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	2.00
Final Sat.:	0	3610	1615	3502	3610	0	0	0	0	1461	0	2842
Capacity Analysis Module:												
Vol/Sat:	0.00	0.05	0.08	0.16	0.02	0.00	0.00	0.00	0.00	0.09	0.00	0.08
Crit Moves:			****	****						****		
Green/Cycle:	0.00	0.22	0.22	0.42	0.42	0.00	0.00	0.00	0.00	0.23	0.00	0.66
Volume/Cap:	0.00	0.21	0.37	0.37	0.04	0.00	0.00	0.00	0.00	0.37	0.00	0.13
Delay/Veh:	0.0	31.7	33.4	19.9	17.0	0.0	0.0	0.0	0.0	32.9	0.0	6.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	31.7	33.4	19.9	17.0	0.0	0.0	0.0	0.0	32.9	0.0	6.5
LOS by Move:	A	C	C	B	B	A	A	A	A	C	A	A
HCM2kAvgQ:	0	2	4	6	1	0	0	0	0	4	0	2

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #46 I-5 SB Ramps (NS) / Santa Ana Bl (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.450
Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh): 27.4
Optimal Cycle: 38 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2 0	0	0 1	2 0	3	0 0	0 0	2	1 0
Volume Module:PM Peak												
Base Vol:	0	0	0	268	0	131	361	631	0	0	755	215
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	268	0	131	361	631	0	0	755	215
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	268	0	131	361	631	0	0	755	215
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	268	0	131	361	631	0	0	755	215
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	268	0	131	361	631	0	0	755	215
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.85	0.92	0.91	1.00	1.00	0.88	0.88
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	2.00	3.00	0.00	0.00	2.34	0.66
Final Sat.:	0	0	0	3502	0	1615	3502	5187	0	0	3904	1112
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.08	0.00	0.08	0.10	0.12	0.00	0.00	0.19	0.19
Crit Moves:						****		****				****
Green/Cycle:	0.00	0.00	0.00	0.18	0.00	0.18	0.27	0.27	0.00	0.00	0.43	0.43
Volume/Cap:	0.00	0.00	0.00	0.42	0.00	0.45	0.38	0.45	0.00	0.00	0.45	0.45
Delay/Veh:	0.0	0.0	0.0	36.9	0.0	37.7	29.9	30.5	0.0	0.0	20.3	20.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	36.9	0.0	37.7	29.9	30.5	0.0	0.0	20.3	20.3
LOS by Move:	A	A	A	D	A	D	C	C	A	A	C	C
HCM2kAvgQ:	0	0	0	4	0	4	5	6	0	0	8	8

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #47 I-5 NB Ramps (NS) / 17th St. (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.851
Loss Time (sec): 16 (Y+R=4.0 sec) Average Delay (sec/veh): 32.3
Optimal Cycle: 100 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 1	0	0 1	1 0	0	0 1	1 0	3	0 1	0 0	2	1 0
Volume Module:												
Base Vol:	730	67	26	107	0	108	129	1118	294	0	1752	87
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	730	67	26	107	0	108	129	1118	294	0	1752	87
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	730	67	26	107	0	108	129	1118	0	0	1752	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	730	67	26	107	0	108	129	1118	0	0	1752	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	730	67	26	107	0	108	129	1118	0	0	1752	87
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.96	0.96	0.85	0.95	1.00	0.85	0.95	0.91	1.00	1.00	0.90	0.90
Lanes:	1.83	0.17	1.00	1.00	0.00	1.00	1.00	3.00	1.00	0.00	2.86	0.14
Final Sat.:	3327	305	1615	1805	0	1615	1805	5187	1900	0	4907	244
Capacity Analysis Module:												
Vol/Sat:	0.22	0.22	0.02	0.06	0.00	0.07	0.07	0.22	0.00	0.00	0.36	0.36
Crit Moves:	****					****	****				****	
Green/Cycle:	0.26	0.26	0.26	0.08	0.00	0.08	0.08	0.50	0.00	0.00	0.42	0.42
Volume/Cap:	0.85	0.85	0.06	0.75	0.00	0.85	0.85	0.43	0.00	0.00	0.85	0.85
Delay/Veh:	42.8	42.8	28.1	65.4	0.0	84.5	79.4	15.8	0.0	0.0	29.6	29.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	42.8	42.8	28.1	65.4	0.0	84.5	79.4	15.8	0.0	0.0	29.6	29.6
LOS by Move:	D	D	C	E	A	F	E	B	A	A	C	C
HCM2kAvgQ:	14	14	1	5	0	6	6	8	0	0	21	21

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #48 I-5 NB Ramps (NS) / Grand Ave (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 1.119
Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh): 62.3
Optimal Cycle: 100 Level Of Service: E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	0	2	0 1	1	0	3	0 0	0	0	0	0 0	2	0	0	0 1
Volume Module:	PM Peak															
Base Vol:	0	1786	571		40	1051	0		0	0	0		514	0	755	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	1786	571		40	1051	0		0	0	0		514	0	755	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	1786	571		40	1051	0		0	0	0		514	0	755	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	1786	571		40	1051	0		0	0	0		514	0	755	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	0	1786	571		40	1051	0		0	0	0		514	0	755	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	0.95	0.85		0.95	0.91	1.00		1.00	1.00	1.00		0.92	1.00	0.85	
Lanes:	0.00	2.00	1.00		1.00	3.00	0.00		0.00	0.00	0.00		2.00	0.00	1.00	
Final Sat.:	0	3610	1615		1805	5187	0		0	0	0		3502	0	1615	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.49	0.35		0.02	0.20	0.00		0.00	0.00	0.00		0.15	0.00	0.47	
Crit Moves:		****			****										****	
Green/Cycle:	0.00	0.44	0.44		0.02	0.46	0.00		0.00	0.00	0.00		0.42	0.00	0.42	
Volume/Cap:	0.00	1.12	0.80		1.12	0.44	0.00		0.00	0.00	0.00		0.35	0.00	1.12	
Delay/Veh:	0.0	90.4	30.4		237.1	18.3	0.0		0.0	0.0	0.0		20.0	0.0	101.1	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	90.4	30.4		237.1	18.3	0.0		0.0	0.0	0.0		20.0	0.0	101.1	
LOS by Move:	A		F	C	F		B	A	A		A	C	A		F	
HCM2kAvgQ:	0		45	17	4		8	0	0		0	6	0		37	

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #49 Mortimer St. / Santa Ana Blvd

Average Delay (sec/veh): 7.6 Worst Case Level Of Service: B[15.0]

Street Name:	Mortimer St.								Santa Ana Blvd							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1!	0 0	0	0	1!	0 0	0	0	0	0 0	1	0	0	1 0
Volume Module:																
Base Vol:	1	0	507		1	0	2		0	0	0		41	435	6	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	1	0	507		1	0	2		0	0	0		41	435	6	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	1	0	507		1	0	2		0	0	0		41	435	6	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	1	0	507		1	0	2		0	0	0		41	435	6	
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2		xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	521	523	0		520	520	438		xxxx	xxxx	xxxxx		0	xxxx	xxxxx	
Potent Cap.:	469	462	900		470	463	623		xxxx	xxxx	xxxxx		900	xxxx	xxxxx	
Move Cap.:	451	441	900		198	442	623		xxxx	xxxx	xxxxx		900	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.56		0.01	0.00	0.00		xxxx	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.2	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		*	*	*		A	*	*	
Movement:	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	- RT
Shared Cap.:	xxxx		898	xxxxx	xxxx		363	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx		3.6	xxxxx	xxxxx		0.0	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx		14.1	xxxxx	xxxxx		15.0	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*		B	*	*		B	*	*	*	*		*	*	*	
ApproachDel:	14.1				15.0				xxxxxx				xxxxxx			
ApproachLOS:	B				B				*				*			

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
Existing PM Peak Hour Analysis

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #50 Mortimer St. / 5th St.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.715
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	15.5
Optimal Cycle:	0	Level Of Service:	C

Street Name:	Mortimer St.						5th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 1	0	0	1 0	0 0	1 0	0 1	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	170	5	5	27	0	454	81	48	10	0	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	170	5	5	27	0	454	81	48	10	0	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	170	5	5	27	0	454	81	48	10	0	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	170	5	5	27	0	454	81	48	10	0	43
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	170	5	5	27	0	454	81	48	10	0	43
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.97	0.03	0.16	0.84	0.00	1.00	0.63	0.37	0.19	0.00	0.81
Final Sat.:	0	608	18	91	489	0	635	461	273	134	0	577
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.28	0.28	0.06	0.06	xxxx	0.72	0.18	0.18	0.07	xxxx	0.07
Crit Moves:			****		****		****			****		
Delay/Veh:	0.0	10.4	10.4	9.0	9.0	0.0	20.8	8.6	8.6	8.2	0.0	8.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	10.4	10.4	9.0	9.0	0.0	20.8	8.6	8.6	8.2	0.0	8.2
LOS by Move:	*	B	B	A	A	*	C	A	A	A	*	A
ApproachDel:		10.4			9.0			18.1			8.2	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		10.4			9.0			18.1			8.2	
LOS by Appr:		B			A			C			A	
AllWayAvgQ:	0.3	0.3	0.3	0.0	0.0	0.0	2.2	0.2	0.2	0.1	0.1	0.1

Note: Queue reported is the number of cars per lane.

APPENDIX C
Signal Warrant Worksheets

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Peak Hour Delay Signal Warrant Report

****
Intersection #30 Lacy st (N/S) / Santa Ana Bl (E/W)
****
Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0 1! 0 0			0 0 1! 0 0			1 0 0 1 0			1 0 0 1 0		
Initial Vol:	20	49	25	39	62	17	3	890	9	79	847	14
ApproachDel:	xxxxxx			1548.1			xxxxxx			xxxxxx		

Approach[northbound] [lanes=1] [control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=OVERFLOW]
SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=94]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4] [total volume=2054]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[southbound] [lanes=1] [control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=50.7]
SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=118]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4] [total volume=2054]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Peak Hour Volume Signal Warrant Report [Urban]

****
Intersection #30 Lacy st (N/S) / Santa Ana Bl (E/W)
****
Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0 1! 0 0			0 0 1! 0 0			1 0 0 1 0			1 0 0 1 0		
Initial Vol:	20	49	25	39	62	17	3	890	9	79	847	14

Major Street Volume: 1842
Minor Approach Volume: 118
Minor Approach Volume Threshold: 74 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Peak Hour Delay Signal Warrant Report

****

Intersection #33 Lacy St (N/S) / 1st St (E/W)

****

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	0 1	0	0	0 1!	0	1	0 3	0	0	0 2	1 0
Initial Vol:	0	2	0	11	1	151	216	1757	0	0	1817	47
ApproachDel:	6092.4			xxxxxx			xxxxxx			xxxxxx		

Approach[northbound] [lanes=1] [control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=3.4]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=2]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4] [total volume=4002]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[southbound] [lanes=1] [control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=OVERFLOW]
SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=163]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4] [total volume=4002]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #33 Lacy St (N/S) / 1st St (E/W)

****

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	0 1	0	0	0 1!	0	1	0 3	0	0	0 2	1 0
Initial Vol:	0	2	0	11	1	151	216	1757	0	0	1817	47

Major Street Volume: 3837
Minor Approach Volume: 163
Minor Approach Volume Threshold: -178 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #34 Santiago St (N/S) / Washington Av (E/W)

****

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Lanes:	1 0	1 0	1	1 0	1 0	1	0 0	1! 0	0	0 0	1! 0	0
Initial Vol:	96	591	248	30	539	155	333	222	49	103	171	46

Major Street Volume: 1659
Minor Approach Volume: 604
Minor Approach Volume Threshold: 110

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #35 Santiago St (N/S) / Civic Center Dr (E/W)

****

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Lanes:	1 0	0 1	0	1 0	0 1	0	0 1	0 0	1	0 0	1! 0	0
Initial Vol:	265	719	61	26	666	179	375	68	500	58	42	21

Major Street Volume: 1916
Minor Approach Volume: 943
Minor Approach Volume Threshold: 94 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

APPENDIX D
Cumulative Projects Related Information

TABLE I

Trip Generation Rate for Cumulative Projects

Proj. Id	Project Name	Land Use Description	ITE Code	Quantity	Unit	Daily	AM Total	AM In	AM Out	PM Total	PM In	PM Out
		Office	710	508.2	TSF	By Formula (1)						
		Office (Rehab Structures)	710	9.803	TSF	11.01	1.00	0.88	0.12	1.00	0.17	0.83
1	**One Broadway Plaza**	Retail	814	8.525	TSF	44.32	6.84	3.28	3.56	5.02	2.81	2.21
		Casual Dining	932	2.681	TSF	127.15	11.52	5.99	5.53	10.92	6.66	4.26
		Formal Dining	931	15.915	TSF	89.95	0.81	0.54	0.27	7.49	5.02	2.47
		Proposed Live-work Loft (Apartment)	220	108	DU	6.72	0.51	0.1	0.41	0.62	0.4	0.22
3	**Santiago Street Lofts**	Existing Manufacture [5]	140	-2.1	TSF	3.82	0.73	0.56	0.17	0.74	0.27	0.47
		Existing out-reach Educational (R&D) [5]	760	-19	TSF	8.11	1.24	1.03	0.21	1.08	0.16	0.92
10	**Bower's Museum**	Museum Expansion		33.1	TSF	Data used is from the traffic impact study, which didn't specify the ITE Code)						
15	**Walgreen's**	Proposed Shopping Center	820	12.4	TSF	42.94	1.03	0.63	0.4	3.75	1.8	1.95
19	**Cobblesstone**	Shopping Center	820	11	TSF	42.94	1.03	0.63	0.4	3.75	1.8	1.95
23	**Xerox Tower II**	General Office Building	710	210	TSF	11.01	1.00	0.88	0.12	1.00	0.17	0.83
27	**1st & Cabrillo Towers**	High Rise Resid. Condo./Townhouse	232	374	DU	4.18	0.34	0.065	0.275	0.38	0.236	0.144
		Health / Fitness Club [5]	492	-5.5	TSF	32.93	1.21	0.51	0.7	4.05	2.07	1.98
		High Rise Resid. Condo./Townhouse	232	5.551	DU	4.18	0.34	0.06	0.28	0.38	0.24	0.14
		Specialty Retail Center (AM [6])	814	1275.44	TSF	44.32	1.76	0.99	0.77	2.71	1.19	1.52
		General Office Building	710	3410.51	TSF	11.01	1.00	0.88	0.12	1.00	0.17	0.83
		Shopping Center [5]	820	-65.96	TSF	42.94	1.03	0.63	0.4	3.75	1.8	1.95
26	**Metro East Overlay Zone**	General Office Building [5]	710	-2720.17	TSF	11.01	1	0.88	0.12	1	0.17	0.83
		Motel [5]	320	-180	ROOMS	5.63	0.45	0.17	0.28	0.47	0.25	0.22
		Automobile Part-Sales [5]	843	-49.96	TSF	61.91	2.21	1.13	1.08	5.98	2.93	3.05
		Medical-Dental Office [5]	720	-40.85	TSF	36.13	2.48	1.96	0.52	3.72	1	2.72
		Nursing Home [5]	620	-99	BEDS	2.37	0.17	0.09	0.08	0.22	0.07	0.15
33	**Olen Properties**	General Office Building	710	2.5	TSF	11.01	1.00	0.88	0.12	1.00	0.17	0.83
13	**Santa Ana Industrial**	General Light Industrial	110	31	TSF	6.97	0.92	0.81	0.11	0.98	0.12	0.86
29	**Town & Country Manor**	Residential Condo/Townhouse	230	174	DU	5.86	0.44	0.07	0.37	0.52	0.35	0.17
5	**City Place**	Residential Condo/Townhouse	230	185	DU	5.86	0.44	0.07	0.37	0.52	0.35	0.17
		Shopping Center	820	60	TSF	42.94	1.03	0.63	0.4	3.75	1.8	1.95
34	**River View Villas**	Residential Condo/Townhouse	230	41	DU	5.86	0.44	0.07	0.37	0.52	0.35	0.17
37	**City Place Sky Lofts**	Apartment	220	355	DU	9.57	0.51	0.1	0.41	0.62	0.4	0.22
25	**Shea Homes**	Single Family Detached	210	36	DU	9.57	0.75	0.19	0.56	1.01	0.64	0.37
39	**Retail (Tustin)**	Replacement of Commercial buiding	820	15	TSF	42.94	1.03	0.63	0.4	3.75	1.8	1.95

J:\2009\JA93181_SA Renaissance TIS Revision\Analysis\Trip Generation\[TripGenCumulative.xls]REV TripGen

TABLE 2

Total Trip Generation for Cumulative Projects

Proj. Id	Project Name	Land Use Description	ITE Code	Quantity	Unit	Daily	AM Total	AM In	Out	PM Total	PM In	PM Out
1	**One Broadway Plaza**	Office	710	508.2	TSF	4,625	681	600	82	649	110	539
		Office (Rehab Structures)	710	9.803	TSF	108	10	9	1	10	2	8
		Retail [2]	814	8.525	TSF	378	58	28	30	43	24	19
		Casual Dining [3]	932	2.681	TSF	341	31	16	15	29	18	11
		Formal Dining [4]	931	15.915	TSF	1,432	13	9	4	119	80	39
		Subtotal				***6,884***	***793***	***661***	***132***	***850***	***234***	***616***
3	**Santiago Street Lofts**	Proposed Live-work Loft (Apartment)	220	108	DU	726	55	11	44	67	43	24
		Existing Manufacture [5]	140	2.1	TSF	-8	-2	-1	0	-2	-1	-1
		Existing out-reach Educational (R&D) [5]	760	19	TSF	-154	-24	-20	-4	-21	-3	-17
		Subtotal				**564**	**30**	**-10**	**41**	**45**	**40**	**5**
10	**Bower's Museum**	Museum Expansion	443	33.1	TSF	560	0	0	0	143	13	130
15	**Walgreen's**	Proposed Shopping Center	820	12.4	TSF	532	13	8	5	47	22	24
19	**Cobblesstone**	Shopping Center	820	11	TSF	472	11	7	4	41	20	21
23	**Xerox Tower II**	General Office Building	710	210	TSF	2,312	210	185	25	210	36	174
27	**1st & Cabrillo Towers**	High Rise Resid. Condo./Townhouse	232	374	DU	1,563	127	24	103	142	88	54
		Specialty Retail Center	814	8.97	TSF	398	16	9	7	24	11	14
		Health / Fitness Club [5]	492	-5.5	TSF	-181	-7	-3	-4	-22	-11	-11
		Subtotal				**1,780**	**136**	**30**	**106**	**144**	**88**	**57**
		Internal Trip Capture (5%)				**-89**	**-7**	**-2**	**-5**	**-7**	**-4**	**-3**
		Net Project Vehicle Trip				**1,691**	**129**	**29**	**101**	**137**	**83**	**54**
26	**Metro East Overlay Zone**	High Rise Resid. Condo./Townhouse	232	5,551	DU	23,203	1,887	333	1,554	2,109	1,332	777
		Specialty Retail Center	814	1,275.44	TSF	54,767	1,314	802	512	4,783	2,296	2,487
		General Office Building	710	3,410.51	TSF	37,550	3,411	3,001	409	3,411	580	2,831
		Shopping Center [5]	820	-65.96	TSF	-2,832	-68	-42	-26	-247	-119	-129
		General Office Building [5]	710	-2,720.17	TSF	-29,949	-2,720	-2,394	-326	-2,720	-462	-2,258
		Motel [5]	320	-180	ROOMS	-1,013	-81	-31	-50	-85	-45	-40
		Automobile Part-Sales [5]	843	-49.96	TSF	-3,093	-110	-56	-54	-299	-146	-152
		Medical-Dental Office [5]	720	-40.85	TSF	-1,476	-101	-80	-21	-152	-41	-111
		Nursing Home [5]	620	-99	BEDS	-235	-17	-9	-8	-22	-7	-15
		Subtotal				**76,922**	**3,514**	**1,525**	**1,989**	**6,778**	**3,388**	**3,391**
		Internal Trip Capture (5%)				**-9,232**	**-661**	**-545**	**-116**	**-988**	**-316**	**-672**
		Net Project Vehicle Trip				**67,690**	**2,853**	**980**	**1,873**	**5,790**	**3,072**	**2,719**
33	**Olen Properties**	General Office Building	710	2.5	TSF	28	3	2	0	3	0	2
		Subtotal				**28**	**3**	**2**	**0**	**3**	**0**	**2**
13	**Santa Ana Industrial**	General Light Industrial	110	31	TSF	216	29	25	3	30	4	27
29	**Town & Country Manor**	Residential Condo/Townhouse	230	174	DU	1,020	77	12	64	90	61	30
5	**City Place**	Residential Condo/Townhouse	230	185	DU	1,084	81	13	68	96	65	31
		Shopping Center	820	60	TSF	2,576	62	38	24	225	108	117
		Subtotal				**3,661**	**143**	**51**	**92**	**321**	**173**	**148**
34	**River View Villas**	Residential Condo/Townhouse	230	41	DU	240	18	3	15	21	14	7
37	**City Place Sky Lofts**	Apartment	220	355	DU	3,397	181	36	146	220	142	78
25	**Shea Homes**	Single Family Detached	210	36	DU	345	27	7	20	36	23	13
39	**Retail (Tustin)**	Replacement of Commercial buiding	820	15	TSF	644	15	9	6	56	27	29
Project Trips (Proposed - Existing)						**90,261**	**4,533**	**2,004**	**2,529**	**8,042**	**3,964**	**4,079**

Note:

[2] ITE Trip Generation does not have AM rate for peak hour of adjacent traffic for speciality retail. Instead, PM rates with 50/50 directional split were used.

[3] Trip Generation rates for high-turnover restaurant assume 50 percent internal capture rate

[4] ITE Trip Generation does not have AM rate for peak hour of adjacent traffic for quality restaurant. Instead, PM rates with 50/50 directional split were used.

[5] Existing uses to be removed

[6] ITE Code 814 rate not available. Average rate for similar uses used

Note: Totals may not add up 100% due to rounding in calculations.

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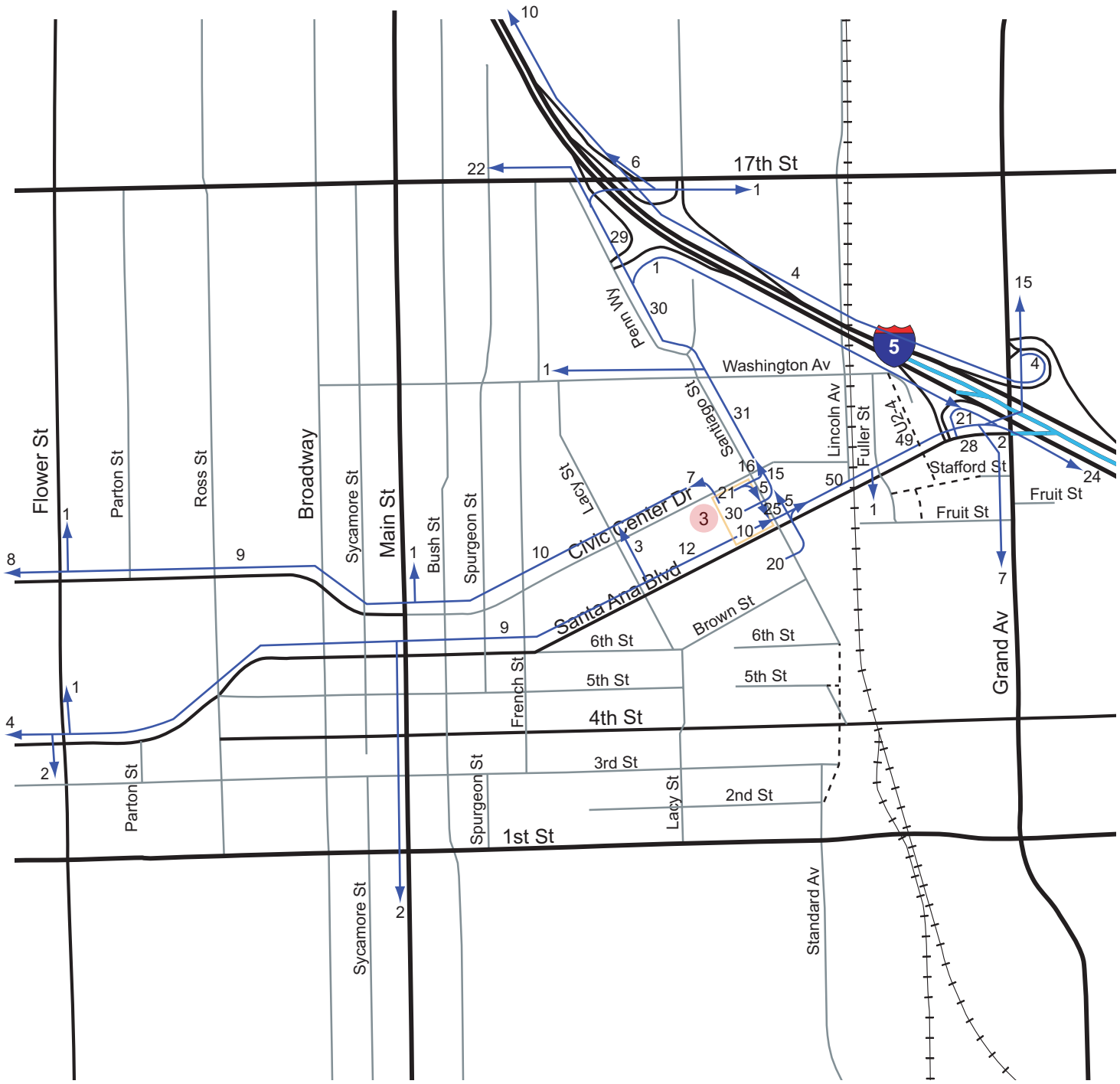

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City of Santa Ana

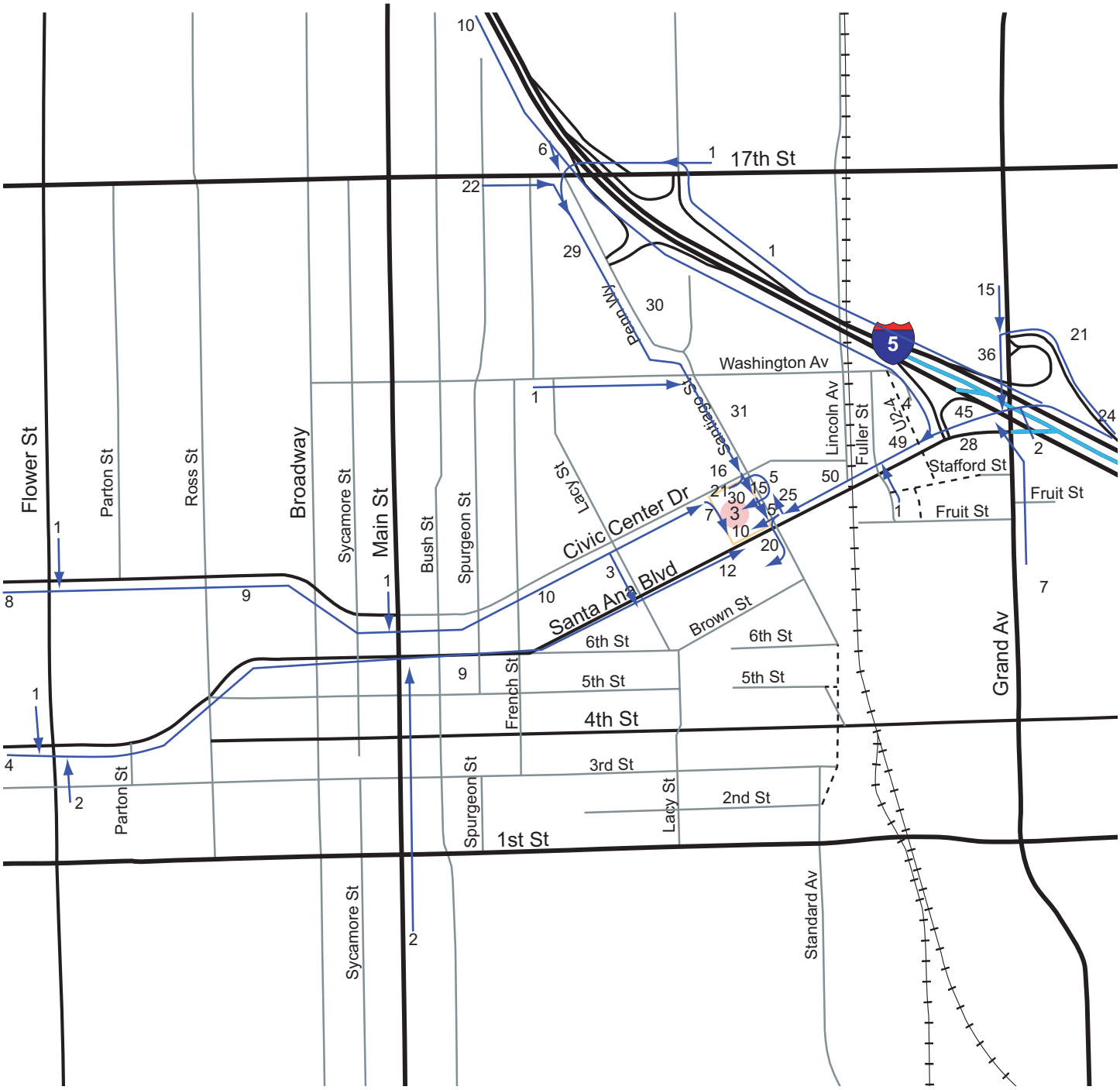
Figure D-1

Santa Ana Renaissance Specific Plan Traffic Study

Cumulative Proj. Trip Distribution
For Santiago Lofts Outbound

PROJECT

3 Santiago St. Lofts



LEGEND

Project area

Inbound

N

Not to Scale

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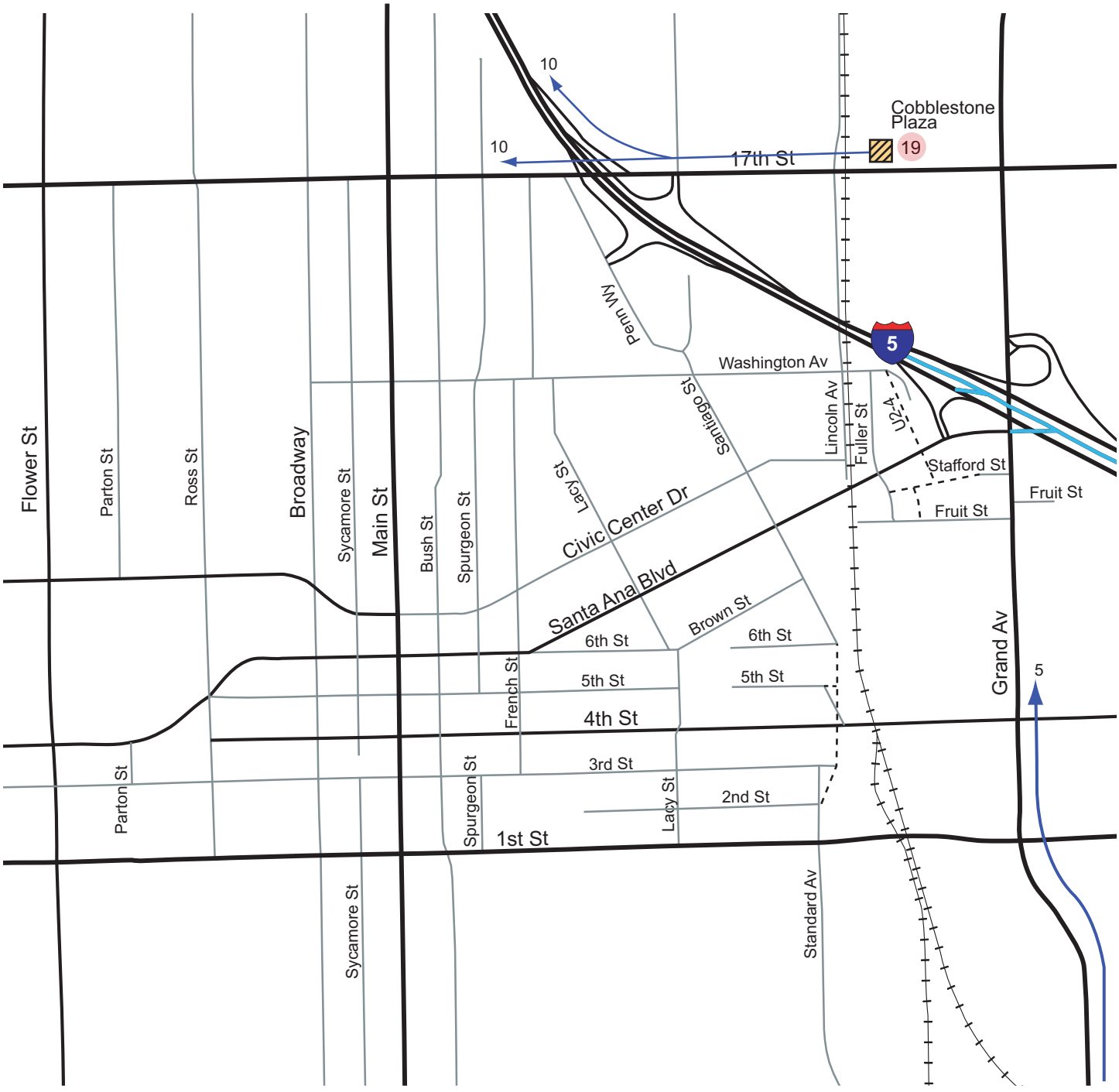
City of Santa Ana

Figure D-2

Santa Ana Renaissance Specific Plan Traffic Study

Cumulative Proj. Trip Distribution
For Santiago Lofts Inbound



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City of Santa Ana

Figure D-3

Santa Ana Renaissance Specific Plan Traffic Study

Cumulative Proj. Trip Distribution for Cobblestone Plaza and Santa Ana Industrial

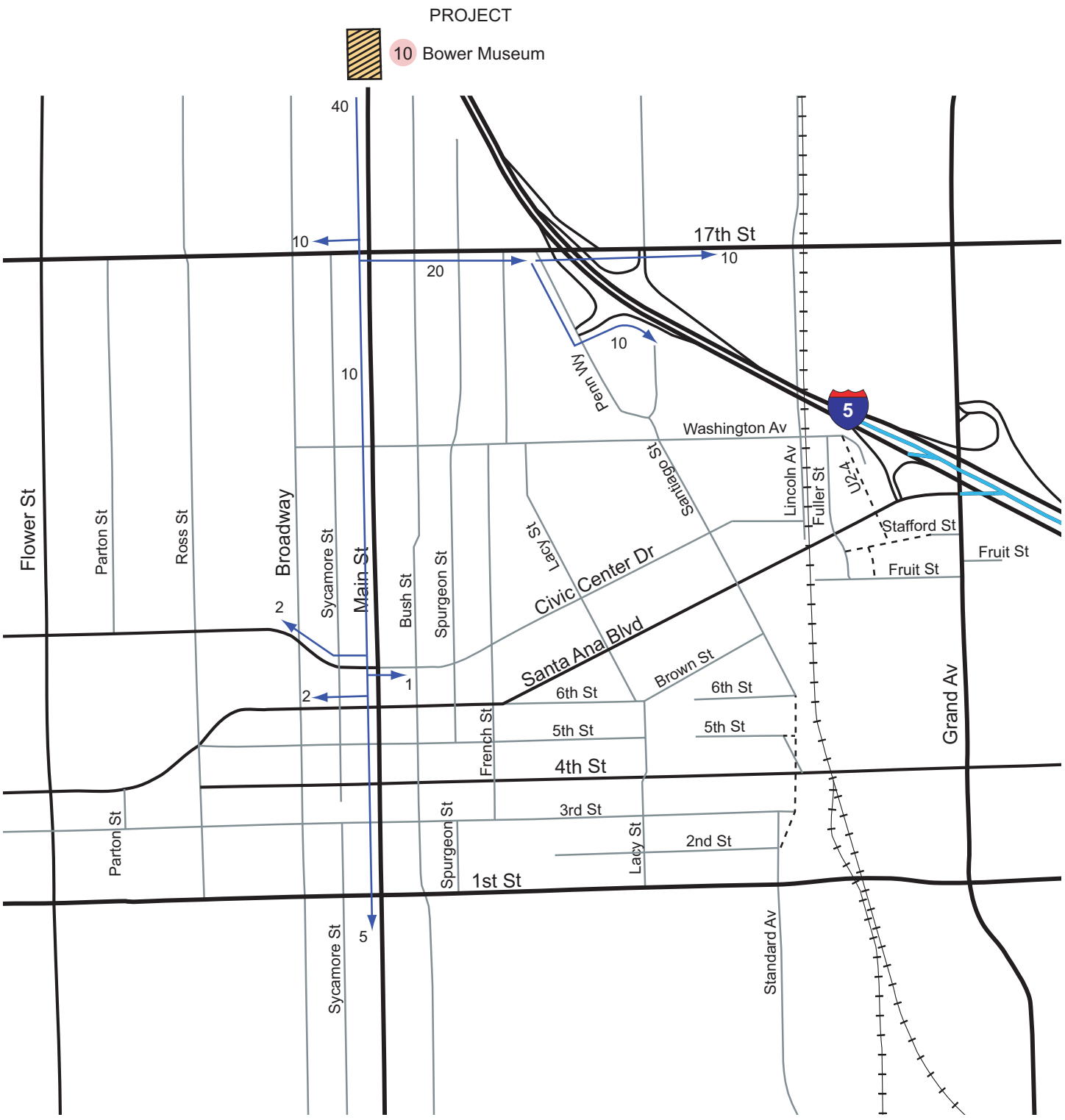

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Figure D-4

Santa Ana Renaissance Specific Plan Traffic Study

Cumulative Proj. Trip Distribution
For Bower Museum

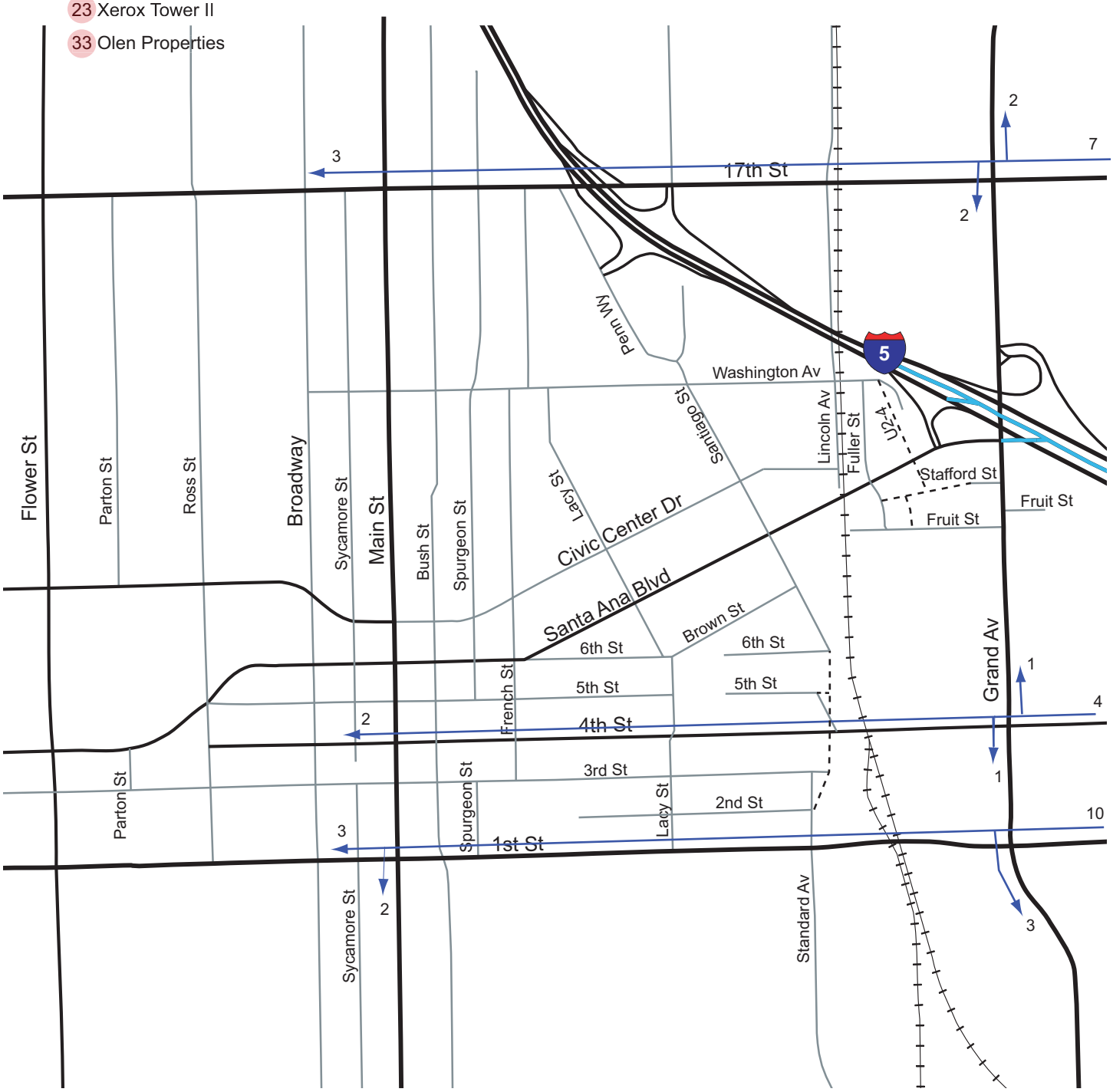
PROJECT

27 1st & Cabrillo Towers

26 Metro East Overlay Zone

23 Xerox Tower II

33 Olen Properties



LEGEND

Project area

Outbound / Inbound

N

Not to Scale

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Figure D-5

Santa Ana Renaissance Specific Plan Traffic Study

Cumulative Proj. Trip Distribution For
1st & Cabrillo Towers, Metro East Overlay Zone

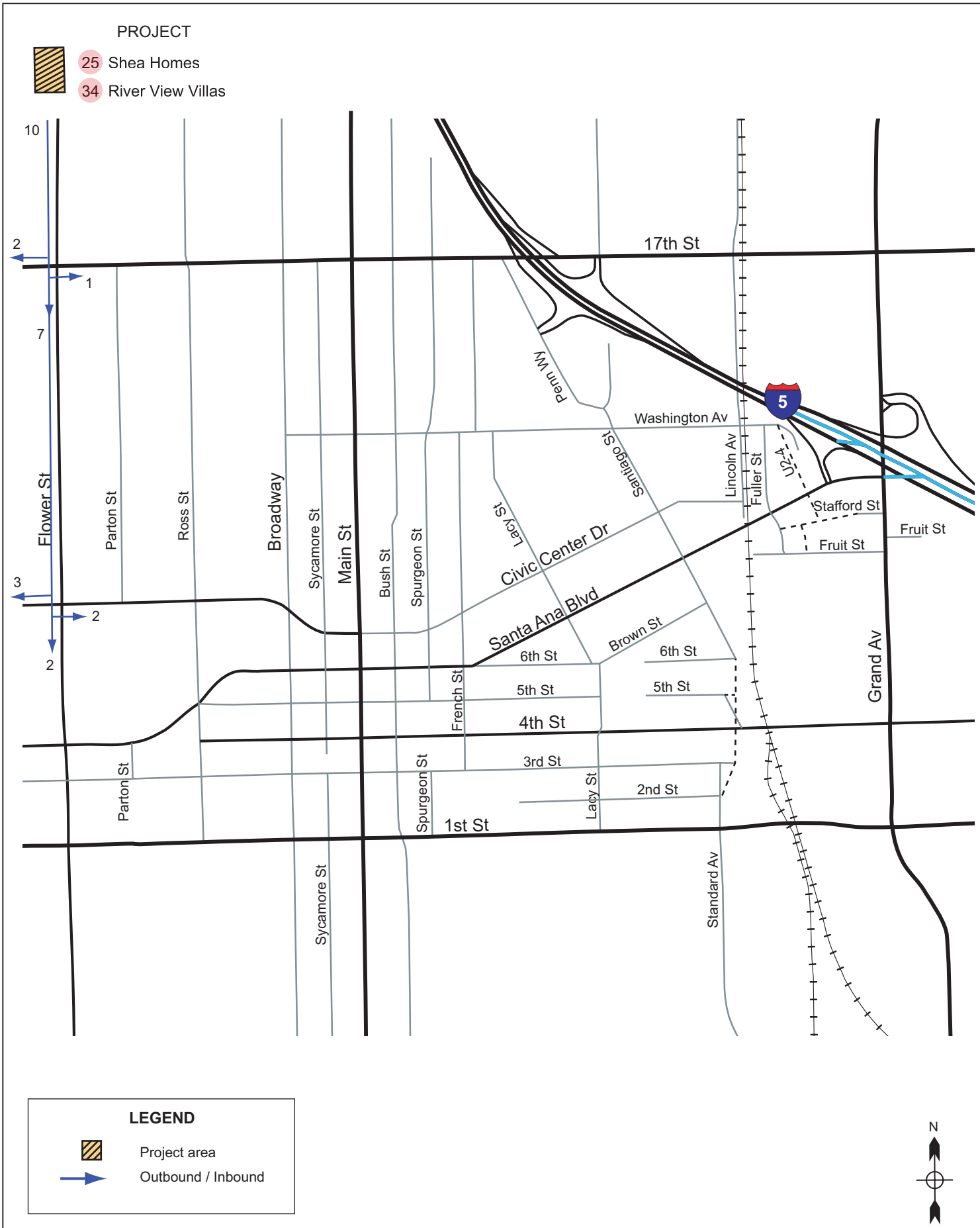

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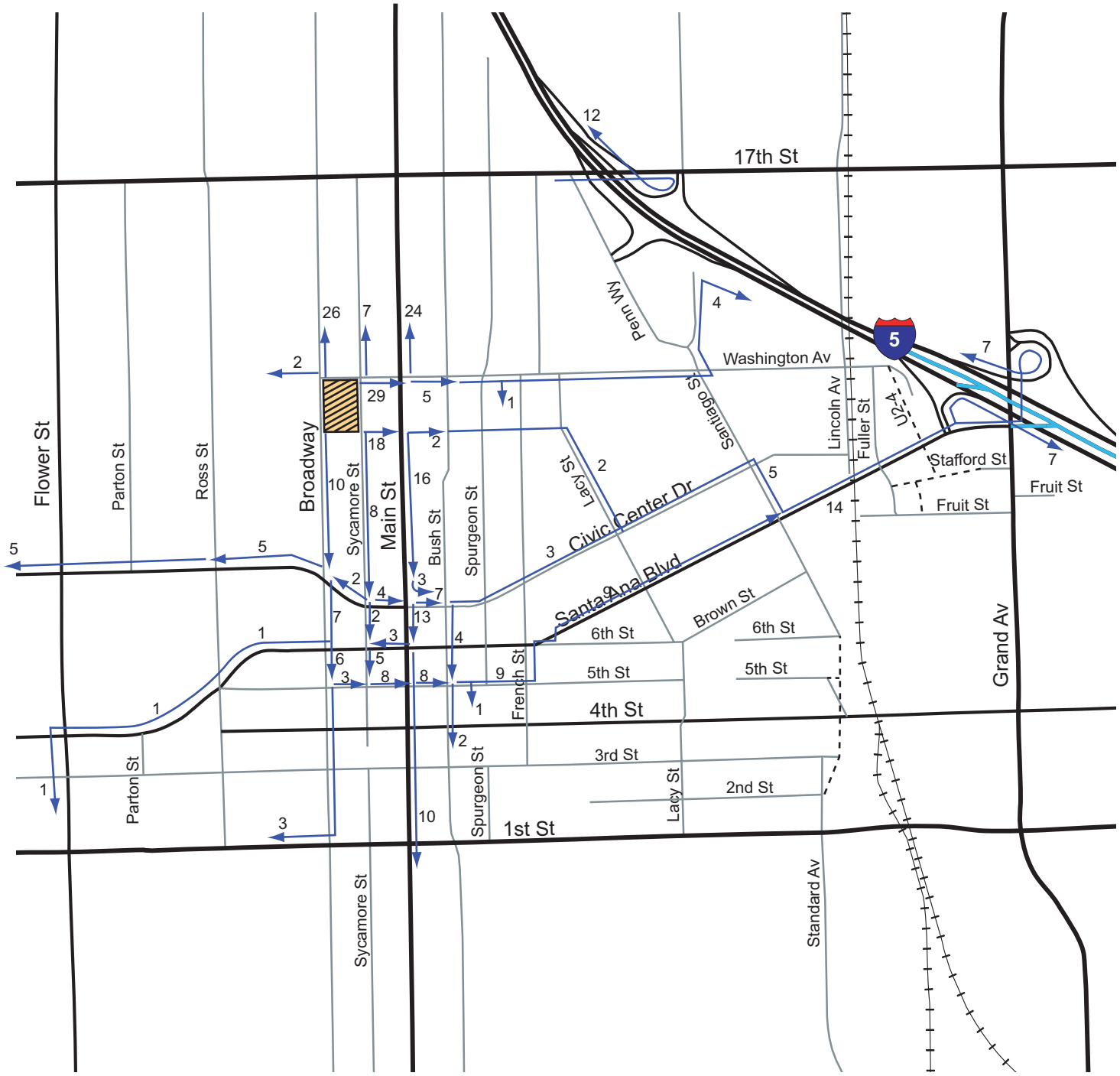
Figure D-6

Santa Ana Renaissance Specific Plan Traffic Study

Cumulative Proj. Trip Distribution
For Shea Homes, River View Villas

PROJECT

1 One Broadway Plaza



LEGEND

Project area

Outbound / Inbound

N

Not to Scale

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Santa Ana Renaissance Specific Plan Traffic Study

Figure D-7

Cumulative Proj. Trip Distribution
For One Broadway Plaza

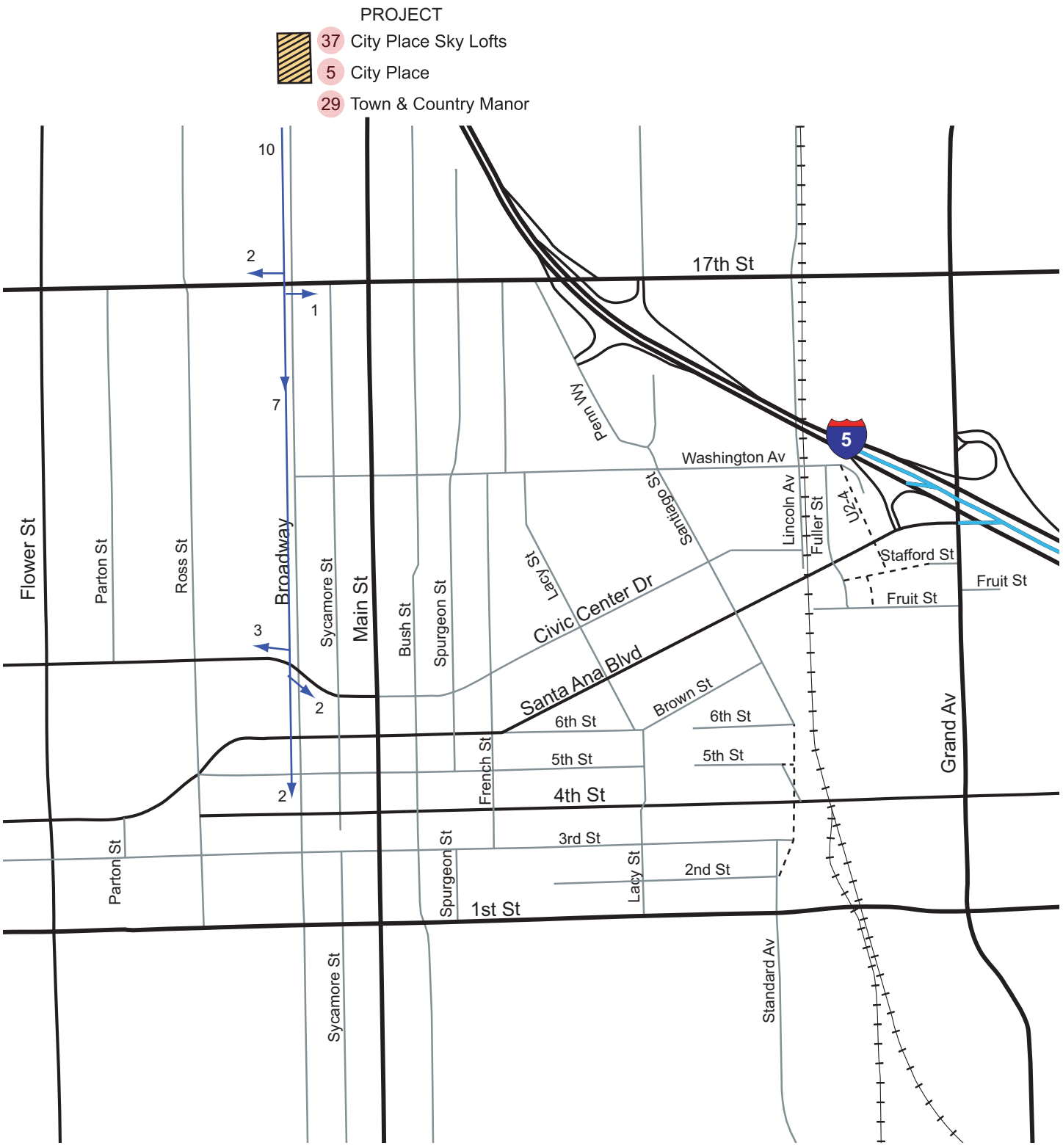

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Figure D-8

Santa Ana Renaissance Specific Plan Traffic Study

Cumulative Proj. Trip Distribution For City Place, City Place Sky Lofts, Town & Country Manor

Intersection Cumulative Only Project AM Volumes

Int ID	Intersection Name	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
1	Flower Street at Civic Center Drive	0	0	0	1	1	1	0	33	0	0	7	0
2	Flower Street at Santa Ana Blvd.	0	0	7	0	0	0	0	0	0	1	0	0
3	Parton Street at Santa Ana Blvd.	0	0	0	0	0	0	0	7	0	0	1	0
4	Ross Street at Civic Center Drive	0	0	0	0	0	0	0	33	0	0	7	0
5	Ross Street at Santa Ana Blvd.	0	0	0	0	0	0	0	7	0	0	1	0
6	Ross Street at 4th Street	0	0	0	0	0	0	0	0	0	0	0	0
7	Broadway at Civic Center Drive	0	81	0	6	13	16	36	0	0	0	0	15
8	Broadway at Santa Ana Blvd.	0	28	0	0	11	1	0	0	0	0	0	53
9	Broadway at 5th Street	0	22	0	1	10	0	7	0	0	0	0	0
10	Broadway at 4th Street	0	20	0	0	4	0	0	0	0	0	0	0
11	Broadway at 3rd Street	0	20	0	0	4	0	0	0	0	0	0	0
12	Broadway at 1st Street	0	0	24	0	0	4	20	36	0	40	60	0
13	Sycamore Street at Civic Center Drive	0	0	24	0	0	4	20	36	0	40	60	0
14	Sycamore Street at Santa Ana Blvd.	0	0	0	0	8	0	0	0	0	0	53	0
15	Sycamore Street at 5th Street	0	0	0	8	0	0	0	1	0	0	0	0
16	Sycamore Street at 4th Street	0	0	24	0	0	0	0	0	0	40	0	0
17	Main Street at Civic Center Drive	0	66	0	2	14	0	0	0	0	0	13	0
18	Main Street at Santa Ana Blvd.	0	66	0	0	14	0	0	0	0	0	53	0
19	Main Street at 5th Street	0	66	0	1	13	0	0	9	0	0	0	0
20	Main Street at 4th Street	0	66	0	0	13	0	0	24	0	0	40	0
21	Main Street at 3rd Street	0	66	0	0	13	0	0	0	0	0	0	0
22	Main Street at 1st Street	0	66	0	0	13	0	0	60	0	0	100	0
23	Bush Street at Santa Ana Blvd.	0	13	0	0	0	0	0	0	0	0	53	0
24	Bush Street at 5th Street	0	13	0	0	0	0	0	7	0	0	0	0
25	Bush Street at 4th Street	0	0	0	0	0	0	0	24	0	0	40	0
26	Spurgeon Street at 1st Street	0	0	0	0	0	0	0	60	0	0	100	0
27	French Street at Santa Ana Blvd.	7	0	0	0	0	0	0	0	0	0	46	0
28	French Street at 4th Street	0	0	0	0	0	0	0	24	0	0	40	0
29	Lacy Street at Civic Center Drive	0	0	0	16	0	0	0	2	0	0	0	152
30	Lacy Street at Santa Ana Blvd.	0	0	0	0	0	0	0	6	0	0	46	0
31	Lacy Street at 6th Street	0	0	0	0	0	0	0	0	0	0	0	0
32	Lacy Street at 4th Street	0	0	0	0	0	0	0	24	0	0	40	0
33	Lacy Street at 1st Street	0	0	0	0	0	0	0	60	0	0	100	0
34	Santiago Ave. at Washington Ave.	0	5	0	0	106	0	0	0	0	0	0	0
35	Santiago Ave. at Civic Center Drive	46	0	0	0	0	106	5	0	12	0	0	0
36	Santiago Ave. at Santa Ana Blvd.	0	0	0	12	0	0	0	6	0	0	46	46
37	Santiago Ave. at Brown Street	0	0	0	0	0	0	0	0	0	0	0	0
38	Santiago Ave. at 6th Street	0	0	0	0	0	0	0	0	0	0	0	0
39	Santiago Ave. at 4th Street	0	0	0	0	0	0	0	24	0	0	40	0
40	Standard Street at 1st Street	0	0	0	0	0	0	0	60	0	0	100	0
41	U2-4 at Santa Ana Blvd.	0	0	0	0	0	0	0	18	0	0	93	0
42	Grand Avenue at Santa Ana Blvd.	0	0	0	0	0	46	9	0	0	0	0	0
43	Grand Avenue at 4th Street	0	0	12	12	2	0	0	24	0	20	40	20
44	Grand Avenue at 1st Street	0	0	36	0	2	0	0	60	0	60	100	0
45	Penn Way at I-5 SB Ramp	0	0	5	1	0	0	0	0	0	106	0	0
46	I-5 SB Ramp/Santa Ana Blvd	0	0	0	0	0	46	9	9	0	0	46	0
47	I-5 NB Ramp/17th St.	0	0	1	0	0	0	0	37	16	0	60	0
48	I-5 NB Ramp/Grand Ave.	0	0	9	0	0	0	0	0	0	46	0	0
49	Mortimer St./Santa Ana Blvd	0	0	6	0	0	0	0	0	0	0	46	0
50	Mortimer St./5th St.	0	0	0	0	0	0	6	0	0	0	0	0

Intersection Cumulative Only Project PM Volumes

Int ID	Intersection Name	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
1	Flower Street at Civic Center Drive	0	1	0	0	0	1	1	12	0	0	31	1
2	Flower Street at Santa Ana Blvd.	0	0	2	0	0	0	0	0	0	6	0	0
3	Parton Street at Santa Ana Blvd.	0	0	0	0	0	0	0	2	0	0	6	0
4	Ross Street at Civic Center Drive	0	0	0	0	0	0	0	12	0	0	31	0
5	Ross Street at Santa Ana Blvd.	0	0	0	0	0	0	0	2	0	0	6	0
6	Ross Street at 4th Street	0	0	0	0	0	0	0	0	0	0	0	0
7	Broadway at Civic Center Drive	0	36	0	5	36	38	23	0	0	0	3	12
8	Broadway at Santa Ana Blvd.	0	17	0	0	30	6	0	0	0	0	0	19
9	Broadway at 5th Street	0	15	0	6	24	0	2	0	0	0	0	0
10	Broadway at 4th Street	0	7	0	0	18	0	0	0	0	0	0	0
11	Broadway at 3rd Street	0	7	0	0	18	0	0	0	0	0	0	0
12	Broadway at 1st Street	0	0	64	0	0	18	7	96	0	59	88	0
13	Sycamore Street at Civic Center Drive	0	0	0	0	37	0	0	0	0	0	7	0
14	Sycamore Street at Santa Ana Blvd.	0	0	0	0	37	0	0	0	0	0	21	0
15	Sycamore Street at 5th Street	0	0	0	37	0	0	0	6	0	0	0	0
16	Sycamore Street at 4th Street	0	0	64	0	0	0	0	0	0	59	0	0
17	Main Street at Civic Center Drive	0	24	0	10	74	3	0	0	0	0	5	0
18	Main Street at Santa Ana Blvd.	0	24	0	0	72	3	0	0	0	0	19	0
19	Main Street at 5th Street	0	24	0	3	68	0	0	43	0	0	0	0
20	Main Street at 4th Street	0	24	0	0	68	0	0	64	0	0	59	0
21	Main Street at 3rd Street	0	24	0	0	68	0	0	0	0	0	0	0
22	Main Street at 1st Street	0	24	0	0	68	0	0	160	0	0	147	0
23	Bush Street at Santa Ana Blvd.	0	5	0	0	0	0	0	0	0	0	19	0
24	Bush Street at 5th Street	0	5	0	0	0	0	0	34	12	0	0	0
25	Bush Street at 4th Street	0	0	0	0	0	0	0	64	0	0	59	0
26	Spurgeon Street at 1st Street	0	0	0	0	0	0	0	160	0	0	147	0
27	French Street at Santa Ana Blvd.	2	0	0	0	0	0	0	0	0	0	16	0
28	French Street at 4th Street	0	0	0	0	0	0	0	64	0	0	59	0
29	Lacy Street at Civic Center Drive	0	0	0	74	0	0	0	9	0	0	0	54
30	Lacy Street at Santa Ana Blvd.	0	0	0	0	0	0	0	28	0	0	16	0
31	Lacy Street at 6th Street	0	0	0	0	0	0	0	0	0	0	0	0
32	Lacy Street at 4th Street	0	0	0	0	0	0	0	64	0	0	59	0
33	Lacy Street at 1st Street	0	0	0	0	0	0	0	160	0	0	147	0
34	Santiago Ave. at Washington Ave.	0	25	0	0	37	0	0	0	0	0	0	0
35	Santiago Ave. at Civic Center Drive	16	0	0	0	0	37	25	0	58	0	0	0
36	Santiago Ave. at Santa Ana Blvd.	0	0	0	58	0	0	0	28	0	0	16	16
37	Santiago Ave. at Brown Street	0	0	0	0	0	0	0	0	0	0	0	0
38	Santiago Ave. at 6th Street	0	0	0	0	0	0	0	0	0	0	0	0
39	Santiago Ave. at 4th Street	0	0	0	0	0	0	0	64	0	0	59	0
40	Standard Street at 1st Street	0	0	0	0	0	0	0	160	0	0	147	0
41	U2-4 at Santa Ana Blvd.	0	0	0	0	0	0	0	86	0	0	33	0
42	Grand Avenue at Santa Ana Blvd.	0	0	0	0	0	16	43	0	0	0	0	0
43	Grand Avenue at 4th Street	0	3	32	32	2	0	0	64	0	29	59	29
44	Grand Avenue at 1st Street	0	3	96	0	2	0	0	160	0	88	147	0
45	Penn Way at I-5 SB Ramp	0	0	25	15	0	0	0	0	0	37	0	0
46	I-5 SB Ramp/Santa Ana Blvd	0	0	0	0	0	16	43	43	0	0	16	0
47	I-5 NB Ramp/17th St.	3	0	2	0	0	0	0	111	74	0	92	0
48	I-5 NB Ramp/Grand Ave.	0	0	43	0	0	0	0	0	0	16	0	0
49	Mortimer St./Santa Ana Blvd	0	0	28	0	0	0	0	0	0	0	16	0
50	Mortimer St./5th St.	0	0	0	0	0	0	28	0	0	0	0	0

APPENDIX E
2030 Without Project Analysis Worksheets

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Scenario Report

Scenario:	2030NPAM
Command:	2030NP AM
Volume:	2030NPAM
Geometry:	Future
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Flower St (NS)/ Civic Center D	B	xxxxx	0.683	B	xxxxx	0.683	+ 0.000 V/C
# 2 Flower St (N/S) / Santa Ana Bl	A	xxxxx	0.572	A	xxxxx	0.572	+ 0.000 V/C
# 3 Parton St (E/W) / Santa Ana Bl	A	xxxxx	0.278	A	xxxxx	0.278	+ 0.000 V/C
# 4 Ross St (N/S) / Civic Center D	A	xxxxx	0.517	A	xxxxx	0.517	+ 0.000 V/C
# 5 Ross St (N/S) / Santa Ana Bl (	A	xxxxx	0.475	A	xxxxx	0.475	+ 0.000 V/C
# 6 Ross St (N/S) / 4th St (E/W)	B	10.8	0.000	B	10.8	0.000	+ 0.000 D/V
# 7 Broadway (N/S) / Civic Center	B	xxxxx	0.614	B	xxxxx	0.614	+ 0.000 V/C
# 8 Broadway (N/S) / Santa Ana Bl	A	xxxxx	0.468	A	xxxxx	0.468	+ 0.000 V/C
# 9 Broadway (N/S) / 5th St (E/W)	A	xxxxx	0.349	A	xxxxx	0.349	+ 0.000 V/C
# 10 Broadway (N/S) / 4th St (E/W)	A	xxxxx	0.298	A	xxxxx	0.298	+ 0.000 V/C
# 11 Broadway (N/S)/ 3rd st (E/W)	A	xxxxx	0.336	A	xxxxx	0.336	+ 0.000 V/C
# 12 Broadway (N/S) / 1st St (E/W)	B	xxxxx	0.651	B	xxxxx	0.651	+ 0.000 V/C
# 13 Sycamore St (N/S) / Civic Cent	A	xxxxx	0.420	A	xxxxx	0.420	+ 0.000 V/C
# 14 Sycamore St (N/S) / Santa Ana	C	21.8	0.000	C	21.8	0.000	+ 0.000 D/V
# 15 Sycamore St (N/S) / 5th St (E/	C	15.7	0.000	C	15.7	0.000	+ 0.000 D/V
# 16 Sycamore St (N/S) / 4th St (E/	A	7.9	0.211	A	7.9	0.211	+ 0.000 V/C
# 17 Main St (N/S) / Civic Center D	C	xxxxx	0.751	C	xxxxx	0.751	+ 0.000 V/C
# 18 Main St (N/S) / Santa Ana Dr (	B	xxxxx	0.654	B	xxxxx	0.654	+ 0.000 V/C
# 19 Main St (N/S) / 5th St (E/W)	A	xxxxx	0.499	A	xxxxx	0.499	+ 0.000 V/C
# 20 Main St (N/S) / 4th St (E/W)	A	xxxxx	0.508	A	xxxxx	0.508	+ 0.000 V/C
# 21 Main St (N/S) / 3rd St (E/W)	A	xxxxx	0.464	A	xxxxx	0.464	+ 0.000 V/C
# 22 Main St (N/S) / 1st St (E/W)	C	xxxxx	0.773	C	xxxxx	0.773	+ 0.000 V/C
# 23 Bush St (N/S) / Santa Ana Bl (	A	xxxxx	0.295	A	xxxxx	0.295	+ 0.000 V/C
# 24 Bush St (N/S) / 5th St (E/W)	A	xxxxx	0.242	A	xxxxx	0.242	+ 0.000 V/C

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 25 Bush St (N/S) / 4th St (E/W)	A	xxxxx	0.270	A	xxxxx	0.270	+ 0.000 V/C
# 26 Spurgeon St (N/S) / 1st St (E/	B	10.5	0.000	B	10.5	0.000	+ 0.000 D/V
# 27 French St (N/S) / Santa Ana Bl	C	19.7	0.000	C	19.7	0.000	+ 0.000 D/V
# 28 French St (N/S) / 4th St (E/W)	A	xxxxx	0.291	A	xxxxx	0.291	+ 0.000 V/C
# 29 Lacy St (N/S) / Civic Center D	C	20.3	0.000	C	20.3	0.000	+ 0.000 D/V
# 30 Lacy st (N/S) / Santa Ana Bl (	D	34.2	0.000	D	34.2	0.000	+ 0.000 D/V
# 31 Lacy St (N/S) / Brown St (E/W)	A	7.2	0.092	A	7.2	0.092	+ 0.000 V/C
# 32 Lacy St (N/S) / 4th St (E/W)	A	xxxxx	0.407	A	xxxxx	0.407	+ 0.000 V/C
# 33 Lacy St (N/S) / 1st St (E/W)	C	23.3	0.000	C	23.3	0.000	+ 0.000 D/V
# 34 Santiago St (N/S) / Washington	C	17.1	0.695	C	17.1	0.695	+ 0.000 V/C
# 35 Santiago St (N/S) / Civic Cent	D	26.2	0.901	D	26.2	0.901	+ 0.000 V/C
# 36 Santiago St (N/S) / Santa Ana	A	xxxxx	0.541	A	xxxxx	0.541	+ 0.000 V/C
# 40 Standard Av (N/S) / 1st St (E/	D	xxxxx	0.808	D	xxxxx	0.808	+ 0.000 V/C
# 42 Grand Av (N/S) / Santa Ana Bl	D	xxxxx	0.866	D	xxxxx	0.866	+ 0.000 V/C
# 43 Grand Av (N/S) / 4th St (E/W)	B	xxxxx	0.646	B	xxxxx	0.646	+ 0.000 V/C
# 44 Grand Av (N/S) / 1st St (E/W)	B	xxxxx	0.700	B	xxxxx	0.700	+ 0.000 V/C
# 45 Penn Way (NS) at I-5 SB Ramps	C	22.2	0.462	C	22.2	0.462	+ 0.000 D/V
# 46 I-5 SB Ramps (NS) / Santa Ana	C	27.2	0.499	C	27.2	0.499	+ 0.000 D/V
# 47 I-5 NB Ramps (NS) / 17th St. (	C	33.3	0.782	C	33.3	0.782	+ 0.000 D/V
# 48 I-5 NB Ramps (NS) / Grand Ave	C	21.2	0.648	C	21.2	0.648	+ 0.000 D/V
# 49 Mortimer (N/S) / Santa Ana Blv	C	20.3	0.000	C	20.3	0.000	+ 0.000 D/V
# 50 Mortimer (N/S) / 5th St (E/W)	A	9.0	0.287	A	9.0	0.287	+ 0.000 V/C

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Flower St (NS)/ Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.683
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 35 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	155	688	165	120	634	180	133	554	158	140	459	41
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	155	688	165	120	634	180	133	554	158	140	459	41
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	155	688	165	120	634	180	133	554	158	140	459	41
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	155	688	165	120	634	180	133	554	158	140	459	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	155	688	165	120	634	180	133	554	158	140	459	41
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	155	688	165	120	634	180	133	554	158	140	459	41
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.61	0.39	1.00	1.56	0.44	1.00	1.56	0.44	1.00	1.84	0.16
Final Sat.:	1598	2742	658	1598	2648	752	1598	2646	754	1598	3121	279
Capacity Analysis Module:												
Vol/Sat:	0.10	0.25	0.25	0.08	0.24	0.24	0.08	0.21	0.21	0.09	0.15	0.15
Crit Moves:	****				****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Flower St (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.572
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	0 1	1 0	2	0 1	1 0	3	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	65	957	71	163	850	80	88	502	153	67	284	117
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	65	957	71	163	850	80	88	502	153	67	284	117
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	65	957	71	163	850	80	88	502	153	67	284	117
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	65	957	71	163	850	80	88	502	153	67	284	117
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	65	957	71	163	850	80	88	502	153	67	284	117
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	65	957	71	163	850	80	88	502	153	67	284	117
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00
Final Sat.:	1598	3400	1598	1598	3400	1598	1598	5100	1598	1598	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.04	0.28	0.04	0.10	0.25	0.05	0.06	0.10	0.10	0.04	0.08	0.07
Crit Moves:		****		****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Parton St (E/W) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.278
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	17	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0 0	0 1	0	0 1	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	14	4	32	21	7	22	31	596	114	75	489	84
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	14	4	32	21	7	22	31	596	114	75	489	84
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	14	4	32	21	7	22	31	596	114	75	489	84
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	14	4	32	21	7	22	31	596	114	75	489	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	4	32	21	7	22	31	596	114	75	489	84
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	14	4	32	21	7	22	31	596	114	75	489	84
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.28	0.08	0.64	0.75	0.25	1.00	1.00	2.52	0.48	1.00	2.56	0.44
Final Sat.:	476	136	1088	1275	425	1598	1598	4281	819	1598	4352	748
Capacity Analysis Module:												
Vol/Sat:	0.01	0.03	0.03	0.01	0.02	0.01	0.02	0.14	0.14	0.05	0.11	0.11
Crit Moves:		****		****				****		****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Ross St (N/S) / Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.517
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 24 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	0 1	1	0 0	1 0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	92	195	66	65	217	56	48	607	97	66	704	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	92	195	66	65	217	56	48	607	97	66	704	50
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	92	195	66	65	217	56	48	607	97	66	704	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	92	195	66	65	217	56	48	607	97	66	704	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	195	66	65	217	56	48	607	97	66	704	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	92	195	66	65	217	56	48	607	97	66	704	50
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.79	0.21	1.00	1.72	0.28	1.00	1.87	0.13
Final Sat.:	1598	1700	1598	1598	1351	349	1598	2932	468	1598	3175	225
Capacity Analysis Module:												
Vol/Sat:	0.06	0.11	0.04	0.04	0.16	0.16	0.03	0.21	0.21	0.04	0.22	0.22
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Ross St (N/S) / Santa Ana Bl (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.475
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 23 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	0 1	1	0 1	0 1	1	0 2	0 1	1	0 3	0 1
Volume Module:												
Base Vol:	23	157	64	59	169	108	76	577	21	201	387	101
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	23	157	64	59	169	108	76	577	21	201	387	101
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	157	64	59	169	108	76	577	21	201	387	101
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	23	157	64	59	169	108	76	577	0	201	387	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	157	64	59	169	108	76	577	0	201	387	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	23	157	64	59	169	108	76	577	0	201	387	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00
Final Sat.:	1598	1700	1598	1598	1700	1598	1598	3400	1598	1598	5100	1598
Capacity Analysis Module:												
Vol/Sat:	0.01	0.09	0.04	0.04	0.10	0.07	0.05	0.17	0.00	0.13	0.08	0.00
Crit Moves:		****		****				****		****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Ross St (N/S) / 4th St (E/W)

Average Delay (sec/veh): 1.9 Worst Case Level Of Service: B[10.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 1 0			1 0 1 0 0			0 0 0 0 0			1 0 0 0 1		
Volume Module:												
Base Vol:	0	262	11	43	196	0	0	0	0	21	0	53
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	262	11	43	196	0	0	0	0	21	0	53
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	262	11	43	196	0	0	0	0	21	0	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	262	11	43	196	0	0	0	0	21	0	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	262	11	43	196	0	0	0	0	21	0	53
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	273	xxxx	xxxxx	xxxx	xxxx	xxxxx	550	xxxx	268
Potent Cap.:	xxxx	xxxx	xxxxx	1302	xxxx	xxxxx	xxxx	xxxx	xxxxx	500	xxxx	776
Move Cap.:	xxxx	xxxx	xxxxx	1302	xxxx	xxxxx	xxxx	xxxx	xxxxx	487	xxxx	776
Volume/Cap:	xxxx	xxxx	xxxx	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	xxxx	0.07
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	0.2
Control Del:	xxxxx	xxxx	xxxxx	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	12.7	xxxx	10.0
LOS by Move:	*	*	*	A	*	*	*	*	*	B	*	A
Movement:	LT	-	LTR - RT	LT	-	LTR - RT	LT	-	LTR - RT	LT	-	LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			10.8		
ApproachLOS:	*			*			*			B		

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Broadway (N/S) / Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.614
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 30 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Ignore			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	0 1	1 0	2	0 1	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	95	532	54	131	691	260	148	463	70	43	605	106
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	95	532	54	131	691	260	148	463	70	43	605	106
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	95	532	54	131	691	260	148	463	70	43	605	106
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	95	532	0	131	691	0	148	463	70	43	605	106
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	532	0	131	691	0	148	463	70	43	605	106
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	95	532	0	131	691	0	148	463	70	43	605	106
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.74	0.26	1.00	1.70	0.30
Final Sat.:	1598	3400	1598	1598	3400	1598	1598	2953	447	1598	2893	507
Capacity Analysis Module:												
Vol/Sat:	0.06	0.16	0.00	0.08	0.20	0.00	0.09	0.16	0.16	0.03	0.21	0.21
Crit Moves:	****				****		****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Broadway (N/S) / Santa Ana Bl (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.468
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 22 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 2	0 0	0	0 1	1 0	0	0 0	0 0 0	0	1 1	1 0
Volume Module:												
Base Vol:	40	653	0	0	673	205	0	0	0	21	550	114
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	653	0	0	673	205	0	0	0	21	550	114
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	40	653	0	0	673	205	0	0	0	21	550	114
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	653	0	0	673	205	0	0	0	21	550	114
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	653	0	0	673	205	0	0	0	21	550	114
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	653	0	0	673	205	0	0	0	21	550	114
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.53	0.47	0.00	0.00	0.00	0.09	2.41	0.50
Final Sat.:	1598	3400	0	0	2606	794	0	0	0	156	4095	849
Capacity Analysis Module:												
Vol/Sat:	0.03	0.19	0.00	0.00	0.26	0.26	0.00	0.00	0.00	0.01	0.13	0.13
Crit Moves:	****				****						****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Broadway (N/S) / 5th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.349
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 19 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 1	1 0	1	0 2	0 0	0	1 1	1 0	0	0 0	0 0
Volume Module:												
Base Vol:	0	493	39	75	529	0	116	367	7	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	493	39	75	529	0	116	367	7	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	493	39	75	529	0	116	367	7	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	493	39	75	529	0	116	367	7	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	493	39	75	529	0	116	367	7	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	493	39	75	529	0	116	367	7	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00	0.94	1.00	0.94
Lanes:	0.00	1.85	0.15	1.00	2.00	0.00	0.71	2.25	0.04	0.00	0.00	0.00
Final Sat.:	0	3151	249	1598	3400	0	1207	3820	73	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.16	0.16	0.05	0.16	0.00	0.07	0.10	0.10	0.00	0.00	0.00
Crit Moves:		****		****				****				

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Broadway (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.298
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	17	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	1 0	1	0 1	1 0	0	0 1!	0 0	0	0 1!	0 0
Volume Module:												
Base Vol:	10	489	24	17	455	76	17	56	17	22	94	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	489	24	17	455	76	17	56	17	22	94	12
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	489	24	17	455	76	17	56	17	22	94	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	489	24	17	455	76	17	56	17	22	94	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	489	24	17	455	76	17	56	17	22	94	12
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	10	489	24	17	455	76	17	56	17	22	94	12
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.91	0.09	1.00	1.71	0.29	0.19	0.62	0.19	0.17	0.74	0.09
Final Sat.:	1598	3241	159	1598	2913	487	321	1058	321	292	1248	159
Capacity Analysis Module:												
Vol/Sat:	0.01	0.15	0.15	0.01	0.16	0.16	0.01	0.05	0.05	0.01	0.08	0.08
Crit Moves:	****			****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Broadway (N/S)/ 3rd st (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.336
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	18	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 0	1 0	1	0 1	0 1	1	0 1	0 1	1	0 1	0 0
Volume Module:												
Base Vol:	24	373	8	24	315	21	12	51	18	10	36	18
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	24	373	8	24	315	21	12	51	18	10	36	18
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	24	373	8	24	315	21	12	51	18	10	36	18
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	373	8	24	315	21	12	51	18	10	36	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	373	8	24	315	21	12	51	18	10	36	18
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	373	8	24	315	21	12	51	18	10	36	18
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.98	0.02	1.00	1.00	1.00	1.00	0.74	0.26	1.00	0.67	0.33
Final Sat.:	1598	1664	36	1598	1700	1598	1598	1257	443	1598	1133	567
Capacity Analysis Module:												
Vol/Sat:	0.02	0.22	0.22	0.02	0.19	0.01	0.01	0.04	0.04	0.01	0.03	0.03
Crit Moves:		****		****				****		****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Broadway (N/S) / 1st St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.651
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	0 1	1	0 1	0 1	1	0 2	1 0	1	0 2	1 0
Volume Module:												
Base Vol:	59	345	102	57	336	54	180	1355	69	140	917	61
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	59	345	102	57	336	54	180	1355	69	140	917	61
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	59	345	102	57	336	54	180	1355	69	140	917	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	59	345	102	57	336	54	180	1355	69	140	917	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	345	102	57	336	54	180	1355	69	140	917	61
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	59	345	102	57	336	54	180	1355	69	140	917	61
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.85	0.15	1.00	2.81	0.19
Final Sat.:	1598	1700	1598	1598	1700	1598	1598	4853	247	1598	4782	318
Capacity Analysis Module:												
Vol/Sat:	0.04	0.20	0.06	0.04	0.20	0.03	0.11	0.28	0.28	0.09	0.19	0.19
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Sycamore St (N/S) / Civic Center Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.420
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	21	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 1! 0	0	0	0 1! 0	0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	22	88	28	29	21	22	68	454	61	29	692	88
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	22	88	28	29	21	22	68	454	61	29	692	88
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	22	88	28	29	21	22	68	454	61	29	692	88
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	22	88	28	29	21	22	68	454	61	29	692	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	88	28	29	21	22	68	454	61	29	692	88
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	22	88	28	29	21	22	68	454	61	29	692	88
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.16	0.64	0.20	0.40	0.29	0.31	1.00	1.76	0.24	1.00	1.77	0.23
Final Sat.:	271	1084	345	685	496	519	1598	2997	403	1598	3016	384
Capacity Analysis Module:												
Vol/Sat:	0.01	0.08	0.08	0.02	0.04	0.04	0.04	0.15	0.15	0.02	0.23	0.23
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #14 Sycamore St (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 3.0 Worst Case Level Of Service: C[21.8]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0 0	0	0	0	1 0	0	0	0	0 0	0	1	1	1 0
Volume Module:																
Base Vol:	9	34	0	0	50	22	0	0	0	68	808	29				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	9	34	0	0	50	22	0	0	0	68	808	29				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	9	34	0	0	50	22	0	0	0	68	808	29				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	9	34	0	0	50	22	0	0	0	68	808	29				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	9	34	0	0	50	22	0	0	0	68	808	29				
Critical Gap Module:																
Critical Gp:	7.1	6.5	xxxxx	xxxxx	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx				
FollowUpTim:	3.5	4.0	xxxxx	xxxxx	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	430	973	xxxxx	xxxx	959	284	xxxx	xxxx	xxxxx	0	xxxx	xxxxx				
Potent Cap.:	539	254	xxxxx	xxxx	259	760	xxxx	xxxx	xxxxx	900	xxxx	xxxxx				
Move Cap.:	413	234	xxxxx	xxxx	238	760	xxxx	xxxx	xxxxx	900	xxxx	xxxxx				
Volume/Cap:	0.02	0.15	xxxx	xxxx	0.21	0.03	xxxx	xxxx	xxxx	0.08	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.3	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	257	xxxx	xxxxx	xxxx	xxxx	302	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	0.6	xxxx	xxxxx	xxxxx	xxxx	0.9	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx				
Shrd ConDel:	21.8	xxxx	xxxxx	xxxxx	xxxx	20.6	xxxxx	xxxx	xxxxx	9.3	xxxx	xxxxx				
Shared LOS:	C	*	*	*	*	C	*	*	*	A	*	*				
ApproachDel:	21.8			20.6			xxxxxx			xxxxxx						
ApproachLOS:	C			C			*			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #15 Sycamore St (N/S) / 5th St (E/W)

Average Delay (sec/veh): 3.1 Worst Case Level Of Service: C[15.7]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	1 0	0	1	0	0 0	0	1	1	1 0	0	0	0	0 0
Volume Module:																
Base Vol:	0	30	23	97	35	0	17	766	17	0	0	0				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	0	30	23	97	35	0	17	766	17	0	0	0				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	0	30	23	97	35	0	17	766	17	0	0	0				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	0	30	23	97	35	0	17	766	17	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	0	30	23	97	35	0	17	766	17	0	0	0				
Critical Gap Module:																
Critical Gp:	xxxxx	6.5	6.2	7.1	6.5	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	4.0	3.3	3.5	4.0	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	xxxx	809	264	304	817	xxxxx	0	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	317	780	652	313	xxxxx	900	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	311	780	578	307	xxxxx	900	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	0.10	0.03	0.17	0.11	xxxx	0.02	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	xxxx	xxxx	420	468	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	0.4	1.1	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	14.8	15.7	xxxx	xxxxx	9.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	B	C	*	*	A	*	*	*	*	*				
ApproachDel:	14.8			15.7			xxxxxx			xxxxxx						
ApproachLOS:	B			C			*			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #16 Sycamore St (N/S) / 4th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.211
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): 7.9
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1! 0	0	0	1! 0	0	0	1! 0
Volume Module:												
Base Vol:	1	9	28	15	12	12	14	48	8	72	80	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	9	28	15	12	12	14	48	8	72	80	30
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	9	28	15	12	12	14	48	8	72	80	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	9	28	15	12	12	14	48	8	72	80	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	9	28	15	12	12	14	48	8	72	80	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	9	28	15	12	12	14	48	8	72	80	30
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.02	0.24	0.74	0.38	0.31	0.31	0.20	0.69	0.11	0.40	0.44	0.16
Final Sat.:	22	200	622	302	241	241	167	573	96	340	378	142
Capacity Analysis Module:												
Vol/Sat:	0.05	0.05	0.05	0.05	0.05	0.05	0.08	0.08	0.08	0.21	0.21	0.21
Crit Moves:	****				****			****			****	
Delay/Veh:	7.2	7.2	7.2	7.6	7.6	7.6	7.6	7.6	7.6	8.2	8.2	8.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.2	7.2	7.2	7.6	7.6	7.6	7.6	7.6	7.6	8.2	8.2	8.2
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	7.2			7.6			7.6			8.2		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	7.2			7.6			7.6			8.2		
LOS by Appr:	A			A			A			A		
AllWayAvgQ:	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.3	0.3	0.3

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Main St (N/S) / Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.751
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 43 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1 1 0	1	0	1 1 0	1	0	1 1 0	1	0	1 1 0
Volume Module:												
Base Vol:	169	934	81	101	1016	189	94	459	136	65	571	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	169	934	81	101	1016	189	94	459	136	65	571	47
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	169	934	81	101	1016	189	94	459	136	65	571	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	169	934	81	101	1016	189	94	459	136	65	571	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	169	934	81	101	1016	189	94	459	136	65	571	47
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	169	934	81	101	1016	189	94	459	136	65	571	47
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.84	0.16	1.00	1.69	0.31	1.00	1.54	0.46	1.00	1.85	0.15
Final Sat.:	1598	3129	271	1598	2867	533	1598	2623	777	1598	3141	259
Capacity Analysis Module:												
Vol/Sat:	0.11	0.30	0.30	0.06	0.35	0.35	0.06	0.18	0.17	0.04	0.18	0.18
Crit Moves:	****				****		****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #18 Main St (N/S) / Santa Ana Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.654
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	0 0	0 0	1	1 0	0 0	0	0 0	0 1	1	1 0
Volume Module:												
Base Vol:	63	987	0	0	1138	88	0	0	0	63	904	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	63	987	0	0	1138	88	0	0	0	63	904	75
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	63	987	0	0	1138	88	0	0	0	63	904	75
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	63	987	0	0	1138	88	0	0	0	63	904	75
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	987	0	0	1138	88	0	0	0	63	904	75
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	63	987	0	0	1138	88	0	0	0	63	904	75
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.86	0.14	0.00	0.00	0.00	0.18	2.60	0.22
Final Sat.:	1598	3400	0	0	3156	244	0	0	0	308	4425	367
Capacity Analysis Module:												
Vol/Sat:	0.04	0.29	0.00	0.00	0.36	0.36	0.00	0.00	0.00	0.04	0.20	0.20
Crit Moves:	****				****						****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #19 Main St (N/S) / 5th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.499
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	24	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	1 0	1 0	2	0 0	0 1	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	963	45	69	1055	0	65	460	32	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	963	45	69	1055	0	65	460	32	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	963	45	69	1055	0	65	460	32	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	963	45	69	1055	0	65	460	32	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	963	45	69	1055	0	65	460	32	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	963	45	69	1055	0	65	460	32	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00	0.94	1.00	0.94
Lanes:	0.00	1.91	0.09	1.00	2.00	0.00	0.35	2.48	0.17	0.00	0.00	0.00
Final Sat.:	0	3248	152	1598	3400	0	595	4212	293	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.30	0.30	0.04	0.31	0.00	0.04	0.11	0.11	0.00	0.00	0.00
Crit Moves:		****		****				****				

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #20 Main St (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.508
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	24	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	1 0	0 0	1	1 0	0 0	0	1 0	0 0	0	1 0
Volume Module:												
Base Vol:	0	966	24	0	1120	18	0	116	20	0	167	42
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	966	24	0	1120	18	0	116	20	0	167	42
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	966	24	0	1120	18	0	116	20	0	167	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	966	24	0	1120	18	0	116	20	0	167	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	966	24	0	1120	18	0	116	20	0	167	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	966	24	0	1120	18	0	116	20	0	167	42
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.00	1.95	0.05	0.00	1.97	0.03	0.00	0.85	0.15	0.00	0.80	0.20
Final Sat.:	0	3318	82	0	3346	54	0	1450	250	0	1358	342
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.29	0.00	0.33	0.33	0.00	0.08	0.08	0.00	0.12	0.12
Crit Moves:	****			****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #21 Main St (N/S) / 3rd St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.464
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	22	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	1 0	0 0	1	1 0	1	0	0 1 0	1	0	0 1 0
Volume Module:												
Base Vol:	0	970	15	0	1104	22	39	95	32	13	73	13
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	970	15	0	1104	22	39	95	32	13	73	13
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	970	15	0	1104	22	39	95	32	13	73	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	970	15	0	1104	22	39	95	32	13	73	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	970	15	0	1104	22	39	95	32	13	73	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	970	15	0	1104	22	39	95	32	13	73	13
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.00	1.97	0.03	0.00	1.96	0.04	1.00	0.75	0.25	1.00	0.85	0.15
Final Sat.:	0	3348	52	0	3334	66	1598	1272	428	1598	1443	257
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.29	0.00	0.33	0.33	0.02	0.07	0.07	0.01	0.05	0.05
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #22 Main St (N/S) / 1st St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.773
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	165	763	79	129	893	86	131	1425	107	91	945	89
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	165	763	79	129	893	86	131	1425	107	91	945	89
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	165	763	79	129	893	86	131	1425	107	91	945	89
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	165	763	79	129	893	86	131	1425	107	91	945	89
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	165	763	79	129	893	86	131	1425	107	91	945	89
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	165	763	79	129	893	86	131	1425	107	91	945	89
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.81	0.19	1.00	2.00	1.00	1.00	2.79	0.21	1.00	2.74	0.26
Final Sat.:	1598	3081	319	1598	3400	1598	1598	4744	356	1598	4661	439
Capacity Analysis Module:												
Vol/Sat:	0.10	0.25	0.25	0.08	0.26	0.05	0.08	0.30	0.30	0.06	0.20	0.20
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #23 Bush St (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.295
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	17	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	0 0	0 0	0	1 0	0 0	0	0 0	0 1	1	1 0
Volume Module:												
Base Vol:	23	135	0	0	95	37	0	0	0	25	665	89
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	23	135	0	0	95	37	0	0	0	25	665	89
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	135	0	0	95	37	0	0	0	25	665	89
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	23	135	0	0	95	37	0	0	0	25	665	89
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	135	0	0	95	37	0	0	0	25	665	89
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	23	135	0	0	95	37	0	0	0	25	665	89
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	0.72	0.28	0.00	0.00	0.00	0.10	2.56	0.34
Final Sat.:	1598	1700	0	0	1223	477	0	0	0	164	4354	583
Capacity Analysis Module:												
Vol/Sat:	0.01	0.08	0.00	0.00	0.08	0.08	0.00	0.00	0.00	0.01	0.15	0.15
Crit Moves:	****				****						****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #24 Bush St (N/S) / 5th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.242
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	16	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0 1	0	1	0 1	0	0 1	1 0	0	0	0 0 0
Volume Module:												
Base Vol:	0	134	31	30	103	0	24	351	14	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	134	31	30	103	0	24	351	14	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	134	31	30	103	0	24	351	14	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	134	31	30	103	0	24	351	14	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	134	31	30	103	0	24	351	14	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	134	31	30	103	0	24	351	14	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00	0.94	1.00	0.94
Lanes:	0.00	0.81	0.19	1.00	1.00	0.00	0.18	2.71	0.11	0.00	0.00	0.00
Final Sat.:	0	1381	319	1598	1700	0	315	4602	184	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.10	0.10	0.02	0.06	0.00	0.01	0.08	0.08	0.00	0.00	0.00
Crit Moves:		****		****				****				

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #25 Bush St (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.270
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	17	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0 1	0	1	0 0 1	0	0 1!	0 0	0	0	1! 0 0
Volume Module:												
Base Vol:	8	135	9	18	97	4	8	102	11	11	172	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	135	9	18	97	4	8	102	11	11	172	20
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	135	9	18	97	4	8	102	11	11	172	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	8	135	9	18	97	4	8	102	11	11	172	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	135	9	18	97	4	8	102	11	11	172	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	8	135	9	18	97	4	8	102	11	11	172	20
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.94	0.06	1.00	0.96	0.04	0.07	0.84	0.09	0.05	0.85	0.10
Final Sat.:	1598	1594	106	1598	1633	67	112	1433	155	92	1440	167
Capacity Analysis Module:												
Vol/Sat:	0.01	0.08	0.08	0.01	0.06	0.06	0.00	0.07	0.07	0.01	0.12	0.12
Crit Moves:		****		****				****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #26 Spurgeon St (N/S) / 1st St (E/W)

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B[10.5]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	0	0	0 1	0	0	3	0 0	0	0	2	1 0
Volume Module:																
Base Vol:	0	0	0	0	0	39	0	1741	0	0	915	7				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	0	0	0	0	0	39	0	1741	0	0	915	7				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	0	0	0	0	0	39	0	1741	0	0	915	7				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	0	0	0	0	0	39	0	1741	0	0	915	7				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	0	0	0	0	0	39	0	1741	0	0	915	7				
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	309	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	693	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	693	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.06	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.2	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	10.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	B	*	*	*	*	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*				
ApproachDel:	xxxxxx			10.5			xxxxxx			xxxxxx						
ApproachLOS:	*			B			*			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #27 French St (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 1.9 Worst Case Level Of Service: C[19.7]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0 0	0	0	0	1 0	0	0	0	0 0	0	1	0	1 0
Volume Module:																
Base Vol:	55	21	0	0	26	2	0	0	0	13	907	11				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	55	21	0	0	26	2	0	0	0	13	907	11				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	55	21	0	0	26	2	0	0	0	13	907	11				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	55	21	0	0	26	2	0	0	0	13	907	11				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	55	21	0	0	26	2	0	0	0	13	907	11				
Critical Gap Module:																
Critical Gp:	7.1	6.5	xxxxx	xxxxx	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx				
FollowUpTim:	3.5	4.0	xxxxx	xxxxx	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	493	944	xxxxx	xxxx	939	459	xxxx	xxxx	xxxxx	0	xxxx	xxxxx				
Potent Cap.:	490	264	xxxxx	xxxx	266	606	xxxx	xxxx	xxxxx	900	xxxx	xxxxx				
Move Cap.:	446	260	xxxxx	xxxx	262	606	xxxx	xxxx	xxxxx	900	xxxx	xxxxx				
Volume/Cap:	0.12	0.08	xxxx	xxxx	0.10	0.00	xxxx	xxxx	xxxx	0.01	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	373	xxxx	xxxxx	xxxx	xxxx	273	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	0.8	xxxx	xxxxx	xxxxx	xxxx	0.3	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx				
Shrd ConDel:	17.1	xxxx	xxxxx	xxxxx	xxxx	19.7	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx				
Shared LOS:	C	*	*	*	*	C	*	*	*	A	*	*				
ApproachDel:	17.1			19.7			xxxxxx			xxxxxx						
ApproachLOS:	C			C			*			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #28 French St (N/S) / 4th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.291
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 17 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	1 0	0 1	0	0 0	1! 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	3	20	33	67	34	13	1	79	4	41	240	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	20	33	67	34	13	1	79	4	41	240	46
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	20	33	67	34	13	1	79	4	41	240	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	20	33	67	34	13	1	79	4	41	240	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	20	33	67	34	13	1	79	4	41	240	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	3	20	33	67	34	13	1	79	4	41	240	46
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.94
Lanes:	0.05	0.36	0.59	1.00	0.72	0.28	0.01	0.94	0.05	0.15	0.85	1.00
Final Sat.:	91	607	1002	1598	1230	470	20	1599	81	248	1452	1598
Capacity Analysis Module:												
Vol/Sat:	0.00	0.03	0.03	0.04	0.03	0.03	0.00	0.05	0.05	0.02	0.17	0.03
Crit Moves:		****		****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #29 Lacy St (N/S) / Civic Center Dr (E/W)

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: C[20.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	25	17	32	25	23	31	3	385	30	7	415	155
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	25	17	32	25	23	31	3	385	30	7	415	155
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	17	32	25	23	31	3	385	30	7	415	155
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	25	17	32	25	23	31	3	385	30	7	415	155
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	25	17	32	25	23	31	3	385	30	7	415	155
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	940	990	400	937	928	493	570	xxxx	xxxxx	415	xxxx	xxxxx
Potent Cap.:	246	248	654	247	270	580	1013	xxxx	xxxxx	1155	xxxx	xxxxx
Move Cap.:	216	246	654	221	268	580	1013	xxxx	xxxxx	1155	xxxx	xxxxx
Volume/Cap:	0.12	0.07	0.05	0.11	0.09	0.05	0.00	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.6	xxxx	xxxxx	8.1	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT	-	LTR	RT	LT	-	LTR	RT	LT	-	LTR	RT	LT	-	LTR	RT
Shared Cap.:	xxxx	317	xxxxx	xxxx	313	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.9	xxxxx	xxxxx	1.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	19.8	xxxxx	xxxxx	20.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	C	*	*	*	*	*	*	*
ApproachDel:		19.8			20.3			xxxxx			xxxxx	
ApproachLOS:		C			C			*			*	

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #30 Lacy st (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 2.8 Worst Case Level Of Service: D[34.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 1! 0 0			1 0 0 1 0			1 0 0 1 0		
Volume Module:												
Base Vol:	3	30	24	11	36	18	10	379	6	11	798	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	30	24	11	36	18	10	379	6	11	798	35
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	30	24	11	36	18	10	379	6	11	798	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	30	24	11	36	18	10	379	6	11	798	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	3	30	24	11	36	18	10	379	6	11	798	35
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1267	1257	382	1267	1243	816	833	xxxx	xxxxx	385	xxxx	xxxxx
Potent Cap.:	147	173	670	147	176	380	809	xxxx	xxxxx	1185	xxxx	xxxxx
Move Cap.:	116	169	670	121	172	380	809	xxxx	xxxxx	1185	xxxx	xxxxx
Volume/Cap:	0.03	0.18	0.04	0.09	0.21	0.05	0.01	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.5	xxxx	xxxxx	8.1	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT	-	LTR	RT	LT	-	LTR	RT	LT	-	LTR	RT
Shared Cap.:	xxxx		238	xxxxx	xxxx		187	xxxxx	xxxx	xxxx	xxxxx	xxxxx
SharedQueue:	xxxxx		0.9	xxxxx	xxxxx		1.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx
Shrd ConDel:	xxxxx		24.8	xxxxx	xxxxx		34.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx
Shared LOS:	*		C	*	*		D	*	*	*	*	*
ApproachDel:			24.8				34.2			xxxxxx		
ApproachLOS:			C				D			*		

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #31 Lacy St (N/S) / Brown St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.092
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): 7.2
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 1! 0 0			0 0 1! 0 0			0 0 1! 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	23	22	41	4	17	2	2	7	8	14	18	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	23	22	41	4	17	2	2	7	8	14	18	4
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	22	41	4	17	2	2	7	8	14	18	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	23	22	41	4	17	2	2	7	8	14	18	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	22	41	4	17	2	2	7	8	14	18	4
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	23	22	41	4	17	2	2	7	8	14	18	4
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.27	0.25	0.48	0.17	0.74	0.09	0.12	0.41	0.47	0.39	0.50	0.11
Final Sat.:	250	239	446	152	644	76	106	371	424	330	424	94
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.03	0.03	0.03	0.02	0.02	0.02	0.04	0.04	0.04
Crit Moves:		****			****			****			****	
Delay/Veh:	7.2	7.2	7.2	7.2	7.2	7.2	7.0	7.0	7.0	7.3	7.3	7.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.2	7.2	7.2	7.2	7.2	7.2	7.0	7.0	7.0	7.3	7.3	7.3
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:		7.2			7.2			7.0			7.3	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		7.2			7.2			7.0			7.3	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #32 Lacy St (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.407
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	20	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1! 0	0	1	0	0	1	0 1
Volume Module:												
Base Vol:	20	31	81	18	24	23	10	302	24	11	446	7
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	31	81	18	24	23	10	302	24	11	446	7
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	31	81	18	24	23	10	302	24	11	446	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	31	81	18	24	23	10	302	24	11	446	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	31	81	18	24	23	10	302	24	11	446	7
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	31	81	18	24	23	10	302	24	11	446	7
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	0.15	0.23	0.62	0.28	0.37	0.35	1.00	0.93	0.07	1.00	1.00	1.00
Final Sat.:	258	399	1043	471	628	602	1598	1575	125	1598	1700	1598
Capacity Analysis Module:												
Vol/Sat:	0.01	0.08	0.08	0.01	0.04	0.04	0.01	0.19	0.19	0.01	0.26	0.00
Crit Moves:		****		****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #33 Lacy St (N/S) / 1st St (E/W)

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: C[23.3]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	1	0	3	0 0	0	0	2	1 0
Volume Module:																
Base Vol:	0	0	0		10	0	84		175	1563		0	0	1005		24
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	0	0		10	0	84		175	1563		0	0	1005		24
Added Vol:	0	0	0		0	0	0		0	0		0	0	0		0
PasserByVol:	0	0	0		0	0	0		0	0		0	0	0		0
Initial Fut:	0	0	0		10	0	84		175	1563		0	0	1005		24
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	0	0	0		10	0	84		175	1563		0	0	1005		24
Reduct Vol:	0	0	0		0	0	0		0	0		0	0	0		0
FinalVolume:	0	0	0		10	0	84		175	1563		0	0	1005		24
Critical Gap Module:																
Critical Gp:	7.5	6.5	6.9		6.8	6.5	6.9		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	2248	2942	521		1888	2930	347		1029	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Potent Cap.:	23	15	505		63	15	655		683	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Move Cap.:	16	11	505		51	11	655		683	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Volume/Cap:	0.00	0.00	0.00		0.20	0.00	0.13		0.26	xxxx	xxxx	xxxx	xxxx	xxxx		
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		1.0	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		12.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
LOS by Move:	*	*	*		*	*	*		B	*	*	*	*	*		
Movement:	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	- RT
Shared Cap.:	xxxx		0	xxxxx	xxxx		290	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	1.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	23.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	C	*	*	*	*	*	*	*				
ApproachDel:	xxxxxx				23.3				xxxxxx				xxxxxx			
ApproachLOS:	*				C				*				*			

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #34 Santiago St (N/S) / Washington Av (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.695
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	17.1
Optimal Cycle:	0	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	1 0	1	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	37	125	86	15	313	99	119	108	43	125	220	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	37	125	86	15	313	99	119	108	43	125	220	30
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	37	125	86	15	313	99	119	108	43	125	220	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	37	125	86	15	313	99	119	108	43	125	220	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	37	125	86	15	313	99	119	108	43	125	220	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	37	125	86	15	313	99	119	108	43	125	220	30
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.44	0.40	0.16	0.33	0.59	0.08
Final Sat.:	426	454	498	465	498	550	224	204	81	180	317	43
Capacity Analysis Module:												
Vol/Sat:	0.09	0.28	0.17	0.03	0.63	0.18	0.53	0.53	0.53	0.69	0.69	0.69
Crit Moves:		****			****			****			****	
Delay/Veh:	11.2	12.4	10.5	10.4	19.7	10.2	16.0	16.0	16.0	21.5	21.5	21.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.2	12.4	10.5	10.4	19.7	10.2	16.0	16.0	16.0	21.5	21.5	21.5
LOS by Move:	B	B	B	B	C	B	C	C	C	C	C	C
ApproachDel:		11.6			17.2			16.0			21.5	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		11.6			17.2			16.0			21.5	
LOS by Appr:		B			C			C			C	
AllWayAvgQ:	0.1	0.3	0.2	0.0	1.4	0.2	0.9	0.9	0.9	1.8	1.8	1.8

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #35 Santiago St (N/S) / Civic Center Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.901
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	26.2
Optimal Cycle:	0	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	341	140	12	9	257	224	129	50	212	41	59	9
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	341	140	12	9	257	224	129	50	212	41	59	9
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	341	140	12	9	257	224	129	50	212	41	59	9
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	341	140	12	9	257	224	129	50	212	41	59	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	341	140	12	9	257	224	129	50	212	41	59	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	341	140	12	9	257	224	129	50	212	41	59	9
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.92	0.08	1.00	0.53	0.47	0.72	0.28	1.00	0.38	0.54	0.08
Final Sat.:	471	465	40	467	285	249	316	123	504	150	216	33
Capacity Analysis Module:												
Vol/Sat:	0.72	0.30	0.30	0.02	0.90	0.90	0.41	0.41	0.42	0.27	0.27	0.27
Crit Moves:	****				****				****		****	
Delay/Veh:	26.6	12.5	12.5	10.4	42.6	42.6	15.6	15.6	14.1	14.1	14.1	14.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.6	12.5	12.5	10.4	42.6	42.6	15.6	15.6	14.1	14.1	14.1	14.1
LOS by Move:	D	B	B	B	E	E	C	C	B	B	B	B
ApproachDel:		22.2			42.0			14.8			14.1	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		22.2			42.0			14.8			14.1	
LOS by Appr:		C			E			B			B	
AllWayAvgQ:	2.1	0.4	0.4	0.0	4.9	4.9	0.6	0.6	0.6	0.3	0.3	0.3

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #36 Santiago St (N/S) / Santa Ana Bl (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.541
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 26 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	0 1	1	0 1	0 1	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	24	62	65	240	163	92	33	436	31	129	965	397
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	24	62	65	240	163	92	33	436	31	129	965	397
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	24	62	65	240	163	92	33	436	31	129	965	397
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	62	65	240	163	92	33	436	31	129	965	397
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	62	65	240	163	92	33	436	31	129	965	397
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	62	65	240	163	92	33	436	31	129	965	397
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.87	0.13	1.00	2.00	1.00
Final Sat.:	1598	1700	1598	1598	1700	1598	1598	3174	226	1598	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.02	0.04	0.04	0.15	0.10	0.06	0.02	0.14	0.14	0.08	0.28	0.25
Crit Moves:		****		****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #40 Standard Av (N/S) / 1st St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.808
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 54 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 0	1 0	0	0 1!	0 0	1	0 1	1 0	1	0 1	0 1
Volume Module:												
Base Vol:	75	179	121	41	274	7	91	1486	141	69	1045	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	75	179	121	41	274	7	91	1486	141	69	1045	12
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	75	179	121	41	274	7	91	1486	141	69	1045	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	75	179	121	41	274	7	91	1486	141	69	1045	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	75	179	121	41	274	7	91	1486	141	69	1045	12
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	75	179	121	41	274	7	91	1486	141	69	1045	12
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.60	0.40	0.13	0.85	0.02	1.00	1.83	0.17	1.00	1.98	0.02
Final Sat.:	1598	1014	686	216	1447	37	1598	3105	295	1598	3361	39
Capacity Analysis Module:												
Vol/Sat:	0.05	0.18	0.18	0.02	0.19	0.19	0.06	0.48	0.48	0.04	0.31	0.31
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #42 Grand Av (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.866
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	71	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	1 0	1 0	2	0 2	2 0	1	0 2	0 1	0	1 0
Volume Module:												
Base Vol:	176	895	15	69	1368	1099	189	152	624	23	97	15
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	176	895	15	69	1368	1099	189	152	624	23	97	15
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	176	895	15	69	1368	1099	189	152	624	23	97	15
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	176	895	15	69	1368	1099	189	152	624	23	97	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	176	895	15	69	1368	1099	189	152	624	23	97	15
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	176	895	15	69	1368	1099	189	152	624	23	97	15
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	2.95	0.05	1.00	2.00	2.00	2.00	1.00	2.00	0.34	1.44	0.22
Final Sat.:	1598	5016	84	1598	3400	3196	3196	1700	3196	579	2443	378
Capacity Analysis Module:												
Vol/Sat:	0.11	0.18	0.18	0.04	0.40	0.34	0.06	0.09	0.20	0.04	0.04	0.04
Crit Moves:			****		****				****		****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #43 Grand Av (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.646
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	3	0 1	1 0	2	1 0	1 0	1	1 0	1 0	2	0 1
Volume Module:												
Base Vol:	99	298	117	131	483	91	109	1078	103	119	338	125
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	99	298	117	131	483	91	109	1078	103	119	338	125
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	99	298	117	131	483	91	109	1078	103	119	338	125
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	99	298	117	131	483	91	109	1078	103	119	338	125
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	99	298	117	131	483	91	109	1078	103	119	338	125
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	99	298	117	131	483	91	109	1078	103	119	338	125
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	1.00	3.00	1.00	1.00	2.52	0.48	1.00	1.83	0.17	1.00	2.00	1.00
Final Sat.:	1598	5100	1598	1598	4291	809	1598	3103	297	1598	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.07	0.08	0.11	0.11	0.07	0.35	0.35	0.07	0.10	0.08
Crit Moves:	****				****				****		****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #44 Grand Av (N/S) / 1st St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.700
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 2	1	0	2 0 3	0	1	2 0 2	1	0	2 0 2	0	1
Volume Module:												
Base Vol:	120	515	77	117	1319	86	303	1059	224	326	671	69
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	515	77	117	1319	86	303	1059	224	326	671	69
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	120	515	77	117	1319	86	303	1059	224	326	671	69
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	515	77	117	1319	86	303	1059	224	326	671	69
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	515	77	117	1319	86	303	1059	224	326	671	69
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	515	77	117	1319	86	303	1059	224	326	671	69
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	2.00	2.61	0.39	2.00	3.00	1.00	2.00	2.48	0.52	2.00	2.00	1.00
Final Sat.:	3196	4437	663	3196	5100	1598	3196	4210	890	3196	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.04	0.12	0.12	0.04	0.26	0.05	0.09	0.25	0.25	0.10	0.20	0.04
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #45 Penn Way (NS) at I-5 SB Ramps (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.462
Loss Time (sec):	12 (Y+R=4.0 sec)	Average Delay (sec/veh):	22.2
Optimal Cycle:	38	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 2	0	1	2 0 2	0	0	0 0 0	0	0	1 0 0	0	2
Volume Module:												
Base Vol:	0	111	82	647	84	0	0	0	0	250	0	219
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	111	82	647	84	0	0	0	0	250	0	219
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	111	82	647	84	0	0	0	0	250	0	219
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	111	82	647	84	0	0	0	0	250	0	219
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	111	82	647	84	0	0	0	0	250	0	219
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	111	82	647	84	0	0	0	0	250	0	219
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.92	0.95	1.00	1.00	1.00	1.00	0.77	1.00	0.75
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	2.00
Final Sat.:	0	3610	1615	3502	3610	0	0	0	0	1461	0	2842
Capacity Analysis Module:												
Vol/Sat:	0.00	0.03	0.05	0.18	0.02	0.00	0.00	0.00	0.00	0.17	0.00	0.08
Crit Moves:			****	****						****		
Green/Cycle:	0.00	0.11	0.11	0.40	0.40	0.00	0.00	0.00	0.00	0.37	0.00	0.77
Volume/Cap:	0.00	0.28	0.46	0.46	0.06	0.00	0.00	0.00	0.00	0.46	0.00	0.10
Delay/Veh:	0.0	41.3	43.6	22.3	18.5	0.0	0.0	0.0	0.0	24.5	0.0	2.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	41.3	43.6	22.3	18.5	0.0	0.0	0.0	0.0	24.5	0.0	2.9
LOS by Move:	A	D	D	C	B	A	A	A	A	C	A	A
HCM2kAvgQ:	0	2	3	8	1	0	0	0	0	6	0	1

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #46 I-5 SB Ramps (NS) / Santa Ana Bl (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.499
Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh): 27.2
Optimal Cycle: 41 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2 0	0	0 1	2 0	3	0 0	0 0	2	1 0
Volume Module:												
Base Vol:	0	0	0	432	0	131	218	431	0	0	1015	166
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	432	0	131	218	431	0	0	1015	166
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	432	0	131	218	431	0	0	1015	166
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	432	0	131	218	431	0	0	1015	166
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	432	0	131	218	431	0	0	1015	166
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	432	0	131	218	431	0	0	1015	166
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.85	0.92	0.91	1.00	1.00	0.89	0.89
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	2.00	3.00	0.00	0.00	2.58	0.42
Final Sat.:	0	0	0	3502	0	1615	3502	5187	0	0	4364	714
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.00	0.08	0.06	0.08	0.00	0.00	0.23	0.23
Crit Moves:				****				****				****
Green/Cycle:	0.00	0.00	0.00	0.25	0.00	0.25	0.17	0.17	0.00	0.00	0.47	0.47
Volume/Cap:	0.00	0.00	0.00	0.50	0.00	0.33	0.37	0.50	0.00	0.00	0.50	0.50
Delay/Veh:	0.0	0.0	0.0	32.8	0.0	31.3	37.4	38.3	0.0	0.0	18.7	18.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	32.8	0.0	31.3	37.4	38.3	0.0	0.0	18.7	18.7
LOS by Move:	A	A	A	C	A	C	D	D	A	A	B	B
HCM2kAvgQ:	0	0	0	6	0	3	3	5	0	0	9	9

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #47 I-5 NB Ramps (NS) / 17th St. (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.782
Loss Time (sec): 16 (Y+R=4.0 sec) Average Delay (sec/veh): 33.3
Optimal Cycle: 83 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 1	0	0 1	1 0	0	0 1	1 0	3	0 1	0 0	2	1 0
Volume Module:												
Base Vol:	665	85	38	37	0	197	130	909	255	0	1277	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	665	85	38	37	0	197	130	909	255	0	1277	48
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	665	85	38	37	0	197	130	909	255	0	1277	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	665	85	38	37	0	197	130	909	0	0	1277	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	665	85	38	37	0	197	130	909	0	0	1277	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	665	85	38	37	0	197	130	909	0	0	1277	48
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.96	0.96	0.85	0.95	1.00	0.85	0.95	0.91	1.00	1.00	0.91	0.91
Lanes:	1.77	0.23	1.00	1.00	0.00	1.00	1.00	3.00	1.00	0.00	2.89	0.11
Final Sat.:	3228	413	1615	1805	0	1615	1805	5187	1900	0	4974	187
Capacity Analysis Module:												
Vol/Sat:	0.21	0.21	0.02	0.02	0.00	0.12	0.07	0.18	0.00	0.00	0.26	0.26
Crit Moves:	****					****	****				****	
Green/Cycle:	0.26	0.26	0.26	0.16	0.00	0.16	0.09	0.42	0.00	0.00	0.33	0.33
Volume/Cap:	0.78	0.78	0.09	0.13	0.00	0.78	0.78	0.42	0.00	0.00	0.78	0.78
Delay/Veh:	38.4	38.4	27.9	36.6	0.0	55.2	65.3	20.5	0.0	0.0	32.8	32.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.4	38.4	27.9	36.6	0.0	55.2	65.3	20.5	0.0	0.0	32.8	32.8
LOS by Move:	D	D	C	D	A	E	E	C	A	A	C	C
HCM2kAvgQ:	13	13	1	1	0	8	6	7	0	0	15	15

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #48 I-5 NB Ramps (NS) / Grand Ave (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.648
Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh): 21.2
Optimal Cycle: 53 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	3	0 1	1 0	3	0 0	0 0	0	0 0	2 0	0	0 1
Volume Module:												
Base Vol:	0	762	408	34	1669	0	0	0	0	871	0	139
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	762	408	34	1669	0	0	0	0	871	0	139
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	762	408	34	1669	0	0	0	0	871	0	139
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	762	0	34	1669	0	0	0	0	871	0	139
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	762	0	34	1669	0	0	0	0	871	0	139
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	762	0	34	1669	0	0	0	0	871	0	139
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	1.00	0.95	0.91	1.00	1.00	1.00	1.00	0.92	1.00	0.85
Lanes:	0.00	3.00	1.00	1.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	5187	1900	1805	5187	0	0	0	0	3502	0	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.15	0.00	0.02	0.32	0.00	0.00	0.00	0.00	0.25	0.00	0.09
Crit Moves:	****				****					****		
Green/Cycle:	0.00	0.44	0.00	0.06	0.50	0.00	0.00	0.00	0.00	0.38	0.00	0.38
Volume/Cap:	0.00	0.33	0.00	0.33	0.65	0.00	0.00	0.00	0.00	0.65	0.00	0.22
Delay/Veh:	0.0	18.5	0.0	47.3	19.3	0.0	0.0	0.0	0.0	26.4	0.0	21.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	18.5	0.0	47.3	19.3	0.0	0.0	0.0	0.0	26.4	0.0	21.0
LOS by Move:	A	B	A	D	B	A	A	A	A	C	A	C
HCM2kAvgQ:	0	6	0	1	14	0	0	0	0	12	0	3

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #49 Mortimer (N/S) / Santa Ana Blvd (E/W)

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: C[20.3]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	1	0	0	1!	0	0	0	0	0	0	0	1	0	0	1	0
Volume Module:																				
Base Vol:	0	0	192		3	4		1		0	0		0		31	846		3		
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		
Initial Bse:	0	0	192		3	4		1		0	0		0		31	846		3		
Added Vol:	0	0	0		0	0		0		0	0		0		0	0		0		
PasserByVol:	0	0	0		0	0		0		0	0		0		0	0		0		
Initial Fut:	0	0	192		3	4		1		0	0		0		31	846		3		
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		
PHF Adj:	1.00	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		
PHF Volume:	0	0	192		3	4		1		0	0		0		31	846		3		
Reduct Vol:	0	0	0		0	0		0		0	0		0		0	0		0		
FinalVolume:	0	0	192		3	4		1		0	0		0		31	846		3		
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	6.2		7.1	6.5		6.2		xxxxx	xxxx		xxxxx		4.1	xxxx		xxxxx		
FollowUpTim:	xxxxx	xxxx	3.3		3.5	4.0		3.3		xxxxx	xxxx		xxxxx		2.2	xxxx		xxxxx		
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	0		910	910		848		xxxx	xxxx		xxxxx		0	xxxx		xxxxx		
Potent Cap.:	xxxx	xxxx	900		258	277		365		xxxx	xxxx		xxxxx		900	xxxx		xxxxx		
Move Cap.:	xxxx	xxxx	900		197	267		365		xxxx	xxxx		xxxxx		900	xxxx		xxxxx		
Volume/Cap:	xxxx	xxxx	0.21		0.02	0.01		0.00		xxxx	xxxx		xxxx		0.03	xxxx		xxxx		
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	0.8		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		0.1	xxxx		xxxxx		
Control Del:	xxxxx	xxxx	10.1		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		9.1	xxxx		xxxxx		
LOS by Move:	*	*	B		*	*		*		*	*		*		A	*		*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	243		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	0.1		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	20.3		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		
Shared LOS:	*	*	*		*	C		*		*	*		*		*	*		*		
ApproachDel:	10.1					20.3					xxxxxx					xxxxxx				
ApproachLOS:	B					C					*					*				

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project AM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #50 Mortimer (N/S) / 5th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.287
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	9.0
Optimal Cycle:	0	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	1 0	0	1	0	0 0	1	0	0	1 0	0	0	1!	0 0
Volume Module:																
Base Vol:	0	129		4	3	19		0	189	28		37	6	0		10
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	129		4	3	19		0	189	28		37	6	0		10
Added Vol:	0	0		0	0	0		0	0	0		0	0	0		0
PasserByVol:	0	0		0	0	0		0	0	0		0	0	0		0
Initial Fut:	0	129		4	3	19		0	189	28		37	6	0		10
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	0	129		4	3	19		0	189	28		37	6	0		10
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	0	129		4	3	19		0	189	28		37	6	0		10
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	0	129		4	3	19		0	189	28		37	6	0		10
Saturation Flow Module:																
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Lanes:	0.00	0.97		0.03	0.14	0.86		0.00	1.00	0.43		0.57	0.37	0.00		0.63
Final Sat.:	0	735		23	98	623		0	658	339		448	298	0		496
Capacity Analysis Module:																
Vol/Sat:	xxxx	0.18		0.18	0.03	0.03		xxxx	0.29	0.08		0.08	0.02	xxxx		0.02
Crit Moves:				****	****				****				****			
Delay/Veh:	0.0	8.5		8.5	7.9	7.9		0.0	10.2	7.6		7.6	7.4	0.0		7.4
Delay Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	0.0	8.5		8.5	7.9	7.9		0.0	10.2	7.6		7.6	7.4	0.0		7.4
LOS by Move:	*	A		A	A	A		*	B	A		A	A	*		A
ApproachDel:		8.5				7.9				9.5				7.4		
Delay Adj:		1.00				1.00				1.00				1.00		
ApprAdjDel:		8.5				7.9				9.5				7.4		
LOS by Appr:		A				A				A				A		
AllWayAvgQ:	0.2	0.2		0.2	0.0	0.0		0.0	0.4	0.1		0.1	0.0	0.0		0.0

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Scenario Report

Scenario:	2030NPPM
Command:	2030NP PM
Volume:	2030NPPM
Geometry:	Future
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Del/ Veh	V/ C	Future LOS	Del/ Veh	V/ C	Change in
# 1 Flower St (NS)/ Civic Center D	C	xxxxx	0.734	C	xxxxx	0.734	+ 0.000 V/C
# 2 Flower St (N/S) / Santa Ana Bl	A	xxxxx	0.587	A	xxxxx	0.587	+ 0.000 V/C
# 3 Parton St (E/W) / Santa Ana Bl	A	xxxxx	0.372	A	xxxxx	0.372	+ 0.000 V/C
# 4 Ross St (N/S) / Civic Center D	A	xxxxx	0.474	A	xxxxx	0.474	+ 0.000 V/C
# 5 Ross St (N/S) / Santa Ana Bl (	A	xxxxx	0.395	A	xxxxx	0.395	+ 0.000 V/C
# 6 Ross St (N/S) / 4th St (E/W)	B	12.3	0.000	B	12.3	0.000	+ 0.000 D/V
# 7 Broadway (N/S) / Civic Center	B	xxxxx	0.643	B	xxxxx	0.643	+ 0.000 V/C
# 8 Broadway (N/S) / Santa Ana Bl	A	xxxxx	0.522	A	xxxxx	0.522	+ 0.000 V/C
# 9 Broadway (N/S) / 5th St (E/W)	A	xxxxx	0.462	A	xxxxx	0.462	+ 0.000 V/C
# 10 Broadway (N/S) / 4th St (E/W)	A	xxxxx	0.409	A	xxxxx	0.409	+ 0.000 V/C
# 11 Broadway (N/S)/ 3rd st (E/W)	B	xxxxx	0.613	B	xxxxx	0.613	+ 0.000 V/C
# 12 Broadway (N/S) / 1st St (E/W)	C	xxxxx	0.729	C	xxxxx	0.729	+ 0.000 V/C
# 13 Sycamore St (N/S) / Civic Cent	A	xxxxx	0.495	A	xxxxx	0.495	+ 0.000 V/C
# 14 Sycamore St (N/S) / Santa Ana	C	20.8	0.000	C	20.8	0.000	+ 0.000 D/V
# 15 Sycamore St (N/S) / 5th St (E/	B	13.7	0.000	B	13.7	0.000	+ 0.000 D/V
# 16 Sycamore St (N/S) / 4th St (E/	A	9.1	0.365	A	9.1	0.365	+ 0.000 V/C
# 17 Main St (N/S) / Civic Center D	C	xxxxx	0.750	C	xxxxx	0.750	+ 0.000 V/C
# 18 Main St (N/S) / Santa Ana Dr (	B	xxxxx	0.693	B	xxxxx	0.693	+ 0.000 V/C
# 19 Main St (N/S) / 5th St (E/W)	B	xxxxx	0.633	B	xxxxx	0.633	+ 0.000 V/C
# 20 Main St (N/S) / 4th St (E/W)	B	xxxxx	0.654	B	xxxxx	0.654	+ 0.000 V/C
# 21 Main St (N/S) / 3rd St (E/W)	B	xxxxx	0.603	B	xxxxx	0.603	+ 0.000 V/C
# 22 Main St (N/S) / 1st St (E/W)	D	xxxxx	0.872	D	xxxxx	0.872	+ 0.000 V/C
# 23 Bush St (N/S) / Santa Ana Bl (	A	xxxxx	0.403	A	xxxxx	0.403	+ 0.000 V/C
# 24 Bush St (N/S) / 5th St (E/W)	A	xxxxx	0.442	A	xxxxx	0.442	+ 0.000 V/C

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Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 25 Bush St (N/S) / 4th St (E/W)	A	xxxxx	0.464	A	xxxxx	0.464	+ 0.000 V/C
# 26 Spurgeon St (N/S) / 1st St (E/	B	14.6	0.000	B	14.6	0.000	+ 0.000 D/V
# 27 French St (N/S) / Santa Ana Bl	C	17.7	0.000	C	17.7	0.000	+ 0.000 D/V
# 28 French St (N/S) / 4th St (E/W)	A	xxxxx	0.462	A	xxxxx	0.462	+ 0.000 V/C
# 29 Lacy St (N/S) / Civic Center D	D	33.2	0.000	D	33.2	0.000	+ 0.000 D/V
# 30 Lacy st (N/S) / Santa Ana Bl (	F	51.6	0.000	F	51.6	0.000	+ 0.000 D/V
# 31 Lacy St (N/S) / Brown St (E/W)	A	7.9	0.213	A	7.9	0.213	+ 0.000 V/C
# 32 Lacy St (N/S) / 4th St (E/W)	A	xxxxx	0.567	A	xxxxx	0.567	+ 0.000 V/C
# 33 Lacy St (N/S) / 1st St (E/W)	F	57.2	0.000	F	57.2	0.000	+ 0.000 D/V
# 34 Santiago St (N/S) / Washington	D	26.9	0.930	D	26.9	0.930	+ 0.000 V/C
# 35 Santiago St (N/S) / Civic Cent	D	26.3	0.795	D	26.3	0.795	+ 0.000 V/C
# 36 Santiago St (N/S) / Santa Ana	B	xxxxx	0.677	B	xxxxx	0.677	+ 0.000 V/C
# 40 Standard Av (N/S) / 1st St (E/	D	xxxxx	0.833	D	xxxxx	0.833	+ 0.000 V/C
# 42 Grand Av (N/S) / Santa Ana Bl	E	xxxxx	0.972	E	xxxxx	0.972	+ 0.000 V/C
# 43 Grand Av (N/S) / 4th St (E/W)	C	xxxxx	0.728	C	xxxxx	0.728	+ 0.000 V/C
# 44 Grand Av (N/S) / 1st St (E/W)	C	xxxxx	0.777	C	xxxxx	0.777	+ 0.000 V/C
# 45 Penn Way (NS) at I-5 SB Ramps	C	23.5	0.458	C	23.5	0.458	+ 0.000 D/V
# 46 I-5 SB Ramps (NS) / Santa Ana	C	28.3	0.520	C	28.3	0.520	+ 0.000 D/V
# 47 I-5 NB Ramps (NS) / 17th St. (	D	40.7	0.958	D	40.7	0.958	+ 0.000 D/V
# 48 I-5 NB Ramps (NS) / Grand Ave	D	50.2	1.042	D	50.2	1.042	+ 0.000 D/V
# 49 Mortimer (N/S) / Santa Ana Blv	C	17.8	0.000	C	17.8	0.000	+ 0.000 D/V
# 50 Mortimer (N/S) / 5th St (E/W)	C	21.4	0.841	C	21.4	0.841	+ 0.000 V/C

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Flower St (NS)/ Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.734
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 41 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	143	799	116	57	495	102	221	672	88	122	735	84
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	143	799	116	57	495	102	221	672	88	122	735	84
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	143	799	116	57	495	102	221	672	88	122	735	84
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	143	799	116	57	495	102	221	672	88	122	735	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	799	116	57	495	102	221	672	88	122	735	84
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	143	799	116	57	495	102	221	672	88	122	735	84
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.75	0.25	1.00	1.66	0.34	1.00	1.77	0.23	1.00	1.79	0.21
Final Sat.:	1598	2969	431	1598	2819	581	1598	3006	394	1598	3051	349
Capacity Analysis Module:												
Vol/Sat:	0.09	0.27	0.27	0.04	0.18	0.18	0.14	0.22	0.22	0.08	0.24	0.24
Crit Moves:		****		****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Flower St (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.587
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	0 1	1 0	2	0 1	1 0	3	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	134	800	48	94	608	43	108	424	103	197	596	198
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	134	800	48	94	608	43	108	424	103	197	596	198
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	134	800	48	94	608	43	108	424	103	197	596	198
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	134	800	48	94	608	43	108	424	103	197	596	198
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	134	800	48	94	608	43	108	424	103	197	596	198
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	134	800	48	94	608	43	108	424	103	197	596	198
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00
Final Sat.:	1598	3400	1598	1598	3400	1598	1598	5100	1598	1598	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.08	0.24	0.03	0.06	0.18	0.03	0.07	0.08	0.06	0.12	0.18	0.12
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Parton St (E/W) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.372
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	19	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0 0	0	1	0 0 1	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	79	4	95	48	8	28	4	544	51	32	932	19
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	79	4	95	48	8	28	4	544	51	32	932	19
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	79	4	95	48	8	28	4	544	51	32	932	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	79	4	95	48	8	28	4	544	51	32	932	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	79	4	95	48	8	28	4	544	51	32	932	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	79	4	95	48	8	28	4	544	51	32	932	19
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.44	0.02	0.54	0.86	0.14	1.00	1.00	2.74	0.26	1.00	2.94	0.06
Final Sat.:	754	38	907	1457	243	1598	1598	4663	437	1598	4998	102
Capacity Analysis Module:												
Vol/Sat:	0.05	0.10	0.10	0.03	0.03	0.02	0.00	0.12	0.12	0.02	0.19	0.19
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Ross St (N/S) / Civic Center Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.474
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	23	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	0 1	1	0 0	1 0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	79	240	127	77	144	88	51	653	57	48	605	97
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	79	240	127	77	144	88	51	653	57	48	605	97
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	79	240	127	77	144	88	51	653	57	48	605	97
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	79	240	127	77	144	88	51	653	57	48	605	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	79	240	127	77	144	88	51	653	57	48	605	97
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	79	240	127	77	144	88	51	653	57	48	605	97
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.62	0.38	1.00	1.84	0.16	1.00	1.72	0.28
Final Sat.:	1598	1700	1598	1598	1055	645	1598	3127	273	1598	2930	470
Capacity Analysis Module:												
Vol/Sat:	0.05	0.14	0.08	0.05	0.14	0.14	0.03	0.21	0.21	0.03	0.21	0.21
Crit Moves:	****			****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Ross St (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.395
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	20	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	0 1	1	0 1	0 1	1	0 2	0 1	1	0 3	0 1
Volume Module:												
Base Vol:	46	149	83	63	211	109	62	426	56	106	622	101
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	46	149	83	63	211	109	62	426	56	106	622	101
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	46	149	83	63	211	109	62	426	56	106	622	101
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	46	149	83	63	211	109	62	426	0	106	622	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	46	149	83	63	211	109	62	426	0	106	622	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	46	149	83	63	211	109	62	426	0	106	622	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00
Final Sat.:	1598	1700	1598	1598	1700	1598	1598	3400	1598	1598	5100	1598
Capacity Analysis Module:												
Vol/Sat:	0.03	0.09	0.05	0.04	0.12	0.07	0.04	0.13	0.00	0.07	0.12	0.00
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Ross St (N/S) / 4th St (E/W)

Average Delay (sec/veh): 2.6 Worst Case Level Of Service: B[12.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 1 0			1 0 1 0 0			0 0 0 0 0			1 0 0 0 1		
Volume Module:												
Base Vol:	0	303	33	70	240	0	0	0	0	44	0	73
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	303	33	70	240	0	0	0	0	44	0	73
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	303	33	70	240	0	0	0	0	44	0	73
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	303	33	70	240	0	0	0	0	44	0	73
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	303	33	70	240	0	0	0	0	44	0	73
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	336	xxxx	xxxxx	xxxx	xxxx	xxxxx	700	xxxx	320
Potent Cap.:	xxxx	xxxx	xxxxx	1235	xxxx	xxxxx	xxxx	xxxx	xxxxx	409	xxxx	726
Move Cap.:	xxxx	xxxx	xxxxx	1235	xxxx	xxxxx	xxxx	xxxx	xxxxx	391	xxxx	726
Volume/Cap:	xxxx	xxxx	xxxx	0.06	xxxx	xxxx	xxxx	xxxx	xxxx	0.11	xxxx	0.10
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.4	xxxx	0.3
Control Del:	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	15.4	xxxx	10.5
LOS by Move:	*	*	*	A	*	*	*	*	*	C	*	B
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			12.3		
ApproachLOS:	*			*			*			B		

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Broadway (N/S) / Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.643
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 32 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Ignore			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	0 1	1 0	2	0 1	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	75	631	62	139	719	179	217	748	75	42	508	119
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	75	631	62	139	719	179	217	748	75	42	508	119
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	75	631	62	139	719	179	217	748	75	42	508	119
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	75	631	0	139	719	0	217	748	75	42	508	119
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	75	631	0	139	719	0	217	748	75	42	508	119
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	75	631	0	139	719	0	217	748	75	42	508	119
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.82	0.18	1.00	1.62	0.38
Final Sat.:	1598	3400	1598	1598	3400	1598	1598	3090	310	1598	2755	645
Capacity Analysis Module:												
Vol/Sat:	0.05	0.19	0.00	0.09	0.21	0.00	0.14	0.24	0.24	0.03	0.18	0.18
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Broadway (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.522
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	1 1	0
Volume Module:												
Base Vol:	46	703	0	0	687	144	0	0	0	45	829	139
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	46	703	0	0	687	144	0	0	0	45	829	139
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	46	703	0	0	687	144	0	0	0	45	829	139
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	46	703	0	0	687	144	0	0	0	45	829	139
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	46	703	0	0	687	144	0	0	0	45	829	139
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	46	703	0	0	687	144	0	0	0	45	829	139
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.65	0.35	0.00	0.00	0.00	0.13	2.46	0.41
Final Sat.:	1598	3400	0	0	2811	589	0	0	0	227	4174	700
Capacity Analysis Module:												
Vol/Sat:	0.03	0.21	0.00	0.00	0.24	0.24	0.00	0.00	0.00	0.03	0.20	0.20
Crit Moves:	****				****						****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Broadway (N/S) / 5th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.462
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	22	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1 1	0	1 0	2 0	0	0 1	1 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	582	75	92	708	0	192	609	20	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	582	75	92	708	0	192	609	20	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	582	75	92	708	0	192	609	20	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	582	75	92	708	0	192	609	20	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	582	75	92	708	0	192	609	20	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	582	75	92	708	0	192	609	20	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00	0.94	1.00	0.94
Lanes:	0.00	1.77	0.23	1.00	2.00	0.00	0.70	2.23	0.07	0.00	0.00	0.00
Final Sat.:	0	3012	388	1598	3400	0	1193	3783	124	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.19	0.19	0.06	0.21	0.00	0.11	0.16	0.16	0.00	0.00	0.00
Crit Moves:		****		****				****				

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Broadway (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.409
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	20	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	1 0	1	0 1	1 0	0	0 1!	0 0	0	0 1!	0 0
Volume Module:												
Base Vol:	20	516	97	26	609	23	50	108	31	51	131	41
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	516	97	26	609	23	50	108	31	51	131	41
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	516	97	26	609	23	50	108	31	51	131	41
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	516	97	26	609	23	50	108	31	51	131	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	516	97	26	609	23	50	108	31	51	131	41
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	516	97	26	609	23	50	108	31	51	131	41
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.68	0.32	1.00	1.93	0.07	0.26	0.58	0.16	0.23	0.59	0.18
Final Sat.:	1598	2862	538	1598	3276	124	450	971	279	389	999	313
Capacity Analysis Module:												
Vol/Sat:	0.01	0.18	0.18	0.02	0.19	0.19	0.03	0.11	0.11	0.03	0.13	0.13
Crit Moves:	****			****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Broadway (N/S)/ 3rd st (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.613
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 0	1 0	1	0 1	0 1	1	0 1	0 1	1	0 1	0 0
Volume Module:												
Base Vol:	56	594	48	54	578	45	40	114	22	19	150	65
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	56	594	48	54	578	45	40	114	22	19	150	65
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	56	594	48	54	578	45	40	114	22	19	150	65
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	56	594	48	54	578	45	40	114	22	19	150	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	594	48	54	578	45	40	114	22	19	150	65
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	56	594	48	54	578	45	40	114	22	19	150	65
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.93	0.07	1.00	1.00	1.00	1.00	0.84	0.16	1.00	0.70	0.30
Final Sat.:	1598	1573	127	1598	1700	1598	1598	1425	275	1598	1186	514
Capacity Analysis Module:												
Vol/Sat:	0.04	0.38	0.38	0.03	0.34	0.03	0.03	0.08	0.08	0.01	0.13	0.13
Crit Moves:		****		****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Broadway (N/S) / 1st St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.729
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 40 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	0 1	1	0 1	0 1	1	0 2	1 0	1	0 2	1 0
Volume Module:												
Base Vol:	92	365	111	66	399	147	142	1215	69	132	1449	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	92	365	111	66	399	147	142	1215	69	132	1449	70
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	92	365	111	66	399	147	142	1215	69	132	1449	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	92	365	111	66	399	147	142	1215	69	132	1449	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	365	111	66	399	147	142	1215	69	132	1449	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	92	365	111	66	399	147	142	1215	69	132	1449	70
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.84	0.16	1.00	2.86	0.14
Final Sat.:	1598	1700	1598	1598	1700	1598	1598	4826	274	1598	4865	235
Capacity Analysis Module:												
Vol/Sat:	0.06	0.21	0.07	0.04	0.23	0.09	0.09	0.25	0.25	0.08	0.30	0.30
Crit Moves:	****			****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Sycamore St (N/S) / Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.495
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 23 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 1!	0 0	0	0 1!	0 0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	24	52	24	95	94	101	23	850	17	8	473	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	24	52	24	95	94	101	23	850	17	8	473	33
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	24	52	24	95	94	101	23	850	17	8	473	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	52	24	95	94	101	23	850	17	8	473	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	52	24	95	94	101	23	850	17	8	473	33
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	52	24	95	94	101	23	850	17	8	473	33
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.24	0.52	0.24	0.33	0.32	0.35	1.00	1.96	0.04	1.00	1.87	0.13
Final Sat.:	408	884	408	557	551	592	1598	3333	67	1598	3178	222
Capacity Analysis Module:												
Vol/Sat:	0.01	0.06	0.06	0.06	0.17	0.17	0.01	0.26	0.25	0.01	0.15	0.15
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #14 Sycamore St (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 5.4 Worst Case Level Of Service: C[20.8]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0 0	0	0	0	1 0	0	0	0	0 0	0	1	1	1 0
Volume Module:																
Base Vol:	55	77	0	0	84	42	0	0	0	39	677	26				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	55	77	0	0	84	42	0	0	0	39	677	26				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	55	77	0	0	84	42	0	0	0	39	677	26				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	55	77	0	0	84	42	0	0	0	39	677	26				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	55	77	0	0	84	42	0	0	0	39	677	26				
Critical Gap Module:																
Critical Gp:	7.1	6.5	xxxxx	xxxxx	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx				
FollowUpTim:	3.5	4.0	xxxxx	xxxxx	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	346	781	xxxxx	xxxx	768	239	xxxx	xxxx	xxxxx	0	xxxx	xxxxx				
Potent Cap.:	612	329	xxxxx	xxxx	334	805	xxxx	xxxx	xxxxx	900	xxxx	xxxxx				
Move Cap.:	447	314	xxxxx	xxxx	319	805	xxxx	xxxx	xxxxx	900	xxxx	xxxxx				
Volume/Cap:	0.12	0.25	xxxx	xxxx	0.26	0.05	xxxx	xxxx	xxxx	0.04	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	358	xxxx	xxxxx	xxxx	xxxx	400	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	1.7	xxxx	xxxxx	xxxxx	xxxx	1.3	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx				
Shrd ConDel:	20.8	xxxx	xxxxx	xxxxx	xxxx	18.1	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx				
Shared LOS:	C	*	*	*	*	C	*	*	*	A	*	*				
ApproachDel:	20.8			18.1			xxxxxx			xxxxxx						
ApproachLOS:	C			C			*			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #15 Sycamore St (N/S) / 5th St (E/W)

Average Delay (sec/veh): 3.7 Worst Case Level Of Service: B[13.7]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	1 0	0	1	0	0 0	0	1	1	1 0	0	0	0	0 0
Volume Module:																
Base Vol:	0	6	24	82	33	0	65	438	15	0	0	0				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	0	6	24	82	33	0	65	438	15	0	0	0				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	0	6	24	82	33	0	65	438	15	0	0	0				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	0	6	24	82	33	0	65	438	15	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	0	6	24	82	33	0	65	438	15	0	0	0				
Critical Gap Module:																
Critical Gp:	xxxxx	6.5	6.2	7.1	6.5	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	4.0	3.3	3.5	4.0	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	xxxx	576	154	279	583	xxxxx	0	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	431	898	677	427	xxxxx	900	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	398	898	614	395	xxxxx	900	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	0.02	0.03	0.13	0.08	xxxx	0.07	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	xxxx	xxxx	718	530	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	0.1	0.8	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	10.2	13.7	xxxx	xxxxx	9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	B	B	*	*	A	*	*	*	*	*				
ApproachDel:	10.2			13.7			xxxxxx			xxxxxx						
ApproachLOS:	B			B			*			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #16 Sycamore St (N/S) / 4th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.365
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): 9.1
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1! 0	0	0	1! 0	0	0	1! 0
Volume Module:												
Base Vol:	3	8	81	19	9	23	20	139	19	88	179	22
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	8	81	19	9	23	20	139	19	88	179	22
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	8	81	19	9	23	20	139	19	88	179	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	8	81	19	9	23	20	139	19	88	179	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	8	81	19	9	23	20	139	19	88	179	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	3	8	81	19	9	23	20	139	19	88	179	22
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	0.09	0.88	0.37	0.18	0.45	0.11	0.78	0.11	0.30	0.62	0.08
Final Sat.:	24	64	650	253	120	306	87	604	83	241	490	60
Capacity Analysis Module:												
Vol/Sat:	0.12	0.12	0.12	0.08	0.08	0.08	0.23	0.23	0.23	0.37	0.37	0.37
Crit Moves:		****			****			****			****	
Delay/Veh:	8.0	8.0	8.0	8.2	8.2	8.2	8.8	8.8	8.8	9.9	9.9	9.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.0	8.0	8.0	8.2	8.2	8.2	8.8	8.8	8.8	9.9	9.9	9.9
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:		8.0			8.2			8.8			9.9	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		8.0			8.2			8.8			9.9	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.3	0.5	0.5	0.5

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Main St (N/S) / Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.750
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 43 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1 1 0	1	0	1 1 0	1	0	1 1 0	1	0	1 1 0
Volume Module:												
Base Vol:	108	1044	89	72	1009	89	138	804	119	61	405	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	108	1044	89	72	1009	89	138	804	119	61	405	70
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	108	1044	89	72	1009	89	138	804	119	61	405	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	108	1044	89	72	1009	89	138	804	119	61	405	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	108	1044	89	72	1009	89	138	804	119	61	405	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	108	1044	89	72	1009	89	138	804	119	61	405	70
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.84	0.16	1.00	1.84	0.16	1.00	1.74	0.26	1.00	1.71	0.29
Final Sat.:	1598	3133	267	1598	3124	276	1598	2962	438	1598	2899	501
Capacity Analysis Module:												
Vol/Sat:	0.07	0.33	0.33	0.05	0.32	0.32	0.09	0.27	0.27	0.04	0.14	0.14
Crit Moves:	****				****			****		****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #18 Main St (N/S) / Santa Ana Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.693
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 2	0 0	0	0 1	1 0	0	0 0	0 0 0	0	1 1	1 0
Volume Module:												
Base Vol:	80	1273	0	0	1263	70	0	0	0	84	833	108
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	1273	0	0	1263	70	0	0	0	84	833	108
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	80	1273	0	0	1263	70	0	0	0	84	833	108
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	1273	0	0	1263	70	0	0	0	84	833	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	1273	0	0	1263	70	0	0	0	84	833	108
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	1273	0	0	1263	70	0	0	0	84	833	108
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.89	0.11	0.00	0.00	0.00	0.24	2.44	0.32
Final Sat.:	1598	3400	0	0	3221	179	0	0	0	418	4145	537
Capacity Analysis Module:												
Vol/Sat:	0.05	0.37	0.00	0.00	0.39	0.39	0.00	0.00	0.00	0.05	0.20	0.20
Crit Moves:	****				****						****	

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #19 Main St (N/S) / 5th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.633
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 1	1 0	1	0 2	0 0	0	1 1	1 0	0	0 0	0 0
Volume Module:												
Base Vol:	0	1251	26	84	1222	0	109	611	69	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1251	26	84	1222	0	109	611	69	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1251	26	84	1222	0	109	611	69	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1251	26	84	1222	0	109	611	69	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1251	26	84	1222	0	109	611	69	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1251	26	84	1222	0	109	611	69	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00	0.94	1.00	0.94
Lanes:	0.00	1.96	0.04	1.00	2.00	0.00	0.41	2.33	0.26	0.00	0.00	0.00
Final Sat.:	0	3331	69	1598	3400	0	705	3949	446	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.38	0.38	0.05	0.36	0.00	0.06	0.15	0.15	0.00	0.00	0.00
Crit Moves:		****		****				****				

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #20 Main St (N/S) / 4th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.654
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 33 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 1	1 0	0	0 1	1 0	0	0 0	1 0	0	0 0	1 0
Volume Module:												
Base Vol:	0	1260	55	0	1247	51	0	203	50	0	303	66
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1260	55	0	1247	51	0	203	50	0	303	66
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1260	55	0	1247	51	0	203	50	0	303	66
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1260	55	0	1247	51	0	203	50	0	303	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1260	55	0	1247	51	0	203	50	0	303	66
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1260	55	0	1247	51	0	203	50	0	303	66
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.00	1.92	0.08	0.00	1.92	0.08	0.00	0.80	0.20	0.00	0.82	0.18
Final Sat.:	0	3258	142	0	3266	134	0	1364	336	0	1396	304
Capacity Analysis Module:												
Vol/Sat:	0.00	0.39	0.39	0.00	0.38	0.38	0.00	0.15	0.15	0.00	0.22	0.22
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #21 Main St (N/S) / 3rd St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.603
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 29 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 1	1 0	0	0 1	1 0	1	0 0	1 0	1	0 0	1 0
Volume Module:												
Base Vol:	0	1230	44	0	1256	57	46	164	43	41	195	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1230	44	0	1256	57	46	164	43	41	195	40
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1230	44	0	1256	57	46	164	43	41	195	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1230	44	0	1256	57	46	164	43	41	195	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1230	44	0	1256	57	46	164	43	41	195	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1230	44	0	1256	57	46	164	43	41	195	40
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.00	1.93	0.07	0.00	1.91	0.09	1.00	0.79	0.21	1.00	0.83	0.17
Final Sat.:	0	3283	117	0	3252	148	1598	1347	353	1598	1411	289
Capacity Analysis Module:												
Vol/Sat:	0.00	0.37	0.37	0.00	0.39	0.39	0.03	0.12	0.12	0.03	0.14	0.14
Crit Moves:	****				****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #22 Main St (N/S) / 1st St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.872
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	73	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	213	1028	88	189	957	155	172	1198	95	114	1290	77
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	213	1028	88	189	957	155	172	1198	95	114	1290	77
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	213	1028	88	189	957	155	172	1198	95	114	1290	77
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	213	1028	88	189	957	155	172	1198	95	114	1290	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	213	1028	88	189	957	155	172	1198	95	114	1290	77
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	213	1028	88	189	957	155	172	1198	95	114	1290	77
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.84	0.16	1.00	2.00	1.00	1.00	2.78	0.22	1.00	2.83	0.17
Final Sat.:	1598	3132	268	1598	3400	1598	1598	4725	375	1598	4813	287
Capacity Analysis Module:												
Vol/Sat:	0.13	0.33	0.33	0.12	0.28	0.10	0.11	0.25	0.25	0.07	0.27	0.27
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #23 Bush St (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.403
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	20	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	0 0	0 0	0	1 0	0 0	0	0 0	0 1	1	1 0
Volume Module:												
Base Vol:	43	327	0	0	211	36	0	0	0	34	724	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	43	327	0	0	211	36	0	0	0	34	724	63
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	43	327	0	0	211	36	0	0	0	34	724	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	43	327	0	0	211	36	0	0	0	34	724	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	327	0	0	211	36	0	0	0	34	724	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	43	327	0	0	211	36	0	0	0	34	724	63
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	0.85	0.15	0.00	0.00	0.00	0.12	2.65	0.23
Final Sat.:	1598	1700	0	0	1452	248	0	0	0	211	4497	391
Capacity Analysis Module:												
Vol/Sat:	0.03	0.19	0.00	0.00	0.15	0.15	0.00	0.00	0.00	0.02	0.16	0.16
Crit Moves:		****		****							****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #24 Bush St (N/S) / 5th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.442
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	21	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 1	0	1 0	1 0	0	0 1	1 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	315	65	29	264	0	46	654	65	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	315	65	29	264	0	46	654	65	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	315	65	29	264	0	46	654	65	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	315	65	29	264	0	46	654	65	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	315	65	29	264	0	46	654	65	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	315	65	29	264	0	46	654	65	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00	0.94	1.00	0.94
Lanes:	0.00	0.83	0.17	1.00	1.00	0.00	0.18	2.57	0.25	0.00	0.00	0.00
Final Sat.:	0	1409	291	1598	1700	0	307	4360	433	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.22	0.02	0.16	0.00	0.03	0.15	0.15	0.00	0.00	0.00
Crit Moves:		****		****				****				

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #25 Bush St (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.464
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	22	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	20	317	26	43	229	12	13	206	28	19	241	42
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	317	26	43	229	12	13	206	28	19	241	42
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	317	26	43	229	12	13	206	28	19	241	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	317	26	43	229	12	13	206	28	19	241	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	317	26	43	229	12	13	206	28	19	241	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	317	26	43	229	12	13	206	28	19	241	42
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.92	0.08	1.00	0.95	0.05	0.05	0.84	0.11	0.06	0.80	0.14
Final Sat.:	1598	1571	129	1598	1615	85	89	1418	193	107	1357	236
Capacity Analysis Module:												
Vol/Sat:	0.01	0.20	0.20	0.03	0.14	0.14	0.01	0.15	0.15	0.01	0.18	0.18
Crit Moves:		****		****				****				

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #26 Spurgeon St (N/S) / 1st St (E/W)

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[14.6]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	0	0	0 1	0	0	3	0 0	0	0	2	1 0
Volume Module:																
Base Vol:	0	0	0	0 0	124	0	1611	0	0	0	1534	40				
Growth Adj:	1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	0	0	0	0 0	124	0	1611	0	0	0	1534	40				
Added Vol:	0	0	0	0 0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0 0	0	0	0	0	0	0	0	0				
Initial Fut:	0	0	0	0 0	124	0	1611	0	0	0	1534	40				
User Adj:	1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	0	0	0	0 0	124	0	1611	0	0	0	1534	40				
Reduct Vol:	0	0	0	0 0	0	0	0	0	0	0	0	0				
FinalVolume:	0	0	0	0 0	124	0	1611	0	0	0	1534	40				
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx xxxx	531	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	498	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Move Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	498	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Volume/Cap:	xxxx	xxxx	xxxx	xxxx xxxx	0.25	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx					
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx xxxx	1.0	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Control Del:	xxxxx	xxxx	xxxxx	xxxxx xxxx	14.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
LOS by Move:	*	*	*	* *	B	*	*	*	*	*	*					
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*				
ApproachDel:	xxxxxx			14.6			xxxxxx			xxxxxx						
ApproachLOS:	*			B			*			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #27 French St (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 4.2 Worst Case Level Of Service: C[17.7]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0 0	0	0	0	1 0	0	0	0	0 0	0	1	0	1 0
Volume Module:																
Base Vol:	93	66	0	0 34	6	0	0	0	23	638	7					
Growth Adj:	1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
Initial Bse:	93	66	0	0 34	6	0	0	0	23	638	7					
Added Vol:	0	0	0	0 0	0	0	0	0	0	0	0					
PasserByVol:	0	0	0	0 0	0	0	0	0	0	0	0					
Initial Fut:	93	66	0	0 34	6	0	0	0	23	638	7					
User Adj:	1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
PHF Adj:	1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
PHF Volume:	93	66	0	0 34	6	0	0	0	23	638	7					
Reduct Vol:	0	0	0	0 0	0	0	0	0	0	0	0					
FinalVolume:	93	66	0	0 34	6	0	0	0	23	638	7					
Critical Gap Module:																
Critical Gp:	7.1	6.5	xxxxx	xxxxx 6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx					
FollowUpTim:	3.5	4.0	xxxxx	xxxxx 4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx					
Capacity Module:																
Cnflict Vol:	382	691	xxxxx	xxxx 688	323	xxxx	xxxx	xxxxx	0	xxxx	xxxxx					
Potent Cap.:	580	370	xxxxx	xxxx 372	723	xxxx	xxxx	xxxxx	900	xxxx	xxxxx					
Move Cap.:	523	361	xxxxx	xxxx 362	723	xxxx	xxxx	xxxxx	900	xxxx	xxxxx					
Volume/Cap:	0.18	0.18	xxxx	xxxx 0.09	0.01	xxxx	xxxx	xxxx	0.03	xxxx	xxxx					
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx					
Control Del:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx					
LOS by Move:	*	*	*	* *	*	*	*	*	A	*	*					
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	441	xxxx	xxxxx	xxxx	xxxx	392	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	1.6	xxxx	xxxxx	xxxxx	xxxx	0.3	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx				
Shrd ConDel:	17.7	xxxx	xxxxx	xxxxx	xxxx	15.2	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx				
Shared LOS:	C	*	*	*	*	C	*	*	*	A	*	*				
ApproachDel:	17.7			15.2			xxxxxx			xxxxxx						
ApproachLOS:	C			C			*			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #28 French St (N/S) / 4th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.462
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 22 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0 0	1 0	0 1	0	0 0	1!	0 0	0 1	0 0	1
Volume Module:												
Base Vol:	20	70	78	133	65	20	13	184	34	79	299	67
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	70	78	133	65	20	13	184	34	79	299	67
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	70	78	133	65	20	13	184	34	79	299	67
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	70	78	133	65	20	13	184	34	79	299	67
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	70	78	133	65	20	13	184	34	79	299	67
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	70	78	133	65	20	13	184	34	79	299	67
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.94
Lanes:	0.12	0.42	0.46	1.00	0.76	0.24	0.05	0.80	0.15	0.21	0.79	1.00
Final Sat.:	202	708	789	1598	1300	400	96	1354	250	355	1345	1598
Capacity Analysis Module:												
Vol/Sat:	0.01	0.10	0.10	0.08	0.05	0.05	0.01	0.14	0.14	0.05	0.22	0.04
Crit Moves:		****		****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #29 Lacy St (N/S) / Civic Center Dr (E/W)

Average Delay (sec/veh): 5.2 Worst Case Level Of Service: D[33.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1!	0 0	0 0	1!	0 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	22	23	42	87	13	17	14	601	18	9	208	71
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	22	23	42	87	13	17	14	601	18	9	208	71
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	22	23	42	87	13	17	14	601	18	9	208	71
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	22	23	42	87	13	17	14	601	18	9	208	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	22	23	42	87	13	17	14	601	18	9	208	71
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	915	935	610	932	909	244	279	xxxx	xxxxx	619	xxxx	xxxxx
Potent Cap.:	256	267	498	249	277	800	1295	xxxx	xxxxx	971	xxxx	xxxxx
Move Cap.:	237	262	498	209	272	800	1295	xxxx	xxxxx	971	xxxx	xxxxx
Volume/Cap:	0.09	0.09	0.08	0.42	0.05	0.02	0.01	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.8	xxxx	xxxxx	8.7	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT	-	LTR - RT	LT	-	LTR - RT	LT	-	LTR - RT	LT	-	LTR - RT
Shared Cap.:	xxxx	329	xxxxx	xxxx	241	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	1.0	xxxxx	xxxxx	2.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	19.9	xxxxx	xxxxx	33.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	D	*	*	*	*	*	*	*
ApproachDel:		19.9			33.2			xxxxx			xxxxx	
ApproachLOS:		C			D			*			*	

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #30 Lacy st (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 4.2 Worst Case Level Of Service: F[51.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 1! 0 0			1 0 0 1 0			1 0 0 1 0		
Volume Module:												
Base Vol:	13	42	14	21	18	14	3	665	6	22	667	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	13	42	14	21	18	14	3	665	6	22	667	20
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	13	42	14	21	18	14	3	665	6	22	667	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	13	42	14	21	18	14	3	665	6	22	667	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	13	42	14	21	18	14	3	665	6	22	667	20
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1411	1405	668	1423	1398	677	687	xxxx	xxxxx	671	xxxx	xxxxx
Potent Cap.:	117	141	462	115	142	456	916	xxxx	xxxxx	929	xxxx	xxxxx
Move Cap.:	100	137	462	83	138	456	916	xxxx	xxxxx	929	xxxx	xxxxx
Volume/Cap:	0.13	0.31	0.03	0.25	0.13	0.03	0.00	xxxx	xxxx	0.02	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.9	xxxx	xxxxx	9.0	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	148	xxxxx	xxxx	128	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	2.2	xxxxx	xxxxx	1.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	49.1	xxxxx	xxxxx	51.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	E	*	*	F	*	*	*	*	*	*	*
ApproachDel:		49.1			51.6			xxxxx			xxxxx	
ApproachLOS:		E			F			*			*	

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #31 Lacy St (N/S) / Brown St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.213
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): 7.9
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 1! 0 0			0 0 1! 0 0			0 0 1! 0 0			0 1 0 0 0		
Volume Module:												
Base Vol:	67	64	56	6	34	13	8	17	10	19	30	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	67	64	56	6	34	13	8	17	10	19	30	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	67	64	56	6	34	13	8	17	10	19	30	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	67	64	56	6	34	13	8	17	10	19	30	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	67	64	56	6	34	13	8	17	10	19	30	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	67	64	56	6	34	13	8	17	10	19	30	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.36	0.34	0.30	0.11	0.64	0.25	0.23	0.48	0.29	0.39	0.61	0.00
Final Sat.:	314	300	262	96	544	208	181	384	226	295	466	0
Capacity Analysis Module:												
Vol/Sat:	0.21	0.21	0.21	0.06	0.06	0.06	0.04	0.04	0.04	0.06	0.06	xxxx
Crit Moves:	****				****			****			****	
Delay/Veh:	8.1	8.1	8.1	7.4	7.4	7.4	7.5	7.5	7.5	7.8	7.8	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.1	8.1	8.1	7.4	7.4	7.4	7.5	7.5	7.5	7.8	7.8	0.0
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	*
ApproachDel:		8.1			7.4			7.5			7.8	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		8.1			7.4			7.5			7.8	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.3	0.3	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #32 Lacy St (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.567
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	45	79	68	56	32	11	6	446	25	151	602	108
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	45	79	68	56	32	11	6	446	25	151	602	108
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	45	79	68	56	32	11	6	446	25	151	602	108
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	45	79	68	56	32	11	6	446	25	151	602	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	79	68	56	32	11	6	446	25	151	602	108
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	45	79	68	56	32	11	6	446	25	151	602	108
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	0.23	0.42	0.35	0.57	0.32	0.11	1.00	0.95	0.05	1.00	1.00	1.00
Final Sat.:	398	699	602	962	549	189	1598	1610	90	1598	1700	1598
Capacity Analysis Module:												
Vol/Sat:	0.03	0.11	0.11	0.03	0.06	0.06	0.00	0.28	0.28	0.09	0.35	0.07
Crit Moves:		****		****				****		****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #33 Lacy St (N/S) / 1st St (E/W)

Average Delay (sec/veh): 3.5 Worst Case Level Of Service: F[57.2]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	- T	- R	L	- T	- R	L	- T	- R				L	- T	- R			
Control:	Stop Sign			Stop Sign			Uncontrolled						Uncontrolled					
Rights:	Include			Include			Include						Include					
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	3	0	0			0 0	2	1	0		
Volume Module:																		
Base Vol:	0	0	0	10	0	130	184	1427	0	0	1457	40						
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
Initial Bse:	0	0	0	10	0	130	184	1427	0	0	1457	40						
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0						
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0						
Initial Fut:	0	0	0	10	0	130	184	1427	0	0	1457	40						
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
PHF Volume:	0	0	0	10	0	130	184	1427	0	0	1457	40						
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0						
FinalVolume:	0	0	0	10	0	130	184	1427	0	0	1457	40						
Critical Gap Module:																		
Critical Gp:	7.5	6.5	6.9	6.8	6.5	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Capacity Module:																		
Cnflict Vol:	2281	3292	476	2321	3272	506	1497	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Potent Cap.:	22	9	541	32	9	517	454	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Move Cap.:	11	5	541	22	5	517	454	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Volume/Cap:	0.00	0.00	0.00	0.45	0.00	0.25	0.41	xxxx	xxxx	xxxx	xxxx	xxxx						
Level Of Service Module:																		
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.9	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	18.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
LOS by Move:	*	*	*	*	*	*	C	*	*	*	*	*						
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT						
Shared Cap.:	xxxx	0	xxxxx	xxxx	199	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	4.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	57.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*						
ApproachDel:	xxxxxx				57.2		xxxxxx			xxxxxx								
ApproachLOS:	*				F		*			*								

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #34 Santiago St (N/S) / Washington Av (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.930
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	26.9
Optimal Cycle:	0	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	1 0	1	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	65	312	174	24	200	125	260	190	21	50	146	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	65	312	174	24	200	125	260	190	21	50	146	36
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	65	312	174	24	200	125	260	190	21	50	146	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	65	312	174	24	200	125	260	190	21	50	146	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	65	312	174	24	200	125	260	190	21	50	146	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	65	312	174	24	200	125	260	190	21	50	146	36
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.56	0.40	0.04	0.22	0.63	0.15
Final Sat.:	429	458	502	407	432	472	280	204	23	97	282	69
Capacity Analysis Module:												
Vol/Sat:	0.15	0.68	0.35	0.06	0.46	0.27	0.93	0.93	0.93	0.52	0.52	0.52
Crit Moves:		****			****		****			****		
Delay/Veh:	12.2	24.1	13.1	11.7	16.9	12.4	49.3	49.3	49.3	17.8	17.8	17.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.2	24.1	13.1	11.7	16.9	12.4	49.3	49.3	49.3	17.8	17.8	17.8
LOS by Move:	B	C	B	B	C	B	E	E	E	C	C	C
ApproachDel:		19.3			14.9			49.3			17.8	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		19.3			14.9			49.3			17.8	
LOS by Appr:		C			B			E			C	
AllWayAvgQ:	0.2	1.8	0.5	0.1	0.7	0.3	5.5	5.5	5.5	0.9	0.9	0.9

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #35 Santiago St (N/S) / Civic Center Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.795
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	26.3
Optimal Cycle:	0	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	203	240	34	15	235	143	311	57	408	32	34	13
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	203	240	34	15	235	143	311	57	408	32	34	13
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	203	240	34	15	235	143	311	57	408	32	34	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	203	240	34	15	235	143	311	57	408	32	34	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	203	240	34	15	235	143	311	57	408	32	34	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	203	240	34	15	235	143	311	57	408	32	34	13
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.88	0.12	1.00	0.62	0.38	0.85	0.15	1.00	0.41	0.43	0.16
Final Sat.:	437	413	59	424	295	180	392	72	541	158	168	64
Capacity Analysis Module:												
Vol/Sat:	0.46	0.58	0.58	0.04	0.80	0.80	0.79	0.79	0.75	0.20	0.20	0.20
Crit Moves:		****			****			****				****
Delay/Veh:	17.4	19.7	19.7	11.2	32.3	32.3	33.5	33.5	26.2	13.6	13.6	13.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.4	19.7	19.7	11.2	32.3	32.3	33.5	33.5	26.2	13.6	13.6	13.6
LOS by Move:	C	C	C	B	D	D	D	D	D	B	B	B
ApproachDel:		18.7			31.5			29.6			13.6	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		18.7			31.5			29.6			13.6	
LOS by Appr:		C			D			D			B	
AllWayAvgQ:	0.8	1.2	1.2	0.0	2.9	2.9	3.0	3.0	2.5	0.2	0.2	0.2

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #36 Santiago St (N/S) / Santa Ana Bl (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.677
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 35 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	0 1	1	0 1	0 1	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	35	99	77	395	197	109	65	784	53	120	677	322
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	35	99	77	395	197	109	65	784	53	120	677	322
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	35	99	77	395	197	109	65	784	53	120	677	322
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	35	99	77	395	197	109	65	784	53	120	677	322
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	99	77	395	197	109	65	784	53	120	677	322
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	99	77	395	197	109	65	784	53	120	677	322
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.87	0.13	1.00	2.00	1.00
Final Sat.:	1598	1700	1598	1598	1700	1598	1598	3185	215	1598	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.02	0.06	0.05	0.25	0.12	0.07	0.04	0.25	0.25	0.08	0.20	0.20
Crit Moves:		****		****				****		****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #40 Standard Av (N/S) / 1st St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.833
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 60 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 0	1 0	0	0 1!	0 0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	202	314	149	19	246	28	86	1344	84	102	1364	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	202	314	149	19	246	28	86	1344	84	102	1364	12
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	202	314	149	19	246	28	86	1344	84	102	1364	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	202	314	149	19	246	28	86	1344	84	102	1364	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	202	314	149	19	246	28	86	1344	84	102	1364	12
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	202	314	149	19	246	28	86	1344	84	102	1364	12
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.68	0.32	0.06	0.84	0.10	1.00	1.88	0.12	1.00	1.98	0.02
Final Sat.:	1598	1153	547	110	1427	162	1598	3200	200	1598	3370	30
Capacity Analysis Module:												
Vol/Sat:	0.13	0.27	0.27	0.01	0.17	0.17	0.05	0.42	0.42	0.06	0.40	0.40
Crit Moves:	****				****			****		****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #42 Grand Av (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.972
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	1 0	1 0	2	0 2	2 0	1	0 2	0 1	0	1 0
Volume Module:												
Base Vol:	254	2038	13	53	968	687	358	118	438	43	210	81
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	254	2038	13	53	968	687	358	118	438	43	210	81
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	254	2038	13	53	968	687	358	118	438	43	210	81
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	254	2038	13	53	968	687	358	118	438	43	210	81
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	254	2038	13	53	968	687	358	118	438	43	210	81
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	254	2038	13	53	968	687	358	118	438	43	210	81
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	2.98	0.02	1.00	2.00	2.00	2.00	1.00	2.00	0.26	1.26	0.48
Final Sat.:	1598	5068	32	1598	3400	3196	3196	1700	3196	438	2138	825
Capacity Analysis Module:												
Vol/Sat:	0.16	0.40	0.40	0.03	0.28	0.21	0.11	0.07	0.14	0.10	0.10	0.10
Crit Moves:			****		****				****	****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #43 Grand Av (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.728
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	3	0 1	1 0	2	1 0	1 0	1	1 0	1 0	2	0 1
Volume Module:												
Base Vol:	161	1159	84	140	830	88	178	609	88	253	792	173
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	161	1159	84	140	830	88	178	609	88	253	792	173
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	161	1159	84	140	830	88	178	609	88	253	792	173
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	161	1159	84	140	830	88	178	609	88	253	792	173
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	161	1159	84	140	830	88	178	609	88	253	792	173
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	161	1159	84	140	830	88	178	609	88	253	792	173
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	1.00	3.00	1.00	1.00	2.71	0.29	1.00	1.75	0.25	1.00	2.00	1.00
Final Sat.:	1598	5100	1598	1598	4611	489	1598	2971	429	1598	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.10	0.23	0.05	0.09	0.18	0.18	0.11	0.20	0.21	0.16	0.23	0.11
Crit Moves:		****		****					****	****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #44 Grand Av (N/S) / 1st St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.777
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0 2	1 0	2	0 3	0 1	2	0 2	1 0	2	0 2	0 1
Volume Module:												
Base Vol:	131	1390	159	105	1065	94	197	1244	122	244	1118	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	131	1390	159	105	1065	94	197	1244	122	244	1118	46
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	131	1390	159	105	1065	94	197	1244	122	244	1118	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	131	1390	159	105	1065	94	197	1244	122	244	1118	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	131	1390	159	105	1065	94	197	1244	122	244	1118	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	131	1390	159	105	1065	94	197	1244	122	244	1118	46
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	2.00	2.69	0.31	2.00	3.00	1.00	2.00	2.73	0.27	2.00	2.00	1.00
Final Sat.:	3196	4577	523	3196	5100	1598	3196	4645	455	3196	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.04	0.30	0.30	0.03	0.21	0.06	0.06	0.27	0.27	0.08	0.33	0.03
Crit Moves:		****		****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #45 Penn Way (NS) at I-5 SB Ramps (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.458
Loss Time (sec):	12 (Y+R=4.0 sec)	Average Delay (sec/veh):	23.5
Optimal Cycle:	38	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 2	0 1	2	0 2	0 0	0	0 0	0 0	1	0 0	0 2
Volume Module:												
Base Vol:	0	190	173	617	71	0	0	0	0	175	0	257
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	190	173	617	71	0	0	0	0	175	0	257
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	190	173	617	71	0	0	0	0	175	0	257
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	190	173	617	71	0	0	0	0	175	0	257
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	190	173	617	71	0	0	0	0	175	0	257
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	190	173	617	71	0	0	0	0	175	0	257
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.92	0.95	1.00	1.00	1.00	1.00	0.77	1.00	0.75
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	2.00
Final Sat.:	0	3610	1615	3502	3610	0	0	0	0	1461	0	2842
Capacity Analysis Module:												
Vol/Sat:	0.00	0.05	0.11	0.18	0.02	0.00	0.00	0.00	0.00	0.12	0.00	0.09
Crit Moves:			****	****						****		
Green/Cycle:	0.00	0.23	0.23	0.38	0.38	0.00	0.00	0.00	0.00	0.26	0.00	0.65
Volume/Cap:	0.00	0.23	0.46	0.46	0.05	0.00	0.00	0.00	0.00	0.46	0.00	0.14
Delay/Veh:	0.0	31.1	33.8	23.2	19.3	0.0	0.0	0.0	0.0	31.9	0.0	6.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	31.1	33.8	23.2	19.3	0.0	0.0	0.0	0.0	31.9	0.0	6.9
LOS by Move:	A	C	C	C	B	A	A	A	A	C	A	A
HCM2kAvgQ:	0	3	5	7	1	0	0	0	0	5	0	2

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #46 I-5 SB Ramps (NS) / Santa Ana Bl (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.520
Loss Time (sec):	12 (Y+R=4.0 sec)	Average Delay (sec/veh):	28.3
Optimal Cycle:	42	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2 0	0	0 1	2 0	3	0 0	0 0	2	1 0
Volume Module:												
Base Vol:	0	0	0	295	0	160	440	737	0	0	847	237
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	295	0	160	440	737	0	0	847	237
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	295	0	160	440	737	0	0	847	237
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	295	0	160	440	737	0	0	847	237
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	295	0	160	440	737	0	0	847	237
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	295	0	160	440	737	0	0	847	237
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.85	0.92	0.91	1.00	1.00	0.88	0.88
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	2.00	3.00	0.00	0.00	2.34	0.66
Final Sat.:	0	0	0	3502	0	1615	3502	5187	0	0	3919	1097
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.08	0.00	0.10	0.13	0.14	0.00	0.00	0.22	0.22
Crit Moves:						****		****				****
Green/Cycle:	0.00	0.00	0.00	0.19	0.00	0.19	0.27	0.27	0.00	0.00	0.42	0.42
Volume/Cap:	0.00	0.00	0.00	0.44	0.00	0.52	0.46	0.52	0.00	0.00	0.52	0.52
Delay/Veh:	0.0	0.0	0.0	36.2	0.0	37.9	30.5	31.1	0.0	0.0	22.0	22.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	36.2	0.0	37.9	30.5	31.1	0.0	0.0	22.0	22.0
LOS by Move:	A	A	A	D	A	D	C	C	A	A	C	C
HCM2kAvgQ:	0	0	0	5	0	5	6	7	0	0	9	9

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #47 I-5 NB Ramps (NS) / 17th St. (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.958
Loss Time (sec):	16 (Y+R=4.0 sec)	Average Delay (sec/veh):	40.7
Optimal Cycle:	100	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 1	0	0 1	1 0	0	0 1	1 0	3	0 1	0 0	2	1 0
Volume Module:												
Base Vol:	806	73	31	118	0	119	142	1341	398	0	2020	96
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	806	73	31	118	0	119	142	1341	398	0	2020	96
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	806	73	31	118	0	119	142	1341	398	0	2020	96
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	806	73	31	118	0	119	142	1341	0	0	2020	96
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	806	73	31	118	0	119	142	1341	0	0	2020	96
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	806	73	31	118	0	119	142	1341	0	0	2020	96
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.96	0.96	0.85	0.95	1.00	0.85	0.95	0.91	1.00	1.00	0.90	0.90
Lanes:	1.83	0.17	1.00	1.00	0.00	1.00	1.00	3.00	1.00	0.00	2.86	0.14
Final Sat.:	3331	302	1615	1805	0	1615	1805	5187	1900	0	4917	234
Capacity Analysis Module:												
Vol/Sat:	0.24	0.24	0.02	0.07	0.00	0.07	0.08	0.26	0.00	0.00	0.41	0.41
Crit Moves:		****				****	****				****	
Green/Cycle:	0.25	0.25	0.25	0.08	0.00	0.08	0.08	0.51	0.00	0.00	0.43	0.43
Volume/Cap:	0.96	0.96	0.08	0.85	0.00	0.96	0.96	0.51	0.00	0.00	0.96	0.96
Delay/Veh:	57.1	57.1	28.6	82.0	0.0	113.6	107.0	16.3	0.0	0.0	38.8	38.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.1	57.1	28.6	82.0	0.0	113.6	107.0	16.3	0.0	0.0	38.8	38.8
LOS by Move:	E	E	C	F	A	F	F	B	A	A	D	D
HCM2kAvgQ:	18	18	1	6	0	7	8	10	0	0	29	29

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #48 I-5 NB Ramps (NS) / Grand Ave (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 1.042
Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh): 50.2
Optimal Cycle: 100 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Ignore				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	0	3	0 1	1	0	3	0 0	0	0	0	0 0	2	0	0	0 1
Volume Module:																
Base Vol:	0	1964	671		43	1157	0		0	0	0		581	0	831	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	1964	671		43	1157	0		0	0	0		581	0	831	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	1964	671		43	1157	0		0	0	0		581	0	831	
User Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	1964	0		43	1157	0		0	0	0		581	0	831	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	1964	0		43	1157	0		0	0	0		581	0	831	
PCE Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	0	1964	0		43	1157	0		0	0	0		581	0	831	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	0.91	1.00		0.95	0.91	1.00		1.00	1.00	1.00		0.92	1.00	0.85	
Lanes:	0.00	3.00	1.00		1.00	3.00	0.00		0.00	0.00	0.00		2.00	0.00	1.00	
Final Sat.:	0	5187	1900		1805	5187	0		0	0	0		3502	0	1615	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.38	0.00		0.02	0.22	0.00		0.00	0.00	0.00		0.17	0.00	0.51	
Crit Moves:		****			****										****	
Green/Cycle:	0.00	0.36	0.00		0.02	0.39	0.00		0.00	0.00	0.00		0.49	0.00	0.49	
Volume/Cap:	0.00	1.04	0.00		1.04	0.58	0.00		0.00	0.00	0.00		0.34	0.00	1.04	
Delay/Veh:	0.0	64.5	0.0		201.7	24.7	0.0		0.0	0.0	0.0		15.5	0.0	68.7	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	64.5	0.0		201.7	24.7	0.0		0.0	0.0	0.0		15.5	0.0	68.7	
LOS by Move:	A	E	A		F	C	A		A	A	A		B	A	E	
HCM2kAvgQ:	0	31	0		4	11	0		0	0	0		6	0	36	

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #49 Mortimer (N/S) / Santa Ana Blvd (E/W)

Average Delay (sec/veh): 8.8 Worst Case Level Of Service: C[17.8]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	0	0	0	0 0	1	0	0	1 0
Volume Module:																
Base Vol:	1	0	586		1	0	2		0	0	0		45	495	7	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	1	0	586		1	0	2		0	0	0		45	495	7	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	1	0	586		1	0	2		0	0	0		45	495	7	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	1	0	586		1	0	2		0	0	0		45	495	7	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	1	0	586		1	0	2		0	0	0		45	495	7	
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2		xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	590	592	0		589	589	499		xxxx	xxxx	xxxxx		0	xxxx	xxxxx	
Potent Cap.:	423	422	900		423	424	576		xxxx	xxxx	xxxxx		900	xxxx	xxxxx	
Move Cap.:	405	401	900		142	403	576		xxxx	xxxx	xxxxx		900	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.65		0.01	0.00	0.00		xxxx	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.2	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		*	*	*		A	*	*	
Movement:	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	- RT
Shared Cap.:	xxxx	898	xxxxx		xxxx	285	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	5.0	xxxxx		xxxxx	0.0	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	16.2	xxxxx		xxxxx	17.8	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*		*	C	*		*	*	*		*	*	*	
ApproachDel:	16.2				17.8				xxxxxx				xxxxxx			
ApproachLOS:	C				C				*				*			

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 Without Project PM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #50 Mortimer (N/S) / 5th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.841
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	21.4
Optimal Cycle:	0	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	0	0	1	0	0	1	0	0	0	1	0	0	1	0	0
Volume Module:																
Base Vol:	0	187	6		6	30	0		527	89	53		11	0	47	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	187	6		6	30	0		527	89	53		11	0	47	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	187	6		6	30	0		527	89	53		11	0	47	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	187	6		6	30	0		527	89	53		11	0	47	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	187	6		6	30	0		527	89	53		11	0	47	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	0	187	6		6	30	0		527	89	53		11	0	47	
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.00	0.97	0.03		0.17	0.83	0.00		1.00	0.63	0.37		0.19	0.00	0.81	
Final Sat.:	0	588	19		94	470	0		627	453	270		129	0	551	
Capacity Analysis Module:																
Vol/Sat:	xxxx	0.32	0.32		0.06	0.06	xxxx		0.84	0.20	0.20		0.09	xxxx	0.09	
Crit Moves:		****			****				****				****			
Delay/Veh:	0.0	11.1	11.1		9.4	9.4	0.0		30.8	8.9	8.9		8.4	0.0	8.4	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	11.1	11.1		9.4	9.4	0.0		30.8	8.9	8.9		8.4	0.0	8.4	
LOS by Move:	*	B	B		A	A	*		D	A	A		A	*	A	
ApproachDel:		11.1				9.4				26.2				8.4		
Delay Adj:		1.00				1.00				1.00				1.00		
ApprAdjDel:		11.1				9.4				26.2				8.4		
LOS by Appr:		B				A				D				A		
AllWayAvgQ:	0.4	0.4	0.4		0.1	0.1	0.1		3.9	0.2	0.2		0.1	0.1	0.1	

Note: Queue reported is the number of cars per lane.

APPENDIX F
General Plan Model Refinement Process

	Location (Interesection)			Link	Base Year Model		Year 2030 Model		Diff *		0.36	Calib Adj Yr		Existing Count		Fut Adjusted Volume	
	N/S Street		E/W Street	(leg)	IN (Fr)	OUT (To)	IN (Fr)	OUT (To)	IN (Fr)	OUT (To)		7	30	IN (Fr)	OUT (To)	IN (Fr)	OUT (To)
1	Flower	/	Civic Cente	NB	1094	1897	527	1245	-204	-235	-156	-180	916	846	1053	973	
				SB	2355	921	2230	1012	-45	33	-34	25	846	783	973	900	
				EB	1748	2482	1973	2770	81	104	62	79	738	715	849	823	
				WB	2345	2239	2455	2155	39	-31	30	-23	575	731	662	841	
				Total	7542	7539	7185	7182	-129	-129	-99	-99	3076	3076	3537	3537	
2	Flower	/	Santa Ana	NB	3315	3409	3542	4121	82	256	63	197	988	972	1137	1169	
				SB	1839	1348	1242	739	-215	-219	-165	-168	993	1056	1142	1214	
				EB	1485	1476	2203	1779	259	109	198	84	675	390	873	474	
				WB	2852	3261	2891	3242	14	-7	11	-5	424	663	488	762	
				Total	9491	9494	9879	9882	140	140	107	107	3081	3081	3543	3543	
3	Parton	/	Santa Ana	NB	106	115	79	58	-10	-21	-8	-16	916	846	1053	973	
				SB	0	0	1015	2439	365	878	280	673	846	783	973	900	
				EB	3261	2852	3242	2891	-7	14	-5	11	738	715	849	823	
				WB	2967	3367	0	0	-1068	-1212	-819	-929	575	731	662	841	
				Total	6333	6333	4336	5388	-719	-340	-551	-261	3076	3076	3537	3537	
4	Ross	/	Civic Cente	NB	818	2233	15	42	-289	-789	-222	-605	321	346	370	397	
				SB	1624	894	515	130	-399	-275	-306	-211	308	267	355	307	
				EB	2239	2345	1794	3379	-160	372	-123	285	654	769	752	1054	
				WB	3182	2394	3455	2230	98	-59	75	-45	740	642	850	738	
				Total	7864	7867	5779	5782	-751	-751	-575	-575	2023	2023	2327	2327	
5	Ross	/	Santa Ana	NB	776	370	1400	809	225	158	172	121	223	357	395	410	
				SB	970	2345	42	15	-334	-839	-256	-643	306	303	352	349	
				EB	3367	2967	2991	4048	-135	389	-104	299	606	469	696	768	
				WB	3417	2845	3423	2985	2	50	2	38	626	631	720	725	
				Total	8529	8527	7856	7858	-242	-241	-186	-185	1760	1760	2024	2024	
6	Ross	/	4th	NB	0	0	55	842	20	303	15	233	248	199	285	229	
				SB	0	0	809	1400	291	504	223	386	217	286	250	329	
				EB	0	0	0	0	0	0	0	0	2	0	2	0	
				WB	0	0	1397	21	503	8	386	6	67	49	77	56	
				Total	0	0	2261	2264	814	815	624	625	534	534	614	614	
7	Broadway	/	Civic Cente	NB	2724	3755	2167	2618	-201	-409	-154	-314	545	719	627	827	
				SB	3421	1942	3279	2045	-51	37	-39	28	951	594	1094	623	
				EB	2394	3182	2230	3455	-59	98	-45	75	587	857	675	986	
				WB	1358	1015	1812	1370	164	128	125	98	672	584	797	682	
				Total	9897	9894	9488	9488	-147	-146	-113	-112	2756	2756	3169	3169	
8	Broadway	/	Santa Ana	NB	3491	3155	2167	2494	-477	-238	-365	-182	605	622	695	715	
				SB	3755	2724	2618	2167	-409	-201	-314	-154	788	624	906	717	
				EB	0	3418	0	3424	0	2	0	2	0	721	0	830	
				WB	2048	0	3300	0	451	0	345	0	574	0	920	0	
				Total	9294	9297	8085	8085	-435	-436	-334	-335	1967	1967	2262	2262	
9	Broadway	/	5th	NB	2697	3682	2348	2885	-125	-287	-96	-220	463	478	532	550	
				SB	3155	3491	2494	2167	-238	-477	-182	-365	539	528	620	607	
				EB	2845	0	2985	0	50	0	38	0	439	0	505	0	
				WB	0	1527	0	2776	0	449	0	345	0	435	0	501	
				Total	8697	8700	7827	7827	-313	-314	-240	-241	1441	1441	1657	1657	
10	Broadway	/	4th	NB	600	3518	2294	2988	610	-191	468	-146	457	445	925	512	
				SB	3682	2697	2885	2348	-287	-125	-220	-96	494	452	568	520	
				EB	0	0	21	1397	8	503	6	386	82	162	94	187	
				WB	2842	906	1973	445	-313	-166	-240	-127	116	89	133	102	
				Total	7124	7121	7173	7179	17	21	13	16	1149	1149	1321	1321	

	Location (Interesection)			Link	Base Year Model		Year 2030 Model		Diff *		0.36	Calib Adj Yr		Existing Count		Fut Adjusted Volume	
	N/S Street		E/W Street	(leg)	IN (Fr)	OUT (To)	IN (Fr)	OUT (To)	IN (Fr)	OUT (To)	7	30		IN (Fr)	OUT (To)	IN (Fr)	OUT (To)
11	Broadway	/	3rd	NB	0	2685	2312	3042	832	129	638	99		351	308	403	407
				SB	3518	600	2988	2294	-191	610	-146	468		324	349	373	816
				EB	1048	1282	9	64	-374	-439	-287	-336		74	75	85	86
				WB	0	0	118	27	43	10	33	8		58	76	67	87
				Total	4567	4567	5427	5427	310	310	238	238		807	807	1045	1045
12	Broadway	/	1st	NB	236	1094	324	1018	32	-27	24	-21		439	452	505	520
				SB	2685	0	2442	2564	-87	923	-67	708		403	515	463	592
				EB	3812	3997	3133	3167	-244	-299	-187	-229		1407	886	1619	1018
				WB	3700	5342	5121	4276	512	-384	392	-294		925	1322	1317	1520
				Total	10433	10433	11021	11024	212	213	162	163		3175	3175	3651	3651
13	Sycamore	/	Civic Cente	NB	0	0	776	652	279	235	214	180		125	94	144	108
				SB	0	0	39	0	14	0	11	0		58	222	67	255
				EB	0	0	1370	1812	493	652	378	500		531	657	610	756
				WB	0	0	1039	761	374	274	287	210		723	464	831	534
				Total	0	0	3224	3224	1161	1161	890	890		1437	1437	1652	1652
14	Sycamore	/	Santa Ana	NB	0	0	545	612	196	220	151	169		39	100	45	115
				SB	0	0	652	776	235	279	180	214		58	57	67	66
				EB	0	0	0	3300	0	1188	0	911		0	714	0	821
				WB	0	0	3488	0	1256	0	963	0		774	0	890	0
				Total	0	0	4685	4688	1687	1688	1293	1294		871	871	1002	1002
15	Sycamore	/	5th	NB	0	0	545	1039	196	374	151	287		48	47	55	54
				SB	0	0	612	545	220	196	169	151		113	42	130	48
				EB	0	0	2776	0	999	0	766	0		725	0	834	0
				WB	0	0	0	2345	0	844	0	647		0	797	0	917
				Total	0	0	3933	3930	1416	1415	1086	1085		886	886	1019	1019
16	Sycamore	/	4th	NB	0	0	0	6	0	2	0	2		13	47	41	55
				SB	0	0	1039	545	374	196	287	151		36	48	15	54
				EB	0	0	445	1973	160	710	123	544		64	85	148	71
				WB	0	0	2518	1479	907	532	695	408		129	62	74	98
				Total	0	0	4003	4003	1441	1441	1105	1105		229	195	263	224
17	Main	/	Civic Cente	NB	3021	4085	3094	3591	26	-178	20	-136		1017	1094	1169	1258
				SB	3933	2648	3188	2436	-268	-76	-206	-59		1173	917	1349	1054
				EB	1015	1358	761	1039	-92	-115	-70	-88		626	833	720	958
				WB	1009	885	770	742	-86	-51	-66	-39		610	580	701	667
				Total	8979	8976	7812	7809	-420	-420	-322	-322		3424	3424	3938	3938
18	Main	/	Santa Ana	NB	3045	3597	3282	3170	85	-154	65	-118		895	1079	1029	1241
				SB	4085	3021	3591	3094	-178	26	-136	20		1101	905	1266	925
				EB	0	2048	0	3488	0	518	0	397		0	911	0	1047
				WB	1536	0	2876	0	482	0	370	0		899	0	1268	0
				Total	8667	8667	9748	9752	389	391	299	299		2895	2895	3329	3329
19	Main	/	5th	NB	2506	3597	2597	3170	33	-154	25	-118		856	976	985	1123
				SB	3597	3045	3170	3282	-154	85	-118	65		1010	875	1161	940
				EB	1527	0	2345	0	295	0	226	0		499	0	725	0
				WB	0	985	0	1658	0	242	0	186		0	514	0	591
				Total	7630	7627	8112	8109	173	173	133	133		2365	2365	2719	2719
20	Main	/	4th	NB	3273	3118	2797	3152	-171	12	-131	9		840	1025	966	1178
				SB	3597	2506	3170	2597	-154	33	-118	25		1023	856	1176	881
				EB	906	2842	1479	2518	206	-117	158	-89		102	131	260	151
				WB	2185	1497	2161	1339	-9	-57	-7	-43		153	106	176	122
				Total	9961	9964	9606	9606	-128	-129	-98	-99		2118	2118	2435	2435

	Location (Interesection)			Link	Base Year Model		Year 2030 Model		Diff *		0.36		Calib Adj Yr		Existing Count		Fut Adjusted Volume	
	N/S Street		E/W Street	(leg)	IN (Fr)	OUT (To)	IN (Fr)	OUT (To)	IN (Fr)	OUT (To)	7	30			IN (Fr)	OUT (To)	IN (Fr)	OUT (To)
21	Main	/	3rd	NB	0	0	2909	3173	1047	1142	803	876			836	1034	962	1189
				SB	0	0	3152	2797	1135	1007	870	772			1013	869	1164	1000
				EB	0	0	27	118	10	43	8	33			150	87	173	100
				WB	0	0	6	3	2	1	2	1			91	100	104	115
				Total	0	0	6094	6091	2194	2193	1682	1681			2090	2090	2403	2403
22	Main	/	1st	NB	3318	3870	2991	3639	-118	-83	-90	-64			855	979	984	1126
				SB	3118	3273	3006	2273	-40	-360	-31	-276			994	833	1144	958
				EB	5342	3700	4282	5121	-382	512	-293	392			1457	995	1675	1388
				WB	3821	4755	4758	4003	337	-271	258	-207			931	1430	1189	1644
				Total	15600	15597	15036	15036	-203	-202	-156	-155			4238	4238	4873	4873
23	Bush	/	Santa Ana	NB	0	0	0	0	0	0	0	0			132	109	152	125
				SB	0	0	0	0	0	0	0	0			120	191	138	220
				EB	0	0	0	0	0	0	0	0			0	612	0	703
				WB	0	0	0	0	0	0	0	0			660	0	759	0
				Total	0	0	0	0	0	0	0	0			912	912	1049	1049
24	Bush	/	5th	NB	455	924	112	61	-123	-311	-95	-238			138	107	159	123
				SB	924	1439	61	58	-311	-497	-238	-381			121	132	139	152
				EB	985	0	1658	0	242	0	186	0			349	0	534	0
				WB	0	0	0	1712	0	616	0	473			0	369	0	424
				Total	2364	2364	1830	1830	-192	-192	-147	-147			608	608	699	699
25	Bush	/	4th	NB	333	388	100	106	-84	-101	-64	-78			138	108	159	124
				SB	924	455	61	112	-311	-123	-238	-95			108	148	124	170
				EB	1497	2185	1339	2161	-57	-9	-43	-7			88	131	101	151
				WB	2339	2064	2215	1339	-45	-261	-34	-200			148	95	170	109
				Total	5094	5091	3715	3718	-496	-494	-381	-379			482	482	554	554
26	Spurgeon	/	1st	NB	0	0	0	0	0	0	0	0			0	0	0	0
				SB	0	0	891	515	321	185	246	142			35	6	40	7
				EB	0	0	4052	4824	1459	1737	1118	1331			1528	776	1757	892
				WB	0	0	4776	4382	1719	1577	1318	1209			747	1528	859	1757
				Total	0	0	9718	9721	3499	3500	2682	2683			2310	2310	2657	2657
27	French	/	Santa Ana	NB	0	0	1952	458	703	165	539	126			63	36	72	41
				SB	0	0	361	230	130	83	100	64			26	29	30	33
				EB	0	0	0	2870	0	1033	0	792			0	829	0	953
				WB	0	0	3102	1854	1117	667	856	512			805	0	926	0
				Total	0	0	5414	5412	1949	1948	1494	1494			894	894	1028	1028
28	French	/	4th	NB	0	0	279	385	100	139	77	106			51	72	59	83
				SB	0	0	458	236	165	85	126	65			104	61	120	70
				EB	0	0	1339	2215	482	797	370	611			55	197	63	227
				WB	0	0	2136	1379	769	496	590	381			261	141	300	162
				Total	0	0	4212	4215	1516	1517	1163	1163			471	471	542	542
29	Lacy	/	Civic Cente	NB	0	0	445	821	160	296	123	227			68	55	78	63
				SB	0	0	467	364	168	131	129	100			58	21	67	25
				EB	0	0	536	721	193	260	148	199			379	428	435	493
				WB	0	0	706	252	254	91	195	69			386	386	444	444
				Total	0	0	2155	2158	776	777	595	595			890	890	1024	1024
30	Lacy	/	Santa Ana	NB	0	0	330	403	119	145	91	111			52	48	60	55
				SB	0	0	821	445	296	160	227	123			59	67	68	77
				EB	0	0	1855	2930	668	1055	512	809			353	704	406	809
				WB	0	0	3212	2442	1156	879	887	674			726	371	835	427
				Total	0	0	6218	6221	2239	2240	1716	1717			1190	1190	1369	1369

	Location (Interesection)			Link	Base Year Model		Year 2030 Model		Diff *		0.36		Calib Adj Yr		Existing Count		Fut Adjusted Volume	
	N/S Street		E/W Street	(leg)	IN (Fr)	OUT (To)	IN (Fr)	OUT (To)	IN (Fr)	OUT (To)	IN (Fr)	OUT (To)	7	30	IN (Fr)	OUT (To)	IN (Fr)	OUT (To)
31	Lacy	/	6th	NB	0	0	539	476	194	171	149	131	78	35	90	40		
				SB	0	0	403	330	145	119	111	91	21	26	24	30		
				EB	0	0	0	173	0	62	0	48	15	39	17	45		
				WB	0	0	76	36	27	13	21	10	33	47	38	54		
				Total	0	0	1018	1015	367	365	281	280	147	147	169	169		
32	Lacy	/	4th	NB	0	0	167	470	60	169	46	130	120	54	138	63		
				SB	0	0	476	539	171	194	131	149	59	43	68	50		
				EB	0	0	1379	2136	496	769	381	590	284	408	327	469		
				WB	0	0	2503	1382	901	497	691	381	385	343	443	394		
				Total	0	0	4524	4527	1629	1630	1249	1250	848	848	976	976		
33	Lacy	/	1st	NB	0	0	0	0	0	0	0	0	0	0	0	0		
				SB	0	0	421	206	152	74	116	57	85	182	98	209		
				EB	0	0	3624	4497	1305	1619	1000	1241	1533	899	1763	1034		
				WB	0	0	4188	3527	1508	1270	1156	974	845	1386	972	1594		
				Total	0	0	8233	8230	2964	2963	2272	2272	2463	2467	2832	2837		
34	Santiago	/	Washingtor	NB	1239	1948	1976	3639	265	609	203	467	221	342	424	808		
				SB	1891	1197	3585	1700	610	181	468	139	292	244	760	383		
				EB	886	1057	167	521	-259	-193	-198	-148	245	324	282	373		
				WB	0	0	221	94	80	34	61	26	342	189	393	218		
				Total	4016	4203	5948	5955	696	631	533	483	1099	1099	1633	1583		
35	Santiago	/	Civic Cente	NB	1742	2121	2752	3964	363	663	279	509	406	453	685	961		
				SB	1948	1239	3936	2203	716	347	549	266	349	248	898	514		
				EB	173	506	15	345	-57	-58	-43	-44	339	428	390	493		
				WB	0	0	352	539	127	194	97	149	98	64	113	74		
				Total	3864	3867	7055	7052	1149	1147	881	879	1193	1193	2073	2072		
36	Santiago	/	Santa Ana	NB	0	0	2218	3370	799	1213	612	930	137	293	158	337		
				SB	2121	1742	3964	2752	663	363	509	279	439	405	948	683		
				EB	1367	1718	2524	3203	417	535	319	410	450	942	769	1083		
				WB	3145	3173	4118	3500	350	118	268	90	1271	657	1539	747		
				Total	6633	6633	12824	12824	2229	2229	1709	1709	2297	2297	4006	4006		
37	Santiago	/	Brown	NB	0	0	0	0	0	0	0	0	25	20	29	23		
				SB	0	0	0	0	0	0	0	0	197	86	227	99		
				EB	0	0	0	0	0	0	0	0	89	142	102	163		
				WB	0	0	0	0	0	0	0	0	0	63	0	72		
				Total	0	0	0	0	0	0	0	0	311	311	358	358		
38	Santiago	/	6th	NB	0	0	0	0	0	0	0	0	0	0	0	0		
				SB	0	0	0	0	0	0	0	0	0	0	0	0		
				EB	0	0	0	0	0	0	0	0	0	0	0	0		
				WB	0	0	0	0	0	0	0	0	0	0	0	0		
				Total	0	0	0	0	0	0	0	0	0	0	0	0		
39	Santiago	/	4th	NB	0	0	0	0	0	0	0	0	0	0	0	0		
				SB	0	0	0	0	0	0	0	0	0	0	0	0		
				EB	0	0	0	0	0	0	0	0	0	0	0	0		
				WB	0	0	0	0	0	0	0	0	0	0	0	0		
				Total	0	0	0	0	0	0	0	0	0	0	0	0		
40	Santiago	/	1st	NB	0	0	1167	1673	420	602	322	462	341	440	392	506		
				SB	0	0	2697	2048	971	737	744	565	292	257	336	295		
				EB	0	0	3561	4300	1282	1548	983	1187	1506	933	1732	1073		
				WB	0	0	5470	4873	1969	1754	1510	1345	934	1443	1074	1659		
				Total	0	0	12894	12894	4642	4642	3559	3559	3073	3073	3534	3534		

	Location (Interesection)			Link	Base Year Model		Year 2030 Model		Diff *		0.36		Calib Adj Yr		Existing Count		Fut Adjusted Volume	
	N/S Street		E/W Street	(leg)	IN (Fr)	OUT (To)	IN (Fr)	OUT (To)	IN (Fr)	OUT (To)	7	30	IN (Fr)	OUT (To)	IN (Fr)	OUT (To)	IN (Fr)	OUT (To)
41	U2-4	/	Santa Ana	NB	0	0	0	0	0	0	0	0	0	0	0	0	0	0
				SB	0	0	0	0	0	0	0	0	0	0	0	0	0	0
				EB	0	0	0	0	0	0	0	0	0	0	0	0	0	0
				WB	0	0	0	0	0	0	0	0	0	0	0	0	0	0
				Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Grand	/	Santa Ana	NB	2848	6052	2033	7082	-293	371	-225	284	927	1507	1066	1733		
				SB	4761	3952	8276	4567	1265	221	970	170	1886	950	2856	1120		
				EB	5270	3133	5230	4018	-14	319	-11	244	728	927	838	1066		
				WB	448	194	385	254	-23	22	-18	17	108	265	124	305		
				Total	13327	13330	15924	15921	935	933	717	715	3649	3649	4366	4364		
43	U2-4	/	Santa Ana	NB	0	0	0	0	0	0	0	0	455	621	524	714		
				SB	0	0	0	0	0	0	0	0	628	464	722	534		
				EB	0	0	0	0	0	0	0	0	1151	443	1323	510		
				WB	0	0	0	0	0	0	0	0	455	1161	524	1335		
				Total	0	0	0	0	0	0	0	0	2689	2689	3092	3092		
44	Grand	/	Santa Ana	NB	3248	5388	4836	8279	572	1041	438	798	615	1642	1053	1889		
				SB	5052	3318	5633	2588	209	-263	161	-202	1380	807	1587	928		
				EB	3918	3836	4873	5470	344	588	263	451	1386	705	1650	1156		
				WB	2997	2676	3582	2588	211	-32	161	-24	824	1051	986	1208		
				Total	15215	15218	18924	18924	1335	1334	1024	1023	4205	4205	5229	5228		
45	Penn Way	/	5 SB Ramp	NB	1197	1892	1700	3586	174	610	134	468	169	205	303	673		
				SB	3063	2783	3547	1850	181	-336	139	-258	647	297	786	342		
				EB	0	0	0	0	0	0	0	0	0	0	0	0		
				WB	2141	1728	2274	2083	48	128	37	98	327	641	376	737		
				Total	6401	6403	7521	7519	403	402	309	308	1143	1143	1452	1451		
46	SB Ram	/	anta Ana Bl	NB	0	0	0	0	0	0	0	0	0	0	0	0		
				SB	2259	0	2000	0	-93	0	-71	0	465	337	535	388		
				EB	3192	3313	3373	4160	65	305	50	234	568	948	653	1090		
				WB	3134	5270	4017	5231	318	-14	244	-11	1021	769	1265	884		
				Total	8585	8583	9390	9391	290	291	222	223	2054	2054	2362	2362		
47	NB Ram	/	17th St.	NB	1590	0	1542	0	-17	0	-13	0	707	215	813	247		
				SB	0	1942	0	1921	0	-8	0	-6	210	236	242	271		
				EB	3411	4917	2315	4698	-395	-79	-302	-60	1117	1871	1285	2152		
				WB	4168	2312	4945	2183	280	-46	214	-36	1139	851	1353	979		
				Total	9169	9171	8802	8802	-132	-133	-101	-102	3173	3173	3649	3649		
48	Grand Ave	/	5 NB Ramp	NB	3951	4760	4568	8276	222	1266	170	970	1088	2336	1258	2686		
				SB	4481	3247	7917	4289	1237	375	948	288	1595	844	2543	1132		
				EB	0	0	0	0	0	0	0	0	0	0	0	0		
				WB	1371	1795	1554	1475	66	-115	51	-88	903	406	1038	467		
				Total	9803	9802	14039	14040	1525	1526	1169	1170	3586	3586	4755	4756		

	Location (Interesection)			Link	Base Year		Year 2030		Diff *	0.27	Calib Adj Yr		Existing Count		Fut Adjusted Volume	
	N/S Street		E/W Street	(leg)	IN (Fr)	OUT (To)	IN (Fr)	OUT (To)	IN (Fr)	OUT (To)	7	30	IN (Fr)	OUT (To)	IN (Fr)	OUT (To)
1	Flower	/	Civic Cente	NB	2576	1335	1394	712	-319	-168	-245	-129	1245	764	798	1503
				SB	1733	3195	1801	2843	18	-95	14	-73	694	1307	1432	878
				EB	3356	2551	3360	3131	1	157	1	120	814	1066	1208	788
				WB	2958	3542	3419	3288	125	-69	96	-53	1051	668	936	1226
				Total	10623	10623	9975	9975	-175	-175	-134	-134	2753	3136	4375	4395
2	Flower	/	Santa Ana	NB	4712	4390	5445	4949	198	151	152	116	892	821	1043	944
				SB	1589	2453	975	1322	-166	-305	-127	-234	677	1005	779	1156
				EB	1924	2292	2606	3254	184	260	141	199	576	703	718	902
				WB	4631	3716	4767	4267	37	149	28	114	897	512	1031	626
				Total	12856	12852	13792	13792	253	254	194	195	3042	3042	3571	3629
3	Parton	/	Santa Ana	NB	140	186	123	140	-5	-13	-4	-10	953	634	1096	729
				SB	0	0	3449	2407	931	650	714	498	586	991	674	1140
				EB	3716	4631	4267	4767	149	37	114	28	872	857	1003	986
				WB	4818	3856	0	0	-1301	-1041	-997	-798	822	752	945	864
				Total	8674	8674	7839	7314	-225	-367	-173	-282	3234	3234	3719	3719
4	Ross	/	Civic Cente	NB	3225	1890	34	30	-861	-502	-660	-385	404	228	465	262
				SB	1428	2089	331	797	-296	-349	-227	-268	280	352	322	404
				EB	3542	2958	4322	3148	211	51	161	39	682	673	843	774
				WB	3496	4754	3877	4589	103	-45	79	-34	654	768	752	883
				Total	11691	11691	8564	8564	-844	-844	-647	-647	2020	2020	2323	2323
5	Ross	/	Santa Ana	NB	915	758	1695	483	211	-74	161	-57	404	250	565	287
				SB	3263	2178	30	34	-873	-579	-669	-444	280	332	322	382
				EB	3856	4818	5559	5030	460	57	353	44	781	734	1133	845
				WB	4287	4568	3812	5551	-128	265	-98	203	682	830	784	1034
				Total	12321	12322	11096	11097	-331	-331	-254	-253	2147	2147	2469	2469
6	Ross	/	4th	NB	0	0	165	525	45	142	34	109	305	258	351	297
				SB	0	0	483	1695	130	458	100	351	282	341	324	392
				EB	0	0	0	0	0	0	0	0	0	0	0	0
				WB	0	0	1686	106	455	29	349	22	106	94	122	108
				Total	0	0	2335	2326	630	628	483	482	693	693	797	797
7	Broadway	/	Civic Cente	NB	4331	4169	3335	2347	-269	-492	-206	-377	665	726	765	835
				SB	3407	3987	3021	3500	-104	-132	-80	-101	870	814	1001	936
				EB	4754	3496	4589	3877	-45	103	-34	79	924	655	1062	753
				WB	1792	2627	1665	2886	-34	70	-26	54	594	858	684	987
				Total	14284	14280	12610	12610	-452	-451	-346	-346	3054	3054	3512	3512
8	Broadway	/	Santa Ana	NB	4949	3508	3335	2606	-436	-244	-334	-187	666	638	766	734
				SB	4169	4331	2347	3335	-492	-269	-377	-206	722	732	830	842
				EB	0	4288	0	3814	0	-128	0	-98	0	921	0	1059
				WB	3008	0	4072	0	287	0	220	0	904	0	1124	0
				Total	12127	12127	9754	9754	-641	-641	-491	-491	2292	2292	2636	2636
9	Broadway	/	5th	NB	3737	4682	3847	3750	30	-252	23	-193	583	640	670	737
				SB	3508	4949	2606	3335	-244	-436	-187	-334	700	687	805	790
				EB	4568	0	5551	0	265	0	203	0	745	0	949	0
				WB	0	2186	0	4915	0	737	0	565	0	700	0	1265
				Total	11814	11818	12004	12000	51	49	39	38	2028	2028	2332	2332
10	Broadway	/	4th	NB	1606	3581	4267	3216	718	-98	551	-75	569	611	1120	703
				SB	4682	3737	3750	3847	-252	30	-193	23	582	546	669	628
				EB	0	0	106	1686	29	455	22	349	171	158	197	182
				WB	3339	2305	2127	1504	-327	-216	-251	-166	203	210	233	241
				Total	9627	9623	10250	10254	168	170	129	131	1525	1525	1754	1754
11	Broadway	/	3rd	NB	0	3280	4335	3263	1170	-5	897	-4	630	546	724	628
				SB	3581	1606	3216	4267	-98	718	-75	551	599	630	689	1181

	Location (Interesection)			Link	Base Year		Year 2030		Diff *	0.27	Calib Adj Yr		Existing Count		Fut Adjusted Volume	
	N/S Street		E/W Street	(leg)	IN (Fr)	OUT (To)	IN (Fr)	OUT (To)	IN (Fr)	OUT (To)	7	30	IN (Fr)	OUT (To)	IN (Fr)	OUT (To)
				EB	2852	1547	17	93	-765	-392	-587	-301	160	229	184	263
				WB	0	0	140	85	38	23	29	18	213	197	244	227
				Total	6432	6432	7708	7708	344	344	264	264	1602	1602	1866	1866
12	Broadway	/	1st	NB	1097	958	979	653	-32	-82	-25	-63	459	493	528	567
				SB	3280	0	3246	3797	-9	1025	-7	786	540	520	621	598
				EB	4326	6610	4424	4106	26	-676	20	-518	1203	1438	1383	1653
				WB	5542	6682	6237	6326	188	-96	144	-74	1368	1120	1573	1288
				Total	14246	14250	14886	14881	173	170	132	131	3571	3571	4106	4106
13	Sycamore	/	Civic Cente	NB	0	0	1208	602	326	162	250	125	92	74	105	86
				SB	0	0	0	0	0	0	0	0	230	99	264	114
				EB	0	0	2886	1665	779	450	597	345	809	538	930	618
				WB	0	0	458	2284	124	617	95	473	461	881	530	1013
				Total	0	0	4551	4551	1229	1229	942	942	1591	1591	1830	1830
14	Sycamore	/	Santa Ana	NB	0	0	873	602	236	162	181	125	120	78	138	90
				SB	0	0	602	1208	162	326	125	250	81	94	93	108
				EB	0	0	0	4072	0	1099	0	843	0	684	0	787
				WB	0	0	4407	0	1190	0	912	0	655	0	753	0
				Total	0	0	5881	5881	1588	1588	1217	1217	856	856	984	984
15	Sycamore	/	5th	NB	0	0	1102	1203	297	325	228	249	27	44	31	51
				SB	0	0	602	873	162	236	125	181	71	64	82	74
				EB	0	0	4915	0	1327	0	1017	0	466	0	536	0
				WB	0	0	0	4542	0	1226	0	940	0	456	0	524
				Total	0	0	6619	6619	1787	1787	1370	1370	564	564	649	649
16	Sycamore	/	4th	NB	0	0	0	0	0	0	0	0	25	51	29	59
				SB	0	0	1203	1102	325	297	249	228	46	45	53	52
				EB	0	0	1504	2127	406	574	311	440	161	187	185	215
				WB	0	0	3000	2479	810	669	621	513	209	158	240	182
				Total	0	0	5708	5708	1541	1541	1181	1181	441	441	507	507
17	Main	/	Civic Cente	NB	4843	4360	4280	4924	-152	152	-117	117	1105	1019	1271	1171
				SB	3970	4517	3547	3631	-114	-239	-88	-183	988	1116	1137	1284
				EB	2627	1792	2284	458	-93	-360	-71	-276	965	539	1110	620
				WB	1076	1847	428	1517	-175	-89	-134	-68	484	868	556	999
				Total	12517	12517	10538	10530	-534	-537	-410	-411	3542	3542	4074	4074
18	Main	/	Santa Ana	NB	4945	3360	4530	3818	-112	124	-86	95	1208	1159	1389	1332
				SB	4360	4843	4924	4280	152	-152	117	-117	1145	1233	1316	1418
				EB	0	3008	0	4407	0	378	0	289	0	874	0	1163
				WB	1911	0	3051	0	308	0	236	0	913	0	1149	0
				Total	11216	11212	12504	12504	348	349	267	268	3265	3265	3755	3755
19	Main	/	5th	NB	4508	3542	3284	3818	-331	74	-253	57	1139	1112	1310	1279
				SB	3360	4945	3818	4530	124	-112	95	-86	1122	1214	1291	1396
				EB	2186	0	4542	0	636	0	488	0	678	0	1166	0
				WB	0	1564	0	3301	0	469	0	360	0	614	0	973
				Total	10055	10051	11644	11648	429	431	329	331	2940	2940	3381	3381
20	Main	/	4th	NB	4610	3339	3661	3559	-256	59	-196	46	1175	1117	1351	1285
				SB	3542	4508	3818	3284	74	-331	57	-253	1118	1185	1286	1363
				EB	2305	3339	2479	3000	47	-92	36	-70	171	268	207	308
				WB	3343	2614	2547	2665	-215	14	-165	11	282	176	324	203
				Total	13801	13801	12504	12508	-350	-349	-268	-268	2746	2746	3158	3158
21	Main	/	3rd	NB	0	0	3792	3631	1024	980	785	752	1136	1157	1307	1330
				SB	0	0	3559	3661	961	988	737	758	1132	1175	1302	1351
				EB	0	0	85	140	23	38	18	29	231	230	265	264
				WB	0	0	13	13	3	3	3	3	251	189	288	218

	Location (Interesection)			Link	Base Year		Year 2030		Diff *		Calib Adj Yr		Existing Count		Fut Adjusted Volume	
	N/S Street		E/W Street	(leg)	IN (Fr)	OUT (To)	IN (Fr)	OUT (To)	IN (Fr)	OUT (To)	7	30	IN (Fr)	OUT (To)	IN (Fr)	OUT (To)
				Total	0	0	7449	7445	2011	2010	1542	1541	2750	2750	3163	3163
22	Main	/	1st	NB	4674	4280	4492	4123	-49	-42	-38	-32	1187	997	1365	1147
				SB	3339	4610	2839	3157	-135	-392	-104	-301	1121	1138	1290	1309
				EB	6682	5542	6326	6237	-96	188	-74	144	1186	1374	1364	1580
				WB	5822	6089	5538	5678	-77	-111	-59	-85	1212	1196	1394	1375
				Total	20517	20521	19195	19195	-357	-358	-274	-275	4706	4706	5412	5412
23	Bush	/	Santa Ana	NB	0	0	0	0	0	0	0	0	332	224	382	257
				SB	0	0	0	0	0	0	0	0	226	351	260	403
				EB	0	0	0	0	0	0	0	0	0	713	0	820
				WB	0	0	0	0	0	0	0	0	729	0	839	0
				Total	0	0	0	0	0	0	0	0	1288	1288	1481	1481
24	Bush	/	5th	NB	1157	788	148	47	-272	-200	-209	-153	342	288	393	331
				SB	788	2720	47	288	-200	-657	-153	-503	266	324	306	373
				EB	1564	0	3301	0	469	0	360	0	655	0	1014	0
				WB	0	0	0	3161	0	853	0	654	0	650	0	747
				Total	3508	3508	3496	3496	-3	-3	-3	-3	1262	1262	1452	1452
25	Bush	/	4th	NB	1059	203	34	110	-277	-25	-212	-19	330	250	380	287
				SB	788	1157	47	148	-200	-272	-153	-209	258	339	297	389
				EB	2614	3343	2665	2547	14	-215	11	-165	166	194	191	224
				WB	3441	3195	2733	2665	-191	-143	-146	-110	221	192	254	221
				Total	7903	7898	5479	5470	-654	-656	-502	-503	975	975	1122	1122
26	Spurgeon	/	1st	NB	0	0	0	0	0	0	0	0	0	0	0	0
				SB	0	0	915	1136	247	307	189	235	113	36	130	41
				EB	0	0	5843	5623	1578	1518	1210	1164	1319	1374	1517	1580
				WB	0	0	5915	5915	1597	1597	1224	1224	1297	1319	1492	1517
				Total	0	0	12674	12674	3422	3422	2623	2623	2729	2729	3138	3138
27	French	/	Santa Ana	NB	0	0	3059	678	826	183	633	140	143	52	164	60
				SB	0	0	542	38	146	10	112	8	36	66	41	76
				EB	0	0	0	2903	0	784	0	601	0	653	0	751
				WB	0	0	3037	3021	820	816	629	625	592	0	681	0
				Total	0	0	6639	6640	1792	1793	1374	1374	771	771	887	887
28	French	/	4th	NB	0	0	339	466	92	126	70	96	153	162	176	186
				SB	0	0	678	114	183	31	140	24	198	137	228	158
				EB	0	0	2665	2733	720	738	552	566	152	254	175	292
				WB	0	0	2712	3081	732	832	561	638	351	301	404	346
				Total	0	0	6394	6394	1726	1726	1324	1324	854	854	982	982
29	Lacy	/	Civic Cente	NB	0	0	589	665	159	180	122	138	80	36	92	42
				SB	0	0	682	458	184	124	141	95	39	49	45	57
				EB	0	0	1288	555	348	150	267	115	567	225	652	258
				WB	0	0	470	1352	127	365	97	280	213	588	244	677
				Total	0	0	3030	3030	818	818	627	627	899	899	1033	1033
30	Lacy	/	Santa Ana	NB	0	0	831	267	224	72	172	55	63	42	73	48
				SB	0	0	665	589	180	159	138	122	49	59	56	68
				EB	0	0	3021	3038	816	820	625	629	588	617	676	710
				WB	0	0	3284	3903	887	1054	680	808	630	612	725	704
				Total	0	0	7801	7797	2106	2105	1615	1614	1330	1330	1530	1530
31	Lacy	/	6th	NB	0	0	1081	297	292	80	224	61	170	57	196	66
				SB	0	0	267	831	72	224	55	172	48	65	55	75
				EB	0	0	0	0	0	0	0	0	31	100	36	115
				WB	0	0	30	250	8	68	6	52	44	71	51	82
				Total	0	0	1377	1377	372	372	285	285	293	293	337	337
32	Lacy	/	4th	NB	0	0	568	153	153	41	118	32	80	36	92	42

	Location (Interesection)			Link	Base Year		Year 2030		Diff *	0.27	Calib Adj Yr		Existing Count		Fut Adjusted Volume	
	N/S Street		E/W Street	(leg)	IN (Fr)	OUT (To)	IN (Fr)	OUT (To)	IN (Fr)	OUT (To)	7	30	IN (Fr)	OUT (To)	IN (Fr)	OUT (To)
				SB	0	0	297	860	80	232	61	178	39	49	45	57
				EB	0	0	3081	2712	832	732	638	561	567	225	652	258
				WB	0	0	2771	2987	748	807	574	618	213	588	244	677
				Total	0	0	6716	6712	1813	1812	1390	1389	899	899	1033	1033
33	Lacy	/	1st	NB	0	0	0	0	0	0	0	0	6	14	7	16
				SB	0	0	148	492	40	133	31	102	127	204	146	235
				EB	0	0	5517	5085	1490	1373	1142	1053	1333	1309	1533	1505
				WB	0	0	5017	5114	1355	1381	1039	1059	1227	1166	1411	1341
				Total	0	0	10682	10691	2884	2886	2211	2213	2693	2693	3097	3097
34	Santiago	/	Washingtor	NB	2064	2237	3814	3847	473	435	362	333	479	213	841	546
				SB	2169	1898	3534	3525	368	439	282	337	284	530	567	867
				EB	1436	1267	593	250	-227	-274	-174	-210	428	306	492	352
				WB	0	0	157	483	42	130	32	100	212	354	243	407
				Total	5669	5402	8097	8106	656	730	503	560	1402	1402	1905	1962
35	Santiago	/	Civic Cente	NB	2339	2945	4733	4394	646	391	496	300	419	561	915	861
				SB	2237	2064	3864	3958	439	511	337	392	325	490	662	882
				EB	712	275	890	169	48	-29	37	-22	629	297	724	342
				WB	0	0	59	1025	16	277	12	212	73	97	84	112
				Total	5288	5284	9547	9547	1150	1151	882	882	1446	1446	2328	2329
36	Santiago	/	Santa Ana	NB	0	0	4140	3144	1118	849	857	651	193	335	222	385
				SB	2945	2339	4394	4733	391	646	300	496	584	427	884	923
				EB	2042	2085	4072	3326	548	335	420	257	794	733	1214	990
				WB	3975	4542	4436	5843	125	351	96	269	988	1063	1136	1332
				Total	8962	8966	17042	17047	2182	2182	1673	1673	2558	2558	4230	4230
37	Santiago	/	Brown	NB	0	0	0	0	0	0	0	0	25	20	29	23
				SB	0	0	0	0	0	0	0	0	197	86	227	99
				EB	0	0	0	0	0	0	0	0	89	142	102	163
				WB	0	0	0	0	0	0	0	0	0	63	0	72
				Total	0	0	0	0	0	0	0	0	311	311	358	358
38	Santiago	/	6th	NB	0	0	0	0	0	0	0	0	0	0	0	0
				SB	0	0	0	0	0	0	0	0	0	0	0	0
				EB	0	0	0	0	0	0	0	0	0	0	0	0
				WB	0	0	0	0	0	0	0	0	0	0	0	0
				Total	0	0	0	0	0	0	0	0	0	0	0	0
39	Santiago	/	4th	NB	0	0	0	0	0	0	0	0	0	0	0	0
				SB	0	0	0	0	0	0	0	0	0	0	0	0
				EB	0	0	0	0	0	0	0	0	0	0	0	0
				WB	0	0	0	0	0	0	0	0	0	0	0	0
				Total	0	0	0	0	0	0	0	0	0	0	0	0
40	Santiago	/	1st	NB	0	0	2119	1826	572	493	439	378	605	392	695	451
				SB	0	0	2653	3530	716	953	549	731	266	374	306	430
				EB	0	0	5301	5127	1431	1384	1097	1061	1229	1316	1414	1513
				WB	0	0	7331	6919	1979	1868	1517	1432	1210	1228	1392	1412
				Total	0	0	17403	17403	4699	4699	3602	3602	3310	3310	3806	3806
41	U2-4	/	Santa Ana	NB	0	0	0	0	0	0	0	0	0	0	0	0
				SB	0	0	0	0	0	0	0	0	0	0	0	0
				EB	0	0	0	0	0	0	0	0	0	0	0	0
				WB	0	0	0	0	0	0	0	0	0	0	0	0
				Total	0	0	0	0	0	0	0	0	0	0	0	0
42	Grand	/	Santa Ana	NB	5733	6195	6513	6280	211	23	161	18	1435	1450	1650	1667
				SB	5208	7212	7220	10915	543	1000	417	767	1566	1401	1982	2168
				EB	6331	3822	7449	4110	302	78	232	60	666	737	898	848

	Location (Interesection)			Link	Base Year		Year 2030		Diff *		0.27	Calib Adj Yr		Existing Count		Fut Adjusted Volume	
	N/S Street		E/W Street	(leg)	IN (Fr)	OUT (To)	IN (Fr)	OUT (To)	IN (Fr)	OUT (To)	7	30		IN (Fr)	OUT (To)	IN (Fr)	OUT (To)
				WB	369	414	326	203	-11	-57	-9	-44		317	395	365	454
				Total	17640	17643	21508	21508	1045	1044	801	800		3984	3984	4784	4784
43	U2-4	/	Santa Ana	NB	0	0	0	0	0	0	0	0		1244	1036	1431	1191
				SB	0	0	0	0	0	0	0	0		930	1344	1069	1546
				EB	0	0	0	0	0	0	0	0		736	892	847	1025
				WB	0	0	0	0	0	0	0	0		1000	640	1151	736
				Total	0	0	0	0	0	0	0	0		3911	3911	4498	4498
44	Grand	/	Santa Ana	NB	6881	5119	10936	7597	1095	669	839	513		1438	1219	2277	1732
				SB	4856	6470	4699	7153	-42	184	-32	141		1146	1483	1317	1705
				EB	5364	4814	6919	7331	420	680	322	521		1275	1086	1597	1607
				WB	3911	4610	3903	4377	-2	-63	-2	-48		1067	1137	1227	1308
				Total	21013	21013	26458	26458	1470	1470	1127	1127		4926	4926	6053	6053
45	Penn Wa	/	5 SB Ramp	NB	1900	2168	3524	3536	438	369	336	283		304	189	640	472
				SB	4125	3700	4657	4349	144	175	110	134		606	403	716	537
				EB	0	0	0	0	0	0	0	0		0	0	0	0
				WB	2372	2527	2476	2770	28	66	22	50		357	675	411	776
				Total	8397	8395	10657	10655	610	610	468	468		1267	1267	1735	1735
46	SB Ram	/	anta Ana Bl	NB	0	0	0	0	0	0	0	0		0	0	0	0
				SB	1646	0	1730	0	23	0	17	0		396	570	455	656
				EB	4798	3936	5778	4169	265	63	203	48		982	878	1185	1010
				WB	3823	6330	4112	7450	78	302	60	232		961	891	1105	1123
				Total	10267	10266	11620	11619	365	365	280	280		2339	2339	2690	2690
47	NB Ram	/	17th St.	NB	1952	0	1642	0	-84	0	-64	0		815	291	937	335
				SB	0	3209	0	2882	0	-88	0	-68		213	281	245	323
				EB	7766	5905	5602	5054	-584	-230	-448	-176		1526	2566	1755	2951
				WB	4946	5550	6101	5408	312	-38	239	-29		1823	1239	2096	1425
				Total	14664	14664	13345	13344	-356	-356	-273	-273		4377	4377	5034	5034
48	Grand Ave	/	5 NB Ramp	NB	7210	5206	10917	7222	1001	544	767	417		2334	1550	3101	1967
				SB	5005	5883	6968	9563	530	994	406	762		1080	2517	1486	3279
				EB	0	0	0	0	0	0	0	0		0	0	0	0
				WB	1860	2985	1775	2875	-23	-30	-18	-23		1257	604	1446	695
				Total	14075	14074	19660	19660	1508	1508	1156	1156		4671	4671	5827	5827

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment:	North/South		East/West	Scenario:	2035 Without Project
Intersection:	Flower	at	Civic Center	Time Period:	2035 Weekday AM

Link Inputs

	North			
	973	900		
823			662	
849			841	
	973	1053		
In - Out	3537	3537	0	

Turn Move Inputs

	163	575	108	
	SR	ST	SL	
121	EL		WR	37
474	ET		WT	411
144	ER		WL	127
	NL	NT	NR	
	141	625	150	
	474	474	474	

					RowTt	Target	144	144	144	To E	To W
From N	0	575	108	163	846	973.25		0	661	124	188
From S	625	0	150	141	916	1053.2		719	0	172	162
From E	37	127	0	411	575	661.57		43	146	0	473
From W	121	144	474	0	739	849.27		139	165	545	0
	To N	To S	To E	To W			ColTot	900	973	841	823
							Target	900	973	841	823

					RowTt	Target		To N	To S	To E	To W
From N	0	662	124	188	973	973		0	662	124	188
From S	719	0	172	162	1053	1053		719	0	172	162
From E	43	146	0	473	662	662		43	146	0	473
From W	139	166	545	0	849	849		139	166	545	0
	To N	To S	To E	To W			ColTot	900	973	841	823
							Target	900	973	841	823

					RowTt	Target		To N	To S	To E	To W
From N	0	662	124	188	973	973		0	662	124	188
From S	719	0	172	162	1053	1053		719	0	172	162
From E	43	146	0	473	662	662		43	146	0	473
From W	139	166	545	0	849	849		139	166	545	0
	To N	To S	To E	To W			ColTot	900	973	841	823
							Target	900	973	841	823

					RowTt	Target		To N	To S	To E	To W
From N	0	662	124	188	973	973		0	662	124	188
From S	719	0	172	162	1053	1053		719	0	172	162
From E	43	146	0	473	662	662		43	146	0	473
From W	139	166	545	0	849	849		139	166	545	0
	To N	To S	To E	To W			ColTot	900	973	841	823
							Target	900	973	841	823
							Pct	**1.00002**	**1**	**1**	**0.99998**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	141	625	150	108	575	163	121	474	144	127	411	37
2035	**162**	**719**	**172**	**124**	**662**	**188**	**139**	**545**	**166**	**146**	**473**	**43**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West
Intersection: Flower at Santa Ana
Scenario: 2035 Without Project
Time Period: 2035 Weekday AM

Link Inputs

North

	1142	1214	
474			488
873			762
	1169	1137	

In - Out	3640.04	3619	21.104

Turn Move Inputs

	73	773	148	
	SR	ST	SL	
80	EL		WR	106
456	ET		WT	258
139	ER		WL	60
	NL	NT	NR	
	59	870	58	
	456	456	456	

					RowTt	Target		139	139	139	To E	To W
From N	0	773	148	73	994	1142.4			0	888	170	84
From S	870	0	58	59	987	1136.6			1002	0	67	68
From E	106	60	0	258	424	487.78			122	69	0	297
From W	80	139	456	0	675	873.24			103	180	590	0
	To N	To S	To E	To W			ColTot		1227	1137	827	449
							Target		1214	1169	762	474

					RowTt	Target		To N	To S	To E	To W
From N	0	913	157	89	1158	1142		0	900	155	87
From S	991	0	62	72	1124	1137		1002	0	62	72
From E	121	71	0	313	505	488		117	69	0	303
From W	102	185	544	0	831	873		108	194	571	0
	To N	To S	To E	To W			ColTot	1226	1163	788	462
							Target	1214	1169	762	474

					RowTt	Target		To N	To S	To E	To W
From N	0	905	150	89	1144	1142		0	904	149	89
From S	992	0	60	74	1127	1137		1001	0	61	75
From E	115	69	0	310	494	488		114	68	0	306
From W	107	195	553	0	854	873		109	199	565	0
	To N	To S	To E	To W			ColTot	1224	1171	775	470
							Target	1214	1169	762	474

					RowTt	Target		To N	To S	To E	To W
From N	0	902	147	90	1139	1142		0	905	147	90
From S	993	0	60	75	1128	1137		1000	0	60	76
From E	113	68	0	308	489	488		113	68	0	307
From W	108	199	556	0	863	873		109	201	562	0
	To N	To S	To E	To W			ColTot	1223	1174	770	474
							Target	1214	1169	762	474
							Pct	**1.00686**	**1.0043**	**1.01**	**1.00012**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	59	870	58	148	773	73	80	456	139	60	258	106
2035	**76**	**1000**	**60**	**147**	**905**	**90**	**109**	**562**	**201**	**68**	**307**	**113**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment:	North/South		East/West	Scenario:	2035 Without Project
Intersection:	Parton	at	Santa Ana	Time Period:	2035 Weekday AM

Link Inputs

	North		
	973	900	
823			662
849			841
	973	1053	
In - Out	3537.282	3537	0

Turn Move Inputs

	20	6	19	
	SR	ST	SL	
28	EL		WR	76
535	ET		WT	444
104	ER		WL	68
	NL	NT	NR	
	13	4	29	
	535	535	535	

					RowTt	Target					
							104	104	104	To E	To W
From N	0	6	19	20	45	973.25		0	130	411	433
From S	4	0	29	13	46	1053.2		92	0	664	298
From E	76	68	0	444	588	661.57		86	77	0	500
From W	28	104	535	0	667	849.27		36	132	681	0
	To N	To S	To E	To W			ColTot	213	339	1756	1230
							Target	900	973	841	823

					RowTt	Target					
								To N	To S	To E	To W
From N	0	373	197	289	859	973		0	422	223	328
From S	388	0	318	199	905	1053		451	0	370	232
From E	362	220	0	334	916	662		261	159	0	241
From W	151	381	326	0	858	849		149	377	323	0
	To N	To S	To E	To W			ColTot	862	958	916	801
							Target	900	973	841	823

					RowTt	Target					
								To N	To S	To E	To W
From N	0	429	205	337	971	973		0	430	205	338
From S	471	0	340	238	1049	1053		473	0	341	239
From E	273	161	0	248	682	662		265	156	0	240
From W	156	383	297	0	835	849		159	389	302	0
	To N	To S	To E	To W			ColTot	896	976	848	817
							Target	900	973	841	823

					RowTt	Target					
								To N	To S	To E	To W
From N	0	429	204	340	973	973		0	429	204	340
From S	475	0	338	241	1054	1053		475	0	338	240
From E	266	156	0	242	664	662		265	155	0	241
From W	159	388	299	0	846	849		160	389	300	0
	To N	To S	To E	To W			ColTot	899	974	842	822
							Target	900	973	841	823
							Pct	**0.99906**	**1.001**	**1.0009**	**0.9989**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	13	4	29	19	6	20	28	535	104	68	444	76
2035	**240**	**475**	**338**	**204**	**429**	**340**	**160**	**300**	**389**	**155**	**241**	**265**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West — Scenario: 2035 Without Project
Intersection: Ross at Civic Center — Time Period: 2035 Weekday AM

Link Inputs

North

	355	307	
1054			850
752			738
	397	370	

In - Out 2326.519 2496 -169.9

Turn Move Inputs

	51	197	59
	SR	ST	SL
44	EL		WR 45
522	ET		WT 634
88	ER		WL 60
	NL	NT	NR
	84	177	60
	522	522	522

					RowTt	Target	88	88	88	To E	To W
From N	0	197	59	51	307	354.54		0	228	68	59
From S	177	0	60	84	321	369.6		204	0	69	97
From E	45	60	0	634	739	850.43		52	69	0	730
From W	44	88	522	0	654	751.95		51	101	600	0
	To N	To S	To E	To W			ColTot	306	398	737	885
							Target	307	397	738	1054

					RowTt	Target		To N	To S	To E	To W
From N	0	227	68	70	366	355		0	220	66	68
From S	204	0	69	115	389	370		194	0	66	110
From E	52	69	0	869	990	850		45	59	0	747
From W	51	101	601	0	753	752		51	101	600	0
	To N	To S	To E	To W			ColTot	290	381	732	924
							Target	307	397	738	1054

					RowTt	Target		To N	To S	To E	To W
From N	0	230	67	78	374	355		0	218	63	73
From S	206	0	66	125	397	370		192	0	62	116
From E	47	62	0	851	961	850		42	55	0	754
From W	54	105	605	0	764	752		53	104	595	0
	To N	To S	To E	To W			ColTot	286	376	720	943
							Target	307	397	738	1054

					RowTt	Target		To N	To S	To E	To W
From N	0	230	65	82	377	355		0	216	61	77
From S	205	0	63	130	399	370		191	0	59	120
From E	45	58	0	842	945	850		40	52	0	758
From W	57	110	610	0	776	752		55	106	591	0
	To N	To S	To E	To W			ColTot	286	375	710	956
							Target	307	397	738	1054
							Pct	**0.93104**	**0.9426**	**0.9627**	**0.90669**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	84	177	60	59	197	51	44	522	88	60	634	45
2035	**120**	**191**	**59**	**61**	**216**	**77**	**55**	**591**	**106**	**52**	**758**	**40**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West
Intersection: Ross at Santa Ana
Scenario: 2035 Without Project
Time Period: 2035 Weekday AM

Link Inputs

North

	352	349	
768			720
696			725
	410	395	
In - Out	2163.01	2252	-89.27

Turn Move Inputs

	98	154	54	
	SR	ST	SL	
69	EL		WR	92
518	ET		WT	351
19	ER		WL	183
	NL	NT	NR	
	21	143	58	
	518	518	518	

					RowTt	Target		19	19	19	To E	To W
From N	0	154	54	98	306	352.22			0	177	62	113
From S	143	0	58	21	222	394.95			254	0	103	37
From E	92	183	0	351	626	719.51			106	210	0	403
From W	69	19	518	0	606	696.33			79	22	595	0
	To N	To S	To E	To W			ColTot		439	409	761	554
							Target		349	410	725	768

					RowTt	Target		To N	To S	To E	To W
From N	0	178	59	157	393	352		0	159	53	140
From S	202	0	98	52	352	395		226	0	110	58
From E	84	211	0	560	854	720		71	177	0	471
From W	63	22	568	0	652	696		67	23	606	0
	To N	To S	To E	To W			ColTot	364	360	769	670
							Target	349	410	725	768

					RowTt	Target		To N	To S	To E	To W
From N	0	181	50	161	392	352		0	163	45	144
From S	217	0	104	67	388	395		221	0	106	68
From E	68	202	0	541	811	720		60	180	0	480
From W	64	27	571	0	662	696		68	28	601	0
	To N	To S	To E	To W			ColTot	349	370	752	692
							Target	349	410	725	768

					RowTt	Target		To N	To S	To E	To W
From N	0	180	43	160	384	352		0	165	40	147
From S	221	0	102	75	399	395		219	0	101	75
From E	60	199	0	532	791	720		55	181	0	484
From W	68	31	580	0	678	696		69	32	595	0
	To N	To S	To E	To W			ColTot	343	378	736	706
							Target	349	410	725	768
							Pct	**0.9835**	**0.9217**	**1.015**	**0.91889**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	21	143	58	54	154	98	69	518	19	183	351	92
2035	**75**	**219**	**101**	**40**	**165**	**147**	**69**	**595**	**32**	**181**	**484**	**55**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment:	North/South		East/West	Scenario:	2035 Without Project
Intersection:	Ross	at	4th	Time Period:	2035 Weekday AM

Link Inputs

	North		
	250	329	
0			77
2			56
	229	285	
In - Out	614.1	614.1	-1E-03

Turn Move Inputs

	0	178	39	
	SR	ST	SL	
0	EL		WR	48
0	ET		WT	0
2	ER		WL	19
	NL	NT	NR	
	0	238	10	
	0	0	0	

					RowTt	Target		2	2	2	To E	To W
From N	0	178	39	0.001	217	249.55			0	205	45	0
From S	238	0	10	0.001	248	285.2			274	0	11	0
From E	48	19	0	0.001	67.001	77.05			55	22	0	0
From W	0.001	2	0.001	0	2.002	2.3			0	2	0	0
	To N	To S	To E	To W			ColTot		329	229	56	0
							Target		329	229	56	0

					RowTt	Target		To N	To S	To E	To W
From N	0	205	45	0	250	250		0	205	45	0
From S	274	0	11	0	285	285		274	0	11	0
From E	55	22	0	0	77	77		55	22	0	0
From W	0	2	0	0	2	2		0	2	0	0
	To N	To S	To E	To W			ColTot	329	229	56	0
							Target	329	229	56	0

					RowTt	Target		To N	To S	To E	To W
From N	0	205	45	0	250	250		0	205	45	0
From S	274	0	11	0	285	285		274	0	11	0
From E	55	22	0	0	77	77		55	22	0	0
From W	0	2	0	0	2	2		0	2	0	0
	To N	To S	To E	To W			ColTot	329	229	56	0
							Target	329	229	56	0

					RowTt	Target		To N	To S	To E	To W
From N	0	205	45	0	250	250		0	205	45	0
From S	274	0	11	0	285	285		274	0	11	0
From E	55	22	0	0	77	77		55	22	0	0
From W	0	2	0	0	2	2		0	2	0	0
	To N	To S	To E	To W			ColTot	329	229	56	0
							Target	329	229	56	0
							Pct	1	1	1	1

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	0	238	10	39	178	0	0	0	2	19	0	48
2035	**0**	**274**	**11**	**45**	**205**	**0**	**0**	**0**	**2**	**22**	**0**	**55**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West — Scenario: 2035 Without Project
Intersection: Broadway at Civic Center — Time Period: 2035 Weekday AM

Link Inputs

North

	1094	623	
986			797
675			682
	827	627	

In - Out 3193.494 3118 75.18

Turn Move Inputs

	222	616	114	
	SR	ST	SL	
102	EL		WR	83
421	ET		WT	550
64	ER		WL	39
	NL	NT	NR	
	86	410	49	
	421	421	421	

					RowTt	Target		64	64	64	To E	To W
From N	0	616	114	222	952	1093.7			0	708	131	255
From S	410	0	49	86	545	626.82			472	0	56	99
From E	83	39	0	550	672	797.46			98	46	0	653
From W	102	64	421	0	587	675.48			117	74	484	0
	To N	To S	To E	To W			ColTot		687	828	672	1007
							Target		623	827	682	986

					RowTt	Target		To N	To S	To E	To W
From N	0	707	133	250	1090	1094		0	710	133	251
From S	427	0	57	97	581	627		461	0	62	104
From E	89	46	0	639	775	797		92	48	0	658
From W	106	74	492	0	672	675		107	74	495	0
	To N	To S	To E	To W			ColTot	659	831	690	1013
							Target	623	827	682	986

					RowTt	Target		To N	To S	To E	To W
From N	0	706	132	244	1082	1094		0	714	133	247
From S	435	0	61	102	598	627		456	0	64	107
From E	87	47	0	640	775	797		89	49	0	659
From W	101	74	489	0	664	675		103	75	498	0
	To N	To S	To E	To W			ColTot	648	838	695	1012
							Target	623	827	682	986

					RowTt	Target		To N	To S	To E	To W
From N	0	705	131	240	1076	1094		0	717	133	244
From S	438	0	63	104	605	627		454	0	65	108
From E	86	48	0	642	776	797		88	50	0	660
From W	99	74	488	0	661	675		101	76	499	0
	To N	To S	To E	To W			ColTot	643	842	697	1011
							Target	623	827	682	986
							Pct	**1.03268**	**1.0175**	**1.0219**	**1.02573**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	86	410	49	114	616	222	102	421	64	39	550	83
2035	**108**	**454**	**65**	**133**	**717**	**244**	**101**	**499**	**76**	**50**	**660**	**88**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West — Scenario: 2035 Without Project
Intersection: Broadway at Santa Ana — Time Period: 2035 Weekday AM

Link Inputs

North

	906	717	
830			920
0			0
	715	695	

In - Out 2520.914 2262 259.28

Turn Move Inputs

	185	602	0
	SR	ST	SL
0	EL		WR 55
0	ET		WT 500
0	ER		WL 19
	NL	NT	NR
	36	568	0

0 0 0

					RowTt	Target
From N	0	602	0.001	185	787	906.04
From S	568	0	0.001	36	604	695.18
From E	55	19	0	500	574	919.69
From W	0.001	0.001	0.001	0	0.003	0.001
	To N	To S	To E	To W		

0	0	0	To E	To W
	0	693	0	213
	654	0	0	41
	88	30	0	801
	0	0	0	0
ColTot	742	724	0	1056
Target	717	715	0	830

					RowTt	Target
From N	0	685	0	167	852	906
From S	632	0	0	33	665	695
From E	85	30	0	630	745	920
From W	0	0	0	0	0	0
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	728	0	178
	661	0	0	34
	105	37	0	777
	0	0	0	0
ColTot	766	765	0	989
Target	717	715	0	830

					RowTt	Target
From N	0	680	0	149	829	906
From S	619	0	0	29	647	695
From E	98	35	0	652	785	920
From W	0	0	0	0	0	0
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	743	0	163
	665	0	0	31
	115	41	0	764
	0	0	0	0
ColTot	780	784	0	957
Target	717	715	0	830

					RowTt	Target
From N	0	678	0	141	819	906
From S	611	0	0	27	638	695
From E	106	37	0	662	805	920
From W	0	0	0	0	0	0
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	750	0	156
	666	0	0	29
	121	42	0	756
	0	0	0	0
ColTot	787	792	0	941
Target	717	715	0	830
Pct	**1.0979**	**1.1081**	**1.0971**	**1.13473**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	36	568	0	0	602	185	0	0	0	19	500	55
2035	**29**	**666**	**0**	**0**	**750**	**156**	**0**	**0**	**0**	**42**	**756**	**121**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West
Intersection: Broadway at 5th
Scenario: 2035 Without Project
Time Period: 2035 Weekday AM

Link Inputs

North

	620	607	
0			0
505			501
	550	532	

In - Out 1657.496 1657 0

Turn Move Inputs

	0	472	67
	SR	ST	SL
99	EL		WR 0
334	ET		WT 0
6	ER		WL 0
	NL	NT	NR
	0	428	35
	334	334	334

					RowTt	Target		6	6	6	To E	To W
From N	0	472	67	0.001	539	619.81			0	543	77	0
From S	428	0	35	0.001	463	532.27			492	0	40	0
From E	0.001	0.001	0	0.001	0.003	0.001			0	0	0	0
From W	99	6	334	0	439	505.42			114	7	385	0
	To N	To S	To E	To W			ColTot		606	550	502	0
							Target		607	550	501	0

					RowTt	Target		To N	To S	To E	To W
From N	0	543	77	0	620	620		0	543	77	0
From S	493	0	40	0	533	532		492	0	40	0
From E	0	0	0	0	0	0		0	0	0	0
From W	114	7	384	0	505	505		114	7	384	0
	To N	To S	To E	To W			ColTot	606	550	501	0
							Target	607	550	501	0

					RowTt	Target		To N	To S	To E	To W
From N	0	543	77	0	620	620		0	543	77	0
From S	493	0	40	0	533	532		492	0	40	0
From E	0	0	0	0	0	0		0	0	0	0
From W	114	7	384	0	505	505		114	7	384	0
	To N	To S	To E	To W			ColTot	607	550	501	0
							Target	607	550	501	0

					RowTt	Target		To N	To S	To E	To W
From N	0	543	77	0	620	620		0	543	77	0
From S	492	0	40	0	532	532		492	0	40	0
From E	0	0	0	0	0	0		0	0	0	0
From W	115	7	384	0	505	505		115	7	384	0
	To N	To S	To E	To W			ColTot	607	550	501	0
							Target	607	550	501	0
							Pct	**0.99969**	**1.0002**	**1.0001**	**0.99992**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	0	428	35	67	472	0	99	334	6	0	0	0
2035	**0**	**492**	**40**	**77**	**543**	**0**	**115**	**384**	**7**	**0**	**0**	**0**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West — Scenario: 2035 Without Project
Intersection: Broadway at 4th — Time Period: 2035 Weekday AM

Link Inputs

North

	568	520
187		133
94		102
	512	925

In - Out 1719.749 1321 398.9

Turn Move Inputs

	69	410	15	
	SR	ST	SL	
15	EL		WR	11
51	ET		WT	85
15	ER		WL	20
	NL	NT	NR	
	9	426	22	
	51	51	51	

					RowTt	Target		15	15	15	To E	To W
From N	0	410	15	69	494	567.726			0	471	17	79
From S	426	0	22	9	457	924.932			862	0	45	18
From E	11	20	0	85	116	133.242			13	23	0	98
From W	15	15	51	0	81	93.8486			17	17	59	0
	To N	To S	To E	To W			ColTot		892	512	121	195
							Target		520	512	102	187

					RowTt	Target		To N	To S	To E	To W
From N	0	472	15	76	562	568		0	476	15	77
From S	503	0	38	17	558	925		834	0	62	29
From E	7	23	0	93	124	133		8	25	0	101
From W	10	17	50	0	77	94		12	21	60	0
	To N	To S	To E	To W			ColTot	854	522	137	206
							Target	520	512	102	187

					RowTt	Target		To N	To S	To E	To W
From N	0	467	11	69	547	568		0	485	11	72
From S	508	0	46	26	580	925		810	0	74	42
From E	5	24	0	91	120	133		5	27	0	101
From W	7	21	45	0	73	94		10	27	58	0
	To N	To S	To E	To W			ColTot	825	538	143	215
							Target	520	512	102	187

					RowTt	Target		To N	To S	To E	To W
From N	0	461	8	63	532	568		0	492	9	67
From S	511	0	53	36	600	925		788	0	81	56
From E	3	26	0	88	117	133		4	29	0	100
From W	6	25	41	0	73	94		8	33	53	0
	To N	To S	To E	To W			ColTot	800	554	143	223
							Target	520	512	102	187
							Pct	**1.537**	**1.082**	**1.4039**	**1.19434**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	9	426	22	15	410	69	15	51	15	20	85	11
2035	**56**	**788**	**81**	**9**	**492**	**67**	**8**	**53**	**33**	**29**	**100**	**4**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South
Intersection: Broadway at East/West 3rd

Scenario: 2035 Without Project
Time Period: 2035 Weekday AM

Link Inputs

North

	373	816	
86			67
85			87
	407	403	

In - Out 928.0586 1396 -467.7

Turn Move Inputs

	19	283	22	
	SR	ST	SL	
11	EL		WR	16
46	ET		WT	33
16	ER		WL	9
	NL	NT	NR	
	22	321	7	
	46	46	46	

					RowTt	Target	16	16	16	To E	To W
From N	0	283	22	19	324	373.077		0	326	25	22
From S	321	0	7	22	350	403.202		370	0	8	25
From E	16	9	0	33	58	67.2003		19	10	0	38
From W	11	16	46	0	73	84.5796		13	19	53	0
	To N	To S	To E	To W			ColTot	401	355	87	85
							Target	816	407	87	86

					RowTt	Target		To N	To S	To E	To W
From N	0	374	25	22	421	373		0	331	22	19
From S	752	0	8	25	786	403		386	0	4	13
From E	38	12	0	38	88	67		29	9	0	29
From W	26	21	53	0	101	85		22	18	45	0
	To N	To S	To E	To W			ColTot	437	358	72	62
							Target	816	407	87	86

					RowTt	Target		To N	To S	To E	To W
From N	0	376	27	27	431	373		0	326	24	23
From S	722	0	5	18	745	403		391	0	3	10
From E	54	10	0	41	105	67		34	7	0	26
From W	41	20	55	0	116	85		30	15	40	0
	To N	To S	To E	To W			ColTot	455	348	66	59
							Target	816	407	87	86

					RowTt	Target		To N	To S	To E	To W
From N	0	382	31	34	447	373		0	319	26	28
From S	701	0	4	14	719	403		393	0	2	8
From E	62	8	0	38	107	67		39	5	0	24
From W	53	17	52	0	123	85		37	12	36	0
	To N	To S	To E	To W			ColTot	469	336	64	60
							Target	816	407	87	86
							Pct	**0.574**	**0.825**	**0.7345**	**0.69781**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	22	321	7	22	283	19	11	46	16	9	33	16
2035	**8**	**393**	**2**	**26**	**319**	**28**	**37**	**36**	**12**	**5**	**24**	**39**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West — Scenario: 2035 Without Project
Intersection: Broadway at 1st — Time Period: 2035 Weekday AM

Link Inputs

	North		
	463	592	
1018			1317
1619			1520
	520	505	
In - Out	3904.349	3651	253.5

Turn Move Inputs

	52	298	52
	SR	ST	SL
145	EL		WR 55
1199	ET		WT 779
63	ER		WL 91
	NL	NT	NR
	54	314	71
	1199	1199	1199

					RowTt	Target	63	63	63	To E	To W
From N	0	298	52	52	402	463.45		0	344	60	60
From S	314	0	71	54	439	505.161		361	0	82	62
From E	55	91	0	779	925	1317.14		78	130	0	1109
From W	145	63	1199	0	1407	1618.6		167	72	1379	0
	To N	To S	To E	To W			ColTot	606	546	1521	1231
							Target	592	520	1520	1018

					RowTt	Target		To N	To S	To E	To W
From N	0	328	60	50	437	463		0	347	64	53
From S	353	0	82	51	486	505		367	0	85	53
From E	76	124	0	917	1117	1317		90	146	0	1081
From W	163	69	1379	0	1610	1619		164	69	1385	0
	To N	To S	To E	To W			ColTot	621	562	1534	1187
							Target	592	520	1520	1018

					RowTt	Target		To N	To S	To E	To W
From N	0	321	63	45	429	463		0	347	68	49
From S	350	0	84	46	480	505		368	0	89	48
From E	86	135	0	927	1148	1317		99	155	0	1064
From W	156	64	1373	0	1593	1619		159	65	1395	0
	To N	To S	To E	To W			ColTot	626	567	1551	1161
							Target	592	520	1520	1018

					RowTt	Target		To N	To S	To E	To W
From N	0	318	67	43	428	463		0	345	72	46
From S	349	0	87	42	478	505		369	0	92	45
From E	93	142	0	933	1169	1317		105	160	0	1052
From W	150	60	1367	0	1577	1619		154	62	1403	0
	To N	To S	To E	To W			ColTot	628	566	1567	1143
							Target	592	520	1520	1018
							Pct	**1.061**	**1.089**	**1.0308**	**1.12237**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	54	314	71	52	298	52	145	1199	63	91	779	55
2035	**45**	**369**	**92**	**72**	**345**	**46**	**154**	**1403**	**62**	**160**	**1052**	**105**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West — Scenario: 2035 Without Project
Intersection: Sycamore at Civic Center — Time Period: 2035 Weekday AM

Link Inputs

	North		
	67	255	
756			831
610			534
	108	144	
In - Out	1652.237	1652	0

Turn Move Inputs

	20	12	26	
	SR	ST	SL	
62	EL		WR	80
413	ET		WT	617
55	ER		WL	26
	NL	NT	NR	
	20	80	25	
	413	413	413	

					RowTt	Target		55	55	55	To E	To W
From N	0	12	26	20	58	67.2003			0	14	30	23
From S	80	0	25	20	125	143.67			92	0	29	23
From E	80	26	0	617	723	831.03			92	30	0	709
From W	62	55	413	0	530	610.337			71	63	476	0
	To N	To S	To E	To W			ColTot		255	107	534	755
							Target		255	108	534	756

					RowTt	Target		To N	To S	To E	To W
From N	0	14	30	23	67	67		0	14	30	23
From S	92	0	29	23	144	144		92	0	29	23
From E	92	30	0	710	831	831		92	30	0	709
From W	71	64	475	0	610	610		71	64	475	0
	To N	To S	To E	To W			ColTot	255	108	534	755
							Target	255	108	534	756

					RowTt	Target		To N	To S	To E	To W
From N	0	14	30	23	67	67		0	14	30	23
From S	92	0	29	23	144	144		92	0	29	23
From E	92	30	0	710	831	831		92	30	0	709
From W	71	64	475	0	610	610		71	64	475	0
	To N	To S	To E	To W			ColTot	255	108	534	756
							Target	255	108	534	756

					RowTt	Target		To N	To S	To E	To W
From N	0	14	30	23	67	67		0	14	30	23
From S	92	0	29	23	144	144		92	0	29	23
From E	92	30	0	709	831	831		92	30	0	709
From W	71	64	475	0	610	610		71	64	475	0
	To N	To S	To E	To W			ColTot	255	108	534	756
							Target	255	108	534	756
							Pct	**1**	**1**	**1.0003**	**0.99979**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	20	80	25	26	12	20	62	413	55	26	617	80
2035	**23**	**92**	**29**	**30**	**14**	**23**	**71**	**475**	**64**	**30**	**709**	**92**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment:	North/South		East/West	Scenario: 2035 Without Project
Intersection:	Sycamore	at	Santa Ana	Time Period: 2035 Weekday AM

Link Inputs

	North		
	67	66	
821			890
0			0
	115	45	
In - Out	1001.651	1002	0

Turn Move Inputs

	20	38	0	
	SR	ST	SL	
0	EL		WR	26
0	ET		WT	686
0	ER		WL	62
	NL	NT	NR	
	8	31	0	
	0	0	0	

					RowTt	Target					
							0	0	0	To E	To W
From N	0	38	0.001	20	58.001	66.7		0	44	0	23
From S	31	0	0.001	8	39.001	44.85		36	0	0	9
From E	26	62	0	686	774	890.1		30	71	0	789
From W	0.001	0.001	0.001	0	0.003	0.001		0	0	0	0
	To N	To S	To E	To W			ColTot	66	115	0	821
							Target	66	115	0	821

					RowTt	Target		To N	To S	To E	To W
From N	0	44	0	23	67	67		0	44	0	23
From S	36	0	0	9	45	45		36	0	0	9
From E	30	71	0	789	890	890		30	71	0	789
From W	0	0	0	0	0	0		0	0	0	0
	To N	To S	To E	To W			ColTot	66	115	0	821
							Target	66	115	0	821

					RowTt	Target		To N	To S	To E	To W
From N	0	44	0	23	67	67		0	44	0	23
From S	36	0	0	9	45	45		36	0	0	9
From E	30	71	0	789	890	890		30	71	0	789
From W	0	0	0	0	0	0		0	0	0	0
	To N	To S	To E	To W			ColTot	66	115	0	821
							Target	66	115	0	821

					RowTt	Target		To N	To S	To E	To W
From N	0	44	0	23	67	67		0	44	0	23
From S	36	0	0	9	45	45		36	0	0	9
From E	30	71	0	789	890	890		30	71	0	789
From W	0	0	0	0	0	0		0	0	0	0
	To N	To S	To E	To W			ColTot	66	115	0	821
							Target	66	115	0	821
							Pct	**1**	**1**	**1**	**1**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	8	31	0	0	38	20	0	0	0	62	686	26
2035	**9**	**36**	**0**	**0**	**44**	**23**	**0**	**0**	**0**	**71**	**789**	**30**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment:	North/South		East/West	Scenario:	2035 Without Project
Intersection:	Sycamore	at	5th	Time Period:	2035 Weekday AM

Link Inputs

	North		
	130	48	
0			0
834			917
	54	55	
In - Out	1018.901	1019	0

Turn Move Inputs

	0	32	81	
	SR	ST	SL	
15	EL		WR	0
695	ET		WT	0
15	ER		WL	0
	NL	NT	NR	
	0	27	21	
	695	695	695	
	15	15	15	

					RowTt	Target					
										To E	To W
From N	0	32	81	0.001	113.001	129.95		0	37	93	0
From S	27	0	21	0.001	48.001	55.2		31	0	24	0
From E	0.001	0.001	0	0.001	0.003	0.001		0	0	0	0
From W	15	15	695	0	725	833.75		17	17	799	0
	To N	To S	To E	To W			ColTot	48	54	917	0
							Target	48	54	917	0

					RowTt	Target		To N	To S	To E	To W
From N	0	37	93	0	130	130		0	37	93	0
From S	31	0	24	0	55	55		31	0	24	0
From E	0	0	0	0	0	0		0	0	0	0
From W	17	17	799	0	834	834		17	17	799	0
	To N	To S	To E	To W			ColTot	48	54	917	0
							Target	48	54	917	0

					RowTt	Target		To N	To S	To E	To W
From N	0	37	93	0	130	130		0	37	93	0
From S	31	0	24	0	55	55		31	0	24	0
From E	0	0	0	0	0	0		0	0	0	0
From W	17	17	799	0	834	834		17	17	799	0
	To N	To S	To E	To W			ColTot	48	54	917	0
							Target	48	54	917	0

					RowTt	Target		To N	To S	To E	To W
From N	0	37	93	0	130	130		0	37	93	0
From S	31	0	24	0	55	55		31	0	24	0
From E	0	0	0	0	0	0		0	0	0	0
From W	17	17	799	0	834	834		17	17	799	0
	To N	To S	To E	To W			ColTot	48	54	917	0
							Target	48	54	917	0
							Pct	**1**	**1**	**1**	**1.00002**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	0	27	21	81	32	0	15	695	15	0	0	0
2035	**0**	**31**	**24**	**93**	**37**	**0**	**17**	**799**	**17**	**0**	**0**	**0**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South
Intersection: Sycamore at East/West 4th

Scenario: 2035 Without Project
Time Period: 2035 Weekday AM

Link Inputs

	North		
	15	54	
71			74
148			98
	55	41	
In - Out	278.3	278.3	0

Turn Move Inputs

	11	11	14
	SR	ST	SL
13	EL	WR	27
44	ET	WT	73
7	ER	WL	29
	NL	NT	NR
	1	8	4
	44	44	44

					RowTt	Target		7	7	7	To E	To W
From N	0	11	14	11	36	14.95			0	5	6	5
From S	8	0	4	1	13	41.4			25	0	13	3
From E	27	29	0	73	129	73.6			15	17	0	42
From W	13	7	44	0	64	148.35			30	16	102	0
	To N	To S	To E	To W			ColTot		71	37	121	49
							Target		54	55	98	71

					RowTt	Target		To N	To S	To E	To W
From N	0	7	5	7	18	15		0	6	4	5
From S	19	0	10	5	34	41		23	0	12	6
From E	12	24	0	60	96	74		9	19	0	46
From W	23	24	83	0	130	148		26	27	95	0
	To N	To S	To E	To W			ColTot	59	52	111	57
							Target	54	55	98	71

					RowTt	Target		To N	To S	To E	To W
From N	0	6	3	7	16	15		0	5	3	6
From S	22	0	11	7	39	41		23	0	12	7
From E	8	20	0	58	86	74		7	17	0	49
From W	24	29	83	0	137	148		26	32	90	0
	To N	To S	To E	To W			ColTot	56	54	105	63
							Target	54	55	98	71

					RowTt	Target		To N	To S	To E	To W
From N	0	6	3	7	16	15		0	5	3	7
From S	22	0	11	8	41	41		22	0	11	8
From E	7	17	0	56	80	74		6	16	0	51
From W	25	32	84	0	142	148		27	34	88	0
	To N	To S	To E	To W			ColTot	55	55	102	67
							Target	54	55	98	71
							Pct	**1.018**	**0.997**	**1.0407**	**0.93298**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	1	8	4	14	11	11	13	44	7	29	73	27
2035	**8**	**22**	**11**	**3**	**5**	**7**	**27**	**88**	**34**	**16**	**51**	**6**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West — Scenario: 2035 Without Project
Intersection: Main at Civic Center — Time Period: 2035 Weekday AM

Link Inputs

North

	1349	1054	
958			701
720			667
	1258	1169	

In - Out 3938.166 3938 0

Turn Move Inputs

172	911	90	
SR	ST	SL	
85	EL	WR	43
417	ET	WT	507
124	ER	WL	59
	NL	NT	NR
	154	789	74
	417	417	417

					RowTt	Target	124	124	124	To E	To W
From N	0	911	90	172	1173	1348.64		0	1047	103	198
From S	789	0	74	154	1017	1169.05		907	0	85	177
From E	43	59	0	507	609	700.968		49	68	0	584
From W	85	124	417	0	626	719.506		98	143	479	0
	To N	To S	To E	To W			ColTot	1054	1258	668	958
							Target	1054	1258	667	958

					RowTt	Target		To N	To S	To E	To W
From N	0	1048	103	198	1349	1349		0	1048	103	198
From S	907	0	85	177	1169	1169		907	0	85	177
From E	50	68	0	583	701	701		50	68	0	584
From W	98	143	479	0	719	720		98	143	479	0
	To N	To S	To E	To W			ColTot	1054	1258	668	958
							Target	1054	1258	667	958

					RowTt	Target		To N	To S	To E	To W
From N	0	1048	103	198	1349	1349		0	1048	103	198
From S	907	0	85	177	1169	1169		907	0	85	177
From E	50	68	0	584	701	701		50	68	0	584
From W	98	143	479	0	719	720		98	143	479	0
	To N	To S	To E	To W			ColTot	1054	1258	667	958
							Target	1054	1258	667	958

					RowTt	Target		To N	To S	To E	To W
From N	0	1048	103	198	1349	1349		0	1048	103	198
From S	907	0	85	177	1169	1169		907	0	85	177
From E	50	68	0	584	701	701		50	68	0	584
From W	98	143	479	0	719	720		98	143	479	0
	To N	To S	To E	To W			ColTot	1054	1258	667	958
							Target	1054	1258	667	958
							Pct	**1**	**1**	**1**	**0.99999**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	154	789	74	90	911	172	85	417	124	59	507	43
2035	**177**	**907**	**85**	**103**	**1048**	**198**	**98**	**479**	**143**	**68**	**584**	**50**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West — Scenario: 2035 Without Project
Intersection: Main at Santa Ana — Time Period: 2035 Weekday AM

Link Inputs

	North		
	1266	925	
1047			1268
0			0
	1241	1029	
In - Out	3563.6	3213	350.5

Turn Move Inputs

	80	1022	0
	SR	ST	SL
0	EL	WR	68
0	ET	WT	774
0	ER	WL	57
	NL	NT	NR
	57	837	0

0 0 0

					RowTt	Target
From N	0	1022	0.001	80	1102	1266.38
From S	837	0	0.001	57	894.001	1028.86
From E	68	57	0	774	899	1268.36
From W	0.001	0.001	0.001	0	0.003	0.001
	To N	To S	To E	To W		

0	0	0	To E	To W
	0	1174	0	92
	963	0	0	66
	96	80	0	1092
	0	0	0	0
ColTot	1059	1255	0	1250
Target	925	1241	0	1047

					RowTt	Target
From N	0	1161	0	77	1238	1266
From S	841	0	0	55	896	1029
From E	84	80	0	915	1079	1268
From W	0	0	0	0	0	0
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	1188	0	79
	966	0	0	63
	98	94	0	1076
	0	0	0	0
ColTot	1064	1281	0	1218
Target	925	1241	0	1047

					RowTt	Target
From N	0	1150	0	68	1218	1266
From S	839	0	0	54	893	1029
From E	86	91	0	925	1102	1268
From W	0	0	0	0	0	0
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	1196	0	70
	966	0	0	63
	99	104	0	1066
	0	0	0	0
ColTot	1065	1300	0	1198
Target	925	1241	0	1047

					RowTt	Target
From N	0	1141	0	62	1203	1266
From S	839	0	0	55	894	1029
From E	86	100	0	931	1116	1268
From W	0	0	0	0	0	0
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	1202	0	65
	966	0	0	63
	97	113	0	1058
	0	0	0	0
ColTot	1063	1315	0	1186
Target	925	1241	0	1047
Pct	**1.15**	**1.059**	**1.105**	**1.13205**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	57	837	0	0	1022	80	0	0	0	57	774	68
2035	**63**	**966**	**0**	**0**	**1202**	**65**	**0**	**0**	**0**	**113**	**1058**	**97**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West — Scenario: 2035 Without Project
Intersection: Main at 5th — Time Period: 2035 Weekday AM

Link Inputs

North

	1161	940	
0			0
725			591
	1123	985	

In - Out 2870.305 2653 217

Turn Move Inputs

	0	947	62
	SR	ST	SL
59	EL		WR 0
410	ET		WT 0
29	ER		WL 0
	NL	NT	NR
	0	815	41
	410	410	410

					RowTt	Target	29	29	29	To E	To W
From N	0	947	62	0.001	1009	1160.94		0	1090	71	0
From S	815	0	41	0.001	856.001	984.831		938	0	47	0
From E	0.001	0.001	0	0.001	0.003	0.001		0	0	0	0
From W	59	29	410	0	498	724.531		86	42	597	0
	To N	To S	To E	To W			ColTot	1023	1132	715	0
							Target	940	1123	591	0

					RowTt	Target		To N	To S	To E	To W
From N	0	1081	59	0	1140	1161		0	1101	60	0
From S	861	0	39	0	900	985		942	0	43	0
From E	0	0	0	0	0	0		0	0	0	0
From W	79	42	493	0	614	725		93	49	582	0
	To N	To S	To E	To W			ColTot	1035	1150	685	0
							Target	940	1123	591	0

					RowTt	Target		To N	To S	To E	To W
From N	0	1074	52	0	1126	1161		0	1108	53	0
From S	855	0	37	0	892	985		944	0	41	0
From E	0	0	0	0	0	0		0	0	0	0
From W	84	48	502	0	635	725		96	55	573	0
	To N	To S	To E	To W			ColTot	1041	1163	667	0
							Target	940	1123	591	0

					RowTt	Target		To N	To S	To E	To W
From N	0	1070	47	0	1117	1161		0	1112	49	0
From S	853	0	36	0	889	985		945	0	40	0
From E	0	0	0	0	0	0		0	0	0	0
From W	87	53	508	0	648	725		97	59	568	0
	To N	To S	To E	To W			ColTot	1042	1171	657	0
							Target	940	1123	591	0
							Pct	**1.109**	**1.043**	**1.1115**	**1.07492**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	0	815	41	62	947	0	59	410	29	0	0	0
2035	**0**	**945**	**40**	**49**	**1112**	**0**	**97**	**568**	**59**	**0**	**0**	**0**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West — Scenario: 2035 Without Project
Intersection: Main at 4th — Time Period: 2035 Weekday AM

Link Inputs

North

	1176	881	
151			176
260			122
	1178	966	

In - Out 2578.239 2332 246.2

Turn Move Inputs

	16	1006	0
	SR	ST	SL
0	EL	WR	38
84	ET	WT	115
18	ER	WL	0
	NL	NT	NR
	0	818	22
	84	84	84

					RowTt	Target		18	18	18	To E	To W
From N	0	1006	0	16	1022	1176			0	1158	0	18
From S	818	0	22	0	840	966.293			941	0	25	0
From E	38	0	0	115	153	176.111			44	0	0	132
From W	0	18	84	0	102	259.83			0	46	214	0
	To N	To S	To E	To W			ColTot		985	1203	239	151
							Target		881	1178	122	151

					RowTt	Target		To N	To S	To E	To W
From N	0	1133	0	18	1152	1176		0	1157	0	19
From S	842	0	13	0	855	966		952	0	15	0
From E	39	0	0	132	171	176		40	0	0	136
From W	0	45	109	0	154	260		0	76	184	0
	To N	To S	To E	To W			ColTot	992	1233	198	155
							Target	881	1178	122	151

					RowTt	Target		To N	To S	To E	To W
From N	0	1106	0	18	1124	1176		0	1157	0	19
From S	846	0	9	0	855	966		956	0	10	0
From E	36	0	0	132	168	176		37	0	0	139
From W	0	73	113	0	185	260		0	102	158	0
	To N	To S	To E	To W			ColTot	994	1259	168	158
							Target	881	1178	122	151

					RowTt	Target		To N	To S	To E	To W
From N	0	1083	0	18	1101	1176		0	1157	0	20
From S	848	0	7	0	856	966		958	0	8	0
From E	33	0	0	132	166	176		35	0	0	141
From W	0	95	114	0	210	260		0	118	142	0
	To N	To S	To E	To W			ColTot	993	1275	150	160
							Target	881	1178	122	151
							Pct	**1.127**	**1.082**	**1.2331**	**1.06408**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	0	818	22	0	1006	16	0	84	18	0	115	38
2035	**0**	**958**	**8**	**0**	**1157**	**20**	**0**	**142**	**118**	**0**	**141**	**35**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West — Scenario: 2035 Without Project
Intersection: Main at 3rd — Time Period: 2035 Weekday AM

Link Inputs

North

	1164	1000	
100			104
173			115
	1189	962	

In - Out 2402.988 2403 0

Turn Move Inputs

	20	992	0	
	SR	ST	SL	
35	EL		WR	12
86	ET		WT	66
29	ER		WL	12
	NL	NT	NR	
	0	822	14	
	86	86	86	

					RowTt	Target		29	29	29	To E	To W
From N	0	992	0	20	1012	1164.42			0	1141	0	23
From S	822	0	14	0	836	961.659			946	0	16	0
From E	12	12	0	66	90	104.276			14	14	0	76
From W	35	29	86	0	150	172.635			40	33	99	0
	To N	To S	To E	To W			ColTot		1000	1189	115	99
							Target		1000	1189	115	100

					RowTt	Target		To N	To S	To E	To W
From N	0	1141	0	23	1165	1164		0	1141	0	23
From S	946	0	16	0	962	962		946	0	16	0
From E	14	14	0	77	104	104		14	14	0	76
From W	40	33	99	0	172	173		40	33	99	0
	To N	To S	To E	To W			ColTot	1000	1189	115	100
							Target	1000	1189	115	100

					RowTt	Target		To N	To S	To E	To W
From N	0	1141	0	23	1164	1164		0	1141	0	23
From S	946	0	16	0	962	962		946	0	16	0
From E	14	14	0	77	104	104		14	14	0	77
From W	40	33	99	0	172	173		40	33	99	0
	To N	To S	To E	To W			ColTot	1000	1189	115	100
							Target	1000	1189	115	100

					RowTt	Target		To N	To S	To E	To W
From N	0	1141	0	23	1164	1164		0	1141	0	23
From S	946	0	16	0	962	962		946	0	16	0
From E	14	14	0	77	104	104		14	14	0	77
From W	40	33	99	0	173	173		40	33	99	0
	To N	To S	To E	To W			ColTot	1000	1189	115	100
							Target	1000	1189	115	100
							Pct	**1**	**1**	**1.0004**	**0.99967**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	0	822	14	0	992	20	35	86	29	12	66	12
2035	**0**	**946**	**16**	**0**	**1141**	**23**	**40**	**99**	**33**	**14**	**77**	**14**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South
Intersection: Main at East/West 1st
Scenario: 2035 Without Project
Time Period: 2035 Weekday AM

Link Inputs

North

	1144	958	
1388			1189
1675			1644
	1126	984	

In - Out 4991.974 5116 -124.1

Turn Move Inputs

	78	800	117	
	SR	ST	SL	
119	EL		WR	81
1241	ET		WT	768
97	ER		WL	83
	NL	NT	NR	
	150	634	72	
	1241	1241	1241	

					RowTt	Target	97	97	97	To E	To W
From N	0	800	117	78	995	1143.56		0	919	134	90
From S	634	0	72	150	856	983.673		729	0	83	172
From E	81	83	0	768	932	1189.37		103	106	0	980
From W	119	97	1241	0	1457	1675.37		137	112	1427	0
	To N	To S	To E	To W			ColTot	969	1137	1644	1242
							Target	958	1126	1644	1388

					RowTt	Target		To N	To S	To E	To W
From N	0	911	134	100	1145	1144		0	909	134	100
From S	721	0	83	193	996	984		712	0	82	190
From E	102	105	0	1095	1302	1189		93	96	0	1000
From W	135	110	1427	0	1673	1675		136	111	1429	0
	To N	To S	To E	To W			ColTot	941	1116	1645	1290
							Target	958	1126	1644	1388

					RowTt	Target		To N	To S	To E	To W
From N	0	918	134	108	1159	1144		0	905	132	106
From S	725	0	82	205	1011	984		705	0	79	199
From E	95	97	0	1076	1267	1189		89	91	0	1009
From W	138	112	1428	0	1678	1675		138	112	1426	0
	To N	To S	To E	To W			ColTot	932	1107	1638	1314
							Target	958	1126	1644	1388

					RowTt	Target		To N	To S	To E	To W
From N	0	920	133	112	1165	1144		0	903	130	110
From S	725	0	80	210	1015	984		703	0	77	204
From E	92	92	0	1066	1250	1189		87	88	0	1014
From W	142	113	1432	0	1687	1675		141	113	1422	0
	To N	To S	To E	To W			ColTot	931	1104	1630	1328
							Target	958	1126	1644	1388
							Pct	**0.971**	**0.98**	**0.9912**	**0.95684**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	150	634	72	117	800	78	119	1241	97	83	768	81
2035	**204**	**703**	**77**	**130**	**903**	**110**	**141**	**1422**	**113**	**88**	**1014**	**87**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West
Intersection: Bush at Santa Ana
Scenario: 2035 Without Project
Time Period: 2035 Weekday AM

Link Inputs

North

	138	220	
703			759
0			0
	125	152	

In - Out 1048.557 1049 0

Turn Move Inputs

	34	86	0
	SR	ST	SL
0	EL	WR	81
0	ET	WT	556
0	ER	WL	23
	NL	NT	NR
	21	111	0

0 0 0

					RowTt	Target
From N	0	86	0.001	34	120.001	137.876
From S	111	0	0.001	21	132.001	151.78
From E	81	23	0	556	660	758.899
From W	0.001	0.001	0.001	0	0.003	0.001
	To N	To S	To E	To W		

0	0	0	To E	To W
	0	99	0	39
	128	0	0	24
	93	26	0	639
	0	0	0	0
ColTot	221	125	0	703
Target	220	125	0	703

					RowTt	Target
From N	0	99	0	39	138	138
From S	127	0	0	24	151	152
From E	93	26	0	640	759	759
From W	0	0	0	0	0	0
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	99	0	39
	128	0	0	24
	93	26	0	640
	0	0	0	0
ColTot	220	125	0	703
Target	220	125	0	703

					RowTt	Target
From N	0	99	0	39	138	138
From S	127	0	0	24	152	152
From E	93	26	0	640	759	759
From W	0	0	0	0	0	0
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	99	0	39
	128	0	0	24
	93	26	0	640
	0	0	0	0
ColTot	220	125	0	703
Target	220	125	0	703

					RowTt	Target
From N	0	99	0	39	138	138
From S	127	0	0	24	152	152
From E	93	26	0	640	759	759
From W	0	0	0	0	0	0
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	99	0	39
	128	0	0	24
	93	26	0	640
	0	0	0	0
ColTot	220	125	0	703
Target	220	125	0	703
Pct	**1**	**1**	**1.0002**	**0.99996**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	21	111	0	0	86	34	0	0	0	23	556	81
2035	**24**	**128**	**0**	**0**	**99**	**39**	**0**	**0**	**0**	**26**	**640**	**93**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West
Intersection: Bush at 5th
Scenario: 2035 Without Project
Time Period: 2035 Weekday AM

Link Inputs

North

	139	152	
0			0
534			424
	123	159	

In - Out 832.0354 698.7 133.4

Turn Move Inputs

	0	94	27
	SR	ST	SL
22	EL		WR
313	ET		WT
13	ER		WL
	NL	NT	NR
	0	110	28

					RowTt	Target		13	13	13	To E	To W
From N	0	94	27	0.001	121.001	139.035			0	108	31	0
From S	110	0	28	0.001	138.001	158.732			127	0	32	0
From E	0.001	0.001	0	0.001	0.003	0.001			0	0	0	0
From W	22	13	313	0	348	534.268			34	20	481	0
	To N	To S	To E	To W			ColTot		160	128	544	0
							Target		152	123	424	0

					RowTt	Target		To N	To S	To E	To W
From N	0	104	24	0	128	139		0	113	26	0
From S	120	0	25	0	145	159		131	0	28	0
From E	0	0	0	0	0	0		0	0	0	0
From W	32	19	375	0	426	534		40	24	470	0
	To N	To S	To E	To W			ColTot	171	137	524	0
							Target	152	123	424	0

					RowTt	Target		To N	To S	To E	To W
From N	0	101	21	0	123	139		0	115	24	0
From S	116	0	22	0	139	159		133	0	26	0
From E	0	0	0	0	0	0		0	0	0	0
From W	36	22	380	0	438	534		43	26	465	0
	To N	To S	To E	To W			ColTot	177	141	514	0
							Target	152	123	424	0

					RowTt	Target		To N	To S	To E	To W
From N	0	100	20	0	120	139		0	116	23	0
From S	114	0	21	0	136	159		134	0	25	0
From E	0	0	0	0	0	0		0	0	0	0
From W	37	23	383	0	443	534		45	28	462	0
	To N	To S	To E	To W			ColTot	179	144	509	0
							Target	152	123	424	0
							Pct	**1.18**	**1.169**	**1.2014**	**1.16396**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	0	110	28	27	94	0	22	313	13	0	0	0
2035	**0**	**134**	**25**	**23**	**116**	**0**	**45**	**462**	**28**	**0**	**0**	**0**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West — Scenario: 2035 Without Project
Intersection: Bush at 4th — Time Period: 2035 Weekday AM

Link Inputs

North

	124	170	
151			170
101			109
	124	159	

In - Out 553.8228 553.8 0

Turn Move Inputs

	4	88	16	
	SR	ST	SL	
7	EL		WR	18
71	ET		WT	120
10	ER		WL	10
	NL	NT	NR	
	7	123	8	
	71	71	71	

					RowTt	Target		10	10	10	To E	To W
From N	0	88	16	4	108	123.973			0	101	18	5
From S	123	0	8	7	138	158.732			141	0	9	8
From E	18	10	0	120	148	170.318			21	12	0	138
From W	7	10	71	0	88	100.8			8	11	81	0
	To N	To S	To E	To W			ColTot		170	124	109	151
							Target		170	124	109	151

					RowTt	Target		To N	To S	To E	To W
From N	0	101	18	5	124	124		0	101	18	5
From S	142	0	9	8	159	159		141	0	9	8
From E	21	12	0	138	170	170		21	12	0	138
From W	8	11	81	0	101	101		8	11	81	0
	To N	To S	To E	To W			ColTot	170	124	109	151
							Target	170	124	109	151

					RowTt	Target		To N	To S	To E	To W
From N	0	101	18	5	124	124		0	101	18	5
From S	142	0	9	8	159	159		142	0	9	8
From E	21	12	0	138	170	170		21	12	0	138
From W	8	11	81	0	101	101		8	11	81	0
	To N	To S	To E	To W			ColTot	170	124	109	151
							Target	170	124	109	151

					RowTt	Target		To N	To S	To E	To W
From N	0	101	18	5	124	124		0	101	18	5
From S	142	0	9	8	159	159		142	0	9	8
From E	21	12	0	138	170	170		21	12	0	138
From W	8	11	81	0	101	101		8	11	81	0
	To N	To S	To E	To W			ColTot	170	124	109	151
							Target	170	124	109	151
							Pct	**1**	**1**	**0.9999**	**1.0002**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	7	123	8	16	88	4	7	71	10	10	120	18
2035	**8**	**142**	**9**	**18**	**101**	**5**	**8**	**81**	**11**	**12**	**138**	**21**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment:	North/South		East/West		Scenario:	2035 Without Project
Intersection:	Spurgeon	at	1st		Time Period:	2035 Weekday AM

Link Inputs

	North		
	40	7	
892			859
1757			1757
	0	0	
In - Out	2656.501	2657	0

Turn Move Inputs

	35	0	0	
	SR	ST	SL	
0	EL		WR	6
1528	ET		WT	741
0	ER		WL	0
	NL	NT	NR	
	0	0	0	
	1528	1528	1528	

					RowTt	Target					
							0	0	0	To E	To W
From N	0	0.001	0.001	35	35.002	40.25		0	0	0	40
From S	0.001	0	0.001	0.001	0.003	0.001		0	0	0	0
From E	6	0.001	0	741	747.001	859.05		7	0	0	852
From W	0.001	0.001	1528	0	1528	1757.2		0	0	1757	0
	To N	To S	To E	To W			ColTot	7	0	1757	892
							Target	7	0	1757	892

					RowTt	Target		To N	To S	To E	To W
From N	0	0	0	40	40	40		0	0	0	40
From S	0	0	0	0	0	0		0	0	0	0
From E	7	0	0	852	859	859		7	0	0	852
From W	0	0	1757	0	1757	1757		0	0	1757	0
	To N	To S	To E	To W			ColTot	7	0	1757	892
							Target	7	0	1757	892

					RowTt	Target		To N	To S	To E	To W
From N	0	0	0	40	40	40		0	0	0	40
From S	0	0	0	0	0	0		0	0	0	0
From E	7	0	0	852	859	859		7	0	0	852
From W	0	0	1757	0	1757	1757		0	0	1757	0
	To N	To S	To E	To W			ColTot	7	0	1757	892
							Target	7	0	1757	892

					RowTt	Target		To N	To S	To E	To W
From N	0	0	0	40	40	40		0	0	0	40
From S	0	0	0	0	0	0		0	0	0	0
From E	7	0	0	852	859	859		7	0	0	852
From W	0	0	1757	0	1757	1757		0	0	1757	0
	To N	To S	To E	To W			ColTot	7	0	1757	892
							Target	7	0	1757	892
							Pct	**1**	**1**	**1**	**1**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	0	0	0	0	0	35	0	1528	0	0	741	6
2035	**0**	**0**	**0**	**0**	**0**	**40**	**0**	**1757**	**0**	**0**	**852**	**7**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West — Scenario: 2035 Without Project
Intersection: French at Santa Ana — Time Period: 2035 Weekday AM

Link Inputs

North

	30	33	
953			926
0			0
	41	72	

In - Out 1028.101 1028 0

Turn Move Inputs

	2	24	0
	SR	ST	SL
0	EL	WR	10
0	ET	WT	783
0	ER	WL	12
	NL	NT	NR
	44	19	0

0 0 0

					RowTt	Target
From N	0	24	0.001	2	26.001	29.9
From S	19	0	0.001	44	63.001	72.45
From E	10	12	0	783	805	925.75
From W	0.001	0.001	0.001	0	0.003	0.001
	To N	To S	To E	To W		

	0	0	0	To E	To W
		0	28	0	2
		22	0	0	51
		12	14	0	900
		0	0	0	0
ColTot		33	41	0	953
Target		33	41	0	953

					RowTt	Target
From N	0	28	0	2	30	30
From S	22	0	0	51	72	72
From E	12	14	0	900	926	926
From W	0	0	0	0	0	0
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	28	0	2
	22	0	0	51
	11	14	0	900
	0	0	0	0
ColTot	33	41	0	953
Target	33	41	0	953

					RowTt	Target
From N	0	28	0	2	30	30
From S	22	0	0	51	72	72
From E	11	14	0	900	926	926
From W	0	0	0	0	0	0
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	28	0	2
	22	0	0	51
	11	14	0	900
	0	0	0	0
ColTot	33	41	0	953
Target	33	41	0	953

					RowTt	Target
From N	0	28	0	2	30	30
From S	22	0	0	51	72	72
From E	11	14	0	900	926	926
From W	0	0	0	0	0	0
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	28	0	2
	22	0	0	51
	11	14	0	900
	0	0	0	0
ColTot	33	41	0	953
Target	33	41	0	953
Pct	**1**	**1**	**1**	**1**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	44	19	0	0	24	2	0	0	0	12	783	10
2035	**51**	**22**	**0**	**0**	**28**	**2**	**0**	**0**	**0**	**14**	**900**	**11**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment:	North/South		East/West		Scenario:	2035 Without Project
Intersection:	French	at	4th		Time Period:	2035 Weekday AM

Link Inputs

	North		
	120	70	
227			300
63			162
	83	59	
In - Out	541.65	541.7	0

Turn Move Inputs

	12	31	61	
	SR	ST	SL	
1	EL		WR	42
50	ET		WT	182
4	ER		WL	37
	NL	NT	NR	
	3	18	30	
	50	50	50	

					RowTt	Target					
							4	4	4	To E	To W
From N	0	31	61	12	104	119.6		0	36	70	14
From S	18	0	30	3	51	58.65		21	0	35	3
From E	42	37	0	182	261	300.15		48	43	0	209
From W	1	4	50	0	55	63.25		1	5	58	0
	To N	To S	To E	To W			ColTot	70	83	162	227
							Target	70	83	162	227

					RowTt	Target		To N	To S	To E	To W
From N	0	36	70	14	120	120		0	36	70	14
From S	21	0	35	3	59	59		21	0	35	3
From E	48	43	0	209	300	300		48	43	0	209
From W	1	5	58	0	63	63		1	5	58	0
	To N	To S	To E	To W			ColTot	70	83	162	227
							Target	70	83	162	227

					RowTt	Target		To N	To S	To E	To W
From N	0	36	70	14	120	120		0	36	70	14
From S	21	0	35	3	59	59		21	0	35	3
From E	48	43	0	209	300	300		48	43	0	209
From W	1	5	58	0	63	63		1	5	58	0
	To N	To S	To E	To W			ColTot	70	83	162	227
							Target	70	83	162	227

					RowTt	Target		To N	To S	To E	To W
From N	0	36	70	14	120	120		0	36	70	14
From S	21	0	35	3	59	59		21	0	35	3
From E	48	43	0	209	300	300		48	43	0	209
From W	1	5	58	0	63	63		1	5	58	0
	To N	To S	To E	To W			ColTot	70	83	162	227
							Target	70	83	162	227
							Pct	**1**	**1**	**1**	**1**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	3	18	30	61	31	12	1	50	4	37	182	42
2035	**3**	**21**	**35**	**70**	**36**	**14**	**1**	**58**	**5**	**43**	**209**	**48**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South
Intersection: Lacy at East/West Civic Center
Scenario: 2035 Without Project
Time Period: 2035 Weekday AM

Link Inputs

North

	67	25	
493			444
435			444
	63	78	

In - Out 1023.678 1024 0

Turn Move Inputs

	28	21	8
	SR	ST	SL
3	EL		WR	3
348	ET		WT	377
27	ER		WL	6
	NL	NT	NR	
	23	15	29	
	348	348	348	

					RowTt	Target	27	27	27	To E	To W
From N	0	21	8	28	57	66.5333		0	25	9	33
From S	15	0	29	23	67	78.2058		18	0	34	27
From E	3	6	0	377	386	443.555		3	7	0	433
From W	3	27	348	0	378	435.384		3	31	401	0
	To N	To S	To E	To W			ColTot	24	63	444	493
							Target	25	63	444	493

					RowTt	Target		To N	To S	To E	To W
From N	0	25	9	33	67	67		0	25	9	33
From S	18	0	34	27	78	78		18	0	34	27
From E	3	7	0	433	443	444		3	7	0	433
From W	3	31	400	0	435	435		3	31	401	0
	To N	To S	To E	To W			ColTot	25	63	444	493
							Target	25	63	444	493

					RowTt	Target		To N	To S	To E	To W
From N	0	25	9	33	67	67		0	25	9	33
From S	18	0	34	27	78	78		18	0	34	27
From E	3	7	0	433	444	444		3	7	0	433
From W	3	31	400	0	435	435		3	31	401	0
	To N	To S	To E	To W			ColTot	25	63	444	493
							Target	25	63	444	493

					RowTt	Target		To N	To S	To E	To W
From N	0	25	9	33	67	67		0	25	9	33
From S	18	0	34	27	78	78		18	0	34	27
From E	3	7	0	433	444	444		3	7	0	433
From W	3	31	400	0	435	435		3	31	401	0
	To N	To S	To E	To W			ColTot	25	63	444	493
							Target	25	63	444	493
							Pct	**1**	**1**	**1.0001**	**0.99992**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	23	15	29	8	21	28	3	348	27	6	377	3
2035	**27**	**18**	**34**	**9**	**25**	**33**	**3**	**401**	**31**	**7**	**433**	**3**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West
Intersection: Lacy at Santa Ana
Scenario: 2035 Without Project
Time Period: 2035 Weekday AM

Link Inputs

North

	68	77	
809			835
406			427
	55	60	
In - Out	1368.891	1369	0

Turn Move Inputs

	16	33	10
	SR	ST	SL
9	EL		WR 32
339	ET		WT 684
5	ER		WL 10
	NL	NT	NR
	3	27	22
	339	339	339

					RowTt	Target		5	5	5	To E	To W
From N	0	33	10	16	59	68.034			0	38	12	18
From S	27	0	22	3	52	59.823			31	0	25	3
From E	32	10	0	684	726	835.176			37	12	0	787
From W	9	5	339	0	353	405.858			10	6	390	0
	To N	To S	To E	To W			ColTot		78	55	427	809
							Target		77	55	427	809

					RowTt	Target		To N	To S	To E	To W
From N	0	38	12	18	68	68		0	38	12	18
From S	31	0	25	3	60	60		31	0	25	3
From E	36	11	0	787	835	835		36	11	0	787
From W	10	6	390	0	406	406		10	6	390	0
	To N	To S	To E	To W			ColTot	78	55	427	809
							Target	77	55	427	809

					RowTt	Target		To N	To S	To E	To W
From N	0	38	12	18	68	68		0	38	12	19
From S	31	0	25	3	60	60		31	0	25	3
From E	36	11	0	787	835	835		36	11	0	787
From W	10	6	390	0	406	406		10	6	390	0
	To N	To S	To E	To W			ColTot	77	55	427	809
							Target	77	55	427	809

					RowTt	Target		To N	To S	To E	To W
From N	0	38	12	19	68	68		0	38	12	19
From S	31	0	25	3	60	60		31	0	25	3
From E	36	11	0	787	835	835		36	11	0	787
From W	10	6	390	0	406	406		10	6	390	0
	To N	To S	To E	To W			ColTot	77	55	427	809
							Target	77	55	427	809
							Pct	**1**	**1**	**1**	**0.99998**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	3	27	22	10	33	16	9	339	5	10	684	32
2035	**3**	**31**	**25**	**12**	**38**	**19**	**10**	**390**	**6**	**11**	**787**	**36**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment:	North/South		East/West	Scenario:	2035 Without Project
Intersection:	Lacy	at	6th	Time Period:	2035 Weekday AM

Link Inputs

	North		
	24	30	
45			38
17			54
	40	90	
In - Out	169.05	169.1	0

Turn Move Inputs

	2	15	4	
	SR	ST	SL	
2	EL		WR	4
6	ET		WT	16
7	ER		WL	13
	NL	NT	NR	
	21	20	37	
	6	6	6	

					RowTt	Target					
							7	7	7	To E	To W
From N	0	15	4	2	21	24.15		0	17	5	2
From S	20	0	37	21	78	89.7		23	0	43	24
From E	4	13	0	16	33	37.95		5	15	0	18
From W	2	7	6	0	15	17.25		2	8	7	0
	To N	To S	To E	To W			ColTot	30	40	54	45
							Target	30	40	54	45

					RowTt	Target		To N	To S	To E	To W
From N	0	17	5	2	24	24		0	17	5	2
From S	23	0	43	24	90	90		23	0	43	24
From E	5	15	0	18	38	38		5	15	0	18
From W	2	8	7	0	17	17		2	8	7	0
	To N	To S	To E	To W			ColTot	30	40	54	45
							Target	30	40	54	45

					RowTt	Target		To N	To S	To E	To W
From N	0	17	5	2	24	24		0	17	5	2
From S	23	0	43	24	90	90		23	0	43	24
From E	5	15	0	18	38	38		5	15	0	18
From W	2	8	7	0	17	17		2	8	7	0
	To N	To S	To E	To W			ColTot	30	40	54	45
							Target	30	40	54	45

					RowTt	Target		To N	To S	To E	To W
From N	0	17	5	2	24	24		0	17	5	2
From S	23	0	43	24	90	90		23	0	43	24
From E	5	15	0	18	38	38		5	15	0	18
From W	2	8	7	0	17	17		2	8	7	0
	To N	To S	To E	To W			ColTot	30	40	54	45
							Target	30	40	54	45
							Pct	**1**	**1**	**1**	**1**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	21	20	37	4	15	2	2	6	7	13	16	4
2035	**24**	**23**	**43**	**5**	**17**	**2**	**2**	**7**	**8**	**15**	**18**	**5**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West — Scenario: 2035 Without Project
Intersection: Lacy at 4th — Time Period: 2035 Weekday AM

Link Inputs

North

	68	50	
469			443
327			394
	63	138	

In - Out 975.5623 975.6 0

Turn Move Inputs

	21	22	16
	SR	ST	SL
9	EL		WR	6
253	ET		WT	369
22	ER		WL	10
	NL	NT	NR	
	18	28	74	
	253	253	253	

					RowTt	Target		22	22	22	To E	To W
From N	0	22	16	21	59	68.3589			0	25	19	24
From S	28	0	74	18	120	137.876			32	0	85	21
From E	6	10	0	369	385	442.595			7	11	0	424
From W	9	22	253	0	284	326.732			10	25	291	0
	To N	To S	To E	To W			ColTot		49	62	395	469
							Target		50	63	394	469

					RowTt	Target		To N	To S	To E	To W
From N	0	26	19	24	68	68		0	26	18	24
From S	32	0	85	21	138	138		32	0	85	21
From E	7	12	0	424	443	443		7	12	0	424
From W	10	25	291	0	326	327		10	25	291	0
	To N	To S	To E	To W			ColTot	50	63	394	469
							Target	50	63	394	469

					RowTt	Target		To N	To S	To E	To W
From N	0	26	18	24	68	68		0	26	18	24
From S	32	0	85	21	138	138		32	0	85	21
From E	7	12	0	424	443	443		7	12	0	424
From W	10	25	291	0	327	327		10	25	291	0
	To N	To S	To E	To W			ColTot	50	63	394	469
							Target	50	63	394	469

					RowTt	Target		To N	To S	To E	To W
From N	0	26	18	24	68	68		0	26	18	24
From S	32	0	85	21	138	138		32	0	85	21
From E	7	12	0	424	443	443		7	12	0	424
From W	10	25	291	0	327	327		10	25	291	0
	To N	To S	To E	To W			ColTot	50	63	394	469
							Target	50	63	394	469
							Pct	**1**	**1**	**1.0003**	**0.99974**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	18	28	74	16	22	21	9	253	22	10	369	6
2035	**21**	**32**	**85**	**18**	**26**	**24**	**10**	**291**	**25**	**12**	**424**	**7**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South
Intersection: Lacy at East/West 1st
Scenario: 2035 Without Project
Time Period: 2035 Weekday AM

Link Inputs

North

	98	209	
1034			972
1763			1594
	0	0	

In - Out 2832.451 2837 -4.6

Turn Move Inputs

	76	0	9	
	SR	ST	SL	
159	EL		WR	22
1366	ET		WT	823
8	ER		WL	0
	NL	NT	NR	
	0	0	0	
	1366	1366	1366	

					RowTt	Target	8	8	8	To E	To W
From N	0	0	9	76	85	97.75		0	0	10	87
From S	0.001	0	0.001	0.001	0.003	0.001		0	0	0	0
From E	22	0	0	823	845	971.75		25	0	0	946
From W	159	8	1366	0	1533	1762.95		183	9	1571	0
	To N	To S	To E	To W			ColTot	208	9	1581	1034
							Target	209	0	1594	1034

					RowTt	Target		To N	To S	To E	To W
From N	0	0	10	87	98	98		0	0	10	87
From S	0	0	0	0	0	0		0	0	0	0
From E	25	0	0	946	972	972		25	0	0	946
From W	184	0	1583	0	1767	1763		183	0	1580	0
	To N	To S	To E	To W			ColTot	209	0	1590	1034
							Target	209	0	1594	1034

					RowTt	Target		To N	To S	To E	To W
From N	0	0	10	87	98	98		0	0	10	87
From S	0	0	0	0	0	0		0	0	0	0
From E	25	0	0	947	972	972		25	0	0	946
From W	184	0	1583	0	1767	1763		183	0	1580	0
	To N	To S	To E	To W			ColTot	209	0	1590	1034
							Target	209	0	1594	1034

					RowTt	Target		To N	To S	To E	To W
From N	0	0	10	87	98	98		0	0	10	87
From S	0	0	0	0	0	0		0	0	0	0
From E	26	0	0	947	972	972		26	0	0	946
From W	184	0	1583	0	1767	1763		183	0	1580	0
	To N	To S	To E	To W			ColTot	209	0	1590	1034
							Target	209	0	1594	1034
							Pct	**0.998**	**0.998**	**0.9976**	**0.99966**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	0	0	0	9	0	76	159	1366	8	0	823	22
2035	**0**	**0**	**0**	**10**	**0**	**87**	**183**	**1580**	**0**	**0**	**946**	**26**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South
Intersection: Santiago at East/West Washington

Scenario: 2035 Without Project
Time Period: 2035 Weekday AM

Link Inputs

North

	760	383	
373			393
282			218
	808	424	

In - Out 1857.901 1782 76.12

Turn Move Inputs

	90	188	14	
	SR	ST	SL	
108	EL		WR	27
98	ET		WT	200
39	ER		WL	114
	NL	NT	NR	
	34	109	78	
	98	98	98	

					RowTt	Target	39	39	39	To E	To W
From N	0	188	14	90	292	759.702		0	489	36	234
From S	109	0	78	34	221	423.879		209	0	150	65
From E	27	114	0	200	341	392.774		31	131	0	230
From W	108	39	98	0	245	281.546		124	45	113	0
	To N	To S	To E	To W			ColTot	364	665	299	530
							Target	383	808	218	373

					RowTt	Target		To N	To S	To E	To W
From N	0	594	27	165	786	760		0	575	26	159
From S	220	0	109	46	375	424		248	0	123	52
From E	33	160	0	162	354	393		36	177	0	180
From W	130	54	82	0	267	282		137	57	87	0
	To N	To S	To E	To W			ColTot	422	809	236	391
							Target	383	808	218	373

					RowTt	Target		To N	To S	To E	To W
From N	0	574	24	152	750	760		0	582	24	154
From S	225	0	114	50	389	424		246	0	124	54
From E	33	177	0	171	381	393		34	182	0	177
From W	125	57	80	0	262	282		134	62	86	0
	To N	To S	To E	To W			ColTot	413	825	234	385
							Target	383	808	218	373

					RowTt	Target		To N	To S	To E	To W
From N	0	570	22	149	741	760		0	584	23	153
From S	227	0	116	52	395	424		244	0	124	56
From E	31	178	0	171	381	393		32	184	0	177
From W	124	60	80	0	264	282		132	64	85	0
	To N	To S	To E	To W			ColTot	408	832	232	386
							Target	383	808	218	373
							Pct	**1.067**	**1.029**	**1.0649**	**1.03428**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	34	109	78	14	188	90	108	98	39	114	200	27
2035	**56**	**244**	**124**	**23**	**584**	**153**	**132**	**85**	**64**	**184**	**177**	**32**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West — Scenario: 2035 Without Project
Intersection: Santiago at Civic Center — Time Period: 2035 Weekday AM

Link Inputs

	North		
	898	514	
493			113
390			74
	961	685	
In - Out	2085.408	2041	44.47

Turn Move Inputs

	107	234	8
	SR	ST	SL
113	EL		WR 8
45	ET		WT 54
182	ER		WL 37
	NL	NT	NR
	268	127	11
	45	45	45

					RowTt	Target	182	182	182	To E	To W
From N	0	234	8	107	349	897.815		0	602	21	275
From S	127	0	11	268	406	684.509		214	0	19	452
From E	8	37	0	54	99	113.223		9	42	0	62
From W	113	182	45	0	340	389.862		130	209	52	0
	To N	To S	To E	To W			ColTot	353	853	91	789
							Target	514	961	74	493

					RowTt	Target		To N	To S	To E	To W
From N	0	678	17	172	867	898		0	703	17	178
From S	312	0	15	282	609	685		350	0	17	317
From E	13	48	0	39	100	113		15	54	0	44
From W	189	235	42	0	466	390		158	197	35	0
	To N	To S	To E	To W			ColTot	523	954	69	539
							Target	514	961	74	493

					RowTt	Target		To N	To S	To E	To W
From N	0	708	18	163	889	898		0	715	19	164
From S	344	0	18	290	652	685		361	0	19	304
From E	15	55	0	40	110	113		15	56	0	41
From W	155	198	37	0	391	390		155	198	37	0
	To N	To S	To E	To W			ColTot	531	970	75	510
							Target	514	961	74	493

					RowTt	Target		To N	To S	To E	To W
From N	0	709	18	159	886	898		0	719	19	161
From S	349	0	19	294	662	685		361	0	19	304
From E	15	56	0	40	111	113		15	57	0	41
From W	150	196	37	0	383	390		152	200	37	0
	To N	To S	To E	To W			ColTot	529	976	75	506
							Target	514	961	74	493
							Pct	**1.029**	**1.015**	**1.0216**	**1.02659**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	268	127	11	8	234	107	113	45	182	37	54	8
2035	**304**	**361**	**19**	**19**	**719**	**161**	**152**	**37**	**200**	**57**	**41**	**15**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South
Intersection: Santiago at Santa Ana

Scenario: 2035 Without Project
Time Period: 2035 Weekday AM

Link Inputs

	North		
	948	683	
1083			1539
769			747
	337	158	
In - Out	3413.971	2851	562.9

Turn Move Inputs

	84	148	207	
	SR	ST	SL	
30	EL		WR	319
391	ET		WT	835
28	ER		WL	117
	NL	NT	NR	
	22	56	59	
	391	391	391	

					RowTt	Target	28	28	28	To E	To W
From N	0	148	207	84	439	948.004		0	320	447	181
From S	56	0	59	22	137	157.579		64	0	68	25
From E	319	117	0	835	1271	1539.25		386	142	0	1011
From W	30	28	391	0	449	769.136		51	48	670	0
	To N	To S	To E	To W			ColTot	502	509	1185	1218
							Target	683	337	747	1083

					RowTt	Target		To N	To S	To E	To W
From N	0	212	282	161	655	948		0	306	408	234
From S	88	0	43	23	153	158		90	0	44	23
From E	526	94	0	899	1519	1539		533	95	0	911
From W	70	32	422	0	524	769		103	47	620	0
	To N	To S	To E	To W			ColTot	726	448	1072	1168
							Target	683	337	747	1083

					RowTt	Target		To N	To S	To E	To W
From N	0	231	284	217	732	948		0	299	368	281
From S	85	0	31	21	137	158		98	0	35	25
From E	502	72	0	845	1418	1539		544	78	0	917
From W	97	35	432	0	564	769		132	48	589	0
	To N	To S	To E	To W			ColTot	774	424	993	1222
							Target	683	337	747	1083

					RowTt	Target		To N	To S	To E	To W
From N	0	238	277	249	763	948		0	295	344	309
From S	86	0	27	22	135	158		101	0	31	26
From E	481	62	0	813	1355	1539		546	70	0	923
From W	116	38	443	0	598	769		150	49	570	0
	To N	To S	To E	To W			ColTot	797	414	946	1257
							Target	683	337	747	1083
							Pct	**1.166**	**1.227**	**1.2658**	**1.16085**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	22	56	59	207	148	84	30	391	28	117	835	319
2035	**26**	**101**	**31**	**344**	**295**	**309**	**150**	**570**	**49**	**70**	**923**	**546**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West — Scenario: 2035 Without Project
Intersection: Santiago at Brown — Time Period: 2035 Weekday AM

Link Inputs

North

	227	99	
163			0
102			0
	23	29	

In - Out 357.651 285.2 72.45

Turn Move Inputs

	132	11	54
	SR	ST	SL
71	EL		WR 0
9	ET		WT 0
9	ER		WL 0
	NL	NT	NR
	10	15	0

9 9 9

					RowTt	Target		9	9	9	To E	To W
From N	0	11	54	132	197	226.55			0	13	62	152
From S	15	0	0.001	10	25.001	28.75			17	0	0	11
From E	0.001	0.001	0	0.001	0.003	0.001			0	0	0	0
From W	71	9	9	0	89	102.35			82	10	10	0
	To N	To S	To E	To W			ColTot		99	23	72	163
							Target		99	23	0	163

					RowTt	Target		To N	To S	To E	To W
From N	0	13	0	152	164	227		0	17	0	209
From S	17	0	0	11	29	29		17	0	0	11
From E	0	0	0	0	0	0		0	0	0	0
From W	82	10	0	0	92	102		91	12	0	0
	To N	To S	To E	To W			ColTot	108	29	0	221
							Target	99	23	0	163

					RowTt	Target		To N	To S	To E	To W
From N	0	14	0	155	169	227		0	19	0	208
From S	16	0	0	9	24	29		19	0	0	10
From E	0	0	0	0	0	0		0	0	0	0
From W	83	9	0	0	92	102		92	10	0	0
	To N	To S	To E	To W			ColTot	111	29	0	218
							Target	99	23	0	163

					RowTt	Target		To N	To S	To E	To W
From N	0	15	0	156	171	227		0	20	0	207
From S	17	0	0	8	24	29		20	0	0	9
From E	0	0	0	0	0	0		0	0	0	0
From W	82	8	0	0	90	102		93	9	0	0
	To N	To S	To E	To W			ColTot	113	29	0	216
							Target	99	23	0	163
							Pct	**1.142**	**1.259**	**1.3082**	**1.32121**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	10	15	0	54	11	132	71	9	9	0	0	0
2035	**9**	**20**	**0**	**0**	**20**	**207**	**93**	**0**	**9**	**0**	**0**	**0**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment:	North/South		East/West	Scenario:	2035 Without Project
Intersection:	Standard	at	1st	Time Period:	2035 Weekday AM

Link Inputs

		North		
	336	295		
1073			1074	
1732			1659	
	506	392		
In - Out	3533.806	3534	0	

Turn Move Inputs

	6	249	37	
	SR	ST	SL	
83	EL		WR	11
1296	ET		WT	859
128	ER		WL	63
	NL	NT	NR	
	68	163	110	
	1296	1296	1296	
	128	128	128	

					RowTt	Target		To N	To S	To E	To W
From N	0	249	37	6	292	336.001		0	287	43	7
From S	163	0	110	68	341	391.615		187	0	126	78
From E	11	63	0	859	933	1074.05		13	73	0	989
From W	83	128	1296	0	1507	1732.14		95	147	1490	0
	To N	To S	To E	To W			ColTot	295	506	1659	1074
							Target	295	506	1659	1073

					RowTt	Target		To N	To S	To E	To W
From N	0	287	43	7	336	336		0	287	43	7
From S	187	0	126	78	392	392		187	0	126	78
From E	13	73	0	988	1073	1074		13	73	0	989
From W	95	147	1490	0	1733	1732		95	147	1490	0
	To N	To S	To E	To W			ColTot	295	506	1659	1074
							Target	295	506	1659	1073

					RowTt	Target		To N	To S	To E	To W
From N	0	287	43	7	336	336		0	287	43	7
From S	187	0	126	78	392	392		187	0	126	78
From E	13	73	0	988	1073	1074		13	73	0	989
From W	95	147	1490	0	1733	1732		95	147	1490	0
	To N	To S	To E	To W			ColTot	295	506	1659	1074
							Target	295	506	1659	1073

					RowTt	Target		To N	To S	To E	To W
From N	0	287	43	7	336	336		0	287	43	7
From S	187	0	126	78	392	392		187	0	126	78
From E	13	73	0	988	1073	1074		13	73	0	989
From W	95	147	1490	0	1733	1732		95	147	1490	0
	To N	To S	To E	To W			ColTot	295	506	1659	1073
							Target	295	506	1659	1073
							Pct	**1**	**1**	**0.9997**	**1.00049**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	68	163	110	37	249	6	83	1296	128	63	859	11
2035	**78**	**187**	**126**	**43**	**287**	**7**	**95**	**1490**	**147**	**73**	**989**	**13**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West — Scenario: 2035 Without Project
Intersection: Grand at Santa Ana — Time Period: 2035 Weekday AM

Link Inputs

North

	2856	1120	
1066			124
838			305
	1733	1066	
In - Out	4883.82	4224	660

Turn Move Inputs

	724	1094	68	
	SR	ST	SL	
157	EL		WR	18
167	ET		WT	81
404	ER		WL	9
	NL	NT	NR	
	122	775	30	
	167	167	167	

					RowTt	Target	404	404	404	To E	To W
From N	0	1094	68	724	1886	2856.2		0	1657	103	1096
From S	775	0	30	122	927	1065.9		891	0	34	140
From E	18	9	0	81	108	123.97		21	10	0	93
From W	157	404	167	0	728	837.69		181	465	192	0
	To N	To S	To E	To W			ColTot	1092	2132	330	1330
							Target	1120	1733	305	1066

					RowTt	Target		To N	To S	To E	To W
From N	0	1347	95	879	2321	2856		0	1658	117	1082
From S	913	0	32	112	1058	1066		920	0	32	113
From E	21	8	0	75	104	124		25	10	0	89
From W	185	378	178	0	741	838		209	427	201	0
	To N	To S	To E	To W			ColTot	1155	2095	350	1284
							Target	1120	1733	305	1066

					RowTt	Target		To N	To S	To E	To W
From N	0	1371	102	898	2371	2856		0	1652	123	1082
From S	892	0	28	94	1014	1066		938	0	29	99
From E	24	8	0	74	106	124		28	10	0	86
From W	203	354	175	0	731	838		233	405	200	0
	To N	To S	To E	To W			ColTot	1199	2066	352	1266
							Target	1120	1733	305	1066

					RowTt	Target		To N	To S	To E	To W
From N	0	1386	106	910	2402	2856		0	1647	126	1083
From S	876	0	25	83	985	1066		948	0	28	90
From E	27	8	0	72	107	124		31	9	0	84
From W	217	340	173	0	730	838		249	390	199	0
	To N	To S	To E	To W			ColTot	1228	2047	352	1256
							Target	1120	1733	305	1066
							Pct	**1.09695**	**1.1807**	**1.1565**	**1.17869**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	122	775	30	68	1094	724	157	167	404	9	81	18
2035	**90**	**948**	**28**	**126**	**1647**	**1083**	**249**	**199**	**390**	**9**	**84**	**31**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment:	North/South		East/West	Scenario:	2035 Without Project
Intersection:	Grand	at	4th	Time Period:	2035 Weekday AM

Link Inputs

North

	722	534	
510			524
1323			1335
	714	524	
In - Out	3092.37	3092	0

Turn Move Inputs

	83	437	108	
	SR	ST	SL	
99	EL		WR	95
958	ET		WT	271
94	ER		WL	90
	NL	NT	NR	
	90	271	95	
	958	958	958	
	94	94	94	

					RowTt	Target				To E	To W
From N	0	437	108	83	628	721.82		0	502	124	95
From S	271	0	95	90	456	523.7		311	0	109	103
From E	95	90	0	271	456	523.7		109	103	0	311
From W	99	94	958	0	1151	1323.1		114	108	1101	0
	To N	To S	To E	To W			ColTot	534	714	1335	510
							Target	534	714	1335	510

					RowTt	Target		To N	To S	To E	To W
From N	0	502	124	95	722	722		0	502	124	95
From S	311	0	109	103	524	524		311	0	109	103
From E	109	103	0	311	524	524		109	103	0	311
From W	114	108	1101	0	1323	1323		114	108	1101	0
	To N	To S	To E	To W			ColTot	534	714	1335	510
							Target	534	714	1335	510

					RowTt	Target		To N	To S	To E	To W
From N	0	502	124	95	722	722		0	502	124	95
From S	311	0	109	103	524	524		311	0	109	103
From E	109	103	0	311	524	524		109	103	0	311
From W	114	108	1101	0	1323	1323		114	108	1101	0
	To N	To S	To E	To W			ColTot	534	714	1335	510
							Target	534	714	1335	510

					RowTt	Target		To N	To S	To E	To W
From N	0	502	124	95	722	722		0	502	124	95
From S	311	0	109	103	524	524		311	0	109	103
From E	109	103	0	311	524	524		109	103	0	311
From W	114	108	1101	0	1323	1323		114	108	1101	0
	To N	To S	To E	To W			ColTot	534	714	1335	510
							Target	534	714	1335	510
							Pct	**1.00002**	**1**	**1**	**1.00005**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	90	271	95	108	437	83	99	958	94	90	271	95
2035	**103**	**311**	**109**	**124**	**502**	**95**	**114**	**1101**	**108**	**103**	**311**	**109**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South / East/West — Scenario: 2035 Without Project
Intersection: Grand at 1st — Time Period: 2035 Weekday AM

Link Inputs

North

	1587	928	
1156			986
1650			1208
	1889	1053	

In - Out	5275.47	5181	94.36

Turn Move Inputs

	78	1197	106	
	SR	ST	SL	
275	EL		WR	63
908	ET		WT	519
204	ER		WL	242
	NL	NT	NR	
	109	468	37	
	908	908	908	

					RowTt	Target	204	204	204	To E	To W
From N	0	1197	106	78	1381	1587:3		0	1376	122	90
From S	468	0	37	109	614	1052.8		802	0	63	187
From E	63	242	0	519	824	985.55		75	289	0	621
From W	275	204	908	0	1387	1649.8		327	243	1080	0
	To N	To S	To E	To W			ColTot	1205	1908	1265	897
							Target	928	1889	1208	1156

					RowTt	Target		To N	To S	To E	To W
From N	0	1362	116	116	1594	1587		0	1356	116	115
From S	618	0	61	241	919	1053		708	0	69	276
From E	58	287	0	800	1144	986		50	247	0	689
From W	252	240	1031	0	1524	1650		273	260	1117	0
	To N	To S	To E	To W			ColTot	1031	1863	1302	1080
							Target	928	1889	1208	1156

					RowTt	Target		To N	To S	To E	To W
From N	0	1375	108	123	1606	1587		0	1359	106	122
From S	637	0	64	295	997	1053		673	0	68	312
From E	45	250	0	738	1033	986		43	239	0	704
From W	246	264	1037	0	1546	1650		262	281	1106	0
	To N	To S	To E	To W			ColTot	978	1879	1281	1137
							Target	928	1889	1208	1156

					RowTt	Target		To N	To S	To E	To W
From N	0	1366	100	124	1590	1587		0	1364	100	124
From S	639	0	64	317	1020	1053		659	0	66	327
From E	41	240	0	715	996	986		40	237	0	708
From W	249	283	1044	0	1575	1650		260	296	1093	0
	To N	To S	To E	To W			ColTot	960	1897	1260	1159
							Target	928	1889	1208	1156
							Pct	**1.03462**	**1.0045**	**1.0423**	**1.00225**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	109	468	37	106	1197	78	275	908	204	242	519	63
2035	**327**	**659**	**66**	**100**	**1364**	**124**	**260**	**1093**	**296**	**237**	**708**	**40**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment:	North/South		East/West	Scenario:	2030 w/o Project Baseline
Intersection:	Penn Way	at	I-5 SB Ramps	Time Period:	2035 Weekday AM

Link Inputs

	North		
	786	342	
0			376
0			737
	673	303	
In - Out	1464.463	1751	-286.8

Turn Move Inputs

0	75	572	
SR	ST	SL	
0	EL	WR	197
0	ET	WT	0
0	ER	WL	130
NL	NT	NR	
0	100	69	

0 0 0

					RowTt	Target		0	0	0	To E	To W
From N	0	75	572	0.001	647	785.83			0	91	695	0
From S	100	0	69	0.001	169	302.58			179	0	124	0
From E	197	130	0	0.001	327	376.05			227	149	0	0
From W	0.001	0.001	0.001	0	0.003	0.001			0	0	0	0
	To N	To S	To E	To W			ColTot		406	241	818	0
							Target		342	673	737	0

					RowTt	Target		To N	To S	To E	To W
From N	0	255	626	0	880	786		0	227	559	0
From S	151	0	111	0	262	303		174	0	128	0
From E	191	418	0	0	609	376		118	258	0	0
From W	0	0	0	0	0	0		0	0	0	0
	To N	To S	To E	To W			ColTot	292	485	687	0
							Target	342	673	737	0

					RowTt	Target		To N	To S	To E	To W
From N	0	315	599	0	914	786		0	271	515	0
From S	204	0	138	0	342	303		180	0	122	0
From E	138	358	0	0	496	376		105	271	0	0
From W	0	0	0	0	0	0		0	0	0	0
	To N	To S	To E	To W			ColTot	285	542	637	0
							Target	342	673	737	0

					RowTt	Target		To N	To S	To E	To W
From N	0	336	596	0	932	786		0	283	503	0
From S	216	0	141	0	357	303		183	0	120	0
From E	125	337	0	0	462	376		102	274	0	0
From W	0	0	0	0	0	0		0	0	0	0
	To N	To S	To E	To W			ColTot	285	557	622	0
							Target	342	673	737	0
							Pct	**0.83447**	**0.8286**	**0.844**	**0.84028**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	0	100	69	572	75	0	0	0	0	130	0	197
2035	**0**	**183**	**120**	**503**	**283**	**0**	**0**	**0**	**0**	**274**	**0**	**102**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment:	North/South		East/West	Scenario:	2030 w/o Project Baseline 2035 Without Project
Intersection:	I-5 SB Ramps	at	Santa Ana Bl	Time Period:	2035 Weekday AM

Link Inputs

North

	535	388	
1090			1265
653			884
	0	0	

In - Out	2452.659	2362	90.558

Turn Move Inputs

	76	0	389	
	SR	ST	SL	
188	EL		WR	149
380	ET		WT	872
0	ER		WL	0
	NL	NT	NR	
	0	0	0	
	380	380	380	

					RowTt	Target					
								0	0	0	To E	To W
From N	0	0.001	389	76	465	534.75			0	0	447	87
From S	0.001	0	0.001	0.001	0.003	0.001			0	0	0	0
From E	149	0.001	0	872	1021	1264.7			185	0	0	1080
From W	188	0.001	380	0	568	653.2			216	0	437	0
	To N	To S	To E	To W			ColTot		401	0	884	1168
							Target		388	0	884	1090

					RowTt	Target					
								To N	To S	To E	To W
From N	0	0	447	82	529	535		0	0	452	83
From S	0	0	0	0	0	0		0	0	0	0
From E	178	0	0	1009	1187	1265		190	0	0	1075
From W	209	0	437	0	646	653		211	0	442	0
	To N	To S	To E	To W			ColTot	402	0	894	1157
							Target	388	0	884	1090

					RowTt	Target					
								To N	To S	To E	To W
From N	0	0	447	78	525	535		0	0	456	79
From S	0	0	0	0	0	0		0	0	0	0
From E	184	0	0	1012	1196	1265		194	0	0	1071
From W	204	0	437	0	641	653		208	0	445	0
	To N	To S	To E	To W			ColTot	402	0	901	1150
							Target	388	0	884	1090

					RowTt	Target					
								To N	To S	To E	To W
From N	0	0	447	75	522	535		0	0	458	77
From S	0	0	0	0	0	0		0	0	0	0
From E	187	0	0	1015	1202	1265		197	0	0	1068
From W	200	0	437	0	638	653		205	0	448	0
	To N	To S	To E	To W			ColTot	402	0	906	1145
							Target	388	0	884	1090
							Pct	**1.03776**	**1.0345**	**1.0242**	**1.05002**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	0	0	0	389	0	76	188	380	0	0	872	149
2035	**0**	**0**	**0**	**458**	**0**	**77**	**205**	**448**	**0**	**0**	**1068**	**197**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment:	North/South		East/West	Scenario:	2030 w/o Project Baseline
Intersection:	I-5 NB Ramps	at	17th St	Time Period:	2035 Weekday AM

Link Inputs

	North		
	242	271	
2152			1353
1285			979
	247	813	
In - Out	3692.552	3649	43.602

Turn Move Inputs

	177	0	33	
	SR	ST	SL	
117	EL		WR	43
785	ET		WT	1096
215	ER		WL	0
	NL	NT	NR	
	598	76	33	
	785	785	785	

					RowTt	Target		215	215	215	To E	To W
From N	0	0	33	177	210	241.5			0	0	38	204
From S	76	0	33	598	707	813.05			87	0	38	688
From E	43	0	0	1096	1139	1353.5			51	0	0	1302
From W	117	215	785	0	1117	1284.6			135	247	903	0
	To N	To S	To E	To W			ColTot		273	247	979	2194
							Target		271	247	979	2152

					RowTt	Target		To N	To S	To E	To W
From N	0	0	38	200	238	242		0	0	39	203
From S	87	0	38	675	799	813		88	0	39	686
From E	51	0	0	1277	1328	1353		52	0	0	1302
From W	134	247	903	0	1284	1285		134	247	903	0
	To N	To S	To E	To W			ColTot	274	247	980	2191
							Target	271	247	979	2152

					RowTt	Target		To N	To S	To E	To W
From N	0	0	38	199	238	242		0	0	39	202
From S	88	0	39	674	800	813		89	0	39	685
From E	51	0	0	1278	1330	1353		52	0	0	1301
From W	133	247	902	0	1281	1285		133	248	904	0
	To N	To S	To E	To W			ColTot	274	248	982	2189
							Target	271	247	979	2152

					RowTt	Target		To N	To S	To E	To W
From N	0	0	39	199	238	242		0	0	40	202
From S	88	0	39	673	800	813		89	0	40	684
From E	52	0	0	1279	1331	1353		53	0	0	1301
From W	132	247	901	0	1280	1285		132	248	904	0
	To N	To S	To E	To W			ColTot	274	248	983	2187
							Target	271	247	979	2152
							Pct	**1.01021**	**1.0039**	**1.0048**	**1.01633**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	598	76	33	33	0	177	117	785	215	0	1096	43
2035	**684**	**89**	**40**	**40**	**0**	**202**	**132**	**904**	**248**	**0**	**1301**	**53**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment:	North/South		East/West	Scenario:	2030 w/o Project Baseline
Intersection:	Grand Av.	at	I-5 NB Ramps	Time Period:	2035 Without Project 2035 Weekday AM

Link Inputs

	North		
	2543	1132	
0			1038
0			467
	2686	1258	
In - Out	4840	4285	555

Turn Move Inputs

	0	1563	32
	SR	ST	SL
0	EL		WR 130
0	ET		WT 0
0	ER		WL 773
	NL	NT	NR
	0	714	374

0 0 0

					RowTt	Target		0	0	0	To E	To W
From N	0	1563	32	0.001	1595	2543.3			0	2492	51	0
From S	714	0	374	0.001	1088	1258.3			826	0	433	0
From E	130	773	0	0	903	1038.5			150	889	0	0
From W	0.001	0.001	0.001	0	0.003	0.001			0	0	0	0
	To N	To S	To E	To W			ColTot		975	3381	484	0
							Target		1132	2686	467	0

					RowTt	Target		To N	To S	To E	To W
From N	0	1980	49	0	2029	2543		0	2482	62	0
From S	958	0	418	0	1376	1258		876	0	382	0
From E	173	706	0	0	880	1038		205	834	0	0
From W	0	0	0	0	0	0		0	0	0	0
	To N	To S	To E	To W			ColTot	1081	3315	444	0
							Target	1132	2686	467	0

					RowTt	Target		To N	To S	To E	To W
From N	0	2011	65	0	2076	2543		0	2464	80	0
From S	917	0	402	0	1319	1258		875	0	383	0
From E	214	676	0	0	890	1038		250	788	0	0
From W	0	0	0	0	0	0		0	0	0	0
	To N	To S	To E	To W			ColTot	1125	3252	463	0
							Target	1132	2686	467	0

					RowTt	Target		To N	To S	To E	To W
From N	0	2035	80	0	2115	2543		0	2447	97	0
From S	880	0	387	0	1267	1258		874	0	384	0
From E	252	651	0	0	903	1038		289	749	0	0
From W	0	0	0	0	0	0		0	0	0	0
	To N	To S	To E	To W			ColTot	1164	3196	481	0
							Target	1132	2686	467	0
							Pct	**1.02828**	**1.1897**	**1.0293**	**1.14131**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	0	714	374	32	1563	0	0	0	0	773	0	130
2035	**0**	**874**	**384**	**97**	**2447**	**0**	**0**	**0**	**0**	**749**	**0**	**289**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment:	North/South		East/West	Scenario:	2035 Without Project
Intersection:	Flower	at	Civic Center	Time Period:	2035 Weekday PM

Link Inputs

	North		
	1432	878	
788			936
1208			1226
	1503	798	
In - Out	4375	4395	-20

Turn Move Inputs

	88	534	73	
	SR	ST	SL	
214	EL		WR	122
512	ET		WT	788
89	ER		WL	141
	NL	NT	NR	
	190	971	84	

					RowTt	Target
From N	0	534	73	88	695	1432.1
From S	971	0	84	190	1245	798.29
From E	122	141	0	788	1051	936.17
From W	214	89	512	0	815	1208.4
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	1100	150	181
	623	0	54	122
	109	126	0	702
	317	132	759	0
ColTot	1049	1358	963	1005
Target	878	1503	1226	788

					RowTt	Target
From N	0	1218	191	142	1551	1432
From S	521	0	69	96	686	798
From E	91	139	0	550	780	936
From W	266	146	966	0	1378	1208
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	1124	177	131
	607	0	80	111
	109	167	0	660
	233	128	847	0
ColTot	950	1419	1104	903
Target	878	1503	1226	788

					RowTt	Target
From N	0	1190	196	115	1501	1432
From S	562	0	89	97	747	798
From E	101	177	0	576	854	936
From W	216	136	941	0	1292	1208
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	1136	187	109
	600	0	95	104
	111	194	0	632
	202	127	880	0
ColTot	912	1456	1162	845
Target	878	1503	1226	788

					RowTt	Target
From N	0	1172	197	102	1471	1432
From S	578	0	100	97	774	798
From E	107	200	0	589	896	936
From W	194	131	928	0	1254	1208
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	1141	192	99
	596	0	103	100
	111	209	0	616
	187	126	895	0
ColTot	894	1476	1190	815
Target	878	1503	1226	788
Pct	**1.018**	**0.982**	**0.971**	**1.03408**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	190	971	84	73	534	88	214	512	89	141	788	122
2035	**100**	**596**	**103**	**192**	**1141**	**99**	**187**	**895**	**126**	**209**	**616**	**111**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South East/West Scenario: 2035 Without Project
Intersection: Flower at Santa Ana Time Period: 2035 Weekday PM

Link Inputs

	North		
	779	1156	
902			1031
718			626
	944	1043	
In - Out	3570.657	3629	-58.11

Turn Move Inputs

	39	553	85
	SR	ST	SL
98	EL		WR 180
385	ET		WT 542
94	ER		WL 174
	NL	NT	NR
	122	727	42

					RowTt	Target
From N	0	553	85	39	677	778.6
From S	727	0	42	122	891	1043.4
From E	180	174	0	542	896	1031.2
From W	98	94	385	0	577	717.51
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	636	98	45
	851	0	49	143
	207	200	0	624
	122	117	479	0
ColTot	1180	953	626	811
Target	1156	944	626	902

					RowTt	Target
From N	0	630	98	50	778	779
From S	834	0	49	159	1042	1043
From E	203	198	0	694	1095	1031
From W	119	116	479	0	714	718
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	631	98	50
	835	0	49	159
	191	187	0	653
	120	116	481	0
ColTot	1146	934	628	862
Target	1156	944	626	902

					RowTt	Target
From N	0	638	97	52	787	779
From S	842	0	49	166	1058	1043
From E	193	189	0	684	1065	1031
From W	121	118	479	0	718	718
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	631	96	52
	831	0	48	164
	187	183	0	662
	121	118	479	0
ColTot	1138	931	624	878
Target	1156	944	626	902

					RowTt	Target
From N	0	640	97	53	789	779
From S	844	0	49	169	1061	1043
From E	190	185	0	680	1055	1031
From W	123	119	481	0	723	718
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	631	95	52
	830	0	48	166
	185	181	0	665
	122	118	477	0
ColTot	1137	930	620	883
Target	1156	944	626	902
Pct	**0.98319**	**0.9853**	**0.9911**	**0.97871**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	122	727	42	85	553	39	98	385	94	174	542	180
2035	**166**	**830**	**48**	**95**	**631**	**52**	**122**	**477**	**118**	**181**	**665**	**185**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment:	North/South		East/West	Scenario:	2035 Without Project
Intersection:	Parton	at	Santa Ana	Time Period:	2035 Weekday PM

Link Inputs

	North		
	674	1140	
986			945
1003			864
	729	1096	
In - Out	3719.186	3719	0

Turn Move Inputs

25	7	44	
SR	ST	SL	
4	EL	WR	17
493	ET	WT	842
46	ER	WL	29
	NL	NT	NR
	72	4	86

					RowTt	Target		To N	To S	To E	To W
From N	0	7	44	25	76	674.32		0	62	390	222
From S	4	0	86	72	162	1096.1		27	0	582	487
From E	17	29	0	842	888	945.44		18	31	0	896
From W	4	46	493	0	543	1003.4		7	85	911	0
	To N	To S	To E	To W			ColTot	53	178	1883	1605
							Target	1140	729	864	986

					RowTt	Target		To N	To S	To E	To W
From N	0	254	179	136	570	674		0	301	212	161
From S	587	0	267	299	1153	1096		558	0	254	284
From E	393	126	0	551	1070	945		347	112	0	487
From W	160	348	418	0	926	1003		174	377	453	0
	To N	To S	To E	To W			ColTot	1079	790	919	932
							Target	1140	729	864	986

					RowTt	Target		To N	To S	To E	To W
From N	0	278	200	171	648	674		0	289	208	178
From S	590	0	239	301	1129	1096		572	0	232	292
From E	367	103	0	515	985	945		352	99	0	494
From W	184	348	426	0	957	1003		192	365	446	0
	To N	To S	To E	To W			ColTot	1117	753	886	964
							Target	1140	729	864	986

					RowTt	Target		To N	To S	To E	To W
From N	0	280	203	182	664	674		0	284	206	184
From S	584	0	226	299	1109	1096		577	0	223	295
From E	360	96	0	506	961	945		354	94	0	497
From W	196	353	436	0	985	1003		200	360	444	0
	To N	To S	To E	To W			ColTot	1131	738	873	977
							Target	1140	729	864	986
							Pct	**0.99211**	**1.0128**	**1.01**	**0.99093**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	72	4	86	44	7	25	4	493	46	29	842	17
2035	**295**	**577**	**223**	**206**	**284**	**184**	**200**	**444**	**360**	**94**	**497**	**354**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West — Scenario: 2035 Without Project
Intersection: Ross at Civic Center — Time Period: 2035 Weekday PM

Link Inputs

North

	322	404	
774			752
843			883
	262	465	

In - Out 2382.121 2323 59.078

Turn Move Inputs

	80	131	70	
	SR	ST	SL	
46	EL		WR	88
583	ET		WT	522
52	ER		WL	44
	NL	NT	NR	
	72	218	115	

					RowTt	Target		To N	To S	To E	To W
From N	0	131	70	80	281	322.1		0	150	80	92
From S	218	0	115	72	405	464.61		250	0	132	83
From E	88	44	0	522	654	751.95		101	51	0	600
From W	46	52	583	0	681	843.47		57	64	722	0
	To N	To S	To E	To W			ColTot	408	265	934	774
							Target	404	262	883	774

					RowTt	Target		To N	To S	To E	To W
From N	0	148	76	92	316	322		0	151	77	93
From S	248	0	125	83	455	465		253	0	127	84
From E	100	50	0	600	750	752		100	50	0	601
From W	56	64	682	0	802	843		59	67	717	0
	To N	To S	To E	To W			ColTot	413	268	922	779
							Target	404	262	883	774

					RowTt	Target		To N	To S	To E	To W
From N	0	148	74	93	315	322		0	151	76	95
From S	248	0	122	84	453	465		254	0	125	86
From E	98	49	0	597	745	752		99	49	0	603
From W	58	65	687	0	810	843		60	68	715	0
	To N	To S	To E	To W			ColTot	414	269	916	784
							Target	404	262	883	774

					RowTt	Target		To N	To S	To E	To W
From N	0	147	73	94	314	322		0	151	75	96
From S	248	0	120	85	453	465		254	0	123	87
From E	97	48	0	595	741	752		99	49	0	604
From W	59	66	689	0	815	843		61	69	714	0
	To N	To S	To E	To W			ColTot	414	269	912	787
							Target	404	262	883	774
							Pct	**1.0242**	**1.0255**	**1.033**	**1.01739**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	72	218	115	70	131	80	46	583	52	44	522	88
2035	**87**	**254**	**123**	**75**	**151**	**96**	**61**	**714**	**69**	**49**	**604**	**99**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West
Intersection: Ross at Santa Ana
Scenario: 2035 Without Project
Time Period: 2035 Weekday AM

Link Inputs

North

	322	382	
845			784
1133			1034
	287	565	

In - Out 2805.298 2548 257.3

Turn Move Inputs

	80	131	70	
	SR	ST	SL	
62	EL		WR	52
646	ET		WT	583
73	ER		WL	46
	NL	NT	NR	
	72	218	115	

					RowTt	Target
From N	0	131	70	80	281	322.1
From S	218	0	115	72	405	565.4
From E	52	46	0	583	681	784.39
From W	62	73	646	0	781	1133.4
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	150	80	92
	304	0	161	101
	60	53	0	672
	90	106	937	0
ColTot	454	309	1178	864
Target	382	287	1034	845

					RowTt	Target
From N	0	140	70	90	300	322
From S	256	0	141	98	495	565
From E	50	49	0	657	756	784
From W	76	98	822	0	997	1133
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	150	76	96
	292	0	161	112
	52	51	0	681
	86	112	935	0
ColTot	431	313	1172	890
Target	382	287	1034	845

					RowTt	Target
From N	0	138	67	92	296	322
From S	260	0	142	107	508	565
From E	46	47	0	647	740	784
From W	76	103	825	0	1004	1133
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	150	73	100
	289	0	158	119
	49	50	0	686
	86	116	931	0
ColTot	424	316	1162	904
Target	382	287	1034	845

					RowTt	Target
From N	0	136	65	93	294	322
From S	260	0	140	111	512	565
From E	44	45	0	641	730	784
From W	78	106	829	0	1012	1133
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	149	71	102
	288	0	155	122
	48	49	0	688
	87	118	928	0
ColTot	422	316	1154	913
Target	382	287	1034	845
Pct	**1.10453**	**1.1009**	**1.1165**	**1.08045**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	72	218	115	70	131	80	62	646	73	46	583	52
2035	**122**	**288**	**155**	**71**	**149**	**102**	**87**	**928**	**118**	**49**	**688**	**48**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West
Intersection: Ross at 4th
Scenario: 2035 Without Project
Time Period: 2035 Weekday AM

Link Inputs

North

	324	392	
0			122
0			108
	297	351	
In - Out	796.951	797	0

Turn Move Inputs

	0	218	64	
	SR	ST	SL	
0	EL		WR	66
0	ET		WT	0
0	ER		WL	40
	NL	NT	NR	
	0	275	30	

					RowTt	Target
From N	0	218	64	0.001	282	324.3
From S	275	0	30	0.001	305	350.75
From E	66	40	0	0.001	106	121.9
From W	0.001	0.001	0.001	0	0.003	0.001
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	251	74	0
	316	0	34	0
	76	46	0	0
	0	0	0	0
ColTot	392	297	108	0
Target	392	297	108	0

					RowTt	Target
From N	0	251	74	0	324	324
From S	316	0	34	0	351	351
From E	76	46	0	0	122	122
From W	0	0	0	0	0	0
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	251	74	0
	316	0	34	0
	76	46	0	0
	0	0	0	0
ColTot	392	297	108	0
Target	392	297	108	0

					RowTt	Target
From N	0	251	74	0	324	324
From S	316	0	34	0	351	351
From E	76	46	0	0	122	122
From W	0	0	0	0	0	0
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	251	74	0
	316	0	34	0
	76	46	0	0
	0	0	0	0
ColTot	392	297	108	0
Target	392	297	108	0
Pct	**1**	**1**	**1**	**1**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	0	275	30	64	218	0	0	0	0	40	0	66
2035	**0**	**316**	**34**	**74**	**251**	**0**	**0**	**0**	**0**	**46**	**0**	**76**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South
Intersection: Broadway at East/West Civic Center
Scenario: 2035 Without Project
Time Period: 2035 Weekday PM

Link Inputs

North

	1001	936	
753			684
1062			987
	835	765	

In - Out 3511.792 3512 0

Turn Move Inputs

	128	621	122
	SR	ST	SL
176	EL		WR 97
680	ET		WT 459
68	ER		WL 38
	NL	NT	NR
	68	541	56

					RowTt	Target
From N	0	621	122	128	871	1001.1
From S	541	0	56	68	665	764.69
From E	97	38	0	459	594	683.59
From W	176	68	680	0	924	1062.5
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	714	140	147
	622	0	64	78
	112	44	0	528
	202	78	782	0
ColTot	936	836	987	754
Target	936	835	987	753

					RowTt	Target
From N	0	713	140	147	1001	1001
From S	622	0	64	78	765	765
From E	112	44	0	528	683	684
From W	202	78	782	0	1063	1062
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	714	140	147
	622	0	64	78
	112	44	0	528
	202	78	782	0
ColTot	936	836	987	753
Target	936	835	987	753

					RowTt	Target
From N	0	714	140	147	1001	1001
From S	622	0	64	78	765	765
From E	112	44	0	528	683	684
From W	202	78	782	0	1063	1062
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	714	140	147
	622	0	64	78
	112	44	0	528
	202	78	782	0
ColTot	936	835	987	753
Target	936	835	987	753

					RowTt	Target
From N	0	714	140	147	1001	1001
From S	622	0	64	78	765	765
From E	112	44	0	528	683	684
From W	202	78	782	0	1063	1062
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	714	140	147
	622	0	64	78
	112	44	0	528
	202	78	782	0
ColTot	936	835	987	753
Target	936	835	987	753
Pct	**0.99996**	**1.0001**	**0.9999**	**1.00012**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	68	541	56	122	621	128	176	680	68	38	459	97
2035	**78**	**622**	**64**	**140**	**714**	**147**	**202**	**782**	**78**	**44**	**528**	**112**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West — Scenario: 2035 Without Project
Intersection: Broadway at Santa Ana — Time Period: 2035 Weekday AM

Link Inputs

North

	830	842	
1059			1124
0			0
	734	766	

In - Out 2720.126 2636 84.598

Turn Move Inputs

	125	597	0
	SR	ST	SL
0	EL		WR 109
0	ET		WT 754
0	ER		WL 41
	NL	NT	NR
	42	624	0

					RowTt	Target
From N	0	597	0.001	125	722	830.39
From S	624	0	0.001	42	666	765.85
From E	109	41	0	754	904	1123.9
From W	0.001	0.001	0.001	0	0.003	0.001
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	687	0	144
	718	0	0	48
	136	51	0	937
	0	0	0	0
ColTot	853	738	0	1129
Target	842	734	0	1059

					RowTt	Target
From N	0	683	0	135	818	830
From S	709	0	0	45	754	766
From E	134	51	0	879	1063	1124
From W	0	0	0	0	0	0
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	694	0	137
	720	0	0	46
	141	54	0	929
	0	0	0	0
ColTot	861	747	0	1112
Target	842	734	0	1059

					RowTt	Target
From N	0	682	0	130	812	830
From S	704	0	0	44	748	766
From E	138	53	0	885	1076	1124
From W	0	0	0	0	0	0
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	697	0	133
	721	0	0	45
	144	55	0	924
	0	0	0	0
ColTot	865	752	0	1103
Target	842	734	0	1059

					RowTt	Target
From N	0	680	0	128	809	830
From S	702	0	0	43	745	766
From E	141	54	0	888	1082	1124
From W	0	0	0	0	0	0
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	699	0	131
	722	0	0	44
	146	56	0	922
	0	0	0	0
ColTot	868	755	0	1098
Target	842	734	0	1059
Pct	**1.02996**	**1.0279**	**1.0273**	**1.03671**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	42	624	0	0	597	125	0	0	0	41	754	109
2035	**44**	**722**	**0**	**0**	**699**	**131**	**0**	**0**	**0**	**56**	**922**	**146**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South at East/West
Intersection: Broadway at 5th
Scenario: 2035 Without Project
Time Period: 2035 Weekday AM

Link Inputs

North

	805	790	
0			0
949			1265
	737	670	
In - Out	2423.907	2792	-368.1

Turn Move Inputs

	0	622	78
	SR	ST	SL
173	EL		WR 0
554	ET		WT 0
18	ER		WL 0
	NL	NT	NR
	0	515	68

					RowTt	Target
From N	0	622	78	0.001	700	805.4
From S	515	0	68	0.001	583	670
From E	0.001	0.001	0	0.001	0.003	0.001
From W	173	18	554	0	745	948.5
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	716	90	0
	592	0	78	0
	0	0	0	0
	220	23	705	0
ColTot	812	739	873	0
Target	790	737	1265	0

					RowTt	Target
From N	0	714	130	0	844	805
From S	576	0	113	0	689	670
From E	0	0	0	0	0	0
From W	214	23	1022	0	1259	949
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	681	124	0
	560	0	110	0
	0	0	0	0
	161	17	770	0
ColTot	721	698	1004	0
Target	790	737	1265	0

					RowTt	Target
From N	0	718	156	0	875	805
From S	613	0	139	0	752	670
From E	0	0	0	0	0	0
From W	177	18	970	0	1165	949
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	661	144	0
	546	0	124	0
	0	0	0	0
	144	15	790	0
ColTot	690	676	1057	0
Target	790	737	1265	0

					RowTt	Target
From N	0	720	172	0	893	805
From S	625	0	148	0	773	670
From E	0	0	0	0	0	0
From W	165	16	945	0	1126	949
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	650	155	0
	542	0	128	0
	0	0	0	0
	139	14	796	0
ColTot	681	664	1080	0
Target	790	737	1265	0
Pct	**0.86141**	**0.9008**	**0.8534**	**0.88661**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	0	515	68	78	622	0	173	554	18	0	0	0
2035	**0**	**542**	**128**	**155**	**650**	**0**	**139**	**796**	**14**	**0**	**0**	**0**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West — Scenario: 2035 Without Project
Intersection: Broadway at 4th — Time Period: 2035 Weekday AM

Link Inputs

	North		
	669	628	
182			233
197			241
	703	1120	
In - Out	2219.172	1754	465.4

Turn Move Inputs

	21	537	24	
	SR	ST	SL	
45	EL		WR	37
98	ET		WT	119
28	ER		WL	46
	NL	NT	NR	
	18	463	88	

					RowTt	Target		To N	To S	To E	To W
From N	0	537	24	21	582	669.254		0	618	28	24
From S	463	0	88	18	569	1120.07		911	0	173	35
From E	37	46	0	119	202	232.884		43	53	0	137
From W	45	28	98	0	171	196.966		52	32	113	0
	To N	To S	To E	To W			ColTot	1006	703	314	197
							Target	628	703	241	182

					RowTt	Target		To N	To S	To E	To W
From N	0	618	21	22	661	669		0	625	21	23
From S	569	0	133	33	735	1120		867	0	203	50
From E	27	53	0	127	206	233		30	60	0	143
From W	32	32	87	0	151	197		42	42	113	0
	To N	To S	To E	To W			ColTot	939	727	337	216
							Target	628	703	241	182

					RowTt	Target		To N	To S	To E	To W
From N	0	604	15	19	639	669		0	633	16	20
From S	580	0	145	42	767	1120		847	0	212	62
From E	20	58	0	121	199	233		24	68	0	142
From W	28	41	81	0	149	197		37	54	106	0
	To N	To S	To E	To W			ColTot	907	755	334	223
							Target	628	703	241	182

					RowTt	Target		To N	To S	To E	To W
From N	0	590	12	16	618	669		0	639	13	18
From S	586	0	153	50	789	1120		832	0	217	71
From E	16	63	0	115	195	233		19	75	0	138
From W	26	50	77	0	152	197		33	64	99	0
	To N	To S	To E	To W			ColTot	885	779	329	227
							Target	628	703	241	182
							Pct	**1.409**	**1.108**	**1.3636**	**1.24702**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	18	463	88	24	537	21	45	98	28	46	119	37
2035	**71**	**832**	**217**	**13**	**639**	**18**	**33**	**99**	**64**	**75**	**138**	**19**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West — Scenario: 2035 Without Project
Intersection: Broadway at 3rd — Time Period: 2035 Weekday AM

Link Inputs

North

	689	1181	
263			244
184			227
	628	724	

In - Out 1842.214 2299 -456.4

Turn Move Inputs

	41	509	49
	SR	ST	SL
36	EL		WR 59
104	ET		WT 136
20	ER		WL 17
	NL	NT	NR
	51	534	44

					RowTt	Target
From N	0	509	49	41	599	689.382
From S	534	0	44	51	629	724.141
From E	59	17	0	136	212	244.47
From W	36	20	104	0	160	184.221
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	586	56	47
	615	0	51	59
	68	20	0	157
	41	23	120	0
ColTot	724	628	227	263
Target	1181	628	227	263

					RowTt	Target
From N	0	585	56	47	689	689
From S	1002	0	51	59	1112	724
From E	111	20	0	157	287	244
From W	68	23	120	0	210	184
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	586	56	47
	653	0	33	38
	94	17	0	134
	59	20	105	0
ColTot	806	622	194	219
Target	1181	628	227	263

					RowTt	Target
From N	0	591	66	57	714	689
From S	956	0	39	46	1040	724
From E	138	17	0	160	315	244
From W	87	20	123	0	229	184
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	571	64	55
	665	0	27	32
	107	13	0	124
	70	16	98	0
ColTot	842	600	189	211
Target	1181	628	227	263

					RowTt	Target
From N	0	597	77	68	742	689
From S	933	0	32	40	1005	724
From E	150	14	0	155	319	244
From W	97	17	118	0	233	184
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	555	71	63
	672	0	23	29
	115	10	0	119
	77	14	94	0
ColTot	865	579	188	211
Target	1181	628	227	263
Pct	**0.732**	**0.922**	**0.8277**	**0.80207**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	51	534	44	49	509	41	36	104	20	17	136	59
2035	**29**	**672**	**23**	**71**	**555**	**63**	**77**	**94**	**14**	**10**	**119**	**115**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West
Intersection: Broadway at 1st
Scenario: 2035 Without Project
Time Period: 2035 Weekday AM

Link Inputs

	North		
	621	598	
1653			1573
1383			1288
	567	528	
In - Out	4106.167	4106	0

Turn Move Inputs

	117	363	60	
	SR	ST	SL	
123	EL		WR	64
1017	ET		WT	1237
63	ER		WL	66
	NL	NT	NR	
	84	332	43	

					RowTt	Target
From N	0	363	60	117	540	621.023
From S	332	0	43	84	459	528.333
From E	64	66	0	1237	1367	1573.41
From W	123	63	1017	0	1203	1383.4
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	417	69	135
	382	0	49	97
	74	76	0	1424
	141	72	1170	0
ColTot	597	566	1288	1655
Target	598	567	1288	1653

					RowTt	Target
From N	0	418	69	134	621	621
From S	383	0	50	97	529	528
From E	74	76	0	1422	1572	1573
From W	142	73	1170	0	1384	1383
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	418	69	134
	382	0	49	97
	74	76	0	1423
	142	73	1169	0
ColTot	598	566	1288	1654
Target	598	567	1288	1653

					RowTt	Target
From N	0	418	69	134	621	621
From S	382	0	50	96	528	528
From E	74	76	0	1423	1573	1573
From W	142	73	1170	0	1384	1383
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	418	69	134
	382	0	49	96
	74	76	0	1423
	142	73	1169	0
ColTot	598	566	1288	1654
Target	598	567	1288	1653

					RowTt	Target
From N	0	418	69	134	621	621
From S	382	0	50	96	528	528
From E	74	76	0	1423	1573	1573
From W	142	73	1170	0	1384	1383
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	418	69	134
	382	0	50	96
	74	76	0	1423
	141	72	1169	0
ColTot	598	567	1288	1654
Target	598	567	1288	1653
Pct	**1**	**1**	**0.9997**	**1.0003**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	84	332	43	60	363	117	123	1017	63	66	1237	64
2035	**96**	**382**	**50**	**69**	**418**	**134**	**141**	**1169**	**72**	**76**	**1423**	**74**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West — Scenario: 2035 Without Project
Intersection: Sycamore at Civic Center — Time Period: 2035 Weekday AM

Link Inputs

North

	264	114	
618			530
930			1013
	86	105	

In - Out 1830.196 1830 0

Turn Move Inputs

	92	52	86
	SR	ST	SL
21	EL		WR 30
773	ET		WT 424
15	ER		WL 7
	NL	NT	NR
	22	47	22

					RowTt	Target		To N	To S	To E	To W
From N	0	52	86	92	230	264.08		0	60	99	106
From S	47	0	22	22	91	105.435		54	0	25	25
From E	30	7	0	424	461	530.305		35	8	0	488
From W	21	15	773	0	809	930.376		24	17	889	0
	To N	To S	To E	To W			ColTot	113	85	1013	619
							Target	114	86	1013	618

					RowTt	Target		To N	To S	To E	To W
From N	0	60	99	106	264	264		0	60	99	105
From S	55	0	25	25	106	105		55	0	25	25
From E	35	8	0	487	530	530		35	8	0	488
From W	24	17	888	0	930	930		24	17	889	0
	To N	To S	To E	To W			ColTot	113	86	1013	618
							Target	114	86	1013	618

					RowTt	Target		To N	To S	To E	To W
From N	0	60	99	105	264	264		0	60	99	105
From S	55	0	25	25	105	105		55	0	25	25
From E	35	8	0	488	530	530		35	8	0	488
From W	24	17	889	0	930	930		24	17	889	0
	To N	To S	To E	To W			ColTot	114	86	1013	618
							Target	114	86	1013	618

					RowTt	Target		To N	To S	To E	To W
From N	0	60	99	105	264	264		0	60	99	105
From S	55	0	25	25	105	105		55	0	25	25
From E	35	8	0	488	530	530		35	8	0	488
From W	24	17	889	0	930	930		24	17	889	0
	To N	To S	To E	To W			ColTot	114	86	1013	618
							Target	114	86	1013	618
							Pct	**1**	**1**	**1**	**0.99996**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	22	47	22	86	52	92	21	773	15	7	424	30
2035	**25**	**55**	**25**	**99**	**60**	**105**	**24**	**889**	**17**	**8**	**488**	**35**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West — Scenario: 2035 Without Project
Intersection: Sycamore at Santa Ana — Time Period: 2035 Weekday AM

Link Inputs

North

	93	108	
787			753
0			0
	90	138	
In - Out	984.401	984.4	0

Turn Move Inputs

	38	43	0	
	SR	ST	SL	
0	EL		WR	24
0	ET		WT	596
0	ER		WL	35
	NL	NT	NR	
	50	70	0	

					RowTt	Target
From N	0	43	0.001	38	81.001	93.15
From S	70	0	0.001	50	120.001	138
From E	24	35	0	596	655	753.25
From W	0.001	0.001	0.001	0	0.003	0.001
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	49	0	44
	80	0	0	57
	28	40	0	685
	0	0	0	0
ColTot	108	90	0	787
Target	108	90	0	787

					RowTt	Target
From N	0	49	0	44	93	93
From S	80	0	0	57	138	138
From E	28	40	0	685	753	753
From W	0	0	0	0	0	0
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	49	0	44
	80	0	0	57
	28	40	0	685
	0	0	0	0
ColTot	108	90	0	787
Target	108	90	0	787

					RowTt	Target
From N	0	49	0	44	93	93
From S	80	0	0	57	138	138
From E	28	40	0	685	753	753
From W	0	0	0	0	0	0
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	49	0	44
	80	0	0	57
	28	40	0	685
	0	0	0	0
ColTot	108	90	0	787
Target	108	90	0	787
Pct	**1**	**1**	**1**	**1**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	50	70	0	0	43	38	0	0	0	35	596	24
2035	**57**	**80**	**0**	**0**	**49**	**44**	**0**	**0**	**0**	**40**	**685**	**28**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment:	North/South		East/West	Scenario:	2035 Without Project
Intersection:	Sycamore	at	5th	Time Period:	2035 Weekday PM

Link Inputs

North

	82	74		
0			0	
536			524	
	51	31		
In - Out	648.601	648.6	0	

Turn Move Inputs

	0	30	41	
	SR	ST	SL	
59	EL		WR	0
393	ET		WT	0
14	ER		WL	0
	NL	NT	NR	
	0	5	22	

					RowTt	Target		To N	To S	To E	To W
From N	0	30	41	0.001	71.001	81.65		0	34	47	0
From S	5	0	22	0.001	27.001	31.05		6	0	25	0
From E	0.001	0.001	0	0.001	0.003	0.001		0	0	0	0
From W	59	14	393	0	466	535.9		68	16	452	0
	To N	To S	To E	To W			ColTot	74	51	524	0
							Target	74	51	524	0

					RowTt	Target		To N	To S	To E	To W
From N	0	34	47	0	82	82		0	34	47	0
From S	6	0	25	0	31	31		6	0	25	0
From E	0	0	0	0	0	0		0	0	0	0
From W	68	16	452	0	536	536		68	16	452	0
	To N	To S	To E	To W			ColTot	74	51	524	0
							Target	74	51	524	0

					RowTt	Target		To N	To S	To E	To W
From N	0	34	47	0	82	82		0	34	47	0
From S	6	0	25	0	31	31		6	0	25	0
From E	0	0	0	0	0	0		0	0	0	0
From W	68	16	452	0	536	536		68	16	452	0
	To N	To S	To E	To W			ColTot	74	51	524	0
							Target	74	51	524	0

					RowTt	Target		To N	To S	To E	To W
From N	0	34	47	0	82	82		0	34	47	0
From S	6	0	25	0	31	31		6	0	25	0
From E	0	0	0	0	0	0		0	0	0	0
From W	68	16	452	0	536	536		68	16	452	0
	To N	To S	To E	To W			ColTot	74	51	524	0
							Target	74	51	524	0
							Pct	**1**	**1**	**1**	**1.00002**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	0	5	22	41	30	0	59	393	14	0	0	0
2035	**0**	**6**	**25**	**47**	**34**	**0**	**68**	**452**	**16**	**0**	**0**	**0**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South
Intersection: Sycamore at 4th

Scenario: 2035 Without Project
Time Period: 2035 Weekday AM

Link Inputs

North

	53	52	
215			240
185			182
	59	29	
In - Out	507.15	507.2	0

Turn Move Inputs

	21	8	17	
	SR	ST	SL	
18	EL		WR	20
126	ET		WT	163
17	ER		WL	26
	NL	NT	NR	
	3	7	15	

					RowTt	Target
From N	0	8	17	21	46	52.9
From S	7	0	15	3	25	28.75
From E	20	26	0	163	209	240.35
From W	18	17	126	0	161	185.15
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	9	20	24
	8	0	17	3
	23	30	0	187
	21	20	145	0
ColTot	52	59	182	215
Target	52	59	182	215

					RowTt	Target
From N	0	9	20	24	53	53
From S	8	0	17	3	29	29
From E	23	30	0	187	240	240
From W	21	20	145	0	185	185
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	9	20	24
	8	0	17	3
	23	30	0	187
	21	20	145	0
ColTot	52	59	182	215
Target	52	59	182	215

					RowTt	Target
From N	0	9	20	24	53	53
From S	8	0	17	3	29	29
From E	23	30	0	187	240	240
From W	21	20	145	0	185	185
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	9	20	24
	8	0	17	3
	23	30	0	187
	21	20	145	0
ColTot	52	59	182	215
Target	52	59	182	215
Pct	**1**	**1**	**1**	**1**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	3	7	15	17	8	21	18	126	17	26	163	20
2035	**3**	**8**	**17**	**20**	**9**	**24**	**21**	**145**	**20**	**30**	**187**	**23**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West — Scenario: 2035 Without Project
Intersection: Main at Civic Center — Time Period: 2035 Weekday PM

Link Inputs

North

	1137	1284	
620			556
1110			999
	1171	1271	

In - Out 4073.726 4074 0

Turn Move Inputs

	78	854	56
	SR	ST	SL
125	EL		WR 64
731	ET		WT 364
109	ER		WL 55
	NL	NT	NR
	98	927	81

					RowTt	Target		To N	To S	To E	To W
From N	0	854	56	78	988	1136.61		0	982	64	90
From S	927	0	81	98	1106	1271.01		1065	0	93	113
From E	64	55	0	364	483	556.14		74	63	0	419
From W	125	109	731	0	965	1109.96		144	125	841	0
	To N	To S	To E	To W			ColTot	1283	1171	998	621
							Target	1284	1171	999	620

					RowTt	Target		To N	To S	To E	To W
From N	0	983	64	90	1137	1137		0	983	64	90
From S	1066	0	93	112	1272	1271		1066	0	93	112
From E	74	63	0	418	555	556		74	63	0	419
From W	144	125	841	0	1110	1110		144	125	841	0
	To N	To S	To E	To W			ColTot	1283	1171	998	621
							Target	1284	1171	999	620

					RowTt	Target		To N	To S	To E	To W
From N	0	983	64	89	1136	1137		0	983	64	89
From S	1066	0	93	112	1271	1271		1066	0	93	112
From E	74	63	0	418	556	556		74	64	0	419
From W	144	125	841	0	1110	1110		144	125	841	0
	To N	To S	To E	To W			ColTot	1284	1172	998	620
							Target	1284	1171	999	620

					RowTt	Target		To N	To S	To E	To W
From N	0	983	65	89	1136	1137		0	983	65	89
From S	1066	0	93	112	1271	1271		1066	0	93	112
From E	74	63	0	418	556	556		74	64	0	419
From W	144	125	841	0	1110	1110		144	125	841	0
	To N	To S	To E	To W			ColTot	1284	1171	999	620
							Target	1284	1171	999	620
							Pct	**1**	**1**	**0.9998**	**1.00028**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	98	927	81	56	854	78	125	731	109	55	364	64
2035	**112**	**1066**	**93**	**65**	**983**	**89**	**144**	**841**	**125**	**64**	**419**	**74**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South at East/West
Intersection: Main at Santa Ana

Scenario: 2035 Without Project
Time Period: 2035 Weekday AM

Link Inputs

North

	1316	1418	
1163			1149
0			0
	1332	1389	

In - Out 3854.13 3914 -59.4

Turn Move Inputs

	61	1083	0
	SR	ST	SL
0	EL		WR 98
0	ET		WT 740
0	ER		WL 76
	NL	NT	NR
	73	1135	0

					RowTt	Target		To N	To S	To E	To W
From N	0	1083	0.001	61	1144	1316.2		0	1246	0	70
From S	1135	0	0.001	73	1208	1389.19		1305	0	0	84
From E	98	76	0	740	914	1148.74		123	96	0	930
From W	0.001	0.001	0.001	0	0.003	0.001		0	0	0	0
	To N	To S	To E	To W			ColTot	1428	1342	0	1084
							Target	1418	1332	0	1163

					RowTt	Target		To N	To S	To E	To W
From N	0	1238	0	75	1313	1316		0	1241	0	75
From S	1296	0	0	90	1386	1389		1299	0	0	90
From E	122	95	0	998	1215	1149		116	90	0	943
From W	0	0	0	0	0	0		0	0	0	0
	To N	To S	To E	To W			ColTot	1415	1330	0	1109
							Target	1418	1332	0	1163

					RowTt	Target		To N	To S	To E	To W
From N	0	1243	0	79	1322	1316		0	1237	0	79
From S	1302	0	0	95	1397	1389		1295	0	0	94
From E	116	90	0	989	1195	1149		111	86	0	951
From W	0	0	0	0	0	0		0	0	0	0
	To N	To S	To E	To W			ColTot	1407	1324	0	1124
							Target	1418	1332	0	1163

					RowTt	Target		To N	To S	To E	To W
From N	0	1245	0	82	1327	1316		0	1235	0	81
From S	1306	0	0	97	1403	1389		1293	0	0	96
From E	112	87	0	984	1183	1149		109	84	0	955
From W	0	0	0	0	0	0		0	0	0	0
	To N	To S	To E	To W			ColTot	1402	1320	0	1133
							Target	1418	1332	0	1163
							Pct	**0.989**	**0.99**	**0.9913**	**0.97387**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	73	1135	0	0	1083	61	0	0	0	76	740	98
2035	**96**	**1293**	**0**	**0**	**1235**	**81**	**0**	**0**	**0**	**84**	**955**	**109**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West
Intersection: Main at 5th
Scenario: 2035 Without Project
Time Period: 2035 Weekday AM

Link Inputs

North

	1291	1396	
0			0
1166			973
	1279	1310	

In - Out 3766.84 3648 118.4

Turn Move Inputs

	0	1049	74
	SR	ST	SL
99	EL		WR 0
516	ET		WT 0
63	ER		WL 0
	NL	NT	NR
	0	1115	24

					RowTt	Target		To N	To S	To E	To W
From N	0	1049	74	0.001	1123	1290.71		0	1206	85	0
From S	1115	0	24	0.001	1139	1310.4		1283	0	28	0
From E	0.001	0.001	0	0.001	0.003	0.001		0	0	0	0
From W	99	63	516	0	678	1165.73		170	108	887	0
	To N	To S	To E	To W			ColTot	1453	1314	1000	0
							Target	1396	1279	973	0

					RowTt	Target		To N	To S	To E	To W
From N	0	1174	83	0	1256	1291		0	1206	85	0
From S	1233	0	27	0	1259	1310		1282	0	28	0
From E	0	0	0	0	0	0		0	0	0	0
From W	164	105	864	0	1133	1166		168	109	889	0
	To N	To S	To E	To W			ColTot	1451	1314	1002	0
							Target	1396	1279	973	0

					RowTt	Target		To N	To S	To E	To W
From N	0	1173	83	0	1256	1291		0	1206	85	0
From S	1234	0	27	0	1261	1310		1282	0	28	0
From E	0	0	0	0	0	0		0	0	0	0
From W	162	106	863	0	1131	1166		167	109	890	0
	To N	To S	To E	To W			ColTot	1449	1315	1003	0
							Target	1396	1279	973	0

					RowTt	Target		To N	To S	To E	To W
From N	0	1173	82	0	1256	1291		0	1206	85	0
From S	1235	0	27	0	1263	1310		1282	0	28	0
From E	0	0	0	0	0	0		0	0	0	0
From W	161	106	863	0	1130	1166		166	109	891	0
	To N	To S	To E	To W			ColTot	1448	1315	1004	0
							Target	1396	1279	973	0
							Pct	**1.037**	**1.028**	**1.0313**	**1.03297**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	0	1115	24	74	1049	0	99	516	63	0	0	0
2035	**0**	**1282**	**28**	**85**	**1206**	**0**	**166**	**891**	**109**	**0**	**0**	**0**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West
Intersection: Main at 4th
Scenario: 2035 Without Project
Time Period: 2035 Weekday AM

Link Inputs

North

	1286	1363	
308			324
207			203
	1285	1351	

In - Out 3168.682 3158 10.27

Turn Move Inputs

	46	1072	0
	SR	ST	SL
0	EL		WR 60
126	ET		WT 222
45	ER		WL 0
	NL	NT	NR
	0	1124	50

					RowTt	Target		To N	To S	To E	To W
From N	0	1072	0	46	1118	1286.07		0	1233	0	53
From S	1124	0	50	0	1174	1350.96		1293	0	58	0
From E	60	0	0	222	282	324.415		69	0	0	255
From W	0	45	126	0	171	207.237		0	55	153	0
	To N	To S	To E	To W			ColTot	1362	1288	210	308
							Target	1363	1285	203	308

					RowTt	Target		To N	To S	To E	To W
From N	0	1230	0	53	1283	1286		0	1233	0	53
From S	1294	0	55	0	1349	1351		1295	0	56	0
From E	69	0	0	255	324	324		69	0	0	255
From W	0	54	147	0	202	207		0	56	151	0
	To N	To S	To E	To W			ColTot	1364	1289	207	308
							Target	1363	1285	203	308

					RowTt	Target		To N	To S	To E	To W
From N	0	1229	0	53	1282	1286		0	1233	0	53
From S	1294	0	54	0	1348	1351		1296	0	55	0
From E	69	0	0	255	324	324		69	0	0	255
From W	0	56	148	0	204	207		0	57	151	0
	To N	To S	To E	To W			ColTot	1365	1290	205	309
							Target	1363	1285	203	308

					RowTt	Target		To N	To S	To E	To W
From N	0	1229	0	53	1282	1286		0	1233	0	53
From S	1294	0	54	0	1348	1351		1297	0	54	0
From E	69	0	0	255	324	324		69	0	0	255
From W	0	56	149	0	205	207		0	57	150	0
	To N	To S	To E	To W			ColTot	1366	1290	204	309
							Target	1363	1285	203	308
							Pct	**1.002**	**1.004**	**1.0078**	**1.00172**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	0	1124	50	0	1072	46	0	126	45	0	222	60
2035	**0**	**1297**	**54**	**0**	**1233**	**53**	**0**	**150**	**57**	**0**	**255**	**69**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West — Scenario: 2035 Without Project
Intersection: Main at 3rd — Time Period: 2035 Weekday AM

Link Inputs

North

	1302	1351	
264			288
265			218
	1330	1307	

In - Out 3163.046 3163 0

Turn Move Inputs

	52	1080	0
	SR	ST	SL
42	EL		WR 36
149	ET		WT 177
39	ER		WL 37
	NL	NT	NR
	0	1096	40

					RowTt	Target
From N	0	1080	0	52	1132	1302.29
From S	1096	0	40	0	1136	1306.93
From E	36	37	0	177	250	288.498
From W	42	39	149	0	230	265.325
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	1242	0	60
	1261	0	46	0
	42	43	0	204
	48	45	172	0
ColTot	1351	1330	218	264
Target	1351	1330	218	264

					RowTt	Target
From N	0	1242	0	60	1302	1302
From S	1261	0	46	0	1307	1307
From E	42	43	0	204	289	288
From W	48	45	172	0	265	265
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	1242	0	60
	1261	0	46	0
	42	43	0	204
	48	45	172	0
ColTot	1351	1330	218	264
Target	1351	1330	218	264

					RowTt	Target
From N	0	1242	0	60	1302	1302
From S	1261	0	46	0	1307	1307
From E	42	43	0	204	289	288
From W	48	45	172	0	265	265
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	1242	0	60
	1261	0	46	0
	42	43	0	204
	48	45	172	0
ColTot	1351	1330	218	264
Target	1351	1330	218	264
Pct	**1**	**1**	**1**	**0.99995**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	0	1096	40	0	1080	52	42	149	39	37	177	36
2035	**0**	**1261**	**46**	**0**	**1242**	**60**	**48**	**172**	**45**	**43**	**204**	**42**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West
Intersection: Main at 1st
Scenario: 2035 Without Project
Time Period: 2035 Weekday AM

Link Inputs

North

	1290	1309	
1580			1394
1364			1375
	1147	1365	

In - Out 5411.937 5412 0

Turn Move Inputs

	141	808	172
	SR	ST	SL
156	EL		WR 70
944	ET		WT 1039
86	ER		WL 104
	NL	NT	NR
	194	913	80

					RowTt	Target		To N	To S	To E	To W
From N	0	808	172	141	1121	1289.55		0	929	198	162
From S	913	0	80	194	1187	1364.86		1050	0	92	223
From E	70	104	0	1039	1213	1393.83		80	120	0	1194
From W	156	86	944	0	1186	1363.7		179	99	1085	0
	To N	To S	To E	To W			ColTot	1310	1148	1375	1579
							Target	1309	1147	1375	1580

					RowTt	Target		To N	To S	To E	To W
From N	0	929	198	162	1289	1290		0	929	198	162
From S	1050	0	92	223	1365	1365		1050	0	92	223
From E	80	119	0	1195	1395	1394		80	119	0	1194
From W	179	99	1085	0	1364	1364		179	99	1086	0
	To N	To S	To E	To W			ColTot	1309	1147	1375	1580
							Target	1309	1147	1375	1580

					RowTt	Target		To N	To S	To E	To W
From N	0	929	198	162	1289	1290		0	929	198	162
From S	1050	0	92	223	1365	1365		1050	0	92	223
From E	80	119	0	1195	1394	1394		80	119	0	1194
From W	179	99	1085	0	1364	1364		179	99	1086	0
	To N	To S	To E	To W			ColTot	1309	1147	1375	1580
							Target	1309	1147	1375	1580

					RowTt	Target		To N	To S	To E	To W
From N	0	929	198	163	1289	1290		0	929	198	163
From S	1050	0	92	223	1365	1365		1050	0	92	223
From E	80	119	0	1194	1394	1394		80	119	0	1194
From W	179	99	1085	0	1364	1364		179	99	1086	0
	To N	To S	To E	To W			ColTot	1309	1147	1375	1580
							Target	1309	1147	1375	1580
							Pct	**1**	**1**	**1.0001**	**0.99988**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	194	913	80	172	808	141	156	944	86	104	1039	70
2035	**223**	**1050**	**92**	**198**	**929**	**163**	**179**	**1086**	**99**	**119**	**1194**	**80**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West
Intersection: Bush at Santa Ana
Scenario: 2035 Without Project
Time Period: 2035 Weekday PM

Link Inputs

North

	260	403	
820			839
0			0
	257	382	

In - Out 1480.724 1481 0

Turn Move Inputs

	33	192	0
	SR	ST	SL
0	EL		WR 57
0	ET		WT 641
0	ER		WL 31
	NL	NT	NR
	39	293	0

					RowTt	Target		To N	To S	To E	To W
From N	0	192	0.001	33	225.001	259.532		0	221	0	38
From S	293	0	0.001	39	332.001	382.346		337	0	0	45
From E	57	31	0	641	729	838.845		66	36	0	738
From W	0.001	0.001	0.001	0	0.003	0.001		0	0	0	0
	To N	To S	To E	To W			ColTot	403	257	0	821
							Target	403	257	0	820

					RowTt	Target		To N	To S	To E	To W
From N	0	222	0	38	260	260		0	221	0	38
From S	338	0	0	45	382	382		337	0	0	45
From E	66	36	0	737	839	839		66	36	0	738
From W	0	0	0	0	0	0		0	0	0	0
	To N	To S	To E	To W			ColTot	403	257	0	820
							Target	403	257	0	820

					RowTt	Target		To N	To S	To E	To W
From N	0	222	0	38	260	260		0	221	0	38
From S	338	0	0	45	382	382		337	0	0	45
From E	66	36	0	737	839	839		66	36	0	737
From W	0	0	0	0	0	0		0	0	0	0
	To N	To S	To E	To W			ColTot	403	257	0	820
							Target	403	257	0	820

					RowTt	Target		To N	To S	To E	To W
From N	0	222	0	38	260	260		0	222	0	38
From S	338	0	0	45	382	382		337	0	0	45
From E	66	36	0	737	839	839		66	36	0	737
From W	0	0	0	0	0	0		0	0	0	0
	To N	To S	To E	To W			ColTot	403	257	0	820
							Target	403	257	0	820
							Pct	**1**	**1**	**0.9999**	**1.00006**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	39	293	0	0	192	33	0	0	0	31	641	57
2035	**45**	**337**	**0**	**0**	**222**	**38**	**0**	**0**	**0**	**36**	**737**	**66**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West — Scenario: 2035 Without Project
Intersection: Bush at 5th — Time Period: 2035 Weekday AM

Link Inputs

North

	306	373	
0			0
1014			747
	331	393	

In - Out 1713.146 1452 261.4

Turn Move Inputs

	0	240	26
	SR	ST	SL
42	EL		WR 0
564	ET		WT 0
48	ER		WL 0
	NL	NT	NR
	0	282	59

					RowTt	Target		To N	To S	To E	To W
From N	0	240	26	0.001	266.001	305.877		0	276	30	0
From S	282	0	59	0.001	341.001	392.774		325	0	68	0
From E	0.001	0.001	0	0.001	0.003	0.001		0	0	0	0
From W	42	48	564	0	654	1014.49		65	74	875	0
	To N	To S	To E	To W			ColTot	390	350	973	0
							Target	373	331	747	0

					RowTt	Target		To N	To S	To E	To W
From N	0	261	23	0	284	306		0	281	25	0
From S	311	0	52	0	363	393		336	0	56	0
From E	0	0	0	0	0	0		0	0	0	0
From W	62	70	672	0	805	1014		79	89	847	0
	To N	To S	To E	To W			ColTot	415	370	928	0
							Target	373	331	747	0

					RowTt	Target		To N	To S	To E	To W
From N	0	252	20	0	272	306		0	283	22	0
From S	302	0	45	0	348	393		341	0	51	0
From E	0	0	0	0	0	0		0	0	0	0
From W	71	80	682	0	832	1014		86	97	831	0
	To N	To S	To E	To W			ColTot	428	380	905	0
							Target	373	331	747	0

					RowTt	Target		To N	To S	To E	To W
From N	0	247	19	0	265	306		0	285	21	0
From S	298	0	42	0	340	393		344	0	49	0
From E	0	0	0	0	0	0		0	0	0	0
From W	75	84	686	0	846	1014		90	101	823	0
	To N	To S	To E	To W			ColTot	434	386	893	0
							Target	373	331	747	0
							Pct	**1.163**	**1.164**	**1.1954**	**1.1518**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	0	282	59	26	240	0	42	564	48	0	0	0
2035	**0**	**344**	**49**	**21**	**285**	**0**	**90**	**823**	**101**	**0**	**0**	**0**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West
Intersection: Bush at 4th
Scenario: 2035 Without Project
Time Period: 2035 Weekday AM

Link Inputs

	North		
	297	389	
224			254
191			221
	287	380	
In - Out	1121.549	1122	0

Turn Move Inputs

	11	208	39
	SR	ST	SL
12	EL		WR 38
129	ET		WT 165
25	ER		WL 17
	NL	NT	NR
	18	288	24

					RowTt	Target
From N	0	208	39	11	258	296.608
From S	288	0	24	18	330	380.029
From E	38	17	0	165	220	253.739
From W	12	25	129	0	166	191.173
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	239	45	13
	332	0	28	21
	44	20	0	190
	14	29	149	0
ColTot	389	288	221	224
Target	389	287	221	224

					RowTt	Target
From N	0	239	45	13	297	297
From S	332	0	28	21	380	380
From E	44	20	0	190	254	254
From W	14	29	149	0	191	191
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	239	45	13
	332	0	28	21
	44	20	0	190
	14	29	149	0
ColTot	389	287	221	224
Target	389	287	221	224

					RowTt	Target
From N	0	239	45	13	297	297
From S	332	0	28	21	380	380
From E	44	20	0	190	254	254
From W	14	29	149	0	191	191
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	239	45	13
	332	0	28	21
	44	20	0	190
	14	29	149	0
ColTot	389	287	221	224
Target	389	287	221	224
Pct	**1**	**1**	**0.9999**	**1.00011**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	18	288	24	39	208	11	12	129	25	17	165	38
2035	**21**	**332**	**28**	**45**	**239**	**13**	**14**	**149**	**29**	**20**	**190**	**44**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment:	North/South		East/West	Scenario:	2035 Without Project
Intersection:	Spurgeon	at	1st	Time Period:	2035 Weekday AM

Link Inputs

	North			
	130	41		
1580			1492	
1517			1517	
	0	0		
In - Out	3138.351	3138	0	

Turn Move Inputs

	113	0	0	
	SR	ST	SL	
0	EL		WR	36
1319	ET		WT	1261
0	ER		WL	0
	NL	NT	NR	
	0	0	0	

					RowTt	Target		To N	To S	To E	To W
From N	0	0.001	0.001	113	113.002	129.95		0	0	0	130
From S	0.001	0	0.001	0.001	0.003	0.001		0	0	0	0
From E	36	0.001	0	1261	1297	1491.55		41	0	0	1450
From W	0.001	0.001	1319	0	1319	1516.85		0	0	1517	0
	To N	To S	To E	To W			ColTot	41	0	1517	1580
							Target	41	0	1517	1580

					RowTt	Target		To N	To S	To E	To W
From N	0	0	0	130	130	130		0	0	0	130
From S	0	0	0	0	0	0		0	0	0	0
From E	41	0	0	1450	1492	1492		41	0	0	1450
From W	0	0	1517	0	1517	1517		0	0	1517	0
	To N	To S	To E	To W			ColTot	41	0	1517	1580
							Target	41	0	1517	1580

					RowTt	Target		To N	To S	To E	To W
From N	0	0	0	130	130	130		0	0	0	130
From S	0	0	0	0	0	0		0	0	0	0
From E	41	0	0	1450	1492	1492		41	0	0	1450
From W	0	0	1517	0	1517	1517		0	0	1517	0
	To N	To S	To E	To W			ColTot	41	0	1517	1580
							Target	41	0	1517	1580

					RowTt	Target		To N	To S	To E	To W
From N	0	0	0	130	130	130		0	0	0	130
From S	0	0	0	0	0	0		0	0	0	0
From E	41	0	0	1450	1492	1492		41	0	0	1450
From W	0	0	1517	0	1517	1517		0	0	1517	0
	To N	To S	To E	To W			ColTot	41	0	1517	1580
							Target	41	0	1517	1580
							Pct	**1**	**1**	**1**	**1**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	0	0	0	0	0	113	0	1319	0	0	1261	36
2035	**0**	**0**	**0**	**0**	**0**	**130**	**0**	**1517**	**0**	**0**	**1450**	**41**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment:	North/South		East/West	Scenario:	2035 Without Project
Intersection:	French	at	Santa Ana	Time Period:	2035 Weekday AM

Link Inputs

	North		
	41	76	
751			681
0			0
	60	164	
In - Out	886.651	886.7	0

Turn Move Inputs

	5	31	0	
	SR	ST	SL	
0	EL		WR	6
0	ET		WT	565
0	ER		WL	21
	NL	NT	NR	
	83	60	0	

					RowTt	Target		To N	To S	To E	To W
From N	0	31	0.001	5	36.001	41.4		0	36	0	6
From S	60	0	0.001	83	143.001	164.45		69	0	0	95
From E	6	21	0	565	592	680.8		7	24	0	650
From W	0.001	0.001	0.001	0	0.003	0.001		0	0	0	0
	To N	To S	To E	To W			ColTot	76	60	0	751
							Target	76	60	0	751

					RowTt	Target		To N	To S	To E	To W
From N	0	36	0	6	41	41		0	36	0	6
From S	69	0	0	95	164	164		69	0	0	95
From E	7	24	0	650	681	681		7	24	0	650
From W	0	0	0	0	0	0		0	0	0	0
	To N	To S	To E	To W			ColTot	76	60	0	751
							Target	76	60	0	751

					RowTt	Target		To N	To S	To E	To W
From N	0	36	0	6	41	41		0	36	0	6
From S	69	0	0	95	164	164		69	0	0	95
From E	7	24	0	650	681	681		7	24	0	650
From W	0	0	0	0	0	0		0	0	0	0
	To N	To S	To E	To W			ColTot	76	60	0	751
							Target	76	60	0	751

					RowTt	Target		To N	To S	To E	To W
From N	0	36	0	6	41	41		0	36	0	6
From S	69	0	0	95	164	164		69	0	0	95
From E	7	24	0	650	681	681		7	24	0	650
From W	0	0	0	0	0	0		0	0	0	0
	To N	To S	To E	To W			ColTot	76	60	0	751
							Target	76	60	0	751
							Pct	**1**	**1**	**1**	**1**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	83	60	0	0	31	5	0	0	0	21	565	6
2035	**95**	**69**	**0**	**0**	**36**	**6**	**0**	**0**	**0**	**24**	**650**	**7**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment:	North/South		East/West	Scenario:	2035 Without Project
Intersection:	French	at	4th	Time Period:	2035 Weekday AM

Link Inputs

	North		
	228	158	
292			404
175			346
	186	176	
In - Out	982.1	982.1	0

Turn Move Inputs

	18	59	121	
	SR	ST	SL	
12	EL		WR	61
109	ET		WT	218
31	ER		WL	72
	NL	NT	NR	
	18	64	71	

					RowTt	Target		To N	To S	To E	To W
From N	0	59	121	18	198	227.7		0	68	139	21
From S	64	0	71	18	153	175.95		74	0	82	21
From E	61	72	0	218	351	403.65		70	83	0	251
From W	12	31	109	0	152	174.8		14	36	125	0
	To N	To S	To E	To W			ColTot	158	186	346	292
							Target	158	186	346	292

					RowTt	Target		To N	To S	To E	To W
From N	0	68	139	21	228	228		0	68	139	21
From S	74	0	82	21	176	176		74	0	82	21
From E	70	83	0	251	404	404		70	83	0	251
From W	14	36	125	0	175	175		14	36	125	0
	To N	To S	To E	To W			ColTot	158	186	346	292
							Target	158	186	346	292

					RowTt	Target		To N	To S	To E	To W
From N	0	68	139	21	228	228		0	68	139	21
From S	74	0	82	21	176	176		74	0	82	21
From E	70	83	0	251	404	404		70	83	0	251
From W	14	36	125	0	175	175		14	36	125	0
	To N	To S	To E	To W			ColTot	158	186	346	292
							Target	158	186	346	292

					RowTt	Target		To N	To S	To E	To W
From N	0	68	139	21	228	228		0	68	139	21
From S	74	0	82	21	176	176		74	0	82	21
From E	70	83	0	251	404	404		70	83	0	251
From W	14	36	125	0	175	175		14	36	125	0
	To N	To S	To E	To W			ColTot	158	186	346	292
							Target	158	186	346	292
							Pct	**1**	**1**	**1**	**1**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	18	64	71	121	59	18	12	109	31	72	218	61
2035	**21**	**74**	**82**	**139**	**68**	**21**	**14**	**125**	**36**	**83**	**251**	**70**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment:	North/South		East/West		Scenario:	2035 Without Project	
Intersection:	Lacy	at	Civic Center		Time Period:	2035 Weekday AM	

Link Inputs

	North			
	45	57		
258			244	
652			677	
	42	92		
In - Out	1033.494	1033	0	

Turn Move Inputs

	15	12	12	
	SR	ST	SL	
13	EL		WR	15
538	ET		WT	189
16	ER		WL	8
	NL	NT	NR	
	20	21	38	

					RowTt	Target		To N	To S	To E	To W
From N	0	12	12	15	39	45.1864		0	14	14	17
From S	21	0	38	20	79	91.5314		24	0	44	23
From E	15	8	0	189	212	244.47		17	9	0	218
From W	13	16	538	0	567	652.306		15	18	619	0
	To N	To S	To E	To W			ColTot	57	42	677	258
							Target	57	42	677	258

					RowTt	Target		To N	To S	To E	To W
From N	0	14	14	17	45	45		0	14	14	17
From S	24	0	44	23	92	92		24	0	44	23
From E	17	9	0	218	244	244		17	9	0	218
From W	15	18	619	0	652	652		15	18	619	0
	To N	To S	To E	To W			ColTot	57	42	677	258
							Target	57	42	677	258

					RowTt	Target		To N	To S	To E	To W
From N	0	14	14	17	45	45		0	14	14	17
From S	24	0	44	23	92	92		24	0	44	23
From E	17	9	0	218	244	244		17	9	0	218
From W	15	18	619	0	652	652		15	18	619	0
	To N	To S	To E	To W			ColTot	57	42	677	258
							Target	57	42	677	258

					RowTt	Target		To N	To S	To E	To W
From N	0	14	14	17	45	45		0	14	14	17
From S	24	0	44	23	92	92		24	0	44	23
From E	17	9	0	218	244	244		17	9	0	218
From W	15	18	619	0	652	652		15	18	619	0
	To N	To S	To E	To W			ColTot	57	42	677	258
							Target	57	42	677	258
							Pct	**1**	**1**	**1**	**0.99992**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	20	21	38	12	12	15	13	538	16	8	189	15
2035	**23**	**24**	**44**	**14**	**14**	**17**	**15**	**619**	**18**	**9**	**218**	**17**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West
Intersection: Lacy at Santa Ana
Scenario: 2035 Without Project
Time Period: 2035 Weekday AM

Link Inputs

North

	56	68	
710			725
676			704
	48	73	

In - Out 1529.592 1530 0

Turn Move Inputs

	13	16	19
	SR	ST	SL
3	EL		WR 18
579	ET		WT 592
5	ER		WL 20
	NL	NT	NR
	12	38	13

	To N	To S	To E	To W	RowTt	Target
From N	0	16	19	13	48	56.304
From S	38	0	13	12	63	72.726
From E	18	20	0	592	630	724.914
From W	3	5	579	0	587	675.648
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	19	22	15
	44	0	15	14
	21	23	0	681
	3	6	666	0
ColTot	68	48	704	710
Target	68	48	704	710

	To N	To S	To E	To W	RowTt	Target
From N	0	19	22	15	57	56
From S	44	0	15	14	73	73
From E	21	23	0	681	725	725
From W	3	6	667	0	676	676
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	19	22	15
	44	0	15	14
	21	23	0	681
	3	6	666	0
ColTot	68	48	704	710
Target	68	48	704	710

	To N	To S	To E	To W	RowTt	Target
From N	0	19	22	15	56	56
From S	44	0	15	14	73	73
From E	21	23	0	681	725	725
From W	3	6	667	0	676	676
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	19	22	15
	44	0	15	14
	21	23	0	681
	3	6	666	0
ColTot	68	48	704	710
Target	68	48	704	710

	To N	To S	To E	To W	RowTt	Target
From N	0	19	22	15	56	56
From S	44	0	15	14	73	73
From E	21	23	0	681	725	725
From W	3	6	667	0	676	676
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	19	22	15
	44	0	15	14
	21	23	0	681
	3	6	666	0
ColTot	68	48	704	710
Target	68	48	704	710
Pct	**1**	**1**	**0.9997**	**1.00026**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	12	38	13	19	16	13	3	579	5	20	592	18
2035	**14**	**44**	**15**	**22**	**19**	**15**	**3**	**666**	**6**	**23**	**681**	**21**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment:	North/South		East/West	Scenario:	2035 Without Project
Intersection:	Lacy	at	6th	Time Period:	2035 Weekday AM

Link Inputs

North

	55	75	
115			51
36			82
	66	196	
In - Out	336.95	337	0

Turn Move Inputs

	12	31	5	
	SR	ST	SL	
7	EL		WR	0
15	ET		WT	27
9	ER		WL	17
	NL	NT	NR	
	61	58	51	

					RowTt	Target		To N	To S	To E	To W
From N	0	31	5	12	48	55.2		0	36	6	14
From S	58	0	51	61	170	195.5		67	0	59	70
From E	0	17	0	27	44	50.6		0	20	0	31
From W	7	9	15	0	31	35.65		8	10	17	0
	To N	To S	To E	To W			ColTot	75	66	82	115
							Target	75	66	82	115

					RowTt	Target		To N	To S	To E	To W
From N	0	36	6	14	55	55		0	36	6	14
From S	67	0	59	70	196	196		67	0	59	70
From E	0	20	0	31	51	51		0	20	0	31
From W	8	10	17	0	36	36		8	10	17	0
	To N	To S	To E	To W			ColTot	75	66	82	115
							Target	75	66	82	115

					RowTt	Target		To N	To S	To E	To W
From N	0	36	6	14	55	55		0	36	6	14
From S	67	0	59	70	196	196		67	0	59	70
From E	0	20	0	31	51	51		0	20	0	31
From W	8	10	17	0	36	36		8	10	17	0
	To N	To S	To E	To W			ColTot	75	66	82	115
							Target	75	66	82	115

					RowTt	Target		To N	To S	To E	To W
From N	0	36	6	14	55	55		0	36	6	14
From S	67	0	59	70	196	196		67	0	59	70
From E	0	20	0	31	51	51		0	20	0	31
From W	8	10	17	0	36	36		8	10	17	0
	To N	To S	To E	To W			ColTot	75	66	82	115
							Target	75	66	82	115
							Pct	**1**	**1**	**1**	**1**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	61	58	51	5	31	12	7	15	9	17	27	0
2035	**70**	**67**	**59**	**6**	**36**	**14**	**8**	**17**	**10**	**20**	**31**	**0**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South
Intersection: Lacy at 4th

Scenario: 2035 Without Project
Time Period: 2035 Weekday AM

Link Inputs

	North		
	45	57	
258			244
652			677
	42	92	
In - Out	1033.494	1033	0

Turn Move Inputs

	15	12	12	
	SR	ST	SL	
13	EL		WR	15
538	ET		WT	189
16	ER		WL	8
	NL	NT	NR	
	20	21	38	

	To N	To S	To E	To W	RowTt	Target
From N	0	12	12	15	39	45.1864
From S	21	0	38	20	79	91.5314
From E	15	8	0	189	212	244.47
From W	13	16	538	0	567	652.306
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	14	14	17
	24	0	44	23
	17	9	0	218
	15	18	619	0
ColTot	57	42	677	258
Target	57	42	677	258

	To N	To S	To E	To W	RowTt	Target
From N	0	14	14	17	45	45
From S	24	0	44	23	92	92
From E	17	9	0	218	244	244
From W	15	18	619	0	652	652
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	14	14	17
	24	0	44	23
	17	9	0	218
	15	18	619	0
ColTot	57	42	677	258
Target	57	42	677	258

	To N	To S	To E	To W	RowTt	Target
From N	0	14	14	17	45	45
From S	24	0	44	23	92	92
From E	17	9	0	218	244	244
From W	15	18	619	0	652	652
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	14	14	17
	24	0	44	23
	17	9	0	218
	15	18	619	0
ColTot	57	42	677	258
Target	57	42	677	258
Pct	**1**	**1**	**1**	**0.99992**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	20	21	38	12	12	15	13	538	16	8	189	15
2035	**23**	**24**	**44**	**14**	**14**	**17**	**15**	**619**	**18**	**9**	**218**	**17**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South
Intersection: Lacy at East/West 1st
Scenario: 2035 Without Project
Time Period: 2035 Weekday AM

Link Inputs

North

	146	235	
1505			1411
1533			1341
	0	0	

In - Out 3090.051 3081 9.2

Turn Move Inputs

	118	0	9
	SR	ST	SL
167	EL		WR 36
1152	ET		WT 1191
14	ER		WL 0
	NL	NT	NR
	0	0	0

					RowTt	Target		To N	To S	To E	To W
From N	0	0.001	9	118	127.001	146.05		0	0	10	136
From S	0.001	0	0.001	0.001	0.003	0.001		0	0	0	0
From E	36	0.001	0	1191	1227	1411.05		41	0	0	1370
From W	167	14	1152	0	1333	1532.95		192	16	1325	0
	To N	To S	To E	To W			ColTot	233	16	1335	1505
							Target	235	0	1341	1505

					RowTt	Target		To N	To S	To E	To W
From N	0	0	10	136	146	146		0	0	10	136
From S	0	0	0	0	0	0		0	0	0	0
From E	42	0	0	1370	1411	1411		42	0	0	1369
From W	193	0	1331	0	1524	1533		194	0	1339	0
	To N	To S	To E	To W			ColTot	236	0	1349	1505
							Target	235	0	1341	1505

					RowTt	Target		To N	To S	To E	To W
From N	0	0	10	136	146	146		0	0	10	136
From S	0	0	0	0	0	0		0	0	0	0
From E	41	0	0	1370	1411	1411		41	0	0	1370
From W	193	0	1331	0	1524	1533		194	0	1339	0
	To N	To S	To E	To W			ColTot	236	0	1349	1505
							Target	235	0	1341	1505

					RowTt	Target		To N	To S	To E	To W
From N	0	0	10	136	146	146		0	0	10	136
From S	0	0	0	0	0	0		0	0	0	0
From E	41	0	0	1370	1411	1411		41	0	0	1370
From W	193	0	1331	0	1524	1533		195	0	1338	0
	To N	To S	To E	To W			ColTot	236	0	1349	1506
							Target	235	0	1341	1505
							Pct	**1.005**	**1.006**	**1.0058**	**1.00019**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	0	0	0	9	0	118	167	1152	14	0	1191	36
2035	**0**	**0**	**0**	**10**	**0**	**136**	**195**	**1338**	**0**	**0**	**1370**	**41**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South at East/West
Intersection: Santiago at Washington

Scenario: 2035 Without Project
Time Period: 2035 Weekday AM

Link Inputs

North

	567	867	
352			243
492			407
	546	841	

In - Out 2143.087 2172 -28.46

Turn Move Inputs

	114	148	22	
	SR	ST	SL	
236	EL		WR	33
173	ET		WT	133
19	ER		WL	45
	NL	NT	NR	
	59	261	158	

					RowTt	Target
From N	0	148	22	114	284	566.547
From S	261	0	158	59	478	840.813
From E	33	45	0	133	211	243.311
From W	236	19	173	0	428	492.416
	To N	To S	To E	To W		

	To N	To S	To E	To W
ColTot	769	369	521	485
Target	867	546	407	352

					RowTt	Target
From N	0	437	34	165	636	567
From S	518	0	217	75	810	841
From E	43	77	0	111	231	243
From W	306	32	155	0	494	492
	To N	To S	To E	To W		

	To N	To S	To E	To W
ColTot	888	502	411	343
Target	867	546	407	352

					RowTt	Target
From N	0	423	30	151	604	567
From S	525	0	223	80	828	841
From E	44	88	0	121	253	243
From W	298	35	153	0	487	492
	To N	To S	To E	To W		

	To N	To S	To E	To W
ColTot	877	517	410	340
Target	867	546	407	352

					RowTt	Target
From N	0	419	28	147	594	567
From S	527	0	225	85	836	841
From E	42	89	0	120	252	243
From W	298	37	154	0	490	492
	To N	To S	To E	To W		

	To N	To S	To E	To W
ColTot	870	524	408	342
Target	867	546	407	352
Pct	**1.004**	**0.959**	**1.0022**	**0.97039**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	59	261	158	22	148	114	236	173	19	45	133	33
2035	**85**	**530**	**226**	**27**	**400**	**140**	**300**	**155**	**38**	**86**	**116**	**41**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West — Scenario: 2035 Without Project
Intersection: Santiago at Civic Center — Time Period: 2035 Weekday AM

Link Inputs

North

	662	882	
342			84
724			112
	861	915	
In - Out	2384.118	2198	186.5

Turn Move Inputs

	96	214	14	
	SR	ST	SL	
260	EL		WR	12
52	ET		WT	31
318	ER		WL	29
	NL	NT	NR	
	170	218	31	

					RowTt	Target		To N	To S	To E	To W
From N	0	214	14	96	324	661.614		0	437	29	196
From S	218	0	31	170	419	914.767		476	0	68	371
From E	12	29	0	31	72	84.042		14	34	0	36
From W	260	318	52	0	630	723.695		299	365	60	0
	To N	To S	To E	To W			ColTot	789	836	156	603
							Target	882	861	112	342

					RowTt	Target		To N	To S	To E	To W
From N	0	450	21	111	582	662		0	512	23	126
From S	532	0	49	210	791	915		615	0	56	243
From E	16	35	0	21	71	84		19	41	0	24
From W	334	376	43	0	753	724		321	361	41	0
	To N	To S	To E	To W			ColTot	955	915	121	394
							Target	882	861	112	342

					RowTt	Target		To N	To S	To E	To W
From N	0	482	22	110	613	662		0	520	23	118
From S	569	0	52	211	832	915		625	0	57	232
From E	17	39	0	21	77	84		19	42	0	23
From W	297	340	38	0	675	724		318	365	41	0
	To N	To S	To E	To W			ColTot	962	927	122	374
							Target	882	861	112	342

					RowTt	Target		To N	To S	To E	To W
From N	0	483	22	108	613	662		0	521	23	117
From S	574	0	53	213	839	915		625	0	58	232
From E	17	39	0	21	78	84		19	43	0	23
From W	292	339	38	0	668	724		316	367	41	0
	To N	To S	To E	To W			ColTot	960	931	122	372
							Target	882	861	112	342
							Pct	**1.088**	**1.081**	**1.0858**	**1.08653**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	170	218	31	14	214	96	260	52	318	29	31	12
2035	**232**	**625**	**58**	**23**	**521**	**117**	**316**	**41**	**367**	**43**	**23**	**19**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South
Intersection: Santiago at East/West Santa Ana
Scenario: 2035 Without Project
Time Period: 2035 Weekday AM

Link Inputs

	North		
	884	923	
990			1136
1214			1332
	385	222	
In - Out	3454.981	3630	-174.9

Turn Move Inputs

	99	179	306	
	SR	ST	SL	
59	EL		WR	278
687	ET		WT	601
48	ER		WL	109
	NL	NT	NR	
	32	90	70	

					RowTt	Target
From N	0	179	306	99	584	883.6
From S	90	0	70	32	192	221.778
From E	278	109	0	601	988	1135.73
From W	59	48	687	0	794	1213.87
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	271	463	150
	104	0	81	37
	320	125	0	691
	90	73	1050	0
ColTot	514	470	1594	878
Target	923	385	1332	990

					RowTt	Target
From N	0	222	387	169	778	884
From S	187	0	68	42	296	222
From E	574	103	0	779	1456	1136
From W	162	60	878	0	1100	1214
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	252	439	192
	140	0	51	31
	448	80	0	608
	179	66	969	0
ColTot	767	399	1459	831
Target	923	385	1332	990

					RowTt	Target
From N	0	244	401	229	873	884
From S	168	0	46	37	252	222
From E	539	77	0	724	1341	1136
From W	215	64	885	0	1164	1214
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	246	406	231
	148	0	41	33
	457	66	0	613
	225	67	922	0
ColTot	830	379	1369	877
Target	923	385	1332	990

					RowTt	Target
From N	0	251	395	261	906	884
From S	165	0	40	37	242	222
From E	508	67	0	692	1267	1136
From W	250	68	897	0	1215	1214
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	244	385	254
	151	0	36	34
	456	60	0	620
	250	68	896	0
ColTot	857	372	1318	909
Target	923	385	1332	990
Pct	**0.928**	**0.966**	**0.9894**	**0.91803**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	32	90	70	306	179	99	59	687	48	109	601	278
2035	**34**	**151**	**36**	**385**	**244**	**254**	**250**	**896**	**68**	**60**	**620**	**456**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West — Scenario: 2035 Without Project
Intersection: Santiago at Brown — Time Period: 2035 Weekday AM

Link Inputs

North

	227	99	
163			0
102			72
	23	29	
In - Out	357.651	357.7	1E-03

Turn Move Inputs

	132	11	54
	SR	ST	SL
71	EL		WR 0
9	ET		WT 0
9	ER		WL 0
	NL	NT	NR
	10	15	0

	To N	To S	To E	To W	RowTt	Target
From N	0	11	54	132	197	226.55
From S	15	0	0.001	10	25.001	28.75
From E	0.001	0.001	0	0.001	0.003	0.001
From W	71	9	9	0	89	102.35
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	13	62	152
	17	0	0	11
	0	0	0	0
	82	10	10	0
ColTot	99	23	72	163
Target	99	23	72	163

	To N	To S	To E	To W	RowTt	Target
From N	0	13	62	152	227	227
From S	17	0	0	11	29	29
From E	0	0	0	0	0	0
From W	82	10	10	0	102	102
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	13	62	152
	17	0	0	11
	0	0	0	0
	82	10	10	0
ColTot	99	23	72	163
Target	99	23	72	163

	To N	To S	To E	To W	RowTt	Target
From N	0	13	62	152	227	227
From S	17	0	0	11	29	29
From E	0	0	0	0	0	0
From W	82	10	10	0	102	102
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	13	62	152
	17	0	0	11
	0	0	0	0
	82	10	10	0
ColTot	99	23	72	163
Target	99	23	72	163
Pct	**1**	**1**	**1**	**1**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	10	15	0	54	11	132	71	9	9	0	0	0
2035	**11**	**17**	**0**	**62**	**13**	**152**	**82**	**10**	**10**	**0**	**0**	**0**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West — Scenario: 2035 Without Project
Intersection: Standard at 1st — Time Period: 2035 Weekday AM

Link Inputs

North

	306	430	
1513			1392
1414			1412
	451	695	

In - Out 3806.083 3806 0

Turn Move Inputs

	25	224	17	
	SR	ST	SL	
78	EL		WR	11
1076	ET		WT	1106
76	ER		WL	93
	NL	NT	NR	
	184	285	135	

					RowTt	Target
From N	0	224	17	25	266	305.877
From S	285	0	135	184	604	695.175
From E	11	93	0	1106	1210	1391.51
From W	78	76	1076	0	1230	1413.52
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	258	20	29
	328	0	155	212
	13	107	0	1272
	90	87	1237	0
ColTot	430	452	1411	1512
Target	430	451	1412	1513

					RowTt	Target
From N	0	257	20	29	305	306
From S	328	0	155	212	695	695
From E	13	107	0	1273	1392	1392
From W	90	87	1237	0	1414	1414
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	257	20	29
	328	0	156	212
	13	107	0	1272
	90	87	1237	0
ColTot	430	451	1412	1513
Target	430	451	1412	1513

					RowTt	Target
From N	0	257	20	29	306	306
From S	328	0	156	212	695	695
From E	13	107	0	1272	1392	1392
From W	90	87	1237	0	1414	1414
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	257	20	29
	328	0	156	212
	13	107	0	1272
	89	87	1237	0
ColTot	430	451	1412	1513
Target	430	451	1412	1513

					RowTt	Target
From N	0	257	20	29	306	306
From S	328	0	156	212	695	695
From E	13	106	0	1272	1391	1392
From W	89	87	1237	0	1414	1414
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	257	20	29
	328	0	156	212
	13	106	0	1272
	89	87	1237	0
ColTot	430	451	1412	1513
Target	430	451	1412	1513
Pct	**1**	**1**	**0.9999**	**1.00001**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	184	285	135	17	224	25	78	1076	76	93	1106	11
2035	**212**	**328**	**156**	**20**	**257**	**29**	**89**	**1237**	**87**	**106**	**1272**	**13**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment:	North/South		East/West	Scenario:	2035 Without Project
Intersection:	Grand	at	Santa Ana	Time Period:	2035 Weekday PM

Link Inputs

	North		
	1982	2168	
848			365
898			454
	1667	1650	
In - Out	4894.65	5138	-242.9

Turn Move Inputs

	380	1063	123	
	SR	ST	SL	
194	EL		WR	59
193	ET		WT	149
278	ER		WL	109
	NL	NT	NR	
	209	1148	79	

					RowTt	Target
From N	0	1063	123	380	1566	1982.3
From S	1148	0	79	209	1436	1649.9
From E	59	109	0	149	317	364.97
From W	194	278	193	0	665	897.52
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	1346	156	481
	1319	0	91	240
	68	125	0	172
	262	375	260	0
ColTot	1649	1846	507	893
Target	2168	1667	454	848

					RowTt	Target
From N	0	1215	139	457	1812	1982
From S	1734	0	81	228	2044	1650
From E	89	113	0	163	366	365
From W	344	339	233	0	916	898
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	1330	153	500
	1400	0	66	184
	89	113	0	163
	337	332	229	0
ColTot	1826	1775	447	847
Target	2168	1667	454	848

					RowTt	Target
From N	0	1249	155	501	1905	1982
From S	1662	0	67	184	1913	1650
From E	106	106	0	163	375	365
From W	400	312	232	0	944	898
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	1300	161	521
	1433	0	58	159
	103	103	0	159
	380	296	221	0
ColTot	1917	1700	440	839
Target	2168	1667	454	848

					RowTt	Target
From N	0	1275	167	527	1969	1982
From S	1621	0	59	161	1842	1650
From E	117	101	0	160	378	365
From W	430	291	228	0	949	898
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	1284	168	531
	1453	0	53	144
	112	98	0	155
	407	275	216	0
ColTot	1972	1657	437	829
Target	2168	1667	454	848
Pct	**0.90952**	**0.9936**	**0.9617**	**0.97787**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	209	1148	79	123	1063	380	194	193	278	109	149	59
2035	**144**	**1453**	**53**	**168**	**1284**	**531**	**407**	**216**	**275**	**98**	**155**	**112**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South — East/West — Scenario: 2035 Without Project
Intersection: Grand at 4th — Time Period: 2035 Weekday PM

Link Inputs

	North		
	1069	1546	
1025			1151
847			736
	1191	1431	
In - Out	4497.78	4498	0

Turn Move Inputs

	80	753	98
	SR	ST	SL
162	EL		WR 131
495	ET		WT 666
80	ER		WL 204
	NL	NT	NR
	146	1051	47

	To N	To S	To E	To W	RowTt	Target
From N	0	753	98	80	931	1069.4
From S	1051	0	47	146	1244	1430.9
From E	131	204	0	666	1001	1150.5
From W	162	80	495	0	737	846.95
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	865	113	92
	1209	0	54	168
	151	234	0	765
	186	92	569	0
ColTot	1546	1191	735	1025
Target	1546	1191	736	1025

	To N	To S	To E	To W	RowTt	Target
From N	0	865	113	92	1069	1069
From S	1209	0	54	168	1431	1431
From E	151	234	0	766	1151	1151
From W	186	92	569	0	847	847
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	865	113	92
	1209	0	54	168
	151	234	0	766
	186	92	569	0
ColTot	1546	1191	736	1025
Target	1546	1191	736	1025

	To N	To S	To E	To W	RowTt	Target
From N	0	865	113	92	1069	1069
From S	1209	0	54	168	1431	1431
From E	151	234	0	766	1150	1151
From W	186	92	569	0	847	847
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	865	113	92
	1209	0	54	168
	151	234	0	766
	186	92	569	0
ColTot	1546	1191	736	1025
Target	1546	1191	736	1025

	To N	To S	To E	To W	RowTt	Target
From N	0	865	113	92	1069	1069
From S	1209	0	54	168	1431	1431
From E	151	234	0	766	1150	1151
From W	186	92	569	0	847	847
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	865	113	92
	1209	0	54	168
	151	234	0	766
	186	92	569	0
ColTot	1546	1191	736	1025
Target	1546	1191	736	1025
Pct	**0.99998**	**1**	**1**	**1.00002**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	146	1051	47	98	753	80	162	495	80	204	666	131
2035	**168**	**1209**	**54**	**113**	**865**	**92**	**186**	**569**	**92**	**234**	**766**	**151**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment: North/South at East/West
Intersection: Grand at 1st
Scenario: 2035 Without Project
Time Period: 2035 Weekday PM

Link Inputs

North

	1317	1705	
1607			1227
1597			1308
	1732	2277	
In - Out	6418.84	6353	65.98

Turn Move Inputs

	85	966	95	
	SR	ST	SL	
179	EL		WR	42
985	ET		WT	883
111	ER		WL	142
	NL	NT	NR	
	119	1261	57	

					RowTt	Target
From N	0	966	95	85	1146	1317.4
From S	1261	0	57	119	1437	2277.1
From E	42	142	0	883	1067	1227
From W	179	111	985	0	1275	1597.4
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	1110	109	98
	1998	0	90	189
	48	163	0	1015
	224	139	1234	0
ColTot	2271	1413	1434	1302
Target	1705	1732	1308	1607

					RowTt	Target
From N	0	1361	100	121	1582	1317
From S	1501	0	82	233	1816	2277
From E	36	200	0	1254	1490	1227
From W	168	171	1126	0	1465	1597
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	1134	83	100
	1882	0	103	292
	30	165	0	1032
	184	186	1228	0
ColTot	2095	1485	1414	1425
Target	1705	1732	1308	1607

					RowTt	Target
From N	0	1323	77	113	1513	1317
From S	1532	0	96	329	1957	2277
From E	24	192	0	1164	1381	1227
From W	149	217	1136	0	1502	1597
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	1152	67	99
	1783	0	111	383
	22	171	0	1035
	159	231	1208	0
ColTot	1963	1553	1386	1516
Target	1705	1732	1308	1607

					RowTt	Target
From N	0	1284	63	105	1452	1317
From S	1549	0	105	406	2060	2277
From E	19	191	0	1096	1306	1227
From W	138	257	1140	0	1535	1597
	To N	To S	To E	To W		

	To N	To S	To E	To W
	0	1165	57	95
	1712	0	116	449
	18	179	0	1030
	144	268	1186	0
ColTot	1873	1612	1359	1574
Target	1705	1732	1308	1607
Pct	**1.09841**	**0.9306**	**1.0392**	**0.97952**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	119	1261	57	95	966	85	179	985	111	142	883	42
2035	**449**	**1712**	**116**	**57**	**1165**	**95**	**144**	**1186**	**268**	**179**	**1030**	**18**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment:	North/South		East/West	Scenario:	2030 w/o Project Baseline
Intersection:	Penn Way	at	I-5 SB Ramps	Time Period:	2035 Without Project / 2035 Weekday PM

Link Inputs

	North		
	716	537	
0			411
0			776
	472	640	
In - Out	1766.843	1786	-18.93

Turn Move Inputs

	0	64	542	
	SR	ST	SL	
0	EL		WR	232
0	ET		WT	0
0	ER		WL	125
	NL	NT	NR	
	0	171	133	

					RowTt	Target		To N	To S	To E	To W
From N	0	64	542	0.001	606	716.12		0	76	640	0
From S	171	0	133	0.001	304	640.17		360	0	280	0
From E	232	125	0	0.001	357	410.55		267	144	0	0
From W	0.001	0.001	0.001	0	0.003	0.001		0	0	0	0
	To N	To S	To E	To W			ColTot	627	219	921	0
							Target	537	472	776	0

					RowTt	Target		To N	To S	To E	To W
From N	0	163	540	0	703	716		0	166	550	0
From S	309	0	236	0	545	640		363	0	277	0
From E	229	309	0	0	538	411		174	236	0	0
From W	0	0	0	0	0	0		0	0	0	0
	To N	To S	To E	To W			ColTot	537	402	828	0
							Target	537	472	776	0

					RowTt	Target		To N	To S	To E	To W
From N	0	195	516	0	711	716		0	196	520	0
From S	363	0	260	0	623	640		373	0	267	0
From E	175	277	0	0	452	411		159	252	0	0
From W	0	0	0	0	0	0		0	0	0	0
	To N	To S	To E	To W			ColTot	531	448	787	0
							Target	537	472	776	0

					RowTt	Target		To N	To S	To E	To W
From N	0	207	513	0	719	716		0	206	510	0
From S	377	0	264	0	641	640		377	0	263	0
From E	160	265	0	0	426	411		155	256	0	0
From W	0	0	0	0	0	0		0	0	0	0
	To N	To S	To E	To W			ColTot	531	462	774	0
							Target	537	472	776	0
							Pct	**0.98881**	**0.9779**	**0.9968**	**0.99213**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	0	171	133	542	64	0	0	0	0	125	0	232
2035	**0**	**377**	**263**	**510**	**206**	**0**	**0**	**0**	**0**	**256**	**0**	**155**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment:	North/South		East/West	Scenario:	2030 w/o Project Baseline
Intersection:	I-5 SB Ramps	at	Santa Ana Bl	Time Period:	2035 Without Project 2035 Weekday PM

Link Inputs

	North		
	455	656	
1010			1105
1185			1123
	0	0	
In - Out	2745.411	2788	-42.63

Turn Move Inputs

	130	0	266
	SR	ST	SL
357	EL		WR 213
625	ET		WT 748
0	ER		WL 0
	NL	NT	NR
	0	0	0

					RowTt	Target		To N	To S	To E	To W
From N	0	0.001	266	130	396	455.4		0	0	306	149
From S	0.001	0	0.001	0.001	0.003	1		0	0	0	0
From E	213	0.001	0	748	961	1105.2		245	0	0	860
From W	357	0.001	625	0	982	1184.9		431	0	754	0
	To N	To S	To E	To W			ColTot	676	0	1060	1010
							Target	656	0	1123	1010

					RowTt	Target		To N	To S	To E	To W
From N	0	0	324	149	473	455		0	1	312	144
From S	0	0	0	0	1	1		0	0	0	0
From E	238	0	0	860	1097	1105		239	0	0	866
From W	418	0	799	0	1216	1185		407	0	778	0
	To N	To S	To E	To W			ColTot	646	1	1090	1010
							Target	656	0	1123	1010

					RowTt	Target		To N	To S	To E	To W
From N	0	0	321	144	465	455		0	1	315	141
From S	0	0	0	0	1	1		0	0	0	0
From E	243	0	0	866	1108	1105		242	0	0	863
From W	413	0	801	0	1214	1185		403	0	782	0
	To N	To S	To E	To W			ColTot	645	1	1097	1004
							Target	656	0	1123	1010

					RowTt	Target		To N	To S	To E	To W
From N	0	0	322	142	464	455		0	0	316	139
From S	0	0	0	0	1	1		0	0	0	0
From E	246	0	0	868	1114	1105		244	0	0	861
From W	409	0	801	0	1210	1185		401	0	784	0
	To N	To S	To E	To W			ColTot	645	0	1101	1001
							Target	656	0	1123	1010
							Pct	**0.98423**	**0.9825**	**0.9803**	**0.99097**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	0	0	0	266	0	130	357	625	0	0	748	213
2035	**0**	**0**	**0**	**316**	**0**	**139**	**401**	**784**	**0**	**0**	**861**	**244**

Turn Movement Forecast: Row-Column-Sum Method

					2030 w/o Project Baseline
Street Alignment:	North/South		East/West	Scenario:	2035 Without Project
Intersection:	I-5 NB Ramps	at	17th St	Time Period:	2035 Weekday PM

Link Inputs

	North		
	245	323	
2951			2096
1755			1425
	335	937	
In - Out	5033.55	5034	0

Turn Move Inputs

	107	0	106	
	SR	ST	SL	
128	EL		WR	87
1107	ET		WT	1736
291	ER		WL	0
	NL	NT	NR	
	723	66	26	

					RowTt	Target		To N	To S	To E	To W
From N	0	0	106	107	213	244.95		0	0	122	123
From S	66	0	26	723	815	937.25		76	0	30	831
From E	87	0	0	1736	1823	2096.5		100	0	0	1996
From W	128	291	1107	0	1526	1754.9		147	335	1273	0
	To N	To S	To E	To W			ColTot	323	335	1425	2951
							Target	323	335	1425	2951

					RowTt	Target		To N	To S	To E	To W
From N	0	0	122	123	245	245		0	0	122	123
From S	76	0	30	831	937	937		76	0	30	831
From E	100	0	0	1996	2096	2096		100	0	0	1996
From W	147	335	1273	0	1755	1755		147	335	1273	0
	To N	To S	To E	To W			ColTot	323	335	1425	2951
							Target	323	335	1425	2951

					RowTt	Target		To N	To S	To E	To W
From N	0	0	122	123	245	245		0	0	122	123
From S	76	0	30	831	937	937		76	0	30	831
From E	100	0	0	1996	2096	2096		100	0	0	1996
From W	147	335	1273	0	1755	1755		147	335	1273	0
	To N	To S	To E	To W			ColTot	323	335	1425	2951
							Target	323	335	1425	2951

					RowTt	Target		To N	To S	To E	To W
From N	0	0	122	123	245	245		0	0	122	123
From S	76	0	30	831	937	937		76	0	30	831
From E	100	0	0	1996	2096	2096		100	0	0	1996
From W	147	335	1273	0	1755	1755		147	335	1273	0
	To N	To S	To E	To W			ColTot	323	335	1425	2951
							Target	323	335	1425	2951
							Pct	**1**	**1**	**1**	**1**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	723	66	26	106	0	107	128	1107	291	0	1736	87
2035	**831**	**76**	**30**	**122**	**0**	**123**	**147**	**1273**	**335**	**0**	**1996**	**100**

Turn Movement Forecast: Row-Column-Sum Method

Street Alignment:	North/South		East/West	Scenario:	2030 w/o Project Baseline
Intersection:	Grand Av.	at	I-5 NB Ramps	Time Period:	2035 Without Project 2035 Weekday PM

Link Inputs

	North		
	1486	3279	
0			1446
0			695
	1967	3101	
In - Out	6033	5941	93

Turn Move Inputs

	0	1041	39	
	SR	ST	SL	
0	EL		WR	748
0	ET		WT	0
0	ER		WL	509
	NL	NT	NR	
	0	1769	565	

					RowTt	Target		To N	To S	To E	To W
From N	0	1041	39	0.001	1080	1486.3		0	1433	54	0
From S	1769	0	565	0.001	2334	3101.3		2351	0	751	0
From E	748	509	0	0.001	1257	1445.6		860	585	0	0
From W	0.001	0.001	0.001	0	0.003	0.001		0	0	0	0
	To N	To S	To E	To W			ColTot	3211	2018	804	0
							Target	3279	1967	695	0

					RowTt	Target		To N	To S	To E	To W
From N	0	1397	46	0	1443	1486		0	1439	48	0
From S	2400	0	648	0	3049	3101		2442	0	659	0
From E	878	571	0	0	1449	1446		876	569	0	0
From W	0	0	0	0	0	0		0	0	0	0
	To N	To S	To E	To W			ColTot	3318	2008	707	0
							Target	3279	1967	695	1

					RowTt	Target		To N	To S	To E	To W
From N	0	1410	47	0	1457	1486		0	1438	48	0
From S	2413	0	648	0	3061	3101		2445	0	656	0
From E	866	558	0	0	1424	1446		879	566	0	0
From W	0	0	0	0	0	0		0	0	0	0
	To N	To S	To E	To W			ColTot	3324	2004	704	1
							Target	3279	1967	695	1

					RowTt	Target		To N	To S	To E	To W
From N	0	1412	47	0	1459	1486		0	1438	48	0
From S	2412	0	647	0	3059	3101		2445	0	656	0
From E	867	556	0	0	1423	1446		881	564	0	0
From W	0	0	0	0	0	0		0	0	0	0
	To N	To S	To E	To W			ColTot	3325	2002	704	1
							Target	3279	1967	695	1
							Pct	**1.01425**	**1.0178**	**1.0141**	**1.0161**

Turn Movements and Traffic Volumes

Year	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
Existing	0	1769	565	39	1041	0	0	0	0	509	0	748
2035	**0**	**2445**	**656**	**48**	**1438**	**0**	**0**	**0**	**0**	**564**	**0**	**881**

APPENDIX G
2035 Without Project Conditions Analysis Worksheets

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Scenario Report

Scenario:	2035NPAM
Command:	2035NP AM
Volume:	2035NPAM
Geometry:	Future
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Flower St (NS)/ Civic Center D	C	xxxxx	0.789	C	xxxxx	0.789	+ 0.000 V/C
# 2 Flower St (N/S) / Santa Ana Bl	B	xxxxx	0.685	B	xxxxx	0.685	+ 0.000 V/C
# 3 Parton St (E/W) / Santa Ana Bl	A	xxxxx	0.316	A	xxxxx	0.316	+ 0.000 V/C
# 4 Ross St (N/S) / Civic Center D	B	xxxxx	0.634	B	xxxxx	0.634	+ 0.000 V/C
# 5 Ross St (N/S) / Santa Ana Bl (	A	xxxxx	0.581	A	xxxxx	0.581	+ 0.000 V/C
# 6 Ross St (N/S) / 4th St (E/W)	B	11.7	0.000	B	11.7	0.000	+ 0.000 D/V
# 7 Broadway (N/S) / Civic Center	C	xxxxx	0.721	C	xxxxx	0.721	+ 0.000 V/C
# 8 Broadway (N/S) / Santa Ana Bl	A	xxxxx	0.595	A	xxxxx	0.595	+ 0.000 V/C
# 9 Broadway (N/S) / 5th St (E/W)	A	xxxxx	0.399	A	xxxxx	0.399	+ 0.000 V/C
# 10 Broadway (N/S) / 4th St (E/W)	A	xxxxx	0.449	A	xxxxx	0.449	+ 0.000 V/C
# 11 Broadway (N/S)/ 3rd st (E/W)	A	xxxxx	0.406	A	xxxxx	0.406	+ 0.000 V/C
# 12 Broadway (N/S) / 1st St (E/W)	C	xxxxx	0.779	C	xxxxx	0.779	+ 0.000 V/C
# 13 Sycamore St (N/S) / Civic Cent	A	xxxxx	0.484	A	xxxxx	0.484	+ 0.000 V/C
# 14 Sycamore St (N/S) / Santa Ana	D	28.7	0.000	D	28.7	0.000	+ 0.000 D/V
# 15 Sycamore St (N/S) / 5th St (E/	C	19.2	0.000	C	19.2	0.000	+ 0.000 D/V
# 16 Sycamore St (N/S) / 4th St (E/	A	8.4	0.259	A	8.4	0.259	+ 0.000 V/C
# 17 Main St (N/S) / Civic Center D	D	xxxxx	0.875	D	xxxxx	0.875	+ 0.000 V/C
# 18 Main St (N/S) / Santa Ana Dr (	C	xxxxx	0.799	C	xxxxx	0.799	+ 0.000 V/C
# 19 Main St (N/S) / 5th St (E/W)	B	xxxxx	0.611	B	xxxxx	0.611	+ 0.000 V/C
# 20 Main St (N/S) / 4th St (E/W)	B	xxxxx	0.613	B	xxxxx	0.613	+ 0.000 V/C
# 21 Main St (N/S) / 3rd St (E/W)	A	xxxxx	0.533	A	xxxxx	0.533	+ 0.000 V/C
# 22 Main St (N/S) / 1st St (E/W)	E	xxxxx	0.918	E	xxxxx	0.918	+ 0.000 V/C
# 23 Bush St (N/S) / Santa Ana Bl (	A	xxxxx	0.335	A	xxxxx	0.335	+ 0.000 V/C
# 24 Bush St (N/S) / 5th St (E/W)	A	xxxxx	0.297	A	xxxxx	0.297	+ 0.000 V/C

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 25 Bush St (N/S) / 4th St (E/W)	A	xxxxx	0.347	A	xxxxx	0.347	+ 0.000 V/C
# 26 Spurgeon St (N/S) / 1st St (E/	B	11.3	0.000	B	11.3	0.000	+ 0.000 D/V
# 27 French St (N/S) / Santa Ana Bl	C	24.5	0.000	C	24.5	0.000	+ 0.000 D/V
# 28 French St (N/S) / 4th St (E/W)	A	xxxxx	0.342	A	xxxxx	0.342	+ 0.000 V/C
# 29 Lacy St (N/S) / Civic Center D	D	28.6	0.000	D	28.6	0.000	+ 0.000 D/V
# 30 Lacy st (N/S) / Santa Ana Bl (	F	122.1	0.000	F	122.1	0.000	+ 0.000 D/V
# 31 Lacy St (N/S) / Brown St (E/W)	A	7.3	0.109	A	7.3	0.109	+ 0.000 V/C
# 32 Lacy St (N/S) / 4th St (E/W)	A	xxxxx	0.508	A	xxxxx	0.508	+ 0.000 V/C
# 33 Lacy St (N/S) / 1st St (E/W)	E	45.3	0.000	E	45.3	0.000	+ 0.000 D/V
# 34 Santiago St (N/S) / Washington	F	126.8	1.561	F	126.8	1.561	+ 0.000 V/C
# 35 Santiago St (N/S) / Civic Cent	F	280.0	2.320	F	280.0	2.320	+ 0.000 V/C
# 36 Santiago St (N/S) / Santa Ana	E	xxxxx	0.904	E	xxxxx	0.904	+ 0.000 V/C
# 40 Standard Av (N/S) / 1st St (E/	E	xxxxx	0.940	E	xxxxx	0.940	+ 0.000 V/C
# 42 Grand Av (N/S) / Santa Ana Bl	F	xxxxx	1.178	F	xxxxx	1.178	+ 0.000 V/C
# 43 Grand Av (N/S) / 4th St (E/W)	C	xxxxx	0.747	C	xxxxx	0.747	+ 0.000 V/C
# 44 Grand Av (N/S) / 1st St (E/W)	D	xxxxx	0.894	D	xxxxx	0.894	+ 0.000 V/C
# 45 Penn Way (NS) at I-5 SB Ramps	C	25.1	0.569	C	25.1	0.569	+ 0.000 D/V
# 46 I-5 SB Ramps (NS) / Santa Ana	C	29.2	0.643	C	29.2	0.643	+ 0.000 D/V
# 47 I-5 NB Ramps (NS) / 17th St. (	D	39.9	0.903	D	39.9	0.903	+ 0.000 D/V
# 48 I-5 NB Ramps (NS) / Grand Ave	C	30.2	0.934	C	30.2	0.934	+ 0.000 D/V
# 49 Mortimer (N/S) / Santa Ana Blv	C	23.1	0.000	C	23.1	0.000	+ 0.000 D/V
# 50 Mortimer (N/S) / 5th St (E/W)	A	9.5	0.343	A	9.5	0.343	+ 0.000 V/C

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Flower St (NS)/ Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.789
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 50 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1 0	1	0	1	1 0	1	0	1	1 0	1	0	1	1 0
Volume Module:																
Base Vol:	181	801	192		141	738	210		155	649	184		163	543	50	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	181	801	192		141	738	210		155	649	184		163	543	50	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	181	801	192		141	738	210		155	649	184		163	543	50	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	181	801	192		141	738	210		155	649	184		163	543	50	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	181	801	192		141	738	210		155	649	184		163	543	50	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	181	801	192		141	738	210		155	649	184		163	543	50	
Saturation Flow Module:																
Sat/Lane:	1700	1700	1700		1700	1700	1700		1700	1700	1700		1700	1700	1700	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	1.61	0.39		1.00	1.56	0.44		1.00	1.56	0.44		1.00	1.83	0.17	
Final Sat.:	1598	2743	657		1598	2647	753		1598	2649	751		1598	3113	287	
Capacity Analysis Module:																
Vol/Sat:	0.11	0.29	0.29		0.09	0.28	0.28		0.10	0.25	0.24		0.10	0.17	0.17	
Crit Moves:	****					****				****				****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Flower St (N/S) / Santa Ana Bl (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.685
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 36 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	0 3	0 1	1	0 2	0 1
Volume Module:												
Base Vol:	84	1114	82	190	1005	100	121	624	223	78	341	135
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	84	1114	82	190	1005	100	121	624	223	78	341	135
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	84	1114	82	190	1005	100	121	624	223	78	341	135
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	84	1114	82	190	1005	100	121	624	223	78	341	135
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	84	1114	82	190	1005	100	121	624	223	78	341	135
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	84	1114	82	190	1005	100	121	624	223	78	341	135
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00
Final Sat.:	1598	3400	1598	1598	3400	1598	1598	5100	1598	1598	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.05	0.33	0.05	0.12	0.30	0.06	0.08	0.12	0.14	0.05	0.10	0.08
Crit Moves:		****		****					****	****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Parton St (E/W) / Santa Ana Bl (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.316
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 18 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 1! 0	0	0	1 0	0 1	1	0 2	1 0	1	0 2	1 0
Volume Module:												
Base Vol:	17	6	37	24	8	26	36	696	133	87	577	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	17	6	37	24	8	26	36	696	133	87	577	98
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	17	6	37	24	8	26	36	696	133	87	577	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	17	6	37	24	8	26	36	696	133	87	577	98
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	6	37	24	8	26	36	696	133	87	577	98
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	17	6	37	24	8	26	36	696	133	87	577	98
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.28	0.10	0.62	0.75	0.25	1.00	1.00	2.52	0.48	1.00	2.56	0.44
Final Sat.:	482	170	1048	1275	425	1598	1598	4282	818	1598	4360	740
Capacity Analysis Module:												
Vol/Sat:	0.01	0.04	0.04	0.01	0.02	0.02	0.02	0.16	0.16	0.05	0.13	0.13
Crit Moves:		****		****				****		****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Ross St (N/S) / Civic Center Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.634
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	0 1	1	0 0	1 0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	133	226	77	75	252	85	61	712	118	77	841	58
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	133	226	77	75	252	85	61	712	118	77	841	58
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	133	226	77	75	252	85	61	712	118	77	841	58
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	133	226	77	75	252	85	61	712	118	77	841	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	133	226	77	75	252	85	61	712	118	77	841	58
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	133	226	77	75	252	85	61	712	118	77	841	58
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.75	0.25	1.00	1.72	0.28	1.00	1.87	0.13
Final Sat.:	1598	1700	1598	1598	1271	429	1598	2917	483	1598	3181	219
Capacity Analysis Module:												
Vol/Sat:	0.08	0.13	0.05	0.05	0.20	0.20	0.04	0.24	0.24	0.05	0.26	0.26
Crit Moves:	****			****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Ross St (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.581
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	0 1	1	0 1	0 1	1	0 2	0 1	1	0 3	0 1
Volume Module:												
Base Vol:	83	243	112	69	198	163	89	674	36	234	537	118
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	83	243	112	69	198	163	89	674	36	234	537	118
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	83	243	112	69	198	163	89	674	36	234	537	118
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	83	243	112	69	198	163	89	674	0	234	537	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	243	112	69	198	163	89	674	0	234	537	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	83	243	112	69	198	163	89	674	0	234	537	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00
Final Sat.:	1598	1700	1598	1598	1700	1598	1598	3400	1598	1598	5100	1598
Capacity Analysis Module:												
Vol/Sat:	0.05	0.14	0.07	0.04	0.12	0.10	0.06	0.20	0.00	0.15	0.11	0.00
Crit Moves:		****		****				****		****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Ross St (N/S) / 4th St (E/W)

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: B[11.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 1 0			1 0 1 0 0			0 0 0 0 1			1 0 0 0 1		
Volume Module:												
Base Vol:	0	305	13	50	228	0	0	0	2	24	0	61
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	305	13	50	228	0	0	0	2	24	0	61
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	305	13	50	228	0	0	0	2	24	0	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	305	13	50	228	0	0	0	2	24	0	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	305	13	50	228	0	0	0	2	24	0	61
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	6.2	7.1	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	3.3	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	318	xxxx	xxxxx	xxxx	xxxx	228	641	xxxx	312
Potent Cap.:	xxxx	xxxx	xxxxx	1253	xxxx	xxxxx	xxxx	xxxx	816	391	xxxx	733
Move Cap.:	xxxx	xxxx	xxxxx	1253	xxxx	xxxxx	xxxx	xxxx	816	378	xxxx	733
Volume/Cap:	xxxx	xxxx	xxxx	0.04	xxxx	xxxx	xxxx	xxxx	0.00	0.06	xxxx	0.08
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	0.0	0.2	xxxx	0.3
Control Del:	xxxxx	xxxx	xxxxx	8.0	xxxx	xxxxx	xxxxx	xxxx	9.4	15.2	xxxx	10.4
LOS by Move:	*	*	*	A	*	*	*	*	A	C	*	B
Movement:	LT	-	LTR - RT	LT	-	LTR - RT	LT	-	LTR - RT	LT	-	LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			9.4			11.7		
ApproachLOS:	*			*			A			B		

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Broadway (N/S) / Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.721
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 40 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Ignore				Ignore				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1 0	2	0	1	1 0	2	0	1	1 0	1	1	0	1 0	1	1	0
Volume Module:																
Base Vol:	120	619	72		153	805	303		172	554	84		56	733	123	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	120	619	72		153	805	303		172	554	84		56	733	123	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	120	619	72		153	805	303		172	554	84		56	733	123	
User Adj:	1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	120	619	0		153	805	0		172	554	84		56	733	123	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	120	619	0		153	805	0		172	554	84		56	733	123	
PCE Adj:	1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	120	619	0		153	805	0		172	554	84		56	733	123	
Saturation Flow Module:																
Sat/Lane:	1700	1700	1700		1700	1700	1700		1700	1700	1700		1700	1700	1700	
Adjustment:	0.94	1.00	0.94		0.94	1.00	0.94		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	1.74	0.26		1.00	1.71	0.29	
Final Sat.:	1598	3400	1598		1598	3400	1598		1598	2952	448		1598	2911	489	
Capacity Analysis Module:																
Vol/Sat:	0.08	0.18	0.00		0.10	0.24	0.00		0.11	0.19	0.19		0.04	0.25	0.25	
Crit Moves:	****					****			****					****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Broadway (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.595
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 2	0 0	0	0 1	1 0	0	0 0	0 0 0	0	1 1	1 0
Volume Module:												
Base Vol:	47	760	0	0	833	239	0	0	0	47	839	134
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	47	760	0	0	833	239	0	0	0	47	839	134
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	47	760	0	0	833	239	0	0	0	47	839	134
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	47	760	0	0	833	239	0	0	0	47	839	134
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	760	0	0	833	239	0	0	0	47	839	134
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	47	760	0	0	833	239	0	0	0	47	839	134
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.55	0.45	0.00	0.00	0.00	0.14	2.47	0.39
Final Sat.:	1598	3400	0	0	2642	758	0	0	0	235	4195	670
Capacity Analysis Module:												
Vol/Sat:	0.03	0.22	0.00	0.00	0.32	0.32	0.00	0.00	0.00	0.03	0.20	0.20
Crit Moves:	****				****						****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Broadway (N/S) / 5th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.399
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	20	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 1	1 0	1	0 2	0 0	0	1 1	1 0	0	0 0	0 0
Volume Module:												
Base Vol:	0	574	44	87	616	0	135	431	8	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	574	44	87	616	0	135	431	8	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	574	44	87	616	0	135	431	8	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	574	44	87	616	0	135	431	8	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	574	44	87	616	0	135	431	8	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	574	44	87	616	0	135	431	8	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00	0.94	1.00	0.94
Lanes:	0.00	1.86	0.14	1.00	2.00	0.00	0.71	2.25	0.04	0.00	0.00	0.00
Final Sat.:	0	3158	242	1598	3400	0	1199	3829	71	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.18	0.18	0.05	0.18	0.00	0.08	0.11	0.11	0.00	0.00	0.00
Crit Moves:		****		****				****				

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Broadway (N/S) / 4th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.449
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 22 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	1 0	1	0 1	1 0	0	0 1!	0 0	0	0 1!	0 0
Volume Module:												
Base Vol:	62	875	90	19	546	89	19	65	37	32	111	14
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	62	875	90	19	546	89	19	65	37	32	111	14
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	62	875	90	19	546	89	19	65	37	32	111	14
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	62	875	90	19	546	89	19	65	37	32	111	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	62	875	90	19	546	89	19	65	37	32	111	14
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	62	875	90	19	546	89	19	65	37	32	111	14
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.81	0.19	1.00	1.72	0.28	0.16	0.54	0.30	0.20	0.71	0.09
Final Sat.:	1598	3083	317	1598	2923	477	267	913	520	346	1202	152
Capacity Analysis Module:												
Vol/Sat:	0.04	0.28	0.28	0.01	0.19	0.19	0.01	0.07	0.07	0.02	0.09	0.09
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Broadway (N/S)/ 3rd st (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.406
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 20 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 0	1 0	1	0 1	0 1	1	0 1	0 1	1	0 1	0 0
Volume Module:												
Base Vol:	28	436	9	29	367	31	41	59	20	11	42	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	28	436	9	29	367	31	41	59	20	11	42	43
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	28	436	9	29	367	31	41	59	20	11	42	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	28	436	9	29	367	31	41	59	20	11	42	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	436	9	29	367	31	41	59	20	11	42	43
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	28	436	9	29	367	31	41	59	20	11	42	43
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.98	0.02	1.00	1.00	1.00	1.00	0.75	0.25	1.00	0.49	0.51
Final Sat.:	1598	1666	34	1598	1700	1598	1598	1270	430	1598	840	860
Capacity Analysis Module:												
Vol/Sat:	0.02	0.26	0.26	0.02	0.22	0.02	0.03	0.05	0.05	0.01	0.05	0.05
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Broadway (N/S) / 1st St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.779
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	0 1	1	0 1	0 1	1	0 2	1 0	1	0 2	1 0
Volume Module:												
Base Vol:	69	410	119	80	383	71	209	1583	81	178	1168	117
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	69	410	119	80	383	71	209	1583	81	178	1168	117
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	69	410	119	80	383	71	209	1583	81	178	1168	117
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	69	410	119	80	383	71	209	1583	81	178	1168	117
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	69	410	119	80	383	71	209	1583	81	178	1168	117
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	69	410	119	80	383	71	209	1583	81	178	1168	117
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.85	0.15	1.00	2.73	0.27
Final Sat.:	1598	1700	1598	1598	1700	1598	1598	4852	248	1598	4636	464
Capacity Analysis Module:												
Vol/Sat:	0.04	0.24	0.07	0.05	0.23	0.04	0.13	0.33	0.33	0.11	0.25	0.25
Crit Moves:		****		****				****		****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Sycamore St (N/S) / Civic Center Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.484
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	23	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 1!	0 0	0	0 1!	0 0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	26	102	32	33	24	26	80	534	71	33	817	102
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	26	102	32	33	24	26	80	534	71	33	817	102
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	102	32	33	24	26	80	534	71	33	817	102
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	26	102	32	33	24	26	80	534	71	33	817	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	102	32	33	24	26	80	534	71	33	817	102
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	26	102	32	33	24	26	80	534	71	33	817	102
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.16	0.64	0.20	0.40	0.29	0.31	1.00	1.77	0.23	1.00	1.78	0.22
Final Sat.:	276	1084	340	676	492	533	1598	3001	399	1598	3023	377
Capacity Analysis Module:												
Vol/Sat:	0.02	0.09	0.09	0.02	0.05	0.05	0.05	0.18	0.18	0.02	0.27	0.27
Crit Moves:		****		****				****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #14 Sycamore St (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 3.8 Worst Case Level Of Service: D[28.7]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0 0	0	0	0	1 0	0	0	0	0 0	0	1	1	1 0
Volume Module:																
Base Vol:	10	40	0	0	58	26	0	0	0	80	947	33				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	10	40	0	0	58	26	0	0	0	80	947	33				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	10	40	0	0	58	26	0	0	0	80	947	33				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	10	40	0	0	58	26	0	0	0	80	947	33				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	10	40	0	0	58	26	0	0	0	80	947	33				
Critical Gap Module:																
Critical Gp:	7.1	6.5	xxxxx	xxxxx	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx				
FollowUpTim:	3.5	4.0	xxxxx	xxxxx	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	505	1140	xxxxx	xxxx	1124	332	xxxx	xxxx	xxxxx	0	xxxx	xxxxx				
Potent Cap.:	481	203	xxxxx	xxxx	207	714	xxxx	xxxx	xxxxx	900	xxxx	xxxxx				
Move Cap.:	328	183	xxxxx	xxxx	188	714	xxxx	xxxx	xxxxx	900	xxxx	xxxxx				
Volume/Cap:	0.03	0.22	xxxx	xxxx	0.31	0.04	xxxx	xxxx	xxxx	0.09	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.4	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	201	xxxx	xxxxx	xxxx	xxxx	243	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	0.9	xxxx	xxxxx	xxxxx	xxxx	1.5	xxxxx	xxxx	xxxxx	0.3	xxxx	xxxxx				
Shrd ConDel:	28.7	xxxx	xxxxx	xxxxx	xxxx	27.4	xxxxx	xxxx	xxxxx	9.4	xxxx	xxxxx				
Shared LOS:	D	*	*	*	*	D	*	*	*	A	*	*				
ApproachDel:	28.7			27.4			xxxxxx			xxxxxx						
ApproachLOS:	D			D			*			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #15 Sycamore St (N/S) / 5th St (E/W)

Average Delay (sec/veh): 3.6 Worst Case Level Of Service: C[19.2]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	1 0	0	1	0	0 0	0	1	1	1 0	0	0	0	0 0
Volume Module:																
Base Vol:	0	34	27	113	41	0	19	895	19	0	0	0				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	0	34	27	113	41	0	19	895	19	0	0	0				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	0	34	27	113	41	0	19	895	19	0	0	0				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	0	34	27	113	41	0	19	895	19	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	0	34	27	113	41	0	19	895	19	0	0	0				
Critical Gap Module:																
Critical Gp:	xxxxx	6.5	6.2	7.1	6.5	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	4.0	3.3	3.5	4.0	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	xxxx	943	308	353	952	xxxxx	0	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	265	737	737	605	261	xxxxx	900	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Move Cap.:	xxxx	259	737	516	256	xxxxx	900	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	0.13	0.04	0.22	0.16	xxxx	0.02	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	xxxx	xxxx	363	406	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	0.6	1.7	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	16.9	19.2	xxxx	xxxxx	9.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	C	C	*	*	A	*	*	*	*	*				
ApproachDel:	16.9			19.2			xxxxxx			xxxxxx						
ApproachLOS:	C			C			*			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #16 Sycamore St (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.259
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	8.4
Optimal Cycle:	0	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	24	33	18	14	14	30	98	38	84	93	34
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	24	33	18	14	14	30	98	38	84	93	34
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	24	33	18	14	14	30	98	38	84	93	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	24	33	18	14	14	30	98	38	84	93	34
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	24	33	18	14	14	30	98	38	84	93	34
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	9	24	33	18	14	14	30	98	38	84	93	34
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.14	0.36	0.50	0.40	0.30	0.30	0.18	0.59	0.23	0.40	0.44	0.16
Final Sat.:	102	271	373	280	218	218	148	484	188	325	359	131
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.06	0.06	0.06	0.20	0.20	0.20	0.26	0.26	0.26
Crit Moves:	****			****					****		****	
Delay/Veh:	7.9	7.9	7.9	8.0	8.0	8.0	8.3	8.3	8.3	8.8	8.8	8.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.9	7.9	7.9	8.0	8.0	8.0	8.3	8.3	8.3	8.8	8.8	8.8
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	7.9			8.0			8.3			8.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	7.9			8.0			8.3			8.8		
LOS by Appr:	A			A			A			A		
AllWayAvgQ:	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Main St (N/S) / Civic Center Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.875
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	74	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1	0	1 0	1	1	0	1 0	1	1	0
Volume Module:												
Base Vol:	209	1096	94	118	1188	221	109	534	163	75	665	56
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	209	1096	94	118	1188	221	109	534	163	75	665	56
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	209	1096	94	118	1188	221	109	534	163	75	665	56
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	209	1096	94	118	1188	221	109	534	163	75	665	56
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	209	1096	94	118	1188	221	109	534	163	75	665	56
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	209	1096	94	118	1188	221	109	534	163	75	665	56
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.84	0.16	1.00	1.69	0.31	1.00	1.53	0.47	1.00	1.84	0.16
Final Sat.:	1598	3131	269	1598	2867	533	1598	2605	795	1598	3136	264
Capacity Analysis Module:												
Vol/Sat:	0.13	0.35	0.35	0.07	0.41	0.41	0.07	0.20	0.21	0.05	0.21	0.21
Crit Moves:	****				****		****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #18 Main St (N/S) / Santa Ana Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.799
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 2	0 0	0	0 1	1 0	0	0 0	0 0 0	0	1 1	1 0
Volume Module:												
Base Vol:	80	1169	0	0	1335	102	0	0	0	125	1174	108
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	1169	0	0	1335	102	0	0	0	125	1174	108
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	80	1169	0	0	1335	102	0	0	0	125	1174	108
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	1169	0	0	1335	102	0	0	0	125	1174	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	1169	0	0	1335	102	0	0	0	125	1174	108
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	1169	0	0	1335	102	0	0	0	125	1174	108
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.86	0.14	0.00	0.00	0.00	0.27	2.50	0.23
Final Sat.:	1598	3400	0	0	3159	241	0	0	0	453	4255	391
Capacity Analysis Module:												
Vol/Sat:	0.05	0.34	0.00	0.00	0.42	0.42	0.00	0.00	0.00	0.07	0.28	0.28
Crit Moves:	****				****						****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #19 Main St (N/S) / 5th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.611
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 1	1 0	1	0 2	0 0	0	1 1	1 0	0	0 0	0 0
Volume Module:												
Base Vol:	0	1147	52	81	1238	0	108	630	65	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1147	52	81	1238	0	108	630	65	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1147	52	81	1238	0	108	630	65	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1147	52	81	1238	0	108	630	65	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1147	52	81	1238	0	108	630	65	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1147	52	81	1238	0	108	630	65	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00	0.94	1.00	0.94
Lanes:	0.00	1.91	0.09	1.00	2.00	0.00	0.40	2.36	0.24	0.00	0.00	0.00
Final Sat.:	0	3253	147	1598	3400	0	686	4001	413	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.35	0.35	0.05	0.36	0.00	0.06	0.16	0.16	0.00	0.00	0.00
Crit Moves:		****		****				****				

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #20 Main St (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.613
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	1 0	0 0	1	1 0	0 0	0	1 0	0 0	0	1 0
Volume Module:												
Base Vol:	0	1124	28	0	1315	22	0	158	131	0	194	74
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1124	28	0	1315	22	0	158	131	0	194	74
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1124	28	0	1315	22	0	158	131	0	194	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1124	28	0	1315	22	0	158	131	0	194	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1124	28	0	1315	22	0	158	131	0	194	74
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1124	28	0	1315	22	0	158	131	0	194	74
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.00	1.95	0.05	0.00	1.97	0.03	0.00	0.55	0.45	0.00	0.72	0.28
Final Sat.:	0	3317	83	0	3344	56	0	929	771	0	1231	469
Capacity Analysis Module:												
Vol/Sat:	0.00	0.34	0.34	0.00	0.39	0.39	0.00	0.17	0.17	0.00	0.16	0.16
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #21 Main St (N/S) / 3rd St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.533
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	1 0	0 0	1	1 0	1	0	0 1 0	1	0	0 1 0
Volume Module:												
Base Vol:	0	1130	18	0	1288	26	44	110	37	16	85	16
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1130	18	0	1288	26	44	110	37	16	85	16
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1130	18	0	1288	26	44	110	37	16	85	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1130	18	0	1288	26	44	110	37	16	85	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1130	18	0	1288	26	44	110	37	16	85	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1130	18	0	1288	26	44	110	37	16	85	16
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.00	1.97	0.03	0.00	1.96	0.04	1.00	0.75	0.25	1.00	0.84	0.16
Final Sat.:	0	3347	53	0	3333	67	1598	1272	428	1598	1431	269
Capacity Analysis Module:												
Vol/Sat:	0.00	0.34	0.34	0.00	0.39	0.39	0.03	0.09	0.09	0.01	0.06	0.06
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #22 Main St (N/S) / 1st St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.918
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 99 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	226	889	94	150	1041	122	157	1664	125	112	1126	104
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	226	889	94	150	1041	122	157	1664	125	112	1126	104
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	226	889	94	150	1041	122	157	1664	125	112	1126	104
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	226	889	94	150	1041	122	157	1664	125	112	1126	104
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	226	889	94	150	1041	122	157	1664	125	112	1126	104
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	226	889	94	150	1041	122	157	1664	125	112	1126	104
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.81	0.19	1.00	2.00	1.00	1.00	2.79	0.21	1.00	2.75	0.25
Final Sat.:	1598	3075	325	1598	3400	1598	1598	4744	356	1598	4669	431
Capacity Analysis Module:												
Vol/Sat:	0.14	0.29	0.29	0.09	0.31	0.08	0.10	0.35	0.35	0.07	0.24	0.24
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #23 Bush St (N/S) / Santa Ana Bl (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.335
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 18 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	0 0	0 0	0	1 0	0 0	0	0 0	0 1	1	1 0
Volume Module:												
Base Vol:	27	158	0	0	110	43	0	0	0	30	774	104
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	27	158	0	0	110	43	0	0	0	30	774	104
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	158	0	0	110	43	0	0	0	30	774	104
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	27	158	0	0	110	43	0	0	0	30	774	104
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	158	0	0	110	43	0	0	0	30	774	104
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	27	158	0	0	110	43	0	0	0	30	774	104
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	0.72	0.28	0.00	0.00	0.00	0.10	2.56	0.34
Final Sat.:	1598	1700	0	0	1222	478	0	0	0	169	4347	584
Capacity Analysis Module:												
Vol/Sat:	0.02	0.09	0.00	0.00	0.09	0.09	0.00	0.00	0.00	0.02	0.18	0.18
Crit Moves:	****				****						****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #24 Bush St (N/S) / 5th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.297
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	17	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 1	0	1 0	1 0	0	0 1	1 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	149	36	34	129	0	50	513	31	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	149	36	34	129	0	50	513	31	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	149	36	34	129	0	50	513	31	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	149	36	34	129	0	50	513	31	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	149	36	34	129	0	50	513	31	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	149	36	34	129	0	50	513	31	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00	0.94	1.00	0.94
Lanes:	0.00	0.81	0.19	1.00	1.00	0.00	0.25	2.59	0.16	0.00	0.00	0.00
Final Sat.:	0	1369	331	1598	1700	0	429	4405	266	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.11	0.02	0.08	0.00	0.03	0.12	0.12	0.00	0.00	0.00
Crit Moves:		****		****				****				

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #25 Bush St (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.347
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	18	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	158	10	20	113	17	31	130	13	13	249	23
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	158	10	20	113	17	31	130	13	13	249	23
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	158	10	20	113	17	31	130	13	13	249	23
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	158	10	20	113	17	31	130	13	13	249	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	158	10	20	113	17	31	130	13	13	249	23
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	9	158	10	20	113	17	31	130	13	13	249	23
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.94	0.06	1.00	0.87	0.13	0.18	0.75	0.07	0.05	0.87	0.08
Final Sat.:	1598	1599	101	1598	1478	222	303	1270	127	78	1485	137
Capacity Analysis Module:												
Vol/Sat:	0.01	0.10	0.10	0.01	0.08	0.08	0.02	0.10	0.10	0.01	0.17	0.17
Crit Moves:		****		****				****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #26 Spurgeon St (N/S) / 1st St (E/W)

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B[11.3]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	0	0	0 1	0	0	3	0 0	0	0	2	1 0
Volume Module:																
Base Vol:	0	0	0	0	0	62	0	2027	0	0	1069	18				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	0	0	0	0	0	62	0	2027	0	0	1069	18				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	0	0	0	0	0	62	0	2027	0	0	1069	18				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	0	0	0	0	0	62	0	2027	0	0	1069	18				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	0	0	0	0	0	62	0	2027	0	0	1069	18				
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	365	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	637	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	637	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.10	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.3	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	11.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	B	*	*	*	*	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*				
ApproachDel:	xxxxxx			11.3			xxxxxx			xxxxxx						
ApproachLOS:	*			B			*			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #27 French St (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 2.5 Worst Case Level Of Service: C[24.5]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0 0	0	0	0	1 0	0	0	0	0 0	0	1	0	1 0
Volume Module:																
Base Vol:	64	29	0	0	33	2	0	0	0	16	1057	13				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	64	29	0	0	33	2	0	0	0	16	1057	13				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	64	29	0	0	33	2	0	0	0	16	1057	13				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	64	29	0	0	33	2	0	0	0	16	1057	13				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	64	29	0	0	33	2	0	0	0	16	1057	13				
Critical Gap Module:																
Critical Gp:	7.1	6.5	xxxxx	xxxxx	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx				
FollowUpTim:	3.5	4.0	xxxxx	xxxxx	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	577	1102	xxxxx	xxxx	1096	535	xxxx	xxxx	xxxxx	0	xxxx	xxxxx				
Potent Cap.:	431	213	xxxxx	xxxx	215	549	xxxx	xxxx	xxxxx	900	xxxx	xxxxx				
Move Cap.:	373	210	xxxxx	xxxx	211	549	xxxx	xxxx	xxxxx	900	xxxx	xxxxx				
Volume/Cap:	0.17	0.14	xxxx	xxxx	0.16	0.00	xxxx	xxxx	xxxx	0.02	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	300	xxxx	xxxxx	xxxx	xxxx	219	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	1.3	xxxx	xxxxx	xxxxx	xxxx	0.6	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx				
Shrd ConDel:	22.3	xxxx	xxxxx	xxxxx	xxxx	24.5	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx				
Shared LOS:	C	*	*	*	*	C	*	*	*	A	*	*				
ApproachDel:	22.3			24.5			xxxxxx			xxxxxx						
ApproachLOS:	C			C			*			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #28 French St (N/S) / 4th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.342
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 18 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	1 0	0 1	0	0 0	1! 0	0	0 1	0	0 1
Volume Module:												
Base Vol:	3	23	39	78	40	22	18	118	6	48	282	53
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	23	39	78	40	22	18	118	6	48	282	53
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	23	39	78	40	22	18	118	6	48	282	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	23	39	78	40	22	18	118	6	48	282	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	23	39	78	40	22	18	118	6	48	282	53
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	3	23	39	78	40	22	18	118	6	48	282	53
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.94
Lanes:	0.05	0.35	0.60	1.00	0.65	0.35	0.13	0.83	0.04	0.15	0.85	1.00
Final Sat.:	78	602	1020	1598	1097	603	215	1413	72	247	1453	1598
Capacity Analysis Module:												
Vol/Sat:	0.00	0.04	0.04	0.05	0.04	0.04	0.01	0.08	0.08	0.03	0.19	0.03
Crit Moves:		****		****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #29 Lacy St (N/S) / Civic Center Dr (E/W)

Average Delay (sec/veh): 4.0 Worst Case Level Of Service: D[28.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	30	20	38	29	33	37	3	447	34	8	486	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	20	38	29	33	37	3	447	34	8	486	180
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	30	20	38	29	33	37	3	447	34	8	486	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	20	38	29	33	37	3	447	34	8	486	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	30	20	38	29	33	37	3	447	34	8	486	180
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1097	1152	464	1091	1079	576	666	xxxx	xxxxx	481	xxxx	xxxxx
Potent Cap.:	192	199	602	194	220	521	933	xxxx	xxxxx	1092	xxxx	xxxxx
Move Cap.:	157	197	602	166	218	521	933	xxxx	xxxxx	1092	xxxx	xxxxx
Volume/Cap:	0.19	0.10	0.06	0.17	0.15	0.07	0.00	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.9	xxxx	xxxxx	8.3	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	247	xxxxx	xxxx	249	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	1.5	xxxxx	xxxxx	1.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	27.4	xxxxx	xxxxx	28.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	D	*	*	D	*	*	*	*	*	*	*
ApproachDel:		27.4			28.6			xxxxx			xxxxx	
ApproachLOS:		D			D			*			*	

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #30 Lacy st (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 8.7 Worst Case Level Of Service: F[122.1]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 1! 0 0			1 0 0 1 0			1 0 0 1 0		
Volume Module:												
Base Vol:	3	34	28	30	42	21	11	452	7	29	939	41
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	34	28	30	42	21	11	452	7	29	939	41
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	34	28	30	42	21	11	452	7	29	939	41
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	34	28	30	42	21	11	452	7	29	939	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	3	34	28	30	42	21	11	452	7	29	939	41
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1527	1516	456	1526	1499	960	980	xxxx	xxxxx	459	xxxx	xxxxx
Potent Cap.:	97	121	609	97	124	314	712	xxxx	xxxxx	1113	xxxx	xxxxx
Move Cap.:	64	116	609	70	118	314	712	xxxx	xxxxx	1113	xxxx	xxxxx
Volume/Cap:	0.05	0.29	0.05	0.43	0.35	0.07	0.02	xxxx	xxxx	0.03	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.1	xxxx	xxxxx	8.3	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	A	*	*
Movement:	LT	-	LTR	RT	LT	-	LTR	RT	LT	-	LTR	RT
Shared Cap.:	xxxx	168	xxxxx	xxxx	109	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	1.7	xxxxx	xxxxx	5.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	39.4	xxxxx	xxxxx	122	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	E	*	*	F	*	*	*	*	*	*	*
ApproachDel:	39.4			122.1			xxxxxx			xxxxxx		
ApproachLOS:	E			F			*			*		

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #31 Lacy St (N/S) / Brown St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.109
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): 7.3
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 1! 0 0			0 0 1! 0 0			0 0 1! 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	27	26	48	6	20	2	2	8	9	17	20	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	27	26	48	6	20	2	2	8	9	17	20	6
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	26	48	6	20	2	2	8	9	17	20	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	27	26	48	6	20	2	2	8	9	17	20	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	26	48	6	20	2	2	8	9	17	20	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	27	26	48	6	20	2	2	8	9	17	20	6
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.27	0.26	0.47	0.21	0.72	0.07	0.11	0.42	0.47	0.40	0.46	0.14
Final Sat.:	248	239	441	184	613	61	93	373	419	332	391	117
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.11	0.03	0.03	0.03	0.02	0.02	0.02	0.05	0.05	0.05
Crit Moves:		****		****				****		****		
Delay/Veh:	7.3	7.3	7.3	7.3	7.3	7.3	7.0	7.0	7.0	7.4	7.4	7.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.3	7.3	7.3	7.3	7.3	7.3	7.0	7.0	7.0	7.4	7.4	7.4
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	7.3			7.3			7.0			7.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	7.3			7.3			7.0			7.4		
LOS by Appr:	A			A			A			A		
AllWayAvgQ:	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #32 Lacy St (N/S) / 4th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.508
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 24 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1! 0	0	1	0	0	1	0
Volume Module:												
Base Vol:	23	36	94	48	29	27	52	355	28	13	522	8
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	23	36	94	48	29	27	52	355	28	13	522	8
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	36	94	48	29	27	52	355	28	13	522	8
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	23	36	94	48	29	27	52	355	28	13	522	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	36	94	48	29	27	52	355	28	13	522	8
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	23	36	94	48	29	27	52	355	28	13	522	8
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	0.15	0.24	0.61	0.46	0.28	0.26	1.00	0.93	0.07	1.00	1.00	1.00
Final Sat.:	256	400	1044	785	474	441	1598	1576	124	1598	1700	1598
Capacity Analysis Module:												
Vol/Sat:	0.01	0.09	0.09	0.03	0.06	0.06	0.03	0.23	0.23	0.01	0.31	0.01
Crit Moves:		****		****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #33 Lacy St (N/S) / 1st St (E/W)

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: E[45.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	1! 0	0	0	1! 0	0	1	0	3	0	0	0	0	2	1	0
Volume Module:																	
Base Vol:	0	0	0	11	0	98	204	1845	0	0	0	1184	29				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	0	0	0	11	0	98	204	1845	0	0	0	1184	29				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	0	0	0	11	0	98	204	1845	0	0	0	1184	29				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	0	0	0	11	0	98	204	1845	0	0	0	1184	29				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	0	0	0	11	0	98	204	1845	0	0	0	1184	29				
Critical Gap Module:																	
Critical Gp:	7.5	6.5	6.9	6.8	6.5	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
Capacity Module:																	
Cnflict Vol:	2648	3466	615	2222	3452	409	1213	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Potent Cap.:	12	7	439	38	7	597	582	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Move Cap.:	7	4	439	28	5	597	582	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Volume/Cap:	0.00	0.00	0.00	0.40	0.00	0.16	0.35	xxxx	xxxx	xxxx	xxxx	xxxx					
Level Of Service Module:																	
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.6	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	14.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*					
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT							
Shared Cap.:	xxxx	0	xxxxx	xxxx	193	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	3.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	45.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
Shared LOS:	*	*	*	*	E	*	*	*	*	*	*	*					
ApproachDel:	xxxxxx			45.3			xxxxxx			xxxxxx							
ApproachLOS:	*			E			*			*							

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #34 Santiago St (N/S) / Washington Av (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	1.561
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	126.8
Optimal Cycle:	0	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	1 0	1	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	62	271	138	26	648	170	147	125	71	204	256	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	62	271	138	26	648	170	147	125	71	204	256	36
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	62	271	138	26	648	170	147	125	71	204	256	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	62	271	138	26	648	170	147	125	71	204	256	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	62	271	138	26	648	170	147	125	71	204	256	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	62	271	138	26	648	170	147	125	71	204	256	36
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.43	0.36	0.21	0.41	0.52	0.07
Final Sat.:	377	398	431	392	415	452	177	151	86	177	222	31
Capacity Analysis Module:												
Vol/Sat:	0.16	0.68	0.32	0.07	1.56	0.38	0.83	0.83	0.83	1.15	1.15	1.15
Crit Moves:		****			****		****				****	
Delay/Veh:	14.0	28.5	14.8	12.5	286	15.4	41.4	41.4	41.4	120.9	121	120.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.0	28.5	14.8	12.5	286	15.4	41.4	41.4	41.4	120.9	121	120.9
LOS by Move:	B	D	B	B	F	C	E	E	E	F	F	F
ApproachDel:		22.6			223.1			41.4			120.9	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		22.6			223.1			41.4			120.9	
LOS by Appr:		C			F			E			F	
AllWayAvgQ:	0.2	1.9	0.5	0.1	31.7	0.6	3.4	3.4	3.4	13.1	13.1	13.1

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #35 Santiago St (N/S) / Civic Center Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	2.320
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	280.0
Optimal Cycle:	0	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	395	401	21	21	798	258	169	58	250	63	69	17
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	395	401	21	21	798	258	169	58	250	63	69	17
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	395	401	21	21	798	258	169	58	250	63	69	17
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	395	401	21	21	798	258	169	58	250	63	69	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	395	401	21	21	798	258	169	58	250	63	69	17
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	395	401	21	21	798	258	169	58	250	63	69	17
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.95	0.05	1.00	0.76	0.24	0.74	0.26	1.00	0.42	0.47	0.11
Final Sat.:	438	445	23	410	344	111	308	106	472	162	178	44
Capacity Analysis Module:												
Vol/Sat:	0.90	0.90	0.90	0.05	2.32	2.32	0.55	0.55	0.53	0.39	0.39	0.39
Crit Moves:	****				****			****			****	
Delay/Veh:	50.8	48.3	48.3	11.7	618	618.3	21.2	21.2	18.3	17.8	17.8	17.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	50.8	48.3	48.3	11.7	618	618.3	21.2	21.2	18.3	17.8	17.8	17.8
LOS by Move:	F	E	E	B	F	F	C	C	C	C	C	C
ApproachDel:		49.5			606.5			19.7			17.8	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		49.5			606.5			19.7			17.8	
LOS by Appr:		E			F			C			C	
AllWayAvgQ:	4.8	4.9	4.9	0.1	76.8	76.8	1.1	1.1	1.1	0.6	0.6	0.6

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #36 Santiago St (N/S) / Santa Ana Bl (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.904
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 89 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	0 1	1	0 1	0 1	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	29	223	98	382	351	343	167	633	54	150	1128	606
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	29	223	98	382	351	343	167	633	54	150	1128	606
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	223	98	382	351	343	167	633	54	150	1128	606
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	29	223	98	382	351	343	167	633	54	150	1128	606
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	223	98	382	351	343	167	633	54	150	1128	606
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	29	223	98	382	351	343	167	633	54	150	1128	606
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.84	0.16	1.00	2.00	1.00
Final Sat.:	1598	1700	1598	1598	1700	1598	1598	3133	267	1598	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.02	0.13	0.06	0.24	0.21	0.21	0.10	0.20	0.20	0.09	0.33	0.38
Crit Moves:		****		****			****					****

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #40 Standard Av (N/S) / 1st St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.940
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 0	1 0	0	0 1!	0 0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	87	209	141	48	319	8	107	1755	164	81	1230	14
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	87	209	141	48	319	8	107	1755	164	81	1230	14
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	87	209	141	48	319	8	107	1755	164	81	1230	14
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	87	209	141	48	319	8	107	1755	164	81	1230	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	87	209	141	48	319	8	107	1755	164	81	1230	14
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	87	209	141	48	319	8	107	1755	164	81	1230	14
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.60	0.40	0.13	0.85	0.02	1.00	1.83	0.17	1.00	1.98	0.02
Final Sat.:	1598	1015	685	218	1446	36	1598	3109	291	1598	3362	38
Capacity Analysis Module:												
Vol/Sat:	0.05	0.21	0.21	0.03	0.22	0.22	0.07	0.56	0.56	0.05	0.37	0.37
Crit Moves:	****				****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #42 Grand Av (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	1.178
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	1 0	1 0	2	0 2	2 0	1	0 2	0 1	0	1 0
Volume Module:												
Base Vol:	204	1052	31	140	2161	1280	276	221	730	27	113	34
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	204	1052	31	140	2161	1280	276	221	730	27	113	34
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	204	1052	31	140	2161	1280	276	221	730	27	113	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	204	1052	31	140	2161	1280	276	221	730	27	113	34
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	204	1052	31	140	2161	1280	276	221	730	27	113	34
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	204	1052	31	140	2161	1280	276	221	730	27	113	34
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	2.91	0.09	1.00	2.00	2.00	2.00	1.00	2.00	0.31	1.30	0.39
Final Sat.:	1598	4954	146	1598	3400	3196	3196	1700	3196	528	2208	664
Capacity Analysis Module:												
Vol/Sat:	0.13	0.21	0.21	0.09	0.64	0.40	0.09	0.13	0.23	0.05	0.05	0.05
Crit Moves:		****			****				****		****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #43 Grand Av (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.747
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	3	0 1	1 0	2	1 0	1 0	1	1 0	1 0	2	0 1
Volume Module:												
Base Vol:	115	350	135	152	563	107	127	1259	121	140	396	147
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	115	350	135	152	563	107	127	1259	121	140	396	147
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	115	350	135	152	563	107	127	1259	121	140	396	147
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	115	350	135	152	563	107	127	1259	121	140	396	147
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	115	350	135	152	563	107	127	1259	121	140	396	147
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	115	350	135	152	563	107	127	1259	121	140	396	147
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	1.00	3.00	1.00	1.00	2.52	0.48	1.00	1.82	0.18	1.00	2.00	1.00
Final Sat.:	1598	5100	1598	1598	4286	814	1598	3102	298	1598	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.08	0.10	0.13	0.13	0.08	0.41	0.41	0.09	0.12	0.09
Crit Moves:	****				****				****		****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #44 Grand Av (N/S) / 1st St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.894
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	83	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 2	1	0	2 0 3	0	1	2 0 2	1	0	2 0 2	0	1
Volume Module:												
Base Vol:	363	731	89	135	1536	138	352	1250	329	382	790	81
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	363	731	89	135	1536	138	352	1250	329	382	790	81
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	363	731	89	135	1536	138	352	1250	329	382	790	81
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	363	731	89	135	1536	138	352	1250	329	382	790	81
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	363	731	89	135	1536	138	352	1250	329	382	790	81
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	363	731	89	135	1536	138	352	1250	329	382	790	81
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	2.00	2.67	0.33	2.00	3.00	1.00	2.00	2.37	0.63	2.00	2.00	1.00
Final Sat.:	3196	4546	554	3196	5100	1598	3196	4037	1063	3196	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.11	0.16	0.16	0.04	0.30	0.09	0.11	0.31	0.31	0.12	0.23	0.05
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #45 Penn Way (NS) at I-5 SB Ramps (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.569
Loss Time (sec):	12 (Y+R=4.0 sec)	Average Delay (sec/veh):	25.1
Optimal Cycle:	46	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 2	0	1	2 0 2	0	0	0 0 0	0	0	1 0 0	0	2
Volume Module:												
Base Vol:	0	203	133	736	314	0	0	0	0	304	0	252
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	203	133	736	314	0	0	0	0	304	0	252
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	203	133	736	314	0	0	0	0	304	0	252
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	203	133	736	314	0	0	0	0	304	0	252
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	203	133	736	314	0	0	0	0	304	0	252
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	203	133	736	314	0	0	0	0	304	0	252
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.92	0.95	1.00	1.00	1.00	1.00	0.77	1.00	0.75
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	2.00
Final Sat.:	0	3610	1615	3502	3610	0	0	0	0	1461	0	2842
Capacity Analysis Module:												
Vol/Sat:	0.00	0.06	0.08	0.21	0.09	0.00	0.00	0.00	0.00	0.21	0.00	0.09
Crit Moves:			****	****						****		
Green/Cycle:	0.00	0.14	0.14	0.37	0.37	0.00	0.00	0.00	0.00	0.37	0.00	0.74
Volume/Cap:	0.00	0.39	0.57	0.57	0.24	0.00	0.00	0.00	0.00	0.57	0.00	0.12
Delay/Veh:	0.0	39.2	43.2	25.8	21.9	0.0	0.0	0.0	0.0	26.9	0.0	3.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	39.2	43.2	25.8	21.9	0.0	0.0	0.0	0.0	26.9	0.0	3.9
LOS by Move:	A	D	D	C	C	A	A	A	A	C	A	A
HCM2kAvgQ:	0	3	5	10	3	0	0	0	0	8	0	1

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #46 I-5 SB Ramps (NS) / Santa Ana Bl (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.643
Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh): 29.2
Optimal Cycle: 53 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2 0	0	0 1	2 0	3	0 0	0 0	2	1 0
Volume Module:												
Base Vol:	0	0	0	508	0	152	263	633	0	0	1296	219
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	508	0	152	263	633	0	0	1296	219
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	508	0	152	263	633	0	0	1296	219
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	508	0	152	263	633	0	0	1296	219
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	508	0	152	263	633	0	0	1296	219
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	508	0	152	263	633	0	0	1296	219
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.85	0.92	0.91	1.00	1.00	0.89	0.89
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	2.00	3.00	0.00	0.00	2.57	0.43
Final Sat.:	0	0	0	3502	0	1615	3502	5187	0	0	4340	733
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.15	0.00	0.09	0.08	0.12	0.00	0.00	0.30	0.30
Crit Moves:				****				****				****
Green/Cycle:	0.00	0.00	0.00	0.23	0.00	0.23	0.19	0.19	0.00	0.00	0.46	0.46
Volume/Cap:	0.00	0.00	0.00	0.64	0.00	0.42	0.40	0.64	0.00	0.00	0.64	0.64
Delay/Veh:	0.0	0.0	0.0	36.9	0.0	33.9	35.9	38.8	0.0	0.0	21.1	21.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	36.9	0.0	33.9	35.9	38.8	0.0	0.0	21.1	21.1
LOS by Move:	A	A	A	D	A	C	D	D	A	A	C	C
HCM2kAvgQ:	0	0	0	8	0	4	4	8	0	0	13	13

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #47 I-5 NB Ramps (NS) / 17th St. (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.903
Loss Time (sec): 16 (Y+R=4.0 sec) Average Delay (sec/veh): 39.9
Optimal Cycle: 100 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 1	0	0 1	1 0	0	0 1	1 0	3	0 1	0 0	2	1 0
Volume Module:												
Base Vol:	767	99	44	44	0	226	150	1051	294	0	1477	59
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	767	99	44	44	0	226	150	1051	294	0	1477	59
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	767	99	44	44	0	226	150	1051	294	0	1477	59
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	767	99	44	44	0	226	150	1051	0	0	1477	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	767	99	44	44	0	226	150	1051	0	0	1477	59
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	767	99	44	44	0	226	150	1051	0	0	1477	59
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.96	0.96	0.85	0.95	1.00	0.85	0.95	0.91	1.00	1.00	0.90	0.90
Lanes:	1.77	0.23	1.00	1.00	0.00	1.00	1.00	3.00	1.00	0.00	2.88	0.12
Final Sat.:	3224	416	1615	1805	0	1615	1805	5187	1900	0	4958	198
Capacity Analysis Module:												
Vol/Sat:	0.24	0.24	0.03	0.02	0.00	0.14	0.08	0.20	0.00	0.00	0.30	0.30
Crit Moves:	****					****	****				****	
Green/Cycle:	0.26	0.26	0.26	0.15	0.00	0.15	0.09	0.42	0.00	0.00	0.33	0.33
Volume/Cap:	0.90	0.90	0.10	0.16	0.00	0.90	0.90	0.48	0.00	0.00	0.90	0.90
Delay/Veh:	47.3	47.3	28.0	36.9	0.0	74.1	88.0	21.1	0.0	0.0	39.2	39.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.3	47.3	28.0	36.9	0.0	74.1	88.0	21.1	0.0	0.0	39.2	39.2
LOS by Move:	D	D	C	D	A	E	F	C	A	A	D	D
HCM2kAvgQ:	17	17	1	1	0	10	8	9	0	0	20	20

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #48 I-5 NB Ramps (NS) / Grand Ave (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.934
Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh): 30.2
Optimal Cycle: 100 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	3	0 1	1 0	3	0 0	0 0	0	0 0 0	2 0	0	0 1
Volume Module:												
Base Vol:	0	970	491	108	2716	0	0	0	0	1045	0	321
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	970	491	108	2716	0	0	0	0	1045	0	321
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	970	491	108	2716	0	0	0	0	1045	0	321
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	970	0	108	2716	0	0	0	0	1045	0	321
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	970	0	108	2716	0	0	0	0	1045	0	321
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	970	0	108	2716	0	0	0	0	1045	0	321
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	1.00	0.95	0.91	1.00	1.00	1.00	1.00	0.92	1.00	0.85
Lanes:	0.00	3.00	1.00	1.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	5187	1900	1805	5187	0	0	0	0	3502	0	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.19	0.00	0.06	0.52	0.00	0.00	0.00	0.00	0.30	0.00	0.20
Crit Moves:	****				****					****		
Green/Cycle:	0.00	0.42	0.00	0.14	0.56	0.00	0.00	0.00	0.00	0.32	0.00	0.32
Volume/Cap:	0.00	0.44	0.00	0.44	0.93	0.00	0.00	0.00	0.00	0.93	0.00	0.62
Delay/Veh:	0.0	20.5	0.0	41.0	26.7	0.0	0.0	0.0	0.0	46.9	0.0	31.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	20.5	0.0	41.0	26.7	0.0	0.0	0.0	0.0	46.9	0.0	31.3
LOS by Move:	A	C	A	D	C	A	A	A	A	D	A	C
HCM2kAvgQ:	0	8	0	4	33	0	0	0	0	21	0	9

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #49 Mortimer (N/S) / Santa Ana Blvd (E/W)

Average Delay (sec/veh): 2.4 Worst Case Level Of Service: C[23.1]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0 0	0	0	1		0 0	1!	0	0		0 0	0	0	0	0	1 0	0	1	0	
Volume Module:																				
Base Vol:	0	0	225			3	6	1			0	0	0			39	931	3		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	0	0	225			3	6	1			0	0	0			39	931	3		
Added Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	0	0	225			3	6	1			0	0	0			39	931	3		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Volume:	0	0	225			3	6	1			0	0	0			39	931	3		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
FinalVolume:	0	0	225			3	6	1			0	0	0			39	931	3		
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	6.2			7.1	6.5	6.2			xxxxx	xxxx	xxxxx			4.1	xxxx	xxxxx		
FollowUpTim:	xxxxx	xxxx	3.3			3.5	4.0	3.3			xxxxx	xxxx	xxxxx			2.2	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	0			1011	1011	933			xxxx	xxxx	xxxxx			0	xxxx	xxxxx		
Potent Cap.:	xxxx	xxxx	900			220	242	326			xxxx	xxxx	xxxxx			900	xxxx	xxxxx		
Move Cap.:	xxxx	xxxx	900			160	231	326			xxxx	xxxx	xxxxx			900	xxxx	xxxxx		
Volume/Cap:	xxxx	xxxx	0.25			0.02	0.03	0.00			xxxx	xxxx	xxxx			0.04	xxxx	xxxx		
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	1.0			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			0.1	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	10.3			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			9.2	xxxx	xxxxx		
LOS by Move:	*	*	B			*	*	*			*	*	*			A	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	209	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx					
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	0.1	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx					
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	23.1	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx					
Shared LOS:	*	*	*		*	C	*		*	*	*		*	*	*					
ApproachDel:	10.3					23.1			xxxxxx				xxxxxx							
ApproachLOS:	B					C			*				*							

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project AM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #50 Mortimer (N/S) / 5th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.343
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 9.5
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	1 0	0	0	1!	0 0	1	0	0	1 0	0	0	1!	0 0
Volume Module:																
Base Vol:	0	150	6		4	22	3		222	32	43		7	0	11	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	150	6		4	22	3		222	32	43		7	0	11	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	150	6		4	22	3		222	32	43		7	0	11	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	150	6		4	22	3		222	32	43		7	0	11	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	150	6		4	22	3		222	32	43		7	0	11	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	0	150	6		4	22	3		222	32	43		7	0	11	
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.00	0.96	0.04		0.14	0.76	0.10		1.00	0.43	0.57		0.39	0.00	0.61	
Final Sat.:	0	708	28		97	534	73		647	330	443		297	0	466	
Capacity Analysis Module:																
Vol/Sat:	xxxx	0.21	0.21	0.04	0.04	0.04	0.34	0.10	0.10	0.02	xxxx	0.02				
Crit Moves:		****			****		****			****						
Delay/Veh:	0.0	8.9	8.9	8.0	8.0	8.0	10.9	7.7	7.7	7.6	0.0	7.6				
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
AdjDel/Veh:	0.0	8.9	8.9	8.0	8.0	8.0	10.9	7.7	7.7	7.6	0.0	7.6				
LOS by Move:	*	A	A	A	A	A	B	A	A	A	*	A				
ApproachDel:		8.9			8.0			10.1			7.6					
Delay Adj:		1.00			1.00			1.00			1.00					
ApprAdjDel:		8.9			8.0			10.1			7.6					
LOS by Appr:		A			A			B			A					
AllWayAvgQ:	0.2	0.2	0.2	0.0	0.0	0.0	0.5	0.1	0.1	0.0	0.0	0.0				

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Scenario Report

Scenario:	2035NPPM
Command:	2035NP PM
Volume:	2035NPPM
Geometry:	Future
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Flower St (NS)/ Civic Center D	F	xxxxx	1.138	F	xxxxx	1.138	+ 0.000 V/C
# 2 Flower St (N/S) / Santa Ana Bl	B	xxxxx	0.694	B	xxxxx	0.694	+ 0.000 V/C
# 3 Parton St (E/W) / Santa Ana Bl	A	xxxxx	0.428	A	xxxxx	0.428	+ 0.000 V/C
# 4 Ross St (N/S) / Civic Center D	A	xxxxx	0.564	A	xxxxx	0.564	+ 0.000 V/C
# 5 Ross St (N/S) / Santa Ana Bl (	B	xxxxx	0.668	B	xxxxx	0.668	+ 0.000 V/C
# 6 Ross St (N/S) / 4th St (E/W)	B	13.6	0.000	B	13.6	0.000	+ 0.000 D/V
# 7 Broadway (N/S) / Civic Center	C	xxxxx	0.743	C	xxxxx	0.743	+ 0.000 V/C
# 8 Broadway (N/S) / Santa Ana Bl	B	xxxxx	0.612	B	xxxxx	0.612	+ 0.000 V/C
# 9 Broadway (N/S) / 5th St (E/W)	B	xxxxx	0.620	B	xxxxx	0.620	+ 0.000 V/C
# 10 Broadway (N/S) / 4th St (E/W)	B	xxxxx	0.610	B	xxxxx	0.610	+ 0.000 V/C
# 11 Broadway (N/S)/ 3rd st (E/W)	D	xxxxx	0.803	D	xxxxx	0.803	+ 0.000 V/C
# 12 Broadway (N/S) / 1st St (E/W)	D	xxxxx	0.844	D	xxxxx	0.844	+ 0.000 V/C
# 13 Sycamore St (N/S) / Civic Cent	A	xxxxx	0.573	A	xxxxx	0.573	+ 0.000 V/C
# 14 Sycamore St (N/S) / Santa Ana	D	29.8	0.000	D	29.8	0.000	+ 0.000 D/V
# 15 Sycamore St (N/S) / 5th St (E/	C	15.7	0.000	C	15.7	0.000	+ 0.000 D/V
# 16 Sycamore St (N/S) / 4th St (E/	A	9.8	0.435	A	9.8	0.435	+ 0.000 V/C
# 17 Main St (N/S) / Civic Center D	D	xxxxx	0.883	D	xxxxx	0.883	+ 0.000 V/C
# 18 Main St (N/S) / Santa Ana Dr (	D	xxxxx	0.836	D	xxxxx	0.836	+ 0.000 V/C
# 19 Main St (N/S) / 5th St (E/W)	D	xxxxx	0.812	D	xxxxx	0.812	+ 0.000 V/C
# 20 Main St (N/S) / 4th St (E/W)	C	xxxxx	0.776	C	xxxxx	0.776	+ 0.000 V/C
# 21 Main St (N/S) / 3rd St (E/W)	B	xxxxx	0.694	B	xxxxx	0.694	+ 0.000 V/C
# 22 Main St (N/S) / 1st St (E/W)	F	xxxxx	1.013	F	xxxxx	1.013	+ 0.000 V/C
# 23 Bush St (N/S) / Santa Ana Bl (	A	xxxxx	0.462	A	xxxxx	0.462	+ 0.000 V/C
# 24 Bush St (N/S) / 5th St (E/W)	A	xxxxx	0.560	A	xxxxx	0.560	+ 0.000 V/C

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Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 25 Bush St (N/S) / 4th St (E/W)	A	xxxxx	0.576	A	xxxxx	0.576	+ 0.000 V/C
# 26 Spurgeon St (N/S) / 1st St (E/	C	18.7	0.000	C	18.7	0.000	+ 0.000 D/V
# 27 French St (N/S) / Santa Ana Bl	C	24.0	0.000	C	24.0	0.000	+ 0.000 D/V
# 28 French St (N/S) / 4th St (E/W)	A	xxxxx	0.543	A	xxxxx	0.543	+ 0.000 V/C
# 29 Lacy St (N/S) / Civic Center D	F	69.9	0.000	F	69.9	0.000	+ 0.000 D/V
# 30 Lacy st (N/S) / Santa Ana Bl (	F	179.1	0.000	F	179.1	0.000	+ 0.000 D/V
# 31 Lacy St (N/S) / Brown St (E/W)	A	8.1	0.250	A	8.1	0.250	+ 0.000 V/C
# 32 Lacy St (N/S) / 4th St (E/W)	C	xxxxx	0.751	C	xxxxx	0.751	+ 0.000 V/C
# 33 Lacy St (N/S) / 1st St (E/W)	F	410.8	0.000	F	410.8	0.000	+ 0.000 D/V
# 34 Santiago St (N/S) / Washington	F	143.1	1.458	F	143.1	1.458	+ 0.000 V/C
# 35 Santiago St (N/S) / Civic Cent	F	221.7	1.781	F	221.7	1.781	+ 0.000 V/C
# 36 Santiago St (N/S) / Santa Ana	E	xxxxx	0.993	E	xxxxx	0.993	+ 0.000 V/C
# 40 Standard Av (N/S) / 1st St (E/	E	xxxxx	0.970	E	xxxxx	0.970	+ 0.000 V/C
# 42 Grand Av (N/S) / Santa Ana Bl	F	xxxxx	1.312	F	xxxxx	1.312	+ 0.000 V/C
# 43 Grand Av (N/S) / 4th St (E/W)	D	xxxxx	0.841	D	xxxxx	0.841	+ 0.000 V/C
# 44 Grand Av (N/S) / 1st St (E/W)	E	xxxxx	0.960	E	xxxxx	0.960	+ 0.000 V/C
# 45 Penn Way (NS) at I-5 SB Ramps	C	28.5	0.658	C	28.5	0.658	+ 0.000 D/V
# 46 I-5 SB Ramps (NS) / Santa Ana	C	29.7	0.615	C	29.7	0.615	+ 0.000 D/V
# 47 I-5 NB Ramps (NS) / 17th St. (	E	73.0	1.108	E	73.0	1.108	+ 0.000 D/V
# 48 I-5 NB Ramps (NS) / Grand Ave	F	119.9	1.316	F	119.9	1.316	+ 0.000 D/V
# 49 Mortimer (N/S) / Santa Ana Blv	C	23.0	0.000	C	23.0	0.000	+ 0.000 D/V
# 50 Mortimer (N/S) / 5th St (E/W)	D	33.5	0.973	D	33.5	0.973	+ 0.000 V/C

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Flower St (NS)/ Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 1.138
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	243	1245	114	213	1267	114	275	993	140	232	1055	160
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	243	1245	114	213	1267	114	275	993	140	232	1055	160
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	243	1245	114	213	1267	114	275	993	140	232	1055	160
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	243	1245	114	213	1267	114	275	993	140	232	1055	160
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	243	1245	114	213	1267	114	275	993	140	232	1055	160
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	243	1245	114	213	1267	114	275	993	140	232	1055	160
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.83	0.17	1.00	1.83	0.17	1.00	1.75	0.25	1.00	1.74	0.26
Final Sat.:	1598	3115	285	1598	3119	281	1598	2980	420	1598	2952	448
Capacity Analysis Module:												
Vol/Sat:	0.15	0.40	0.40	0.13	0.41	0.41	0.17	0.33	0.33	0.15	0.36	0.36
Crit Moves:	****				****		****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Flower St (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.694
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	0 1	1 0	2	0 1	1 0	3	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	184	931	57	109	708	58	135	529	131	230	738	231
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	184	931	57	109	708	58	135	529	131	230	738	231
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	184	931	57	109	708	58	135	529	131	230	738	231
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	184	931	57	109	708	58	135	529	131	230	738	231
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	184	931	57	109	708	58	135	529	131	230	738	231
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	184	931	57	109	708	58	135	529	131	230	738	231
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00
Final Sat.:	1598	3400	1598	1598	3400	1598	1598	5100	1598	1598	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.12	0.27	0.04	0.07	0.21	0.04	0.08	0.10	0.08	0.14	0.22	0.14
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Parton St (E/W) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.428
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	21	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0 0	0	1	0 0 1	1 0	2	1 0	1	0	2 1 0
Volume Module:												
Base Vol:	92	6	110	57	9	32	6	645	59	37	1094	22
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	92	6	110	57	9	32	6	645	59	37	1094	22
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	92	6	110	57	9	32	6	645	59	37	1094	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	92	6	110	57	9	32	6	645	59	37	1094	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	6	110	57	9	32	6	645	59	37	1094	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	92	6	110	57	9	32	6	645	59	37	1094	22
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.44	0.03	0.53	0.86	0.14	1.00	1.00	2.75	0.25	1.00	2.94	0.06
Final Sat.:	752	49	899	1468	232	1598	1598	4673	427	1598	4999	101
Capacity Analysis Module:												
Vol/Sat:	0.05	0.12	0.12	0.03	0.04	0.02	0.00	0.14	0.14	0.02	0.22	0.22
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Ross St (N/S) / Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.564
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 27 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	0 1	1	0 0	1 0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	97	282	148	90	168	107	68	793	77	57	717	113
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	97	282	148	90	168	107	68	793	77	57	717	113
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	97	282	148	90	168	107	68	793	77	57	717	113
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	97	282	148	90	168	107	68	793	77	57	717	113
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	97	282	148	90	168	107	68	793	77	57	717	113
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	97	282	148	90	168	107	68	793	77	57	717	113
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.61	0.39	1.00	1.82	0.18	1.00	1.73	0.27
Final Sat.:	1598	1700	1598	1598	1039	661	1598	3099	301	1598	2937	463
Capacity Analysis Module:												
Vol/Sat:	0.06	0.17	0.09	0.06	0.16	0.16	0.04	0.26	0.26	0.04	0.24	0.24
Crit Moves:		****		****				****		****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Ross St (N/S) / Santa Ana Bl (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.668
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 34 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	0 1	1	0 1	0 1	1	0 2	0 1	1	0 3	0 1
Volume Module:												
Base Vol:	135	320	172	79	244	127	97	1030	131	123	764	118
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	135	320	172	79	244	127	97	1030	131	123	764	118
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	135	320	172	79	244	127	97	1030	131	123	764	118
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	135	320	172	79	244	127	97	1030	0	123	764	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	135	320	172	79	244	127	97	1030	0	123	764	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	135	320	172	79	244	127	97	1030	0	123	764	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00
Final Sat.:	1598	1700	1598	1598	1700	1598	1598	3400	1598	1598	5100	1598
Capacity Analysis Module:												
Vol/Sat:	0.08	0.19	0.11	0.05	0.14	0.08	0.06	0.30	0.00	0.08	0.15	0.00
Crit Moves:		****		****				****		****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Ross St (N/S) / 4th St (E/W)

Average Delay (sec/veh): 2.8 Worst Case Level Of Service: B[13.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 1 0			1 0 1 0 0			0 0 0 0 0			1 0 0 0 1		
Volume Module:												
Base Vol:	0	352	39	82	280	0	0	0	0	51	0	84
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	352	39	82	280	0	0	0	0	51	0	84
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	352	39	82	280	0	0	0	0	51	0	84
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	352	39	82	280	0	0	0	0	51	0	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	352	39	82	280	0	0	0	0	51	0	84
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	391	xxxx	xxxxx	xxxx	xxxx	xxxxx	816	xxxx	372
Potent Cap.:	xxxx	xxxx	xxxxx	1179	xxxx	xxxxx	xxxx	xxxx	xxxxx	350	xxxx	679
Move Cap.:	xxxx	xxxx	xxxxx	1179	xxxx	xxxxx	xxxx	xxxx	xxxxx	331	xxxx	679
Volume/Cap:	xxxx	xxxx	xxxx	0.07	xxxx	xxxx	xxxx	xxxx	xxxx	0.15	xxxx	0.12
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.5	xxxx	0.4
Control Del:	xxxxx	xxxx	xxxxx	8.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	17.9	xxxx	11.1
LOS by Move:	*	*	*	A	*	*	*	*	*	C	*	B
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			13.6		
ApproachLOS:	*			*			*			B		

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Broadway (N/S) / Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.743
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 42 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Ignore			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	0 1	1 0	2	0 1	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	87	735	72	162	837	208	252	888	87	49	604	138
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	87	735	72	162	837	208	252	888	87	49	604	138
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	87	735	72	162	837	208	252	888	87	49	604	138
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	87	735	0	162	837	0	252	888	87	49	604	138
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	87	735	0	162	837	0	252	888	87	49	604	138
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	87	735	0	162	837	0	252	888	87	49	604	138
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.82	0.18	1.00	1.63	0.37
Final Sat.:	1598	3400	1598	1598	3400	1598	1598	3097	303	1598	2768	632
Capacity Analysis Module:												
Vol/Sat:	0.05	0.22	0.00	0.10	0.25	0.00	0.16	0.29	0.29	0.03	0.22	0.22
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Broadway (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.612
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 2	0 0	0	0 1	1 0	0	0 0	0 0 0	0	1 1	1 0
Volume Module:												
Base Vol:	53	819	0	0	799	168	0	0	0	62	1023	162
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	53	819	0	0	799	168	0	0	0	62	1023	162
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	53	819	0	0	799	168	0	0	0	62	1023	162
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	53	819	0	0	799	168	0	0	0	62	1023	162
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	53	819	0	0	799	168	0	0	0	62	1023	162
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	53	819	0	0	799	168	0	0	0	62	1023	162
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.65	0.35	0.00	0.00	0.00	0.15	2.46	0.39
Final Sat.:	1598	3400	0	0	2809	591	0	0	0	254	4184	663
Capacity Analysis Module:												
Vol/Sat:	0.03	0.24	0.00	0.00	0.28	0.28	0.00	0.00	0.00	0.04	0.24	0.24
Crit Moves:	****				****						****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Broadway (N/S) / 5th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.620
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 1	1 0	1	0 2	0 0	0	1 1	1 0	0	0 0	0 0
Volume Module:												
Base Vol:	0	677	142	172	825	0	224	884	23	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	677	142	172	825	0	224	884	23	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	677	142	172	825	0	224	884	23	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	677	142	172	825	0	224	884	23	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	677	142	172	825	0	224	884	23	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	677	142	172	825	0	224	884	23	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00	0.94	1.00	0.94
Lanes:	0.00	1.65	0.35	1.00	2.00	0.00	0.59	2.35	0.06	0.00	0.00	0.00
Final Sat.:	0	2811	589	1598	3400	0	1010	3986	104	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.24	0.11	0.24	0.00	0.13	0.22	0.22	0.00	0.00	0.00
Crit Moves:		****		****				****				

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Broadway (N/S) / 4th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.610
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 30 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	1 0	1	0 1	1 0	0	0 1!	0 0	0	0 1!	0 0
Volume Module:												
Base Vol:	79	924	241	31	709	27	58	125	71	83	153	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	79	924	241	31	709	27	58	125	71	83	153	48
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	79	924	241	31	709	27	58	125	71	83	153	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	79	924	241	31	709	27	58	125	71	83	153	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	79	924	241	31	709	27	58	125	71	83	153	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	79	924	241	31	709	27	58	125	71	83	153	48
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.59	0.41	1.00	1.93	0.07	0.23	0.49	0.28	0.29	0.54	0.17
Final Sat.:	1598	2697	703	1598	3275	125	388	837	475	497	916	287
Capacity Analysis Module:												
Vol/Sat:	0.05	0.34	0.34	0.02	0.22	0.22	0.03	0.15	0.15	0.05	0.17	0.17
Crit Moves:		****		****				****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Broadway (N/S)/ 3rd st (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.803
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 53 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 0	1 0	1	0 1	0 1	1	0 1	0 1	1	0 1	0 0
Volume Module:												
Base Vol:	65	746	57	79	673	70	85	133	26	22	174	128
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	65	746	57	79	673	70	85	133	26	22	174	128
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	65	746	57	79	673	70	85	133	26	22	174	128
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	65	746	57	79	673	70	85	133	26	22	174	128
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	65	746	57	79	673	70	85	133	26	22	174	128
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	65	746	57	79	673	70	85	133	26	22	174	128
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.93	0.07	1.00	1.00	1.00	1.00	0.84	0.16	1.00	0.58	0.42
Final Sat.:	1598	1579	121	1598	1700	1598	1598	1422	278	1598	979	721
Capacity Analysis Module:												
Vol/Sat:	0.04	0.47	0.47	0.05	0.40	0.04	0.05	0.09	0.09	0.01	0.18	0.18
Crit Moves:		****		****				****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Broadway (N/S) / 1st St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.844
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 63 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	0 1	1	0 1	0 1	1	0 2	1 0	1	0 2	1 0
Volume Module:												
Base Vol:	108	425	130	77	465	171	165	1431	81	153	1701	82
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	108	425	130	77	465	171	165	1431	81	153	1701	82
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	108	425	130	77	465	171	165	1431	81	153	1701	82
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	108	425	130	77	465	171	165	1431	81	153	1701	82
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	108	425	130	77	465	171	165	1431	81	153	1701	82
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	108	425	130	77	465	171	165	1431	81	153	1701	82
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.84	0.16	1.00	2.86	0.14
Final Sat.:	1598	1700	1598	1598	1700	1598	1598	4827	273	1598	4865	235
Capacity Analysis Module:												
Vol/Sat:	0.07	0.25	0.08	0.05	0.27	0.11	0.10	0.30	0.30	0.10	0.35	0.35
Crit Moves:	****			****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Sycamore St (N/S) / Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.573
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 27 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 1!	0 0	0	0 1!	0 0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	28	61	28	110	110	118	27	1008	19	9	564	39
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	28	61	28	110	110	118	27	1008	19	9	564	39
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	28	61	28	110	110	118	27	1008	19	9	564	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	28	61	28	110	110	118	27	1008	19	9	564	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	61	28	110	110	118	27	1008	19	9	564	39
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	28	61	28	110	110	118	27	1008	19	9	564	39
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.24	0.52	0.24	0.32	0.33	0.35	1.00	1.96	0.04	1.00	1.87	0.13
Final Sat.:	407	886	407	553	553	593	1598	3337	63	1598	3180	220
Capacity Analysis Module:												
Vol/Sat:	0.02	0.07	0.07	0.06	0.20	0.20	0.02	0.30	0.30	0.01	0.18	0.18
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #14 Sycamore St (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 7.2 Worst Case Level Of Service: D[29.8]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0 0	0	0	0	1 0	0	0	0	0 0	0	1	1	1 0
Volume Module:																
Base Vol:	64	90	0	0	98	49	0	0	0	44	796	31				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	64	90	0	0	98	49	0	0	0	44	796	31				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	64	90	0	0	98	49	0	0	0	44	796	31				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	64	90	0	0	98	49	0	0	0	44	796	31				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	64	90	0	0	98	49	0	0	0	44	796	31				
Critical Gap Module:																
Critical Gp:	7.1	6.5	xxxxx	xxxxx	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx				
FollowUpTim:	3.5	4.0	xxxxx	xxxxx	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	402	915	xxxxx	xxxx	900	281	xxxx	xxxx	xxxxx	0	xxxx	xxxxx				
Potent Cap.:	562	275	xxxxx	xxxx	281	763	xxxx	xxxx	xxxxx	900	xxxx	xxxxx				
Move Cap.:	362	261	xxxxx	xxxx	266	763	xxxx	xxxx	xxxxx	900	xxxx	xxxxx				
Volume/Cap:	0.18	0.35	xxxx	xxxx	0.37	0.06	xxxx	xxxx	xxxx	0.05	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	295	xxxx	xxxxx	xxxx	xxxx	340	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	2.8	xxxx	xxxxx	xxxxx	xxxx	2.1	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx				
Shrd ConDel:	29.8	xxxx	xxxxx	xxxxx	xxxx	23.4	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx				
Shared LOS:	D	*	*	*	*	C	*	*	*	A	*	*				
ApproachDel:	29.8			23.4			xxxxxx			xxxxxx						
ApproachLOS:	D			C			*			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #15 Sycamore St (N/S) / 5th St (E/W)

Average Delay (sec/veh): 4.1 Worst Case Level Of Service: C[15.7]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	1 0	0	1	0	0 0	0	1	1	1 0	0	0	0	0 0
Volume Module:																
Base Vol:	0	7	28	95	39	0	75	521	18	0	0	0				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	0	7	28	95	39	0	75	521	18	0	0	0				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	0	7	28	95	39	0	75	521	18	0	0	0				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	0	7	28	95	39	0	75	521	18	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	0	7	28	95	39	0	75	521	18	0	0	0				
Critical Gap Module:																
Critical Gp:	xxxxx	6.5	6.2	7.1	6.5	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	4.0	3.3	3.5	4.0	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	xxxx	680	183	327	689	xxxxx	0	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	376	865	630	371	xxxxx	900	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	343	865	560	339	xxxxx	900	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	0.02	0.03	0.17	0.12	xxxx	0.08	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	xxxx	xxxx	663	470	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	0.2	1.2	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	10.7	15.7	xxxx	xxxxx	9.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	B	C	*	*	A	*	*	*	*	*				
ApproachDel:	10.7			15.7			xxxxxx			xxxxxx						
ApproachLOS:	B			C			*			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #16 Sycamore St (N/S) / 4th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.435
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): 9.8
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1! 0	0	0	1! 0	0	0	1! 0
Volume Module:												
Base Vol:	3	9	94	22	10	27	23	161	22	101	209	26
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	9	94	22	10	27	23	161	22	101	209	26
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	9	94	22	10	27	23	161	22	101	209	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	9	94	22	10	27	23	161	22	101	209	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	9	94	22	10	27	23	161	22	101	209	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	3	9	94	22	10	27	23	161	22	101	209	26
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	0.08	0.89	0.37	0.17	0.46	0.11	0.78	0.11	0.30	0.62	0.08
Final Sat.:	20	60	622	240	109	295	84	586	80	232	480	60
Capacity Analysis Module:												
Vol/Sat:	0.15	0.15	0.15	0.09	0.09	0.09	0.27	0.27	0.27	0.44	0.44	0.44
Crit Moves:		****			****			****			****	
Delay/Veh:	8.4	8.4	8.4	8.5	8.5	8.5	9.3	9.3	9.3	10.8	10.8	10.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.4	8.4	8.4	8.5	8.5	8.5	9.3	9.3	9.3	10.8	10.8	10.8
LOS by Move:	A	A	A	A	A	A	A	A	A	B	B	B
ApproachDel:		8.4			8.5			9.3			10.8	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		8.4			8.5			9.3			10.8	
LOS by Appr:		A			A			A			B	
AllWayAvgQ:	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.3	0.7	0.7	0.7

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Main St (N/S) / Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.883
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 78 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	T	R	L	T	T	R	L	T	T	R	L	T	T	R
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	1	1	0	1	0	1	0	1	1	0
Volume Module:																
Base Vol:	139	1225	104		83	1192	103		161	937	155		71	472	82	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	139	1225	104		83	1192	103		161	937	155		71	472	82	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	139	1225	104		83	1192	103		161	937	155		71	472	82	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	139	1225	104		83	1192	103		161	937	155		71	472	82	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	139	1225	104		83	1192	103		161	937	155		71	472	82	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	139	1225	104		83	1192	103		161	937	155		71	472	82	
Saturation Flow Module:																
Sat/Lane:	1700	1700	1700		1700	1700	1700		1700	1700	1700		1700	1700	1700	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	1.84	0.16		1.00	1.84	0.16		1.00	1.72	0.28		1.00	1.70	0.30	
Final Sat.:	1598	3134	266		1598	3130	270		1598	2917	483		1598	2897	503	
Capacity Analysis Module:																
Vol/Sat:	0.09	0.39	0.39		0.05	0.38	0.38		0.10	0.32	0.32		0.04	0.16	0.16	
Crit Moves:	****					****				****			****			

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #18 Main St (N/S) / Santa Ana Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.836
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 2	0 0	0	0 1	1 0	0	0 0	0 0 0	0	1 1	1 0
Volume Module:												
Base Vol:	107	1505	0	0	1499	90	0	0	0	98	1060	125
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	107	1505	0	0	1499	90	0	0	0	98	1060	125
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	107	1505	0	0	1499	90	0	0	0	98	1060	125
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	107	1505	0	0	1499	90	0	0	0	98	1060	125
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	107	1505	0	0	1499	90	0	0	0	98	1060	125
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	107	1505	0	0	1499	90	0	0	0	98	1060	125
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.89	0.11	0.00	0.00	0.00	0.23	2.48	0.29
Final Sat.:	1598	3400	0	0	3207	193	0	0	0	390	4214	497
Capacity Analysis Module:												
Vol/Sat:	0.07	0.44	0.00	0.00	0.47	0.47	0.00	0.00	0.00	0.06	0.25	0.25
Crit Moves:	****				****						****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #19 Main St (N/S) / 5th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.812
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 1	1 0	1	0 2	0 0	0	1 1	1 0	0	0 0	0 0
Volume Module:												
Base Vol:	0	1486	31	99	1452	0	184	989	121	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1486	31	99	1452	0	184	989	121	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1486	31	99	1452	0	184	989	121	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1486	31	99	1452	0	184	989	121	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1486	31	99	1452	0	184	989	121	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1486	31	99	1452	0	184	989	121	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00	0.94	1.00	0.94
Lanes:	0.00	1.96	0.04	1.00	2.00	0.00	0.43	2.29	0.28	0.00	0.00	0.00
Final Sat.:	0	3331	69	1598	3400	0	725	3898	477	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.45	0.45	0.06	0.43	0.00	0.11	0.25	0.25	0.00	0.00	0.00
Crit Moves:		****		****				****				

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #20 Main St (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.776
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 1	1 0	0	0 1	1 0	0	0 0	1 0	0	0 0	1 0
Volume Module:												
Base Vol:	0	1470	64	0	1492	59	0	236	63	0	353	105
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1470	64	0	1492	59	0	236	63	0	353	105
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1470	64	0	1492	59	0	236	63	0	353	105
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1470	64	0	1492	59	0	236	63	0	353	105
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1470	64	0	1492	59	0	236	63	0	353	105
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1470	64	0	1492	59	0	236	63	0	353	105
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.00	1.92	0.08	0.00	1.92	0.08	0.00	0.79	0.21	0.00	0.77	0.23
Final Sat.:	0	3258	142	0	3271	129	0	1342	358	0	1310	390
Capacity Analysis Module:												
Vol/Sat:	0.00	0.45	0.45	0.00	0.46	0.46	0.00	0.18	0.18	0.00	0.27	0.27
Crit Moves:	****			****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #21 Main St (N/S) / 3rd St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.694
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 1	1 0	0	0 1	1 0	1	0 0	1 0	1	0 0	1 0
Volume Module:												
Base Vol:	0	1433	51	0	1464	67	53	191	50	48	226	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1433	51	0	1464	67	53	191	50	48	226	47
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1433	51	0	1464	67	53	191	50	48	226	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1433	51	0	1464	67	53	191	50	48	226	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1433	51	0	1464	67	53	191	50	48	226	47
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1433	51	0	1464	67	53	191	50	48	226	47
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.00	1.93	0.07	0.00	1.91	0.09	1.00	0.79	0.21	1.00	0.83	0.17
Final Sat.:	0	3283	117	0	3251	149	1598	1347	353	1598	1407	293
Capacity Analysis Module:												
Vol/Sat:	0.00	0.44	0.44	0.00	0.45	0.45	0.03	0.14	0.14	0.03	0.16	0.16
Crit Moves:	****			****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #22 Main St (N/S) / 1st St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	1.013
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	249	1199	111	221	1116	181	200	1413	110	139	1515	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	249	1199	111	221	1116	181	200	1413	110	139	1515	90
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	249	1199	111	221	1116	181	200	1413	110	139	1515	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	249	1199	111	221	1116	181	200	1413	110	139	1515	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	249	1199	111	221	1116	181	200	1413	110	139	1515	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	249	1199	111	221	1116	181	200	1413	110	139	1515	90
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.83	0.17	1.00	2.00	1.00	1.00	2.78	0.22	1.00	2.83	0.17
Final Sat.:	1598	3112	288	1598	3400	1598	1598	4732	368	1598	4814	286
Capacity Analysis Module:												
Vol/Sat:	0.16	0.39	0.39	0.14	0.33	0.11	0.13	0.30	0.30	0.09	0.31	0.31
Crit Moves:		****		****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #23 Bush St (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.462
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	22	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	0 0	0 0	0	1 0	0 0	0	0 0	0 1	1	1 0
Volume Module:												
Base Vol:	50	381	0	0	246	42	0	0	0	40	844	73
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	381	0	0	246	42	0	0	0	40	844	73
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	50	381	0	0	246	42	0	0	0	40	844	73
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	381	0	0	246	42	0	0	0	40	844	73
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	381	0	0	246	42	0	0	0	40	844	73
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	381	0	0	246	42	0	0	0	40	844	73
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	0.85	0.15	0.00	0.00	0.00	0.12	2.65	0.23
Final Sat.:	1598	1700	0	0	1452	248	0	0	0	213	4498	389
Capacity Analysis Module:												
Vol/Sat:	0.03	0.22	0.00	0.00	0.17	0.17	0.00	0.00	0.00	0.02	0.19	0.19
Crit Moves:		****		****							****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #24 Bush St (N/S) / 5th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.560
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 1	0	1 0	1 0	0	0 1	1 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	382	75	33	316	0	100	914	112	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	382	75	33	316	0	100	914	112	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	382	75	33	316	0	100	914	112	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	382	75	33	316	0	100	914	112	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	382	75	33	316	0	100	914	112	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	382	75	33	316	0	100	914	112	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00	0.94	1.00	0.94
Lanes:	0.00	0.84	0.16	1.00	1.00	0.00	0.27	2.43	0.30	0.00	0.00	0.00
Final Sat.:	0	1421	279	1598	1700	0	453	4140	507	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.27	0.02	0.19	0.00	0.06	0.22	0.22	0.00	0.00	0.00
Crit Moves:		****		****				****				

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #25 Bush St (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.576
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	23	369	53	72	266	70	16	279	32	22	309	49
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	23	369	53	72	266	70	16	279	32	22	309	49
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	369	53	72	266	70	16	279	32	22	309	49
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	23	369	53	72	266	70	16	279	32	22	309	49
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	369	53	72	266	70	16	279	32	22	309	49
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	23	369	53	72	266	70	16	279	32	22	309	49
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.87	0.13	1.00	0.79	0.21	0.05	0.85	0.10	0.06	0.81	0.13
Final Sat.:	1598	1486	214	1598	1346	354	83	1450	166	98	1382	219
Capacity Analysis Module:												
Vol/Sat:	0.01	0.25	0.25	0.05	0.20	0.20	0.01	0.19	0.19	0.01	0.22	0.22
Crit Moves:		****		****				****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #26 Spurgeon St (N/S) / 1st St (E/W)

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: C[18.7]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	0	0	0 1	0	0	3	0 0	0	0	2	1 0
Volume Module:																
Base Vol:	0	0	0	0 0	163	0	1877	0	0	1788	82					
Growth Adj:	1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
Initial Bse:	0	0	0	0 0	163	0	1877	0	0	1788	82					
Added Vol:	0	0	0	0 0	0	0	0	0	0	0	0					
PasserByVol:	0	0	0	0 0	0	0	0	0	0	0	0					
Initial Fut:	0	0	0	0 0	163	0	1877	0	0	1788	82					
User Adj:	1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
PHF Adj:	1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
PHF Volume:	0	0	0	0 0	163	0	1877	0	0	1788	82					
Reduct Vol:	0	0	0	0 0	0	0	0	0	0	0	0					
FinalVolume:	0	0	0	0 0	163	0	1877	0	0	1788	82					
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx xxxx	637	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	425	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Move Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	425	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Volume/Cap:	xxxx	xxxx	xxxx	xxxx xxxx	0.38	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx					
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx xxxx	1.8	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Control Del:	xxxxx	xxxx	xxxxx	xxxxx xxxx	18.7	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
LOS by Move:	*	*	*	* *	C	*	*	*	*	*	*					
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*				
ApproachDel:	xxxxxx			18.7			xxxxxx			xxxxxx						
ApproachLOS:	*			C			*			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #27 French St (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 5.6 Worst Case Level Of Service: C[24.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0 0	0	0	0	1 0	0	0	0	0 0	0	1	0	1 0
Volume Module:																
Base Vol:	109	81	0	0 47	7	0	0	0	27	743	8					
Growth Adj:	1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
Initial Bse:	109	81	0	0 47	7	0	0	0	27	743	8					
Added Vol:	0	0	0	0 0	0	0	0	0	0	0	0					
PasserByVol:	0	0	0	0 0	0	0	0	0	0	0	0					
Initial Fut:	109	81	0	0 47	7	0	0	0	27	743	8					
User Adj:	1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
PHF Adj:	1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
PHF Volume:	109	81	0	0 47	7	0	0	0	27	743	8					
Reduct Vol:	0	0	0	0 0	0	0	0	0	0	0	0					
FinalVolume:	109	81	0	0 47	7	0	0	0	27	743	8					
Critical Gap Module:																
Critical Gp:	7.1	6.5	xxxxx	xxxxx 6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx					
FollowUpTim:	3.5	4.0	xxxxx	xxxxx 4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx					
Capacity Module:																
Cnflict Vol:	449	805	xxxxx	xxxx 801	376	xxxx	xxxx	xxxxx	0	xxxx	xxxxx					
Potent Cap.:	524	318	xxxxx	xxxx 320	675	xxxx	xxxx	xxxxx	900	xxxx	xxxxx					
Move Cap.:	448	309	xxxxx	xxxx 310	675	xxxx	xxxx	xxxxx	900	xxxx	xxxxx					
Volume/Cap:	0.24	0.26	xxxx	xxxx 0.15	0.01	xxxx	xxxx	xxxx	0.03	xxxx	xxxx					
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx					
Control Del:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx					
LOS by Move:	*	*	*	* *	*	*	*	*	A	*	*					
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	375	xxxx	xxxxx	xxxx	xxxx	334	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	2.7	xxxx	xxxxx	xxxxx	xxxx	0.6	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx				
Shrd ConDel:	24.0	xxxx	xxxxx	xxxxx	xxxx	17.9	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx				
Shared LOS:	C	*	*	*	*	C	*	*	*	A	*	*				
ApproachDel:	24.0			17.9			xxxxxx			xxxxxx						
ApproachLOS:	C			C			*			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #28 French St (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.543
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0 0	1 0	0 1	0	0 0	1!	0 0	0 1	0 0	1
Volume Module:												
Base Vol:	23	82	91	155	75	47	32	274	40	92	353	78
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	23	82	91	155	75	47	32	274	40	92	353	78
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	82	91	155	75	47	32	274	40	92	353	78
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	23	82	91	155	75	47	32	274	40	92	353	78
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	82	91	155	75	47	32	274	40	92	353	78
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	23	82	91	155	75	47	32	274	40	92	353	78
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.94
Lanes:	0.12	0.42	0.46	1.00	0.61	0.39	0.09	0.79	0.12	0.21	0.79	1.00
Final Sat.:	199	711	789	1598	1045	655	157	1346	197	351	1349	1598
Capacity Analysis Module:												
Vol/Sat:	0.01	0.12	0.12	0.10	0.07	0.07	0.02	0.20	0.20	0.05	0.26	0.05
Crit Moves:		****		****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #29 Lacy St (N/S) / Civic Center Dr (E/W)

Average Delay (sec/veh): 9.5 Worst Case Level Of Service: F[69.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1!	0 0	0 0	1!	0 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	26	27	49	101	16	19	17	704	22	10	242	81
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	26	27	49	101	16	19	17	704	22	10	242	81
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	27	49	101	16	19	17	704	22	10	242	81
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	26	27	49	101	16	19	17	704	22	10	242	81
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	26	27	49	101	16	19	17	704	22	10	242	81
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1069	1092	715	1090	1063	283	323	xxxx	xxxxx	726	xxxx	xxxxx
Potent Cap.:	201	216	434	195	225	761	1248	xxxx	xxxxx	886	xxxx	xxxxx
Move Cap.:	181	211	434	153	220	761	1248	xxxx	xxxxx	886	xxxx	xxxxx
Volume/Cap:	0.14	0.13	0.11	0.66	0.07	0.02	0.01	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.9	xxxx	xxxxx	9.1	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	266	xxxxx	xxxx	179	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	1.7	xxxxx	xxxxx	4.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	26.8	xxxxx	xxxxx	69.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	D	*	*	F	*	*	*	*	*	*	*
ApproachDel:		26.8			69.9			xxxxxx			xxxxxx	
ApproachLOS:		D			F			*			*	

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #30 Lacy st (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 12.5 Worst Case Level Of Service: F[179.1]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	1	0	0	1 0	1	0	0	1 0
Volume Module:																
Base Vol:	16	49	17		26	21	17		3	791	7		26	795	23	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	16	49	17		26	21	17		3	791	7		26	795	23	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	16	49	17		26	21	17		3	791	7		26	795	23	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	16	49	17		26	21	17		3	791	7		26	795	23	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	16	49	17		26	21	17		3	791	7		26	795	23	
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1678	1671	795		1692	1663	807		818	xxxx	xxxxx		798	xxxx	xxxxx	
Potent Cap.:	76	97	391		75	98	385		819	xxxx	xxxxx		833	xxxx	xxxxx	
Move Cap.:	59	94	391		41	95	385		819	xxxx	xxxxx		833	xxxx	xxxxx	
Volume/Cap:	0.27	0.52	0.04		0.64	0.22	0.04		0.00	xxxx	xxxx		0.03	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.4	xxxx	xxxxx		9.5	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		A	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	98	xxxxx		xxxx	71	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	4.6	xxxxx		xxxxx	4.5	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	129	xxxxx		xxxxx	179	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	F	*		*	F	*		*	*	*		*	*	*	
ApproachDel:	128.9				179.1				xxxxxx				xxxxxx			
ApproachLOS:	F				F				*				*			

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #31 Lacy St (N/S) / Brown St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.250
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): 8.1
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	0	1! 0	0	0	0	1! 0	0	0	0	1! 0	0	0	1	0	0 0
Volume Module:																
Base Vol:	78	74	65		7	40	16		9	19	11		22	34	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	78	74	65		7	40	16		9	19	11		22	34	0	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	78	74	65		7	40	16		9	19	11		22	34	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	78	74	65		7	40	16		9	19	11		22	34	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	78	74	65		7	40	16		9	19	11		22	34	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	78	74	65		7	40	16		9	19	11		22	34	0	
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.36	0.34	0.30		0.11	0.64	0.25		0.23	0.49	0.28		0.39	0.61	0.00	
Final Sat.:	312	296	260		93	529	212		177	374	217		291	450	0	
Capacity Analysis Module:																
Vol/Sat:	0.25	0.25	0.25		0.08	0.08	0.08		0.05	0.05	0.05		0.08	0.08	xxxx	
Crit Moves:	****					****				****				****		
Delay/Veh:	8.4	8.4	8.4		7.5	7.5	7.5		7.6	7.6	7.6		8.0	8.0	0.0	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	8.4	8.4	8.4		7.5	7.5	7.5		7.6	7.6	7.6		8.0	8.0	0.0	
LOS by Move:	A	A	A		A	A	A		A	A	A		A	A	*	
ApproachDel:	8.4				7.5				7.6				8.0			
Delay Adj:	1.00				1.00				1.00				1.00			
ApprAdjDel:	8.4				7.5				7.6				8.0			
LOS by Appr:	A				A				A				A			
AllWayAvgQ:	0.3	0.3	0.3		0.1	0.1	0.1		0.0	0.0	0.0		0.1	0.1	0.1	

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #32 Lacy St (N/S) / 4th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.751
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 44 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1! 0	0	1	0	0	1	0
Volume Module:												
Base Vol:	52	92	80	65	37	19	17	687	30	175	705	125
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	52	92	80	65	37	19	17	687	30	175	705	125
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	52	92	80	65	37	19	17	687	30	175	705	125
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	52	92	80	65	37	19	17	687	30	175	705	125
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	52	92	80	65	37	19	17	687	30	175	705	125
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	52	92	80	65	37	19	17	687	30	175	705	125
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	0.23	0.41	0.36	0.54	0.30	0.16	1.00	0.96	0.04	1.00	1.00	1.00
Final Sat.:	395	698	607	913	520	267	1598	1629	71	1598	1700	1598
Capacity Analysis Module:												
Vol/Sat:	0.03	0.13	0.13	0.04	0.07	0.07	0.01	0.42	0.42	0.11	0.41	0.08
Crit Moves:		****		****				****		****		

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #33 Lacy St (N/S) / 1st St (E/W)

Average Delay (sec/veh): 19.0 Worst Case Level Of Service: F[410.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	1! 0	0	0	1! 0	0	1	0	3	0	0
Volume Module:												
Base Vol:	0	0	0	11	0	151	216	1691	0	0	1734	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	11	0	151	216	1691	0	0	1734	47
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	11	0	151	216	1691	0	0	1734	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	11	0	151	216	1691	0	0	1734	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	11	0	151	216	1691	0	0	1734	47
Critical Gap Module:												
Critical Gp:	7.5	6.5	6.9	6.8	6.5	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	2701	3904	564	2753	3881	602	1781	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	10	3	474	16	4	448	353	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	4	1	474	8	1	448	353	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	0.00	0.00	1.32	0.00	0.34	0.61	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	3.9	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	30.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	D	*	*	*	*	*
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	0	xxxxx	xxxx	98	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	12.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	411	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			410.8			xxxxxx			xxxxxx		
ApproachLOS:	*			F			*			*		

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #34 Santiago St (N/S) / Washington Av (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	1.458
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	143.1
Optimal Cycle:	0	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	1 0	1	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	94	588	251	30	444	155	333	222	42	95	171	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	94	588	251	30	444	155	333	222	42	95	171	46
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	94	588	251	30	444	155	333	222	42	95	171	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	94	588	251	30	444	155	333	222	42	95	171	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	94	588	251	30	444	155	333	222	42	95	171	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	94	588	251	30	444	155	333	222	42	95	171	46
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.56	0.37	0.07	0.30	0.55	0.15
Final Sat.:	382	403	438	379	400	434	231	154	29	121	217	58
Capacity Analysis Module:												
Vol/Sat:	0.25	1.46	0.57	0.08	1.11	0.36	1.44	1.44	1.44	0.79	0.79	0.79
Crit Moves:		****			****		****			****		
Delay/Veh:	15.2	243	21.4	13.0	108	15.5	236.9	237	236.9	38.6	38.6	38.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	15.2	243	21.4	13.0	108	15.5	236.9	237	236.9	38.6	38.6	38.6
LOS by Move:	C	F	C	B	F	C	F	F	F	E	E	E
ApproachDel:	160.3			80.3			236.9			38.6		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	160.3			80.3			236.9			38.6		
LOS by Appr:	F			F			F			E		
AllWayAvgQ:	0.3	25.9	1.3	0.1	10.7	0.5	25.9	25.9	25.9	2.9	2.9	2.9

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #35 Santiago St (N/S) / Civic Center Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	1.781
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	221.7
Optimal Cycle:	0	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	258	694	64	26	578	174	363	67	474	48	40	21
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	258	694	64	26	578	174	363	67	474	48	40	21
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	258	694	64	26	578	174	363	67	474	48	40	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	258	694	64	26	578	174	363	67	474	48	40	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	258	694	64	26	578	174	363	67	474	48	40	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	258	694	64	26	578	174	363	67	474	48	40	21
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.92	0.08	1.00	0.77	0.23	0.84	0.16	1.00	0.44	0.37	0.19
Final Sat.:	415	406	37	389	325	98	356	66	486	164	136	72
Capacity Analysis Module:												
Vol/Sat:	0.62	1.71	1.71	0.07	1.78	1.78	1.02	1.02	0.97	0.29	0.29	0.29
Crit Moves:			****		****			****			****	
Delay/Veh:	24.6	349	348.8	12.5	381	381.2	78.0	78.0	61.7	16.7	16.7	16.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.6	349	348.8	12.5	381	381.2	78.0	78.0	61.7	16.7	16.7	16.7
LOS by Move:	C	F	F	B	F	F	F	F	F	C	C	C
ApproachDel:	266.5			368.9			69.4			16.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	266.5			368.9			69.4			16.7		
LOS by Appr:	F			F			F			C		
AllWayAvgQ:	1.5	41.6	41.6	0.1	43.4	43.4	7.8	7.8	7.0	0.4	0.4	0.4

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #36 Santiago St (N/S) / Santa Ana Bl (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.993
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	41	279	113	461	271	282	278	995	75	147	809	506
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	279	113	461	271	282	278	995	75	147	809	506
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	279	113	461	271	282	278	995	75	147	809	506
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	41	279	113	461	271	282	278	995	75	147	809	506
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	279	113	461	271	282	278	995	75	147	809	506
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	41	279	113	461	271	282	278	995	75	147	809	506
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.86	0.14	1.00	2.00	1.00
Final Sat.:	1598	1700	1598	1598	1700	1598	1598	3162	238	1598	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.03	0.16	0.07	0.29	0.16	0.18	0.17	0.31	0.31	0.09	0.24	0.32
Crit Moves:		****		****			****					****

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #40 Standard Av (N/S) / 1st St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.970
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	0 0	1! 0	0	1 0	1 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	235	365	173	22	287	32	100	1594	98	119	1625	14
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	235	365	173	22	287	32	100	1594	98	119	1625	14
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	235	365	173	22	287	32	100	1594	98	119	1625	14
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	235	365	173	22	287	32	100	1594	98	119	1625	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	235	365	173	22	287	32	100	1594	98	119	1625	14
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	235	365	173	22	287	32	100	1594	98	119	1625	14
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.68	0.32	0.06	0.85	0.09	1.00	1.88	0.12	1.00	1.98	0.02
Final Sat.:	1598	1153	547	110	1431	160	1598	3203	197	1598	3371	29
Capacity Analysis Module:												
Vol/Sat:	0.15	0.32	0.32	0.01	0.20	0.20	0.06	0.50	0.50	0.07	0.48	0.48
Crit Moves:	****				****			****		****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #42 Grand Av (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	1.312
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	1 0	1 0	2	0 2	2 0	1	0 2	0 1	0	1 0
Volume Module:												
Base Vol:	300	2707	59	186	1425	833	452	240	509	109	246	124
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	300	2707	59	186	1425	833	452	240	509	109	246	124
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	300	2707	59	186	1425	833	452	240	509	109	246	124
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	300	2707	59	186	1425	833	452	240	509	109	246	124
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	300	2707	59	186	1425	833	452	240	509	109	246	124
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	300	2707	59	186	1425	833	452	240	509	109	246	124
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	2.94	0.06	1.00	2.00	2.00	2.00	1.00	2.00	0.45	1.03	0.52
Final Sat.:	1598	4991	109	1598	3400	3196	3196	1700	3196	774	1746	880
Capacity Analysis Module:												
Vol/Sat:	0.19	0.54	0.54	0.12	0.42	0.26	0.14	0.14	0.16	0.14	0.14	0.14
Crit Moves:		****			****				****			****

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #43 Grand Av (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.841
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	62	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	3	0 1	1 0	2	1 0	1 0	1	1 0	1 0	2	0 1
Volume Module:												
Base Vol:	188	1351	98	162	967	102	208	713	102	296	927	202
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	188	1351	98	162	967	102	208	713	102	296	927	202
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	188	1351	98	162	967	102	208	713	102	296	927	202
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	188	1351	98	162	967	102	208	713	102	296	927	202
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	188	1351	98	162	967	102	208	713	102	296	927	202
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	188	1351	98	162	967	102	208	713	102	296	927	202
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	1.00	3.00	1.00	1.00	2.71	0.29	1.00	1.75	0.25	1.00	2.00	1.00
Final Sat.:	1598	5100	1598	1598	4613	487	1598	2974	426	1598	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.12	0.26	0.06	0.10	0.21	0.21	0.13	0.24	0.24	0.19	0.27	0.13
Crit Moves:		****			****				****		****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #44 Grand Av (N/S) / 1st St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.960
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	2	1 0	2 0	3	0 1	2 0	2	1 0	2 0	2	0 1
Volume Module:												
Base Vol:	498	1900	185	122	1293	109	230	1467	297	284	1328	53
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	498	1900	185	122	1293	109	230	1467	297	284	1328	53
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	498	1900	185	122	1293	109	230	1467	297	284	1328	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	498	1900	185	122	1293	109	230	1467	297	284	1328	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	498	1900	185	122	1293	109	230	1467	297	284	1328	53
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	498	1900	185	122	1293	109	230	1467	297	284	1328	53
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	2.00	2.73	0.27	2.00	3.00	1.00	2.00	2.49	0.51	2.00	2.00	1.00
Final Sat.:	3196	4647	453	3196	5100	1598	3196	4241	859	3196	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.16	0.41	0.41	0.04	0.25	0.07	0.07	0.35	0.35	0.09	0.39	0.03
Crit Moves:		****		****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #45 Penn Way (NS) at I-5 SB Ramps (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.658
Loss Time (sec):	12 (Y+R=4.0 sec)	Average Delay (sec/veh):	28.5
Optimal Cycle:	54	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	2	0 1	2 0	2	0 0	0 0	0	0 0	1 0	0	0 2
Volume Module:												
Base Vol:	0	418	292	713	229	0	0	0	0	284	0	297
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	418	292	713	229	0	0	0	0	284	0	297
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	418	292	713	229	0	0	0	0	284	0	297
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	418	292	713	229	0	0	0	0	284	0	297
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	418	292	713	229	0	0	0	0	284	0	297
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	418	292	713	229	0	0	0	0	284	0	297
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.92	0.95	1.00	1.00	1.00	1.00	0.77	1.00	0.75
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	2.00
Final Sat.:	0	3610	1615	3502	3610	0	0	0	0	1461	0	2842
Capacity Analysis Module:												
Vol/Sat:	0.00	0.12	0.18	0.20	0.06	0.00	0.00	0.00	0.00	0.19	0.00	0.10
Crit Moves:			****	****						****		
Green/Cycle:	0.00	0.27	0.27	0.31	0.31	0.00	0.00	0.00	0.00	0.30	0.00	0.61
Volume/Cap:	0.00	0.42	0.66	0.66	0.20	0.00	0.00	0.00	0.00	0.66	0.00	0.17
Delay/Veh:	0.0	30.0	35.7	31.4	25.5	0.0	0.0	0.0	0.0	34.5	0.0	8.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	30.0	35.7	31.4	25.5	0.0	0.0	0.0	0.0	34.5	0.0	8.8
LOS by Move:	A	C	D	C	C	A	A	A	A	C	A	A
HCM2kAvgQ:	0	6	9	11	3	0	0	0	0	9	0	2

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #46 I-5 SB Ramps (NS) / Santa Ana Bl (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.615
Loss Time (sec):	12 (Y+R=4.0 sec)	Average Delay (sec/veh):	29.7
Optimal Cycle:	50	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2	0 0	0 1	2	0 3	0 0	0	0 2	1 0
Volume Module:												
Base Vol:	0	0	0	351	0	190	509	870	0	0	1012	273
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	351	0	190	509	870	0	0	1012	273
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	351	0	190	509	870	0	0	1012	273
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	351	0	190	509	870	0	0	1012	273
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	351	0	190	509	870	0	0	1012	273
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	351	0	190	509	870	0	0	1012	273
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.85	0.92	0.91	1.00	1.00	0.88	0.88
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	2.00	3.00	0.00	0.00	2.36	0.64
Final Sat.:	0	0	0	3502	0	1615	3502	5187	0	0	3954	1067
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.10	0.00	0.12	0.15	0.17	0.00	0.00	0.26	0.26
Crit Moves:						****		****			****	
Green/Cycle:	0.00	0.00	0.00	0.19	0.00	0.19	0.27	0.27	0.00	0.00	0.42	0.42
Volume/Cap:	0.00	0.00	0.00	0.52	0.00	0.62	0.53	0.62	0.00	0.00	0.62	0.62
Delay/Veh:	0.0	0.0	0.0	37.1	0.0	40.7	31.5	32.6	0.0	0.0	23.5	23.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	37.1	0.0	40.7	31.5	32.6	0.0	0.0	23.5	23.5
LOS by Move:	A	A	A	D	A	D	C	C	A	A	C	C
HCM2kAvgQ:	0	0	0	6	0	6	7	9	0	0	12	12

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #47 I-5 NB Ramps (NS) / 17th St. (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	1.108
Loss Time (sec):	16 (Y+R=4.0 sec)	Average Delay (sec/veh):	73.0
Optimal Cycle:	100	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 1	0	0 1	1	0 0	0 1	1	0 3	0 1	0	0 2	1 0
Volume Module:												
Base Vol:	934	84	36	135	0	138	164	1548	458	0	2333	111
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	934	84	36	135	0	138	164	1548	458	0	2333	111
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	934	84	36	135	0	138	164	1548	458	0	2333	111
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	934	84	36	135	0	138	164	1548	0	0	2333	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	934	84	36	135	0	138	164	1548	0	0	2333	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	934	84	36	135	0	138	164	1548	0	0	2333	111
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.96	0.96	0.85	0.95	1.00	0.85	0.95	0.91	1.00	1.00	0.90	0.90
Lanes:	1.83	0.17	1.00	1.00	0.00	1.00	1.00	3.00	1.00	0.00	2.86	0.14
Final Sat.:	3333	300	1615	1805	0	1615	1805	5187	1900	0	4917	234
Capacity Analysis Module:												
Vol/Sat:	0.28	0.28	0.02	0.07	0.00	0.09	0.09	0.30	0.00	0.00	0.47	0.47
Crit Moves:	****					****	****				****	
Green/Cycle:	0.25	0.25	0.25	0.08	0.00	0.08	0.08	0.51	0.00	0.00	0.43	0.43
Volume/Cap:	1.11	1.11	0.09	0.97	0.00	1.11	1.11	0.59	0.00	0.00	1.11	1.11
Delay/Veh:	101.4	101	28.6	112.9	0.0	158.9	151.9	17.4	0.0	0.0	84.6	84.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	101.4	101	28.6	112.9	0.0	158.9	151.9	17.4	0.0	0.0	84.6	84.6
LOS by Move:	F	F	C	F	A	F	F	B	A	A	F	F
HCM2kAvgQ:	26	26	1	8	0	9	10	12	0	0	42	42

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #48 I-5 NB Ramps (NS) / Grand Ave (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 1.316
Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh): 119.9
Optimal Cycle: 100 Level Of Service: F

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Ignore				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	0	3	0 1	1	0	3	0 0	0	0	0	0 0	2	0	0	0 1
Volume Module:																
Base Vol:	0	2714	775		53	1596	0		0	0	0		673	0	978	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	2714	775		53	1596	0		0	0	0		673	0	978	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	2714	775		53	1596	0		0	0	0		673	0	978	
User Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	2714	0		53	1596	0		0	0	0		673	0	978	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	2714	0		53	1596	0		0	0	0		673	0	978	
PCE Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	0	2714	0		53	1596	0		0	0	0		673	0	978	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	0.91	1.00		0.95	0.91	1.00		1.00	1.00	1.00		0.92	1.00	0.85	
Lanes:	0.00	3.00	1.00		1.00	3.00	0.00		0.00	0.00	0.00		2.00	0.00	1.00	
Final Sat.:	0	5187	1900		1805	5187	0		0	0	0		3502	0	1615	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.52	0.00		0.03	0.31	0.00		0.00	0.00	0.00		0.19	0.00	0.61	
Crit Moves:		****				****									****	
Green/Cycle:	0.00	0.40	0.00		0.02	0.42	0.00		0.00	0.00	0.00		0.46	0.00	0.46	
Volume/Cap:	0.00	1.32	0.00		1.32	0.73	0.00		0.00	0.00	0.00		0.42	0.00	1.32	
Delay/Veh:	0.0	176	0.0		297.6	25.6	0.0		0.0	0.0	0.0		18.2	0.0	178.7	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	176	0.0		297.6	25.6	0.0		0.0	0.0	0.0		18.2	0.0	178.7	
LOS by Move:	A	F	A		F	C	A		A	A	A		B	A	F	
HCM2kAvgQ:	0	61	0		5	16	0		0	0	0		7	0	60	

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #49 Mortimer (N/S) / Santa Ana Blvd (E/W)

Average Delay (sec/veh): 10.4 Worst Case Level Of Service: C[23.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	0	0	0	0 0	1	0	0	1 0
Volume Module:																
Base Vol:	1	0	660		1	0	2		0	0	0		65	557	8	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	1	0	660		1	0	2		0	0	0		65	557	8	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	1	0	660		1	0	2		0	0	0		65	557	8	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	1	0	660		1	0	2		0	0	0		65	557	8	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	1	0	660		1	0	2		0	0	0		65	557	8	
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2		xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	692	695	0		691	691	561		xxxx	xxxx	xxxxx		0	xxxx	xxxxx	
Potent Cap.:	361	368	900		362	370	531		xxxx	xxxx	xxxxx		900	xxxx	xxxxx	
Move Cap.:	340	342	900		91	344	531		xxxx	xxxx	xxxxx		900	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.73		0.01	0.00	0.00		xxxx	xxxx	xxxx		0.07	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.3	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		*	*	*		A	*	*	
Movement:	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	- RT
Shared Cap.:	xxxx	898	xxxxx		xxxx	203	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	6.8	xxxxx		xxxxx	0.0	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	19.3	xxxxx		xxxxx	23.0	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*		*	C	*		*	*	*		*	*	*	
ApproachDel:	19.3				23.0				xxxxxx				xxxxxx			
ApproachLOS:	C				C				*				*			

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 Without Project PM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #50 Mortimer (N/S) / 5th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.973
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	33.5
Optimal Cycle:	0	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	0 0	1	0	0	0	1! 0	0	1	0 0	1	0	0	0	1! 0	0
Volume Module:																
Base Vol:	0	218	7		7	34	12		592	104	61		13	0	56	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	218	7		7	34	12		592	104	61		13	0	56	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	218	7		7	34	12		592	104	61		13	0	56	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	218	7		7	34	12		592	104	61		13	0	56	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	218	7		7	34	12		592	104	61		13	0	56	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	0	218	7		7	34	12		592	104	61		13	0	56	
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.00	0.97	0.03		0.13	0.64	0.23		1.00	0.63	0.37		0.19	0.00	0.81	
Final Sat.:	0	581	19		75	363	128		609	440	258		122	0	526	
Capacity Analysis Module:																
Vol/Sat:	xxxx	0.38	0.38		0.09	0.09	0.09		0.97	0.24	0.24		0.11	xxxx	0.11	
Crit Moves:		****				****			****						****	
Delay/Veh:	0.0	12.3	12.3		9.8	9.8	9.8		53.2	9.4	9.4		8.9	0.0	8.9	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	12.3	12.3		9.8	9.8	9.8		53.2	9.4	9.4		8.9	0.0	8.9	
LOS by Move:	*	B	B		A	A	A		F	A	A		A	*	A	
ApproachDel:		12.3				9.8				43.7				8.9		
Delay Adj:		1.00				1.00				1.00				1.00		
ApprAdjDel:		12.3				9.8				43.7				8.9		
LOS by Appr:		B				A				E				A		
AllWayAvgQ:	0.6	0.6	0.6		0.1	0.1	0.1		7.5	0.3	0.3		0.1	0.1	0.1	

Note: Queue reported is the number of cars per lane.

APPENDIX H
2030 With Project Conditions Analysis Worksheets

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Scenario Report

Scenario:	2030WPAM
Command:	2030WP AM
Volume:	2030WPAM
Geometry:	Future WP
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Flower St (NS)/ Civic Center D	B	xxxxx	0.679	B	xxxxx	0.679	+ 0.000 V/C
# 2 Flower St (N/S) / Santa Ana Bl	A	xxxxx	0.589	A	xxxxx	0.589	+ 0.000 V/C
# 3 Parton St (E/W) / Santa Ana Bl	A	xxxxx	0.275	A	xxxxx	0.275	+ 0.000 V/C
# 4 Ross St (N/S) / Civic Center D	A	xxxxx	0.541	A	xxxxx	0.541	+ 0.000 V/C
# 5 Ross St (N/S) / Santa Ana Bl (	A	xxxxx	0.476	A	xxxxx	0.476	+ 0.000 V/C
# 6 Ross St (N/S) / 4th St (E/W)	B	10.9	0.000	B	10.9	0.000	+ 0.000 D/V
# 7 Broadway (N/S) / Civic Center	B	xxxxx	0.637	B	xxxxx	0.637	+ 0.000 V/C
# 8 Broadway (N/S) / Santa Ana Bl	A	xxxxx	0.492	A	xxxxx	0.492	+ 0.000 V/C
# 9 Broadway (N/S) / 5th St (E/W)	A	xxxxx	0.355	A	xxxxx	0.355	+ 0.000 V/C
# 10 Broadway (N/S) / 4th St (E/W)	A	xxxxx	0.334	A	xxxxx	0.334	+ 0.000 V/C
# 11 Broadway (N/S)/ 3rd st (E/W)	A	xxxxx	0.338	A	xxxxx	0.338	+ 0.000 V/C
# 12 Broadway (N/S) / 1st St (E/W)	B	xxxxx	0.655	B	xxxxx	0.655	+ 0.000 V/C
# 13 Sycamore St (N/S) / Civic Cent	A	xxxxx	0.442	A	xxxxx	0.442	+ 0.000 V/C
# 14 Sycamore St (N/S) / Santa Ana	C	24.2	0.000	C	24.2	0.000	+ 0.000 D/V
# 15 Sycamore St (N/S) / 5th St (E/	C	16.0	0.000	C	16.0	0.000	+ 0.000 D/V
# 16 Sycamore St (N/S) / 4th St (E/	A	8.1	0.251	A	8.1	0.251	+ 0.000 V/C
# 17 Main St (N/S) / Civic Center D	C	xxxxx	0.781	C	xxxxx	0.781	+ 0.000 V/C
# 18 Main St (N/S) / Santa Ana Dr (	B	xxxxx	0.672	B	xxxxx	0.672	+ 0.000 V/C
# 19 Main St (N/S) / 5th St (E/W)	A	xxxxx	0.518	A	xxxxx	0.518	+ 0.000 V/C
# 20 Main St (N/S) / 4th St (E/W)	A	xxxxx	0.571	A	xxxxx	0.571	+ 0.000 V/C
# 21 Main St (N/S) / 3rd St (E/W)	A	xxxxx	0.490	A	xxxxx	0.490	+ 0.000 V/C
# 22 Main St (N/S) / 1st St (E/W)	C	xxxxx	0.776	C	xxxxx	0.776	+ 0.000 V/C
# 23 Bush St (N/S) / Santa Ana Bl (	A	xxxxx	0.305	A	xxxxx	0.305	+ 0.000 V/C
# 24 Bush St (N/S) / 5th St (E/W)	A	xxxxx	0.242	A	xxxxx	0.242	+ 0.000 V/C

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Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 25 Bush St (N/S) / 4th St (E/W)	A	xxxxx	0.293	A	xxxxx	0.293	+ 0.000 V/C
# 26 Spurgeon St (N/S) / 1st St (E/	B	10.9	0.000	B	10.9	0.000	+ 0.000 D/V
# 27 French St (N/S) / Santa Ana Bl	C	19.9	0.000	C	19.9	0.000	+ 0.000 D/V
# 28 French St (N/S) / 4th St (E/W)	A	xxxxx	0.316	A	xxxxx	0.316	+ 0.000 V/C
# 29 Lacy St (N/S) / Civic Center D	D	25.4	0.000	D	25.4	0.000	+ 0.000 D/V
# 30 Lacy st (N/S) / Santa Ana Bl (	D	31.9	0.000	D	31.9	0.000	+ 0.000 D/V
# 31 Lacy St (N/S) / Brown St (E/W)	A	7.3	0.114	A	7.3	0.114	+ 0.000 V/C
# 32 Lacy St (N/S) / 4th St (E/W)	A	xxxxx	0.398	A	xxxxx	0.398	+ 0.000 V/C
# 33 Lacy St (N/S) / 1st St (E/W)	D	33.6	0.000	D	33.6	0.000	+ 0.000 D/V
# 34 Santiago St (N/S) / Washington	C	16.3	0.683	C	16.3	0.683	+ 0.000 V/C
# 35 Santiago St (N/S) / Civic Cent	C	23.5	0.844	C	23.5	0.844	+ 0.000 V/C
# 36 Santiago St (N/S) / Santa Ana	A	xxxxx	0.545	A	xxxxx	0.545	+ 0.000 V/C
# 37 Santiago St (N/S) / Brown St (	B	12.1	0.000	B	12.1	0.000	+ 0.000 D/V
# 38 Santiago St (N/S) / 6th St (E/	B	11.3	0.000	B	11.3	0.000	+ 0.000 D/V
# 39 Santiago St (N/S) / 4th (E/W)	F	OVRFL	0.000	F	OVRFL	0.000	+ 0.000 D/V
# 40 Standard Av (N/S) / 1st St (E/	D	xxxxx	0.832	D	xxxxx	0.832	+ 0.000 V/C
# 41 U-24 (N/S) / Santa Ana Bl (E/W	E	46.3	0.000	E	46.3	0.000	+ 0.000 D/V
# 42 Grand Av (N/S) / Santa Ana Bl	C	xxxxx	0.794	C	xxxxx	0.794	+ 0.000 V/C
# 43 Grand Av (N/S) / 4th St (E/W)	B	xxxxx	0.665	B	xxxxx	0.665	+ 0.000 V/C
# 44 Grand Av (N/S) / 1st St (E/W)	C	xxxxx	0.729	C	xxxxx	0.729	+ 0.000 V/C
# 45 Penn Way (NS) at I-5 SB Ramps	C	22.7	0.439	C	22.7	0.439	+ 0.000 D/V
# 46 I-5 SB Ramps (NS) / Santa Ana	C	28.7	0.527	C	28.7	0.527	+ 0.000 D/V
# 47 I-5 NB Ramps (NS) / 17th St. (	C	33.2	0.780	C	33.2	0.780	+ 0.000 D/V
# 48 I-5 NB Ramps (NS) / Grand Ave	C	20.6	0.626	C	20.6	0.626	+ 0.000 D/V
# 49 Mortimer (N/S) / Santa Ana Blv	C	22.2	0.000	C	22.2	0.000	+ 0.000 D/V

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 50 Mortimer (N/S) / 5th St (E/W)	A	9.1	0.303	A	9.1	0.303	+ 0.000 V/C

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Flower St (NS)/ Civic Center Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.679
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	156	689	163	117	634	180	133	534	158	141	507	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	156	689	163	117	634	180	133	534	158	141	507	60
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	156	689	163	117	634	180	133	534	158	141	507	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	156	689	163	117	634	180	133	534	158	141	507	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	156	689	163	117	634	180	133	534	158	141	507	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	156	689	163	117	634	180	133	534	158	141	507	60
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.62	0.38	1.00	1.56	0.44	1.00	1.54	0.46	1.00	1.79	0.21
Final Sat.:	1598	2750	650	1598	2648	752	1598	2624	776	1598	3040	360
Capacity Analysis Module:												
Vol/Sat:	0.10	0.25	0.25	0.07	0.24	0.24	0.08	0.20	0.20	0.09	0.17	0.17
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Flower St (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.589
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	0 1	1 0	2	0 1	1 0	3	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	65	957	59	164	850	80	88	496	153	82	338	119
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	65	957	59	164	850	80	88	496	153	82	338	119
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	65	957	59	164	850	80	88	496	153	82	338	119
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	65	957	59	164	850	80	88	496	153	82	338	119
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	65	957	59	164	850	80	88	496	153	82	338	119
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	65	957	59	164	850	80	88	496	153	82	338	119
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00
Final Sat.:	1598	3400	1598	1598	3400	1598	1598	5100	1598	1598	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.04	0.28	0.04	0.10	0.25	0.05	0.06	0.10	0.10	0.05	0.10	0.07
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Parton St (E/W) / Santa Ana Bl (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.275
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 17 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1	0	0	2	1	0	
Volume Module:												
Base Vol:	14	4	32	21	7	22	31	579	114	75	560	84
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	14	4	32	21	7	22	31	579	114	75	560	84
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	14	4	32	21	7	22	31	579	114	75	560	84
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	14	4	32	21	7	22	31	579	114	75	560	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	4	32	21	7	22	31	579	114	75	560	84
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	14	4	32	21	7	22	31	579	114	75	560	84
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.28	0.08	0.64	0.75	0.25	1.00	1.00	2.51	0.49	1.00	2.61	0.39
Final Sat.:	476	136	1088	1275	425	1598	1598	4261	839	1598	4435	665
Capacity Analysis Module:												
Vol/Sat:	0.01	0.03	0.03	0.01	0.02	0.01	0.02	0.14	0.14	0.05	0.13	0.13
Crit Moves:		****		****				****		****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Ross St (N/S) / Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.541
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 26 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	0	1	1	0	0	1	0	1	0
Volume Module:												
Base Vol:	92	197	67	64	218	56	48	582	97	66	772	51
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	92	197	67	64	218	56	48	582	97	66	772	51
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	92	197	67	64	218	56	48	582	97	66	772	51
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	92	197	67	64	218	56	48	582	97	66	772	51
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	197	67	64	218	56	48	582	97	66	772	51
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	92	197	67	64	218	56	48	582	97	66	772	51
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.80	0.20	1.00	1.71	0.29	1.00	1.88	0.12
Final Sat.:	1598	1700	1598	1598	1353	347	1598	2914	486	1598	3189	211
Capacity Analysis Module:												
Vol/Sat:	0.06	0.12	0.04	0.04	0.16	0.16	0.03	0.20	0.20	0.04	0.24	0.24
Crit Moves:	****				****		****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Ross St (N/S) / Santa Ana Bl (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.476
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 23 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	0 1	1	0 1	0 1	1	0 2	0 1	1	0 3	0 1
Volume Module:												
Base Vol:	28	160	64	59	170	108	76	559	23	209	453	101
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	28	160	64	59	170	108	76	559	23	209	453	101
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	28	160	64	59	170	108	76	559	23	209	453	101
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	28	160	64	59	170	108	76	559	0	209	453	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	160	64	59	170	108	76	559	0	209	453	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	28	160	64	59	170	108	76	559	0	209	453	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00
Final Sat.:	1598	1700	1598	1598	1700	1598	1598	3400	1598	1598	5100	1598
Capacity Analysis Module:												
Vol/Sat:	0.02	0.09	0.04	0.04	0.10	0.07	0.05	0.16	0.00	0.13	0.09	0.00
Crit Moves:		****		****				****		****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Ross St (N/S) / 4th St (E/W)

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: B[10.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1	0 0	1	0 1	0 0	0 0	0	0 0	1	0 0	0 1
Volume Module:												
Base Vol:	0	260	0	43	205	0	0	0	0	27	0	58
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	260	0	43	205	0	0	0	0	27	0	58
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	260	0	43	205	0	0	0	0	27	0	58
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	260	0	43	205	0	0	0	0	27	0	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	260	0	43	205	0	0	0	0	27	0	58
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	260	xxxx	xxxxx	xxxx	xxxx	xxxxx	551	xxxx	260
Potent Cap.:	xxxx	xxxx	xxxxx	1316	xxxx	xxxxx	xxxx	xxxx	xxxxx	499	xxxx	784
Move Cap.:	xxxx	xxxx	xxxxx	1316	xxxx	xxxxx	xxxx	xxxx	xxxxx	486	xxxx	784
Volume/Cap:	xxxx	xxxx	xxxx	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	0.06	xxxx	0.07
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	0.2
Control Del:	xxxxx	xxxx	xxxxx	7.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	12.8	xxxx	10.0
LOS by Move:	*	*	*	A	*	*	*	*	*	B	*	A
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			10.9		
ApproachLOS:	*			*			*			B		

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Broadway (N/S) / Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.637
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 31 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Ignore			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	97	539	54	130	693	260	148	437	70	43	672	108
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	97	539	54	130	693	260	148	437	70	43	672	108
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	97	539	54	130	693	260	148	437	70	43	672	108
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	97	539	0	130	693	0	148	437	70	43	672	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	97	539	0	130	693	0	148	437	70	43	672	108
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	97	539	0	130	693	0	148	437	70	43	672	108
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.72	0.28	1.00	1.72	0.28
Final Sat.:	1598	3400	1598	1598	3400	1598	1598	2931	469	1598	2929	471
Capacity Analysis Module:												
Vol/Sat:	0.06	0.16	0.00	0.08	0.20	0.00	0.09	0.15	0.15	0.03	0.23	0.23
Crit Moves:	****			****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Broadway (N/S) / Santa Ana Bl (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.492
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 23 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 2	0 0	0	0 1	1 0	0	0 0	0 0	0	1 1	1 0
Volume Module:												
Base Vol:	58	662	0	0	676	205	0	0	0	25	609	114
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	58	662	0	0	676	205	0	0	0	25	609	114
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	58	662	0	0	676	205	0	0	0	25	609	114
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	58	662	0	0	676	205	0	0	0	25	609	114
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	662	0	0	676	205	0	0	0	25	609	114
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	58	662	0	0	676	205	0	0	0	25	609	114
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.53	0.47	0.00	0.00	0.00	0.10	2.44	0.46
Final Sat.:	1598	3400	0	0	2609	791	0	0	0	170	4152	777
Capacity Analysis Module:												
Vol/Sat:	0.04	0.19	0.00	0.00	0.26	0.26	0.00	0.00	0.00	0.01	0.15	0.15
Crit Moves:	****				****						****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Broadway (N/S) / 5th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.355
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	19	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	1 0	1 0	2	0 0	0 1	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	518	44	75	535	0	119	352	1	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	518	44	75	535	0	119	352	1	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	518	44	75	535	0	119	352	1	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	518	44	75	535	0	119	352	1	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	518	44	75	535	0	119	352	1	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	518	44	75	535	0	119	352	1	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00	0.94	1.00	0.94
Lanes:	0.00	1.84	0.16	1.00	2.00	0.00	0.75	2.24	0.01	0.00	0.00	0.00
Final Sat.:	0	3134	266	1598	3400	0	1286	3803	11	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.17	0.05	0.16	0.00	0.07	0.09	0.09	0.00	0.00	0.00
Crit Moves:		****		****				****				

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Broadway (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.334
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	18	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	14	490	23	12	464	79	24	47	30	40	105	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	14	490	23	12	464	79	24	47	30	40	105	28
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	14	490	23	12	464	79	24	47	30	40	105	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	14	490	23	12	464	79	24	47	30	40	105	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	490	23	12	464	79	24	47	30	40	105	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	14	490	23	12	464	79	24	47	30	40	105	28
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.91	0.09	1.00	1.71	0.29	0.24	0.46	0.30	0.23	0.61	0.16
Final Sat.:	1598	3248	152	1598	2905	495	404	791	505	393	1032	275
Capacity Analysis Module:												
Vol/Sat:	0.01	0.15	0.15	0.01	0.16	0.16	0.01	0.06	0.06	0.02	0.10	0.10
Crit Moves:	****				****		****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Broadway (N/S)/ 3rd st (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.338
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	18	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0 1	0	1	0 1	1	0	0 1	0	1	0 1
Volume Module:												
Base Vol:	24	377	8	24	355	21	12	51	18	10	37	18
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	24	377	8	24	355	21	12	51	18	10	37	18
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	24	377	8	24	355	21	12	51	18	10	37	18
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	377	8	24	355	21	12	51	18	10	37	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	377	8	24	355	21	12	51	18	10	37	18
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	377	8	24	355	21	12	51	18	10	37	18
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.98	0.02	1.00	1.00	1.00	1.00	0.74	0.26	1.00	0.67	0.33
Final Sat.:	1598	1665	35	1598	1700	1598	1598	1257	443	1598	1144	556
Capacity Analysis Module:												
Vol/Sat:	0.02	0.23	0.23	0.02	0.21	0.01	0.01	0.04	0.04	0.01	0.03	0.03
Crit Moves:		****		****				****		****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Broadway (N/S) / 1st St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.655
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1 0 1	1	0	1 0 1	1	0	2 1 0	1	0	2 1 0
Volume Module:												
Base Vol:	59	340	102	64	345	78	187	1347	69	140	949	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	59	340	102	64	345	78	187	1347	69	140	949	63
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	59	340	102	64	345	78	187	1347	69	140	949	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	59	340	102	64	345	78	187	1347	69	140	949	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	340	102	64	345	78	187	1347	69	140	949	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	59	340	102	64	345	78	187	1347	69	140	949	63
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.85	0.15	1.00	2.81	0.19
Final Sat.:	1598	1700	1598	1598	1700	1598	1598	4851	249	1598	4783	317
Capacity Analysis Module:												
Vol/Sat:	0.04	0.20	0.06	0.04	0.20	0.05	0.12	0.28	0.28	0.09	0.20	0.20
Crit Moves:	****				****			****		****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Sycamore St (N/S) / Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.442
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 21 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 1! 0	0	0	0 1! 0	0	1	0 1	1 0	1	0 1	0
Volume Module:												
Base Vol:	26	88	28	29	21	22	68	425	62	29	757	88
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	26	88	28	29	21	22	68	425	62	29	757	88
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	88	28	29	21	22	68	425	62	29	757	88
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	26	88	28	29	21	22	68	425	62	29	757	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	88	28	29	21	22	68	425	62	29	757	88
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	26	88	28	29	21	22	68	425	62	29	757	88
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.18	0.62	0.20	0.40	0.29	0.31	1.00	1.75	0.25	1.00	1.79	0.21
Final Sat.:	311	1054	335	685	496	519	1598	2967	433	1598	3046	354
Capacity Analysis Module:												
Vol/Sat:	0.02	0.08	0.08	0.02	0.04	0.04	0.04	0.14	0.14	0.02	0.25	0.25
Crit Moves:		****		****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #14 Sycamore St (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 3.1 Worst Case Level Of Service: C[24.2]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	- T	- R			L	- T	- R			L	- T	- R			L	- T	- R		
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	1 0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	1	0
Volume Module:																				
Base Vol:	9	38	0	0	51	22	0	0	0	69	871	29								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	9	38	0	0	51	22	0	0	0	69	871	29								
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	9	38	0	0	51	22	0	0	0	69	871	29								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	9	38	0	0	51	22	0	0	0	69	871	29								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	9	38	0	0	51	22	0	0	0	69	871	29								
Critical Gap Module:																				
Critical Gp:	7.1	6.5	xxxxx	xxxxx	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	xxxxx	xxxxx	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	454	1038	xxxxx	xxxx	1024	305	xxxx	xxxx	xxxxx	0	xxxx	xxxxx								
Potent Cap.:	520	233	xxxxx	xxxx	237	740	xxxx	xxxx	xxxxx	900	xxxx	xxxxx								
Move Cap.:	389	214	xxxxx	xxxx	218	740	xxxx	xxxx	xxxxx	900	xxxx	xxxxx								
Volume/Cap:	0.02	0.18	xxxx	xxxx	0.23	0.03	xxxx	xxxx	xxxx	0.08	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.3	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*								
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT								
Shared Cap.:	234	xxxx	xxxxx	xxxx	xxxx	277	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	0.7	xxxx	xxxxx	xxxxx	xxxx	1.0	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx								
Shrd ConDel:	24.2	xxxx	xxxxx	xxxxx	xxxx	22.6	xxxxx	xxxx	xxxxx	9.3	xxxx	xxxxx								
Shared LOS:	C	*	*	*	*	C	*	*	*	A	*	*								
ApproachDel:	24.2			22.6			xxxxx			xxxxx										
ApproachLOS:	C			C			*			*										

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #15 Sycamore St (N/S) / 5th St (E/W)

Average Delay (sec/veh): 3.3 Worst Case Level Of Service: C[16.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 1 0			0 1 0 0 0			0 1 1 1 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	34	29	97	38	0	17	756	17	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	34	29	97	38	0	17	756	17	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	34	29	97	38	0	17	756	17	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	34	29	97	38	0	17	756	17	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	34	29	97	38	0	17	756	17	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	6.5	6.2	7.1	6.5	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	4.0	3.3	3.5	4.0	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	799	261	303	807	xxxxx	0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	321	783	653	317	xxxxx	900	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	315	783	569	311	xxxxx	900	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	0.11	0.04	0.17	0.12	xxxx	0.02	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	434	461	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	0.5	1.2	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	14.7	16.0	xxxx	xxxxx	9.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	B	C	*	*	A	*	*	*	*	*
ApproachDel:	14.7			16.0			xxxxxx			xxxxxx		
ApproachLOS:	B			C			*			*		

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #16 Sycamore St (N/S) / 4th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.251
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): 8.1
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	2	9	28	15	13	25	18	30	14	72	112	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	9	28	15	13	25	18	30	14	72	112	30
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	9	28	15	13	25	18	30	14	72	112	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	9	28	15	13	25	18	30	14	72	112	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	9	28	15	13	25	18	30	14	72	112	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	9	28	15	13	25	18	30	14	72	112	30
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.05	0.23	0.72	0.28	0.25	0.47	0.29	0.48	0.23	0.34	0.52	0.14
Final Sat.:	42	190	590	224	194	373	240	400	187	287	447	120
Capacity Analysis Module:												
Vol/Sat:	0.05	0.05	0.05	0.07	0.07	0.07	0.07	0.07	0.07	0.25	0.25	0.25
Crit Moves:		****			****			****				****
Delay/Veh:	7.3	7.3	7.3	7.6	7.6	7.6	7.6	7.6	7.6	8.5	8.5	8.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.3	7.3	7.3	7.6	7.6	7.6	7.6	7.6	7.6	8.5	8.5	8.5
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:		7.3			7.6			7.6			8.5	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		7.3			7.6			7.6			8.5	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.3

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Main St (N/S) / Civic Center Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.781
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	193	970	85	99	1017	189	94	432	135	64	612	58
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	193	970	85	99	1017	189	94	432	135	64	612	58
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	193	970	85	99	1017	189	94	432	135	64	612	58
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	193	970	85	99	1017	189	94	432	135	64	612	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	193	970	85	99	1017	189	94	432	135	64	612	58
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	193	970	85	99	1017	189	94	432	135	64	612	58
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.84	0.16	1.00	1.69	0.31	1.00	1.52	0.48	1.00	1.83	0.17
Final Sat.:	1598	3126	274	1598	2867	533	1598	2590	810	1598	3106	294
Capacity Analysis Module:												
Vol/Sat:	0.12	0.31	0.31	0.06	0.35	0.35	0.06	0.17	0.17	0.04	0.20	0.20
Crit Moves:	****			****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #18 Main St (N/S) / Santa Ana Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.672
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	0 0	0 0	1	1 0	0 0	1	0 0	0 1	1	1 0
Volume Module:												
Base Vol:	74	1050	0	0	1135	90	0	0	0	66	955	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	74	1050	0	0	1135	90	0	0	0	66	955	75
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	74	1050	0	0	1135	90	0	0	0	66	955	75
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	74	1050	0	0	1135	90	0	0	0	66	955	75
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	74	1050	0	0	1135	90	0	0	0	66	955	75
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	74	1050	0	0	1135	90	0	0	0	66	955	75
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.85	0.15	0.00	0.00	0.00	0.18	2.61	0.21
Final Sat.:	1598	3400	0	0	3150	250	0	0	0	307	4444	349
Capacity Analysis Module:												
Vol/Sat:	0.05	0.31	0.00	0.00	0.36	0.36	0.00	0.00	0.00	0.04	0.21	0.21
Crit Moves:	****				****						****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #19 Main St (N/S) / 5th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.518
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	24	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	1 0	1 0	2	0 0	0 1	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	1030	45	69	1055	0	72	448	32	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1030	45	69	1055	0	72	448	32	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1030	45	69	1055	0	72	448	32	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1030	45	69	1055	0	72	448	32	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1030	45	69	1055	0	72	448	32	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1030	45	69	1055	0	72	448	32	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00	0.94	1.00	0.94
Lanes:	0.00	1.92	0.08	1.00	2.00	0.00	0.39	2.44	0.17	0.00	0.00	0.00
Final Sat.:	0	3258	142	1598	3400	0	665	4139	296	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.32	0.32	0.04	0.31	0.00	0.04	0.11	0.11	0.00	0.00	0.00
Crit Moves:		****		****				****				

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #20 Main St (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.571
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	1 0	0 1	0	1 0	0 0	0	1 0	0 0	0	1 0
Volume Module:												
Base Vol:	0	960	5	9	1153	20	0	107	35	0	230	64
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	960	5	9	1153	20	0	107	35	0	230	64
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	960	5	9	1153	20	0	107	35	0	230	64
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	960	5	9	1153	20	0	107	35	0	230	64
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	960	5	9	1153	20	0	107	35	0	230	64
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	960	5	9	1153	20	0	107	35	0	230	64
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.00	1.99	0.01	0.02	1.95	0.03	0.00	0.75	0.25	0.00	0.78	0.22
Final Sat.:	0	3382	18	26	3317	58	0	1281	419	0	1330	370
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.28	0.01	0.35	0.35	0.00	0.08	0.08	0.00	0.17	0.17
Crit Moves:	****				****		****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #21 Main St (N/S) / 3rd St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.490
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 23 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	1 0	0 0	1	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	0	945	15	0	1192	23	39	95	32	13	73	13
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	945	15	0	1192	23	39	95	32	13	73	13
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	945	15	0	1192	23	39	95	32	13	73	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	945	15	0	1192	23	39	95	32	13	73	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	945	15	0	1192	23	39	95	32	13	73	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	945	15	0	1192	23	39	95	32	13	73	13
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.00	1.97	0.03	0.00	1.96	0.04	1.00	0.75	0.25	1.00	0.85	0.15
Final Sat.:	0	3347	53	0	3336	64	1598	1272	428	1598	1443	257
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.28	0.00	0.36	0.36	0.02	0.07	0.07	0.01	0.05	0.05
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #22 Main St (N/S) / 1st St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.776
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 47 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	166	756	80	186	911	99	126	1432	110	98	967	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	166	756	80	186	911	99	126	1432	110	98	967	75
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	166	756	80	186	911	99	126	1432	110	98	967	75
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	166	756	80	186	911	99	126	1432	110	98	967	75
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	166	756	80	186	911	99	126	1432	110	98	967	75
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	166	756	80	186	911	99	126	1432	110	98	967	75
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.81	0.19	1.00	2.00	1.00	1.00	2.79	0.21	1.00	2.78	0.22
Final Sat.:	1598	3075	325	1598	3400	1598	1598	4736	364	1598	4733	367
Capacity Analysis Module:												
Vol/Sat:	0.10	0.25	0.25	0.12	0.27	0.06	0.08	0.30	0.30	0.06	0.20	0.20
Crit Moves:		****			****				****		****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #23 Bush St (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.305
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	17	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	0	0 0	0 1	0	0 0	0 0	0	0 1	1 1	0
Volume Module:												
Base Vol:	23	135	0	0	95	37	0	0	0	24	720	89
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	23	135	0	0	95	37	0	0	0	24	720	89
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	135	0	0	95	37	0	0	0	24	720	89
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	23	135	0	0	95	37	0	0	0	24	720	89
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	135	0	0	95	37	0	0	0	24	720	89
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	23	135	0	0	95	37	0	0	0	24	720	89
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	0.72	0.28	0.00	0.00	0.00	0.09	2.59	0.32
Final Sat.:	1598	1700	0	0	1223	477	0	0	0	147	4408	545
Capacity Analysis Module:												
Vol/Sat:	0.01	0.08	0.00	0.00	0.08	0.08	0.00	0.00	0.00	0.01	0.16	0.16
Crit Moves:	****				****						****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #24 Bush St (N/S) / 5th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.242
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	16	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 1	0	1 0	1 0	0	0 1	1 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	134	34	30	102	0	24	339	14	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	134	34	30	102	0	24	339	14	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	134	34	30	102	0	24	339	14	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	134	34	30	102	0	24	339	14	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	134	34	30	102	0	24	339	14	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	134	34	30	102	0	24	339	14	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00	0.94	1.00	0.94
Lanes:	0.00	0.80	0.20	1.00	1.00	0.00	0.19	2.70	0.11	0.00	0.00	0.00
Final Sat.:	0	1356	344	1598	1700	0	325	4586	189	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.10	0.10	0.02	0.06	0.00	0.01	0.07	0.07	0.00	0.00	0.00
Crit Moves:		****		****				****				

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #25 Bush St (N/S) / 4th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.293
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 17 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 0	1 0	1	0 0	1 0	0	0 1!	0 0	0	0 1!	0 0
Volume Module:												
Base Vol:	8	135	9	18	97	4	8	110	11	11	211	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	135	9	18	97	4	8	110	11	11	211	20
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	135	9	18	97	4	8	110	11	11	211	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	8	135	9	18	97	4	8	110	11	11	211	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	135	9	18	97	4	8	110	11	11	211	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	8	135	9	18	97	4	8	110	11	11	211	20
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.94	0.06	1.00	0.96	0.04	0.06	0.85	0.09	0.05	0.87	0.08
Final Sat.:	1598	1594	106	1598	1633	67	105	1450	145	77	1482	140
Capacity Analysis Module:												
Vol/Sat:	0.01	0.08	0.08	0.01	0.06	0.06	0.00	0.08	0.08	0.01	0.14	0.14
Crit Moves:		****		****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #26 Spurgeon St (N/S) / 1st St (E/W)

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[10.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	0 0	0 0	1	0 0	3 0	0	0 0	2 1	0
Volume Module:												
Base Vol:	0	0	0	0	0	74	0	1800	0	0	916	16
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	74	0	1800	0	0	916	16
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	74	0	1800	0	0	916	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	74	0	1800	0	0	916	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	74	0	1800	0	0	916	16
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	313	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	688	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	688	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.11	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.4	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	10.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			10.9			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #27 French St (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 3.0 Worst Case Level Of Service: C[19.9]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0 0	0	0	0	1 0	0	0	0	0 0	0	1	0	1 0
Volume Module:																
Base Vol:	58	33	0	0	34	55	0	0	0	13	907	11				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	58	33	0	0	34	55	0	0	0	13	907	11				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	58	33	0	0	34	55	0	0	0	13	907	11				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	58	33	0	0	34	55	0	0	0	13	907	11				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	58	33	0	0	34	55	0	0	0	13	907	11				
Critical Gap Module:																
Critical Gp:	7.1	6.5	xxxxx	xxxxx	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx				
FollowUpTim:	3.5	4.0	xxxxx	xxxxx	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	497	944	xxxxx	xxxx	939	459	xxxx	xxxx	xxxxx	0	xxxx	xxxxx				
Potent Cap.:	487	264	xxxxx	xxxx	266	606	xxxx	xxxx	xxxxx	900	xxxx	xxxxx				
Move Cap.:	395	260	xxxxx	xxxx	262	606	xxxx	xxxx	xxxxx	900	xxxx	xxxxx				
Volume/Cap:	0.15	0.13	xxxx	xxxx	0.13	0.09	xxxx	xxxx	xxxx	0.01	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	332	xxxx	xxxxx	xxxx	xxxx	404	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	1.1	xxxx	xxxxx	xxxxx	xxxx	0.8	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx				
Shrd ConDel:	19.9	xxxx	xxxxx	xxxxx	xxxx	16.4	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx				
Shared LOS:	C	*	*	*	*	C	*	*	*	A	*	*				
ApproachDel:	19.9			16.4			xxxxxx			xxxxxx						
ApproachLOS:	C			C			*			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #28 French St (N/S) / 4th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.316
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 18 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	0	1!	0 0	1	0	0	1 0	0	0	1!	0 0	0	1	0	0 1
Volume Module:																
Base Vol:	3	19	33		65	37	21		31	64	4		41	256	49	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	3	19	33		65	37	21		31	64	4		41	256	49	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	3	19	33		65	37	21		31	64	4		41	256	49	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	3	19	33		65	37	21		31	64	4		41	256	49	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	3	19	33		65	37	21		31	64	4		41	256	49	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	3	19	33		65	37	21		31	64	4		41	256	49	
Saturation Flow Module:																
Sat/Lane:	1700	1700	1700		1700	1700	1700		1700	1700	1700		1700	1700	1700	
Adjustment:	1.00	1.00	1.00		0.94	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.94	
Lanes:	0.05	0.35	0.60		1.00	0.64	0.36		0.31	0.65	0.04		0.14	0.86	1.00	
Final Sat.:	93	587	1020		1598	1084	616		532	1099	69		235	1465	1598	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.03	0.03		0.04	0.03	0.03		0.02	0.06	0.06		0.02	0.17	0.03	
Crit Moves:		****			****				****					****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #29 Lacy St (N/S) / Civic Center Dr (E/W)

Average Delay (sec/veh): 3.5 Worst Case Level Of Service: D[25.4]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	0	0	1! 0	0	0	0	1! 0	0
Volume Module:																
Base Vol:	44	33	32		25	5	32		7	382	7		7	441	155	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	44	33	32		25	5	32		7	382	7		7	441	155	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	44	33	32		25	5	32		7	382	7		7	441	155	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	44	33	32		25	5	32		7	382	7		7	441	155	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	44	33	32		25	5	32		7	382	7		7	441	155	
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	951	1010	386		965	936	519		596	xxxx	xxxxx		389	xxxx	xxxxx	
Potent Cap.:	242	242	667		237	267	561		990	xxxx	xxxxx		1181	xxxx	xxxxx	
Move Cap.:	222	239	667		199	264	561		990	xxxx	xxxxx		1181	xxxx	xxxxx	
Volume/Cap:	0.20	0.14	0.05		0.13	0.02	0.06		0.01	xxxx	xxxx		0.01	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		0.0	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		8.7	xxxx	xxxxx		8.1	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		A	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	284	xxxxx		xxxx	308	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	1.7	xxxxx		xxxxx	0.7	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	25.4	xxxxx		xxxxx	19.6	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	D	*		*	C	*		*	*	*		*	*	*	
ApproachDel:	25.4				19.6				xxxxxx				xxxxxx			
ApproachLOS:	D				C				*				*			

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #30 Lacy st (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 3.3 Worst Case Level Of Service: D[31.9]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	1	0	0	1 0	1	0	0	1 0
Volume Module:																
Base Vol:	4	54	63		5	10	18		10	390	10		5	859	46	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	4	54	63		5	10	18		10	390	10		5	859	46	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	4	54	63		5	10	18		10	390	10		5	859	46	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	4	54	63		5	10	18		10	390	10		5	859	46	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	4	54	63		5	10	18		10	390	10		5	859	46	
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1321	1330	395		1366	1312	882		905	xxxx	xxxxx		400	xxxx	xxxxx	
Potent Cap.:	135	156	659		126	160	348		760	xxxx	xxxxx		1170	xxxx	xxxxx	
Move Cap.:	120	153	659		82	157	348		760	xxxx	xxxxx		1170	xxxx	xxxxx	
Volume/Cap:	0.03	0.35	0.10		0.06	0.06	0.05		0.01	xxxx	xxxx		0.00	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		0.0	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.8	xxxx	xxxxx		8.1	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		A	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	252	xxxxx		xxxx	187	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	2.4	xxxxx		xxxxx	0.6	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	31.9	xxxxx		xxxxx	28.3	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	D	*		*	D	*		*	*	*		*	*	*	
ApproachDel:	31.9				28.3				xxxxxx				xxxxxx			
ApproachLOS:	D				D				*				*			

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #31 Lacy St (N/S) / Brown St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.114
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	7.3
Optimal Cycle:	0	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	23	42	41	4	3	2	2	7	8	14	18	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	23	42	41	4	3	2	2	7	8	14	18	4
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	42	41	4	3	2	2	7	8	14	18	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	23	42	41	4	3	2	2	7	8	14	18	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	42	41	4	3	2	2	7	8	14	18	4
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	23	42	41	4	3	2	2	7	8	14	18	4
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.22	0.39	0.39	0.45	0.33	0.22	0.12	0.41	0.47	0.39	0.50	0.11
Final Sat.:	201	368	359	387	291	194	105	369	422	328	422	94
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.11	0.01	0.01	0.01	0.02	0.02	0.02	0.04	0.04	0.04
Crit Moves:		****		****				****			****	
Delay/Veh:	7.3	7.3	7.3	7.1	7.1	7.1	7.0	7.0	7.0	7.3	7.3	7.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.3	7.3	7.3	7.1	7.1	7.1	7.0	7.0	7.0	7.3	7.3	7.3
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:		7.3			7.1			7.0			7.3	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		7.3			7.1			7.0			7.3	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #32 Lacy St (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.398
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	20	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1	0 0	1 0	1	0 1	0 1
Volume Module:												
Base Vol:	20	31	81	5	25	43	5	312	24	11	450	66
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	31	81	5	25	43	5	312	24	11	450	66
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	31	81	5	25	43	5	312	24	11	450	66
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	31	81	5	25	43	5	312	24	11	450	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	31	81	5	25	43	5	312	24	11	450	66
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	31	81	5	25	43	5	312	24	11	450	66
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	0.15	0.23	0.62	0.07	0.34	0.59	1.00	0.93	0.07	1.00	1.00	1.00
Final Sat.:	258	399	1043	116	582	1001	1598	1579	121	1598	1700	1598
Capacity Analysis Module:												
Vol/Sat:	0.01	0.08	0.08	0.00	0.04	0.04	0.00	0.20	0.20	0.01	0.26	0.04
Crit Moves:		****		****				****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #33 Lacy St (N/S) / 1st St (E/W)

Average Delay (sec/veh): 1.8 Worst Case Level Of Service: D[33.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 1! 0 0			1 0 3 0 0			0 0 2 1 0		
Volume Module:												
Base Vol:	0	0	0	10	1	84	175	1619	0	0	1021	24
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	10	1	84	175	1619	0	0	1021	24
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	10	1	84	175	1619	0	0	1021	24
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	10	1	84	175	1619	0	0	1021	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	10	1	84	175	1619	0	0	1021	24
Critical Gap Module:												
Critical Gp:	7.5	6.5	6.9	6.8	6.5	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	2310	3014	540	1923	3002	352	1045	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	21	14	492	60	14	650	673	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	14	10	492	48	10	650	673	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	0.00	0.00	0.21	0.10	0.13	0.26	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	12.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	0	xxxxx	xxxx	218	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	2.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	33.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	D	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			33.6			xxxxxx			xxxxxx		
ApproachLOS:	*			D			*			*		

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #34 Santiago St (N/S) / Washington Av (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.683
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): 16.3
Optimal Cycle: 0 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1 0 1			1 0 1 0 1			0 0 1! 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	42	195	93	15	258	99	119	108	41	114	220	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	42	195	93	15	258	99	119	108	41	114	220	30
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	42	195	93	15	258	99	119	108	41	114	220	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	42	195	93	15	258	99	119	108	41	114	220	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	195	93	15	258	99	119	108	41	114	220	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	42	195	93	15	258	99	119	108	41	114	220	30
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.45	0.40	0.15	0.31	0.61	0.08
Final Sat.:	442	471	518	451	483	532	224	203	77	167	322	44
Capacity Analysis Module:												
Vol/Sat:	0.10	0.41	0.18	0.03	0.53	0.19	0.53	0.53	0.53	0.68	0.68	0.68
Crit Moves:		****			****			****			****	
Delay/Veh:	11.1	14.3	10.5	10.5	16.9	10.4	16.2	16.2	16.2	21.0	21.0	21.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.1	14.3	10.5	10.5	16.9	10.4	16.2	16.2	16.2	21.0	21.0	21.0
LOS by Move:	B	B	B	B	C	B	C	C	C	C	C	C
ApproachDel:	12.8			14.9			16.2			21.0		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	12.8			14.9			16.2			21.0		
LOS by Appr:	B			B			C			C		
AllWayAvgQ:	0.1	0.6	0.2	0.0	0.9	0.2	0.9	0.9	0.9	1.7	1.7	1.7

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #35 Santiago St (N/S) / Civic Center Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.844
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	23.5
Optimal Cycle:	0	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0 0	1	0	1	0 0	1	0	0	1 0	0	1	0	0 1!	0	0
Volume Module:																
Base Vol:	358	194	19		9	217	232		129	51	207		30	59	9	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	358	194	19		9	217	232		129	51	207		30	59	9	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	358	194	19		9	217	232		129	51	207		30	59	9	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	358	194	19		9	217	232		129	51	207		30	59	9	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	358	194	19		9	217	232		129	51	207		30	59	9	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	358	194	19		9	217	232		129	51	207		30	59	9	
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	0.91	0.09		1.00	0.48	0.52		0.72	0.28	1.00		0.31	0.60	0.09	
Final Sat.:	482	471	46		463	257	275		315	125	505		122	239	37	
Capacity Analysis Module:																
Vol/Sat:	0.74	0.41	0.41		0.02	0.84	0.84		0.41	0.41	0.41		0.25	0.25	0.25	
Crit Moves:	****					****					****			****		
Delay/Veh:	27.8	14.0	14.0		10.4	34.5	34.5		15.6	15.6	13.8		13.7	13.7	13.7	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	27.8	14.0	14.0		10.4	34.5	34.5		15.6	15.6	13.8		13.7	13.7	13.7	
LOS by Move:	D	B	B		B	D	D		C	C	B		B	B	B	
ApproachDel:	22.7				34.0				14.6				13.7			
Delay Adj:	1.00				1.00				1.00				1.00			
ApprAdjDel:	22.7				34.0				14.6				13.7			
LOS by Appr:	C				D				B				B			
AllWayAvgQ:	2.4	0.7	0.7	0.0	3.7	3.7	0.6	0.6	0.6	0.3	0.3	0.3				

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #36 Santiago St (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.545
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Permitted				Permitted				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0 2	0	1	1	0 2	0	1	1	0 1	1	0	1	0 2	0	1
Volume Module:																
Base Vol:	58	130	73		240	118	81		43	513	21		127	927	397	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	58	130	73		240	118	81		43	513	21		127	927	397	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	58	130	73		240	118	81		43	513	21		127	927	397	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	58	130	73		240	118	81		43	513	21		127	927	397	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	58	130	73		240	118	81		43	513	21		127	927	397	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	58	130	73		240	118	81		43	513	21		127	927	397	
Saturation Flow Module:																
Sat/Lane:	1700	1700	1700		1700	1700	1700		1700	1700	1700		1700	1700	1700	
Adjustment:	0.94	1.00	0.94		0.94	1.00	0.94		0.94	1.00	1.00		0.94	1.00	0.94	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	1.92	0.08		1.00	2.00	1.00	
Final Sat.:	1598	3400	1598		1598	3400	1598		1598	3266	134		1598	3400	1598	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.04	0.05		0.15	0.03	0.05		0.03	0.16	0.16		0.08	0.27	0.25	
Crit Moves:			****		****				****					****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #37 Santiago St (N/S) / Brown St (E/W)

Average Delay (sec/veh): 3.6 Worst Case Level Of Service: B[12.1]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	1	1 0	0	1	1	1 0	1	0	0	1 0	0	0	0	0 0
Volume Module:																
Base Vol:	55	196	0	0	207	59	120	0	48	0	0	0				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	55	196	0	0	207	59	120	0	48	0	0	0				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	55	196	0	0	207	59	120	0	48	0	0	0				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	55	196	0	0	207	59	120	0	48	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	55	196	0	0	207	59	120	0	48	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	266	xxxx	xxxxx	xxxx	xxxx	xxxxx	412	543	99	xxxx	xxxx	xxxxx				
Potent Cap.:	1310	xxxx	xxxxx	xxxx	xxxx	xxxxx	573	450	945	xxxx	xxxx	xxxxx				
Move Cap.:	1310	xxxx	xxxxx	xxxx	xxxx	xxxxx	554	430	945	xxxx	xxxx	xxxxx				
Volume/Cap:	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	0.22	0.00	0.05	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.8	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	13.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	A	*	*	*	*	*	B	*	*	*	*	*				
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	945	xxxx	xxxx	xxxxx				
SharedQueue:	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	0.2	xxxxx	xxxx	xxxxx				
Shrd ConDel:	7.9	xxxx	xxxxx	9.0	xxxx	xxxxx	xxxxx	xxxx	9.0	xxxxx	xxxx	xxxxx				
Shared LOS:	A	*	*	A	*	*	*	*	A	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			12.1			xxxxxx						
ApproachLOS:	*			*			B			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #38 Santiago St (N/S) / 6th St (E/W)

Average Delay (sec/veh): 3.9 Worst Case Level Of Service: B[11.3]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	1	1 0	0	1	1	1 0	1	0	0	0 1	0	0	0	0 0
Volume Module:																
Base Vol:	31	119	0	0	186	69	132	0	48	0	0	0				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	31	119	0	0	186	69	132	0	48	0	0	0				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	31	119	0	0	186	69	132	0	48	0	0	0				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	31	119	0	0	186	69	132	0	48	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	31	119	0	0	186	69	132	0	48	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	255	xxxx	xxxxx	xxxx	xxxx	xxxxx	322	xxxx	97	xxxx	xxxx	xxxxx				
Potent Cap.:	1322	xxxx	xxxxx	xxxx	xxxx	xxxxx	652	xxxx	947	xxxx	xxxx	xxxxx				
Move Cap.:	1322	xxxx	xxxxx	xxxx	xxxx	xxxxx	640	xxxx	947	xxxx	xxxx	xxxxx				
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.21	xxxx	0.05	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.8	xxxx	0.2	xxxx	xxxx	xxxxx				
Control Del:	7.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	12.1	xxxx	9.0	xxxxx	xxxx	xxxxx				
LOS by Move:	A	*	*	*	*	*	B	*	A	*	*	*				
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	7.8	xxxx	xxxxx	9.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	A	*	*	A	*	*	*	*	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			11.3			xxxxxx						
ApproachLOS:	*			*			B			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #39 Santiago St (N/S) / 4th (E/W)

Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	1	1 0	1 0	2	1 0	0 1	0	1 0	0 1	0	1 0
Volume Module:												
Base Vol:	41	66	167	84	150	0	18	817	62	10	430	66
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	66	167	84	150	0	18	817	62	10	430	66
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	66	167	84	150	0	18	817	62	10	430	66
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	41	66	167	84	150	0	18	817	62	10	430	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	41	66	167	84	150	0	18	817	62	10	430	66
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	150	xxxx	xxxxx	233	xxxx	xxxxx	637	633	50	858	550	106
Potent Cap.:	1444	xxxx	xxxxx	1346	xxxx	xxxxx	366	400	1014	254	446	935
Move Cap.:	1444	xxxx	xxxxx	1346	xxxx	xxxxx	0	363	1014	0	405	935
Volume/Cap:	0.03	xxxx	xxxx	0.06	xxxx	xxxx	xxxx	2.25	0.06	xxxx	1.06	0.07
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.6	xxxx	xxxxx	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0	xxxx	380	0	xxxx	438
SharedQueue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	67.3	xxxxx	xxxx	17.8
Shrd ConDel:	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	621.9	xxxxx	xxxx	114.6
Shared LOS:	A	*	*	*	*	*	*	*	F	*	*	F
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			F			F		

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #40 Standard Av (N/S) / 1st St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.832
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 59 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	1 0	0	0	1! 0	0	0	1	0	1	1 0
Volume Module:												
Base Vol:	73	170	121	42	278	7	91	1552	149	69	1043	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	73	170	121	42	278	7	91	1552	149	69	1043	12
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	73	170	121	42	278	7	91	1552	149	69	1043	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	73	170	121	42	278	7	91	1552	149	69	1043	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	73	170	121	42	278	7	91	1552	149	69	1043	12
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	73	170	121	42	278	7	91	1552	149	69	1043	12
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.58	0.42	0.13	0.85	0.02	1.00	1.82	0.18	1.00	1.98	0.02
Final Sat.:	1598	993	707	218	1445	36	1598	3102	298	1598	3361	39
Capacity Analysis Module:												
Vol/Sat:	0.05	0.17	0.17	0.02	0.19	0.19	0.06	0.50	0.50	0.04	0.31	0.31
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #41 U-24 (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: E[46.3]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0 0	0	0 0	1	0 0	0	1	1	0 2	1	0	1	0 2	1	0
Volume Module:																
Base Vol:	0	0	0	40	0	12	8	877	0	0	1214	25				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	0	0	0	40	0	12	8	877	0	0	1214	25				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	0	0	0	40	0	12	8	877	0	0	1214	25				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	0	0	0	40	0	12	8	877	0	0	1214	25				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	0	0	0	40	0	12	8	877	0	0	1214	25				
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	1535	xxxx	417	1239	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx	109	xxxx	590	569	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	xxxx	xxxxx	108	xxxx	590	569	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	xxxx	xxxx	0.37	xxxx	0.02	0.01	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	1.5	xxxx	0.1	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	56.8	xxxx	11.2	11.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	F	*	B	B	*	*	*	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*				
ApproachDel:	xxxxxx			46.3			xxxxxx			xxxxxx						
ApproachLOS:	*			E			*			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #42 Grand Av (N/S) / Santa Ana Bl (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.794
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 51 Level Of Service: C

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	- T	- R			L	- T	- R			L	- T	- R			L	- T	- R		
Control:	Split Phase					Split Phase					Split Phase					Split Phase				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 2	1	0		1	0 3	0	2		2	0 1	0	2		0	1	0	1	0
Volume Module:																				
Base Vol:	164	895	15	69	1368	1022	361	162	659	23	97	15								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	164	895	15	69	1368	1022	361	162	659	23	97	15								
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	164	895	15	69	1368	1022	361	162	659	23	97	15								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	164	895	15	69	1368	1022	361	162	659	23	97	15								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	164	895	15	69	1368	1022	361	162	659	23	97	15								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
FinalVolume:	164	895	15	69	1368	1022	361	162	659	23	97	15								
Saturation Flow Module:																				
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700								
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	0.94	1.00	1.00	1.00								
Lanes:	1.00	2.95	0.05	1.00	3.00	2.00	2.00	1.00	2.00	0.34	1.44	0.22								
Final Sat.:	1598	5016	84	1598	5100	3196	3196	1700	3196	579	2443	378								
Capacity Analysis Module:																				
Vol/Sat:	0.10	0.18	0.18	0.04	0.27	0.32	0.11	0.10	0.21	0.04	0.04	0.04								
Crit Moves:			****			****			****		****									

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #43 Grand Av (N/S) / 4th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.665
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 34 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 3	0 1	1	0 2	1 0	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	69	286	119	131	518	91	109	1122	165	118	325	125
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	69	286	119	131	518	91	109	1122	165	118	325	125
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	69	286	119	131	518	91	109	1122	165	118	325	125
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	69	286	119	131	518	91	109	1122	165	118	325	125
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	69	286	119	131	518	91	109	1122	165	118	325	125
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	69	286	119	131	518	91	109	1122	165	118	325	125
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	1.00	3.00	1.00	1.00	2.55	0.45	1.00	1.74	0.26	1.00	2.00	1.00
Final Sat.:	1598	5100	1598	1598	4338	762	1598	2964	436	1598	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.07	0.08	0.12	0.12	0.07	0.38	0.38	0.07	0.10	0.08
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #44 Grand Av (N/S) / 1st St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.729
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 41 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0 2	1 0	2	0 3	0 1	2	0 2	1 0	2	0 2	0 1
Volume Module:												
Base Vol:	121	479	77	130	1403	85	305	1100	248	326	670	62
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	121	479	77	130	1403	85	305	1100	248	326	670	62
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	121	479	77	130	1403	85	305	1100	248	326	670	62
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	121	479	77	130	1403	85	305	1100	248	326	670	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	121	479	77	130	1403	85	305	1100	248	326	670	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	121	479	77	130	1403	85	305	1100	248	326	670	62
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	2.00	2.58	0.42	2.00	3.00	1.00	2.00	2.45	0.55	2.00	2.00	1.00
Final Sat.:	3196	4394	706	3196	5100	1598	3196	4162	938	3196	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.04	0.11	0.11	0.04	0.28	0.05	0.10	0.26	0.26	0.10	0.20	0.04
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #45 Penn Way (NS) at I-5 SB Ramps (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.439
Loss Time (sec):	12 (Y+R=4.0 sec)	Average Delay (sec/veh):	22.7
Optimal Cycle:	37	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2 0 1	2	0	2 0 0	0	0	0 0 0	1	0	0 0 2
Volume Module:												
Base Vol:	0	181	82	647	59	0	0	0	0	220	0	219
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	181	82	647	59	0	0	0	0	220	0	219
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	181	82	647	59	0	0	0	0	220	0	219
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	181	82	647	59	0	0	0	0	220	0	219
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	181	82	647	59	0	0	0	0	220	0	219
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	181	82	647	59	0	0	0	0	220	0	219
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.92	0.95	1.00	1.00	1.00	1.00	0.77	1.00	0.75
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	2.00
Final Sat.:	0	3610	1615	3502	3610	0	0	0	0	1461	0	2842
Capacity Analysis Module:												
Vol/Sat:	0.00	0.05	0.05	0.18	0.02	0.00	0.00	0.00	0.00	0.15	0.00	0.08
Crit Moves:			****	****						****		
Green/Cycle:	0.00	0.12	0.12	0.42	0.42	0.00	0.00	0.00	0.00	0.34	0.00	0.76
Volume/Cap:	0.00	0.43	0.44	0.44	0.04	0.00	0.00	0.00	0.00	0.44	0.00	0.10
Delay/Veh:	0.0	41.9	42.8	20.8	17.0	0.0	0.0	0.0	0.0	26.0	0.0	3.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	41.9	42.8	20.8	17.0	0.0	0.0	0.0	0.0	26.0	0.0	3.0
LOS by Move:	A	D	D	C	B	A	A	A	A	C	A	A
HCM2kAvgQ:	0	3	3	7	1	0	0	0	0	5	0	1

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #46 I-5 SB Ramps (NS) / Santa Ana Bl (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.527
Loss Time (sec):	12 (Y+R=4.0 sec)	Average Delay (sec/veh):	28.7
Optimal Cycle:	43	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0 0 0	2	0	0 0 1	2	0	3 0 0	0	0	2 1 0
Volume Module:												
Base Vol:	0	0	0	432	0	101	296	648	0	0	926	166
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	432	0	101	296	648	0	0	926	166
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	432	0	101	296	648	0	0	926	166
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	432	0	101	296	648	0	0	926	166
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	432	0	101	296	648	0	0	926	166
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	432	0	101	296	648	0	0	926	166
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.85	0.92	0.91	1.00	1.00	0.89	0.89
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	2.00	3.00	0.00	0.00	2.54	0.46
Final Sat.:	0	0	0	3502	0	1615	3502	5187	0	0	4297	770
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.00	0.06	0.08	0.12	0.00	0.00	0.22	0.22
Crit Moves:				****				****			****	
Green/Cycle:	0.00	0.00	0.00	0.23	0.00	0.23	0.24	0.24	0.00	0.00	0.41	0.41
Volume/Cap:	0.00	0.00	0.00	0.53	0.00	0.27	0.36	0.53	0.00	0.00	0.53	0.53
Delay/Veh:	0.0	0.0	0.0	34.1	0.0	31.7	32.1	33.7	0.0	0.0	22.5	22.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	34.1	0.0	31.7	32.1	33.7	0.0	0.0	22.5	22.5
LOS by Move:	A	A	A	C	A	C	C	C	A	A	C	C
HCM2kAvgQ:	0	0	0	6	0	3	4	7	0	0	9	9

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #47 I-5 NB Ramps (NS) / 17th St. (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.780
Loss Time (sec):	16 (Y+R=4.0 sec)	Average Delay (sec/veh):	33.2
Optimal Cycle:	82	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	1 0	0 1	1	0 0	0 1	1	0 3	0 1	0	0 2	1 0
Volume Module:												
Base Vol:	665	85	38	37	0	197	130	913	271	0	1268	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	665	85	38	37	0	197	130	913	271	0	1268	48
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	665	85	38	37	0	197	130	913	271	0	1268	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	665	85	38	37	0	197	130	913	0	0	1268	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	665	85	38	37	0	197	130	913	0	0	1268	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	665	85	38	37	0	197	130	913	0	0	1268	48
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.96	0.96	0.85	0.95	1.00	0.85	0.95	0.91	1.00	1.00	0.91	0.91
Lanes:	1.77	0.23	1.00	1.00	0.00	1.00	1.00	3.00	1.00	0.00	2.89	0.11
Final Sat.:	3228	413	1615	1805	0	1615	1805	5187	1900	0	4973	188
Capacity Analysis Module:												
Vol/Sat:	0.21	0.21	0.02	0.02	0.00	0.12	0.07	0.18	0.00	0.00	0.25	0.25
Crit Moves:	****					****	****				****	
Green/Cycle:	0.26	0.26	0.26	0.16	0.00	0.16	0.09	0.42	0.00	0.00	0.33	0.33
Volume/Cap:	0.78	0.78	0.09	0.13	0.00	0.78	0.78	0.42	0.00	0.00	0.78	0.78
Delay/Veh:	38.2	38.2	27.8	36.5	0.0	54.9	65.0	20.6	0.0	0.0	32.8	32.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.2	38.2	27.8	36.5	0.0	54.9	65.0	20.6	0.0	0.0	32.8	32.8
LOS by Move:	D	D	C	D	A	D	E	C	A	A	C	C
HCM2kAvgQ:	13	13	1	1	0	8	6	7	0	0	15	15

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #48 I-5 NB Ramps (NS) / Grand Ave (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.626
Loss Time (sec):	12 (Y+R=4.0 sec)	Average Delay (sec/veh):	20.6
Optimal Cycle:	51	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 3	0 1	1	0 3	0 0	0	0 0	0 0	2	0 0	0 1
Volume Module:												
Base Vol:	0	859	483	34	1645	0	0	0	0	817	0	139
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	859	483	34	1645	0	0	0	0	817	0	139
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	859	483	34	1645	0	0	0	0	817	0	139
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	859	0	34	1645	0	0	0	0	817	0	139
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	859	0	34	1645	0	0	0	0	817	0	139
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	859	0	34	1645	0	0	0	0	817	0	139
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	1.00	0.95	0.91	1.00	1.00	1.00	1.00	0.92	1.00	0.85
Lanes:	0.00	3.00	1.00	1.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	5187	1900	1805	5187	0	0	0	0	3502	0	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.00	0.02	0.32	0.00	0.00	0.00	0.00	0.23	0.00	0.09
Crit Moves:	****				****					****		
Green/Cycle:	0.00	0.46	0.00	0.05	0.51	0.00	0.00	0.00	0.00	0.37	0.00	0.37
Volume/Cap:	0.00	0.36	0.00	0.36	0.63	0.00	0.00	0.00	0.00	0.63	0.00	0.23
Delay/Veh:	0.0	17.9	0.0	48.2	18.3	0.0	0.0	0.0	0.0	26.6	0.0	21.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	17.9	0.0	48.2	18.3	0.0	0.0	0.0	0.0	26.6	0.0	21.7
LOS by Move:	A	B	A	D	B	A	A	A	A	C	A	C
HCM2kAvgQ:	0	6	0	1	14	0	0	0	0	11	0	3

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #49 Mortimer (N/S) / Santa Ana Blvd (E/W)

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: C[22.2]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 1	0	0	1!	0 0	0	0	0	0 0	1	0	0	1 0
Volume Module:																
Base Vol:	0	0	202		3	4		1	0	0		0	35	908		3
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	0	202		3	4		1	0	0		0	35	908		3
Added Vol:	0	0	0		0	0		0	0	0		0	0	0		0
PasserByVol:	0	0	0		0	0		0	0	0		0	0	0		0
Initial Fut:	0	0	202		3	4		1	0	0		0	35	908		3
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	0	0	202		3	4		1	0	0		0	35	908		3
Reduct Vol:	0	0	0		0	0		0	0	0		0	0	0		0
FinalVolume:	0	0	202		3	4		1	0	0		0	35	908		3
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	6.2		7.1	6.5		6.2	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	xxxxx	xxxx	3.3		3.5	4.0		3.3	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	0		980	980		910	xxxx	xxxx	xxxxx		0	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	900		231	252		336	xxxx	xxxx	xxxxx		900	xxxx	xxxxx	
Move Cap.:	xxxx	xxxx	900		174	242		336	xxxx	xxxx	xxxxx		900	xxxx	xxxxx	
Volume/Cap:	xxxx	xxxx	0.22		0.02	0.02		0.00	xxxx	xxxx	xxxx		0.04	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	0.9		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	10.2		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.2	xxxx	xxxxx	
LOS by Move:	*	*	B		*	*	*		*	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	218	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	0.1	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	22.2	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	C	*		*	*	*		*	*	*	
ApproachDel:	10.2				22.2				xxxxxx				xxxxxx			
ApproachLOS:	B				C				*				*			

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #50 Mortimer (N/S) / 5th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.303
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 9.1
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	0	0	1 0	0	0	1!	0 0	1	0	0	1 0	0	0	1!	0 0
Volume Module:																
Base Vol:	0	129		4	3	19		4	199	28		37	6	0		10
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	129		4	3	19		4	199	28		37	6	0		10
Added Vol:	0	0		0	0	0		0	0	0		0	0	0		0
PasserByVol:	0	0		0	0	0		0	0	0		0	0	0		0
Initial Fut:	0	129		4	3	19		4	199	28		37	6	0		10
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	0	129		4	3	19		4	199	28		37	6	0		10
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	0	129		4	3	19		4	199	28		37	6	0		10
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	0	129		4	3	19		4	199	28		37	6	0		10
Saturation Flow Module:																
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Lanes:	0.00	0.97		0.03	0.12	0.73		0.15	1.00	0.43		0.57	0.37	0.00		0.63
Final Sat.:	0	728		23	84	533		112	657	338		447	296	0		493
Capacity Analysis Module:																
Vol/Sat:	xxxx	0.18		0.18	0.04	0.04		0.04	0.30	0.08		0.08	0.02	xxxx		0.02
Crit Moves:		****				****			****				****			
Delay/Veh:	0.0	8.5		8.5	7.8	7.8		7.8	10.3	7.6		7.6	7.5	0.0		7.5
Delay Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	0.0	8.5		8.5	7.8	7.8		7.8	10.3	7.6		7.6	7.5	0.0		7.5
LOS by Move:	*	A		A	A	A		A	B	A		A	A	*		A
ApproachDel:		8.5				7.8				9.7				7.5		
Delay Adj:		1.00				1.00				1.00				1.00		
ApprAdjDel:		8.5				7.8				9.7				7.5		
LOS by Appr:		A				A				A				A		
AllWayAvgQ:	0.2	0.2		0.2	0.0	0.0		0.0	0.4	0.1		0.1	0.0	0.0		0.0

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Scenario Report

Scenario:	2030WPPM
Command:	2030WP PM
Volume:	2030WPPM
Geometry:	Future WP
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Del/ Veh	V/ C	Future LOS	Del/ Veh	V/ C	Change in
# 1 Flower St (NS)/ Civic Center D	C	xxxxx	0.761	C	xxxxx	0.761	+ 0.000 V/C
# 2 Flower St (N/S) / Santa Ana Bl	A	xxxxx	0.598	A	xxxxx	0.598	+ 0.000 V/C
# 3 Parton St (E/W) / Santa Ana Bl	A	xxxxx	0.378	A	xxxxx	0.378	+ 0.000 V/C
# 4 Ross St (N/S) / Civic Center D	A	xxxxx	0.508	A	xxxxx	0.508	+ 0.000 V/C
# 5 Ross St (N/S) / Santa Ana Bl (	A	xxxxx	0.432	A	xxxxx	0.432	+ 0.000 V/C
# 6 Ross St (N/S) / 4th St (E/W)	B	12.4	0.000	B	12.4	0.000	+ 0.000 D/V
# 7 Broadway (N/S) / Civic Center	B	xxxxx	0.657	B	xxxxx	0.657	+ 0.000 V/C
# 8 Broadway (N/S) / Santa Ana Bl	A	xxxxx	0.535	A	xxxxx	0.535	+ 0.000 V/C
# 9 Broadway (N/S) / 5th St (E/W)	A	xxxxx	0.488	A	xxxxx	0.488	+ 0.000 V/C
# 10 Broadway (N/S) / 4th St (E/W)	A	xxxxx	0.437	A	xxxxx	0.437	+ 0.000 V/C
# 11 Broadway (N/S)/ 3rd st (E/W)	B	xxxxx	0.643	B	xxxxx	0.643	+ 0.000 V/C
# 12 Broadway (N/S) / 1st St (E/W)	C	xxxxx	0.755	C	xxxxx	0.755	+ 0.000 V/C
# 13 Sycamore St (N/S) / Civic Cent	A	xxxxx	0.529	A	xxxxx	0.529	+ 0.000 V/C
# 14 Sycamore St (N/S) / Santa Ana	C	23.1	0.000	C	23.1	0.000	+ 0.000 D/V
# 15 Sycamore St (N/S) / 5th St (E/	C	15.5	0.000	C	15.5	0.000	+ 0.000 D/V
# 16 Sycamore St (N/S) / 4th St (E/	A	9.7	0.391	A	9.7	0.391	+ 0.000 V/C
# 17 Main St (N/S) / Civic Center D	D	xxxxx	0.818	D	xxxxx	0.818	+ 0.000 V/C
# 18 Main St (N/S) / Santa Ana Dr (	C	xxxxx	0.737	C	xxxxx	0.737	+ 0.000 V/C
# 19 Main St (N/S) / 5th St (E/W)	B	xxxxx	0.673	B	xxxxx	0.673	+ 0.000 V/C
# 20 Main St (N/S) / 4th St (E/W)	C	xxxxx	0.760	C	xxxxx	0.760	+ 0.000 V/C
# 21 Main St (N/S) / 3rd St (E/W)	B	xxxxx	0.641	B	xxxxx	0.641	+ 0.000 V/C
# 22 Main St (N/S) / 1st St (E/W)	E	xxxxx	0.960	E	xxxxx	0.960	+ 0.000 V/C
# 23 Bush St (N/S) / Santa Ana Bl (	A	xxxxx	0.409	A	xxxxx	0.409	+ 0.000 V/C
# 24 Bush St (N/S) / 5th St (E/W)	A	xxxxx	0.458	A	xxxxx	0.458	+ 0.000 V/C

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Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 25 Bush St (N/S) / 4th St (E/W)	A	xxxxx	0.504	A	xxxxx	0.504	+ 0.000 V/C
# 26 Spurgeon St (N/S) / 1st St (E/	C	17.1	0.000	C	17.1	0.000	+ 0.000 D/V
# 27 French St (N/S) / Santa Ana Bl	C	20.8	0.000	C	20.8	0.000	+ 0.000 D/V
# 28 French St (N/S) / 4th St (E/W)	A	xxxxx	0.499	A	xxxxx	0.499	+ 0.000 V/C
# 29 Lacy St (N/S) / Civic Center D	E	44.8	0.000	E	44.8	0.000	+ 0.000 D/V
# 30 Lacy st (N/S) / Santa Ana Bl (	F	412.6	0.000	F	412.6	0.000	+ 0.000 D/V
# 31 Lacy St (N/S) / Brown St (E/W)	A	8.3	0.263	A	8.3	0.263	+ 0.000 V/C
# 32 Lacy St (N/S) / 4th St (E/W)	B	xxxxx	0.634	B	xxxxx	0.634	+ 0.000 V/C
# 33 Lacy St (N/S) / 1st St (E/W)	F	OVRFL	0.000	F	OVRFL	0.000	+ 0.000 D/V
# 34 Santiago St (N/S) / Washington	D	34.5	0.995	D	34.5	0.995	+ 0.000 V/C
# 35 Santiago St (N/S) / Civic Cent	E	42.6	1.021	E	42.6	1.021	+ 0.000 V/C
# 36 Santiago St (N/S) / Santa Ana	B	xxxxx	0.694	B	xxxxx	0.694	+ 0.000 V/C
# 37 Santiago St (N/S) / Brown St (	B	13.9	0.000	B	13.9	0.000	+ 0.000 D/V
# 38 Santiago St (N/S) / 6th St (E/	B	13.0	0.000	B	13.0	0.000	+ 0.000 D/V
# 39 Santiago St (N/S) / 4th (E/W)	F	OVRFL	0.000	F	OVRFL	0.000	+ 0.000 D/V
# 40 Standard Av (N/S) / 1st St (E/	D	xxxxx	0.858	D	xxxxx	0.858	+ 0.000 V/C
# 41 U-24 (N/S) / Santa Ana Bl (E/W	F	52.8	0.000	F	52.8	0.000	+ 0.000 D/V
# 42 Grand Av (N/S) / Santa Ana Bl	E	xxxxx	0.991	E	xxxxx	0.991	+ 0.000 V/C
# 43 Grand Av (N/S) / 4th St (E/W)	C	xxxxx	0.768	C	xxxxx	0.768	+ 0.000 V/C
# 44 Grand Av (N/S) / 1st St (E/W)	D	xxxxx	0.822	D	xxxxx	0.822	+ 0.000 V/C
# 45 Penn Way (NS) at I-5 SB Ramps	C	23.8	0.473	C	23.8	0.473	+ 0.000 D/V
# 46 I-5 SB Ramps (NS) / Santa Ana	C	31.5	0.690	C	31.5	0.690	+ 0.000 D/V
# 47 I-5 NB Ramps (NS) / 17th St. (	D	40.9	0.960	D	40.9	0.960	+ 0.000 D/V
# 48 I-5 NB Ramps (NS) / Grand Ave	D	50.8	1.052	D	50.8	1.052	+ 0.000 D/V
# 49 Mortimer (N/S) / Santa Ana Blv	D	25.1	0.000	D	25.1	0.000	+ 0.000 D/V

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Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 50 Mortimer (N/S) / 5th St (E/W)	E	44.1	1.030	E	44.1	1.030	+ 0.000 V/C

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Flower St (NS)/ Civic Center Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.761
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	144	800	118	86	496	102	221	748	89	129	750	95
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	144	800	118	86	496	102	221	748	89	129	750	95
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	144	800	118	86	496	102	221	748	89	129	750	95
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	144	800	118	86	496	102	221	748	89	129	750	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	144	800	118	86	496	102	221	748	89	129	750	95
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	144	800	118	86	496	102	221	748	89	129	750	95
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.74	0.26	1.00	1.66	0.34	1.00	1.79	0.21	1.00	1.78	0.22
Final Sat.:	1598	2963	437	1598	2820	580	1598	3038	362	1598	3018	382
Capacity Analysis Module:												
Vol/Sat:	0.09	0.27	0.27	0.05	0.18	0.18	0.14	0.25	0.25	0.08	0.25	0.25
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Flower St (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.598
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	0 3	0 1	1	0 2	0 1
Volume Module:												
Base Vol:	134	800	68	97	608	43	108	502	103	198	626	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	134	800	68	97	608	43	108	502	103	198	626	200
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	134	800	68	97	608	43	108	502	103	198	626	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	134	800	68	97	608	43	108	502	103	198	626	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	134	800	68	97	608	43	108	502	103	198	626	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	134	800	68	97	608	43	108	502	103	198	626	200
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00
Final Sat.:	1598	3400	1598	1598	3400	1598	1598	5100	1598	1598	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.08	0.24	0.04	0.06	0.18	0.03	0.07	0.10	0.06	0.12	0.18	0.13
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Parton St (E/W) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.378
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	19	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1	0	0	2	1	0	
Volume Module:												
Base Vol:	79	4	95	48	8	28	4	645	51	32	965	19
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	79	4	95	48	8	28	4	645	51	32	965	19
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	79	4	95	48	8	28	4	645	51	32	965	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	79	4	95	48	8	28	4	645	51	32	965	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	79	4	95	48	8	28	4	645	51	32	965	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	79	4	95	48	8	28	4	645	51	32	965	19
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.44	0.02	0.54	0.86	0.14	1.00	1.00	2.78	0.22	1.00	2.94	0.06
Final Sat.:	754	38	907	1457	243	1598	1598	4726	374	1598	5002	98
Capacity Analysis Module:												
Vol/Sat:	0.05	0.10	0.10	0.03	0.03	0.02	0.00	0.14	0.14	0.02	0.19	0.19
Crit Moves:		****		****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Ross St (N/S) / Civic Center Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.508
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	24	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	0	1	1	0	0	1	0	1	0
Volume Module:												
Base Vol:	79	242	128	79	147	88	51	758	57	49	639	97
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	79	242	128	79	147	88	51	758	57	49	639	97
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	79	242	128	79	147	88	51	758	57	49	639	97
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	79	242	128	79	147	88	51	758	57	49	639	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	79	242	128	79	147	88	51	758	57	49	639	97
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	79	242	128	79	147	88	51	758	57	49	639	97
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.63	0.37	1.00	1.86	0.14	1.00	1.74	0.26
Final Sat.:	1598	1700	1598	1598	1063	637	1598	3162	238	1598	2952	448
Capacity Analysis Module:												
Vol/Sat:	0.05	0.14	0.08	0.05	0.14	0.14	0.03	0.24	0.24	0.03	0.22	0.22
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Ross St (N/S) / Santa Ana Bl (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.432
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 21 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	2 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	51	152	97	63	215	109	62	520	63	113	650	101
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	51	152	97	63	215	109	62	520	63	113	650	101
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	51	152	97	63	215	109	62	520	63	113	650	101
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	51	152	97	63	215	109	62	520	0	113	650	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	152	97	63	215	109	62	520	0	113	650	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	51	152	97	63	215	109	62	520	0	113	650	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00
Final Sat.:	1598	1700	1598	1598	1700	1598	1598	3400	1598	1598	5100	1598
Capacity Analysis Module:												
Vol/Sat:	0.03	0.09	0.06	0.04	0.13	0.07	0.04	0.15	0.00	0.07	0.13	0.00
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Ross St (N/S) / 4th St (E/W)

Average Delay (sec/veh): 2.6 Worst Case Level Of Service: B[12.4]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0	1 0	1 0	1	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	315	40	78	242	0	0	0	0	40	0	77
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	315	40	78	242	0	0	0	0	40	0	77
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	315	40	78	242	0	0	0	0	40	0	77
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	315	40	78	242	0	0	0	0	40	0	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	315	40	78	242	0	0	0	0	40	0	77
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	355	xxxx	xxxxx	xxxx	xxxx	xxxxx	733	xxxx	335
Potent Cap.:	xxxx	xxxx	xxxxx	1215	xxxx	xxxxx	xxxx	xxxx	xxxxx	391	xxxx	712
Move Cap.:	xxxx	xxxx	xxxxx	1215	xxxx	xxxxx	xxxx	xxxx	xxxxx	372	xxxx	712
Volume/Cap:	xxxx	xxxx	xxxx	0.06	xxxx	xxxx	xxxx	xxxx	xxxx	0.11	xxxx	0.11
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.4	xxxx	0.4
Control Del:	xxxxx	xxxx	xxxxx	8.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	15.9	xxxx	10.7
LOS by Move:	*	*	*	A	*	*	*	*	*	C	*	B
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			12.4		
ApproachLOS:	*			*			*			B		

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Broadway (N/S) / Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.657
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 33 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Ignore			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	76	636	62	143	728	179	217	852	77	42	541	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	76	636	62	143	728	179	217	852	77	42	541	120
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	76	636	62	143	728	179	217	852	77	42	541	120
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	76	636	0	143	728	0	217	852	77	42	541	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	76	636	0	143	728	0	217	852	77	42	541	120
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	76	636	0	143	728	0	217	852	77	42	541	120
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.83	0.17	1.00	1.64	0.36
Final Sat.:	1598	3400	1598	1598	3400	1598	1598	3118	282	1598	2783	617
Capacity Analysis Module:												
Vol/Sat:	0.05	0.19	0.00	0.09	0.21	0.00	0.14	0.27	0.27	0.03	0.19	0.19
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Broadway (N/S) / Santa Ana Bl (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.535
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 25 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	1 1	0
Volume Module:												
Base Vol:	52	709	0	0	698	144	0	0	0	52	855	139
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	52	709	0	0	698	144	0	0	0	52	855	139
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	52	709	0	0	698	144	0	0	0	52	855	139
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	52	709	0	0	698	144	0	0	0	52	855	139
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	52	709	0	0	698	144	0	0	0	52	855	139
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	52	709	0	0	698	144	0	0	0	52	855	139
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.66	0.34	0.00	0.00	0.00	0.15	2.45	0.40
Final Sat.:	1598	3400	0	0	2819	581	0	0	0	254	4169	678
Capacity Analysis Module:												
Vol/Sat:	0.03	0.21	0.00	0.00	0.25	0.25	0.00	0.00	0.00	0.03	0.21	0.21
Crit Moves:	****				****						****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Broadway (N/S) / 5th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.488
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	23	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	1 0	1 0	2	0 0	0 1	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	592	82	92	726	0	194	697	38	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	592	82	92	726	0	194	697	38	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	592	82	92	726	0	194	697	38	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	592	82	92	726	0	194	697	38	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	592	82	92	726	0	194	697	38	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	592	82	92	726	0	194	697	38	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00	0.94	1.00	0.94
Lanes:	0.00	1.76	0.24	1.00	2.00	0.00	0.63	2.25	0.12	0.00	0.00	0.00
Final Sat.:	0	2986	414	1598	3400	0	1065	3826	209	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.20	0.06	0.21	0.00	0.11	0.18	0.18	0.00	0.00	0.00
Crit Moves:		****		****				****				

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Broadway (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.437
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	21	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	37	525	122	45	612	32	57	124	42	63	134	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	37	525	122	45	612	32	57	124	42	63	134	47
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	37	525	122	45	612	32	57	124	42	63	134	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	37	525	122	45	612	32	57	124	42	63	134	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	37	525	122	45	612	32	57	124	42	63	134	47
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	37	525	122	45	612	32	57	124	42	63	134	47
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.62	0.38	1.00	1.90	0.10	0.25	0.56	0.19	0.26	0.55	0.19
Final Sat.:	1598	2759	641	1598	3231	169	435	945	320	439	934	327
Capacity Analysis Module:												
Vol/Sat:	0.02	0.19	0.19	0.03	0.19	0.19	0.03	0.13	0.13	0.04	0.14	0.14
Crit Moves:		****		****				****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Broadway (N/S)/ 3rd st (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.643
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0 1	0	1	0 1	1	0	0 1	0	1	0
Volume Module:												
Base Vol:	56	644	48	54	604	45	40	115	22	19	151	65
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	56	644	48	54	604	45	40	115	22	19	151	65
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	56	644	48	54	604	45	40	115	22	19	151	65
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	56	644	48	54	604	45	40	115	22	19	151	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	644	48	54	604	45	40	115	22	19	151	65
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	56	644	48	54	604	45	40	115	22	19	151	65
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.93	0.07	1.00	1.00	1.00	1.00	0.84	0.16	1.00	0.70	0.30
Final Sat.:	1598	1582	118	1598	1700	1598	1598	1427	273	1598	1188	512
Capacity Analysis Module:												
Vol/Sat:	0.04	0.41	0.41	0.03	0.36	0.03	0.03	0.08	0.08	0.01	0.13	0.13
Crit Moves:		****		****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Broadway (N/S) / 1st St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.755
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1 0 1	1	0	1 0 1	1	0	2 1 0	1	0	2 1 0
Volume Module:												
Base Vol:	92	377	111	72	400	166	172	1273	69	132	1474	79
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	92	377	111	72	400	166	172	1273	69	132	1474	79
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	92	377	111	72	400	166	172	1273	69	132	1474	79
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	92	377	111	72	400	166	172	1273	69	132	1474	79
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	377	111	72	400	166	172	1273	69	132	1474	79
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	92	377	111	72	400	166	172	1273	69	132	1474	79
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.85	0.15	1.00	2.85	0.15
Final Sat.:	1598	1700	1598	1598	1700	1598	1598	4838	262	1598	4841	259
Capacity Analysis Module:												
Vol/Sat:	0.06	0.22	0.07	0.05	0.24	0.10	0.11	0.26	0.26	0.08	0.30	0.30
Crit Moves:	****				****		****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Sycamore St (N/S) / Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.529
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 25 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1! 0	0	1	0 1	1	0	1 0
Volume Module:												
Base Vol:	28	52	24	95	94	101	23	953	23	8	504	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	28	52	24	95	94	101	23	953	23	8	504	33
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	28	52	24	95	94	101	23	953	23	8	504	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	28	52	24	95	94	101	23	953	23	8	504	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	52	24	95	94	101	23	953	23	8	504	33
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	28	52	24	95	94	101	23	953	23	8	504	33
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.27	0.50	0.23	0.33	0.32	0.35	1.00	1.95	0.05	1.00	1.88	0.12
Final Sat.:	458	850	392	557	551	592	1598	3320	80	1598	3191	209
Capacity Analysis Module:												
Vol/Sat:	0.02	0.06	0.06	0.06	0.17	0.17	0.01	0.29	0.29	0.01	0.16	0.16
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #14 Sycamore St (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 5.9 Worst Case Level Of Service: C[23.1]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	1	0
Volume Module:																				
Base Vol:	55	81		0		0	90		42		0	0		0		44	711		26	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	55	81		0		0	90		42		0	0		0		44	711		26	
Added Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
PasserByVol:	0	0		0		0	0		0		0	0		0		0	0		0	
Initial Fut:	55	81		0		0	90		42		0	0		0		44	711		26	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Volume:	55	81		0		0	90		42		0	0		0		44	711		26	
Reduct Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
FinalVolume:	55	81		0		0	90		42		0	0		0		44	711		26	
Critical Gap Module:																				
Critical Gp:	7.1	6.5	xxxxx	xxxxx		6.5	6.2	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx						
FollowUpTim:	3.5	4.0	xxxxx	xxxxx		4.0	3.3	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx						
Capacity Module:																				
Cnflict Vol:	370	825	xxxxx	xxxx		812	250	xxxx	xxxx	xxxxx		0	xxxx	xxxxx						
Potent Cap.:	590	310	xxxxx	xxxx		315	794	xxxx	xxxx	xxxxx		900	xxxx	xxxxx						
Move Cap.:	413	294	xxxxx	xxxx		299	794	xxxx	xxxx	xxxxx		900	xxxx	xxxxx						
Volume/Cap:	0.13	0.28	xxxx	xxxx	0.30	0.05	xxxx	xxxx	xxxx		0.05	xxxx	xxxx							
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		0.2	xxxx	xxxxx							
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		9.2	xxxx	xxxxx							
LOS by Move:	*	*	*	*	*	*	*	*	*		A	*	*							
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT							
Shared Cap.:	333	xxxx	xxxxx	xxxx	xxxx	373	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx							
SharedQueue:	1.9	xxxx	xxxxx	xxxxx	xxxx	1.6	xxxxx	xxxx	xxxxx		0.2	xxxx	xxxxx							
Shrd ConDel:	23.1	xxxx	xxxxx	xxxxx	xxxx	19.8	xxxxx	xxxx	xxxxx		9.2	xxxx	xxxxx							
Shared LOS:	C	*	*	*	*	C	*	*	*		A	*	*							
ApproachDel:	23.1					19.8					xxxxxx									
ApproachLOS:	C					C					*									

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #15 Sycamore St (N/S) / 5th St (E/W)

Average Delay (sec/veh): 3.8 Worst Case Level Of Service: C[15.5]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	1 0	0	1	0	0 0	0	1	1	1 0	0	0	0	0 0
Volume Module:																
Base Vol:	0	10		26	82	44		0	65	533		15	0	0		0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	10		26	82	44		0	65	533		15	0	0		0
Added Vol:	0	0		0	0	0		0	0	0		0	0	0		0
PasserByVol:	0	0		0	0	0		0	0	0		0	0	0		0
Initial Fut:	0	10		26	82	44		0	65	533		15	0	0		0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	0	10		26	82	44		0	65	533		15	0	0		0
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
FinalVolume:	0	10		26	82	44		0	65	533		15	0	0		0
Critical Gap Module:																
Critical Gp:	xxxxx	6.5		6.2	7.1	6.5	xxxxx		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
FollowUpTim:	xxxxx	4.0		3.3	3.5	4.0	xxxxx		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	xxxx	671		185	313	678	xxxxx		0	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Potent Cap.:	xxxx	380		862	644	377	xxxxx		900	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Move Cap.:	xxxx	352		862	576	348	xxxxx		900	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Volume/Cap:	xxxx	0.03		0.03	0.14	0.13	xxxx		0.07	xxxx	xxxx	xxxx	xxxx	xxxx		
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx		xxxxx	xxxx	xxxx	xxxxx		0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Control Del:	xxxxx	xxxx		xxxxx	xxxxx	xxxx	xxxxx		9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
LOS by Move:	*	*		*	*	*	*		A	*	*	*	*	*		
Movement:	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT
Shared Cap.:	xxxx	xxxx		614	469	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx		0.2	1.1	xxxx	xxxxx		0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx	xxxx		11.2	15.5	xxxx	xxxxx		9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Shared LOS:	*	*		B	C	*	*		A	*	*	*	*	*		
ApproachDel:		11.2				15.5				xxxxxx				xxxxxx		
ApproachLOS:		B				C				*				*		

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #16 Sycamore St (N/S) / 4th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.391
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): 9.7
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0		0	0	0		0	0	0		0	0	0		0
Lanes:	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0
Volume Module:																
Base Vol:	9	9		81	19	10		35	37	182		22	88	189		22
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	9	9		81	19	10		35	37	182		22	88	189		22
Added Vol:	0	0		0	0	0		0	0	0		0	0	0		0
PasserByVol:	0	0		0	0	0		0	0	0		0	0	0		0
Initial Fut:	9	9		81	19	10		35	37	182		22	88	189		22
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	9	9		81	19	10		35	37	182		22	88	189		22
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	9	9		81	19	10		35	37	182		22	88	189		22
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	9	9		81	19	10		35	37	182		22	88	189		22
Saturation Flow Module:																
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Lanes:	0.09	0.09		0.82	0.30	0.15		0.55	0.15	0.76		0.09	0.29	0.64		0.07
Final Sat.:	63	63		567	194	102		358	116	571		69	225	483		56
Capacity Analysis Module:																
Vol/Sat:	0.14	0.14		0.14	0.10	0.10		0.10	0.32	0.32		0.32	0.39	0.39		0.39
Crit Moves:		****				****				****				****		
Delay/Veh:	8.4	8.4		8.4	8.4	8.4		8.4	9.6	9.6		9.6	10.4	10.4		10.4
Delay Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	8.4	8.4		8.4	8.4	8.4		8.4	9.6	9.6		9.6	10.4	10.4		10.4
LOS by Move:	A	A		A	A	A		A	A	A		A	B	B		B
ApproachDel:		8.4				8.4				9.6				10.4		
Delay Adj:		1.00				1.00				1.00				1.00		
ApprAdjDel:		8.4				8.4				9.6				10.4		
LOS by Appr:		A				A				A				B		
AllWayAvgQ:	0.1	0.1		0.1	0.1	0.1		0.1	0.4	0.4		0.4	0.6	0.6		0.6

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Main St (N/S) / Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.818
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 56 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	133	1077	92	87	1069	89	138	865	162	68	411	74
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	133	1077	92	87	1069	89	138	865	162	68	411	74
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	133	1077	92	87	1069	89	138	865	162	68	411	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	133	1077	92	87	1069	89	138	865	162	68	411	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	133	1077	92	87	1069	89	138	865	162	68	411	74
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	133	1077	92	87	1069	89	138	865	162	68	411	74
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.84	0.16	1.00	1.85	0.15	1.00	1.68	0.32	1.00	1.69	0.31
Final Sat.:	1598	3132	268	1598	3139	261	1598	2864	536	1598	2881	519
Capacity Analysis Module:												
Vol/Sat:	0.08	0.34	0.34	0.05	0.34	0.34	0.09	0.30	0.30	0.04	0.14	0.14
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #18 Main St (N/S) / Santa Ana Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.737
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 41 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 2	0 0	0	0 1	1 0	0	0 0	0 0	0	1 1	1 0
Volume Module:												
Base Vol:	91	1334	0	0	1365	78	0	0	0	85	854	108
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	91	1334	0	0	1365	78	0	0	0	85	854	108
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	91	1334	0	0	1365	78	0	0	0	85	854	108
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	91	1334	0	0	1365	78	0	0	0	85	854	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	91	1334	0	0	1365	78	0	0	0	85	854	108
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	91	1334	0	0	1365	78	0	0	0	85	854	108
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.89	0.11	0.00	0.00	0.00	0.24	2.45	0.31
Final Sat.:	1598	3400	0	0	3216	184	0	0	0	414	4160	526
Capacity Analysis Module:												
Vol/Sat:	0.06	0.39	0.00	0.00	0.42	0.42	0.00	0.00	0.00	0.05	0.21	0.21
Crit Moves:	****				****						****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #19 Main St (N/S) / 5th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.673
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 34 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	1 0	1 0	2	0 0	0 1	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	1318	30	84	1325	0	113	685	88	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1318	30	84	1325	0	113	685	88	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1318	30	84	1325	0	113	685	88	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1318	30	84	1325	0	113	685	88	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1318	30	84	1325	0	113	685	88	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1318	30	84	1325	0	113	685	88	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00	0.94	1.00	0.94
Lanes:	0.00	1.96	0.04	1.00	2.00	0.00	0.38	2.32	0.30	0.00	0.00	0.00
Final Sat.:	0	3324	76	1598	3400	0	650	3943	507	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.40	0.40	0.05	0.39	0.00	0.07	0.17	0.17	0.00	0.00	0.00
Crit Moves:		****		****				****				

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #20 Main St (N/S) / 4th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.760
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 45 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	1 0	0 1	0	1 0	0 0	0	1 0	0 0	0	1 0
Volume Module:												
Base Vol:	0	1344	136	33	1276	60	0	241	64	0	344	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1344	136	33	1276	60	0	241	64	0	344	90
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1344	136	33	1276	60	0	241	64	0	344	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1344	136	33	1276	60	0	241	64	0	344	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1344	136	33	1276	60	0	241	64	0	344	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1344	136	33	1276	60	0	241	64	0	344	90
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.00	1.82	0.18	0.05	1.86	0.09	0.00	0.79	0.21	0.00	0.79	0.21
Final Sat.:	0	3088	312	82	3169	149	0	1343	357	0	1347	353
Capacity Analysis Module:												
Vol/Sat:	0.00	0.44	0.44	0.02	0.40	0.40	0.00	0.18	0.18	0.00	0.26	0.26
Crit Moves:		****		****				****			****	

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #21 Main St (N/S) / 3rd St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.641
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 1	1 0	0	0 1	1 0	1	0 0	1 0	1	0 0	1 0
Volume Module:												
Base Vol:	0	1393	44	0	1333	58	47	164	43	41	195	41
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1393	44	0	1333	58	47	164	43	41	195	41
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1393	44	0	1333	58	47	164	43	41	195	41
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1393	44	0	1333	58	47	164	43	41	195	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1393	44	0	1333	58	47	164	43	41	195	41
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1393	44	0	1333	58	47	164	43	41	195	41
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.00	1.94	0.06	0.00	1.92	0.08	1.00	0.79	0.21	1.00	0.83	0.17
Final Sat.:	0	3296	104	0	3258	142	1598	1347	353	1598	1405	295
Capacity Analysis Module:												
Vol/Sat:	0.00	0.42	0.42	0.00	0.41	0.41	0.03	0.12	0.12	0.03	0.14	0.14
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #22 Main St (N/S) / 1st St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.960
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	1 0	1	0 2	0 1	1	0 2	1 0	1	0 2	1 0
Volume Module:												
Base Vol:	217	1056	99	243	967	167	198	1236	97	119	1315	186
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	217	1056	99	243	967	167	198	1236	97	119	1315	186
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	217	1056	99	243	967	167	198	1236	97	119	1315	186
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	217	1056	99	243	967	167	198	1236	97	119	1315	186
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	217	1056	99	243	967	167	198	1236	97	119	1315	186
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	217	1056	99	243	967	167	198	1236	97	119	1315	186
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.83	0.17	1.00	2.00	1.00	1.00	2.78	0.22	1.00	2.63	0.37
Final Sat.:	1598	3109	291	1598	3400	1598	1598	4729	371	1598	4468	632
Capacity Analysis Module:												
Vol/Sat:	0.14	0.34	0.34	0.15	0.28	0.10	0.12	0.26	0.26	0.07	0.29	0.29
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #23 Bush St (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.409
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	20	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	0	0	0 0	1 0	0	0 0	0 0	0	1 1	1 0
Volume Module:												
Base Vol:	43	327	0	0	211	36	0	0	0	39	746	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	43	327	0	0	211	36	0	0	0	39	746	63
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	43	327	0	0	211	36	0	0	0	39	746	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	43	327	0	0	211	36	0	0	0	39	746	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	327	0	0	211	36	0	0	0	39	746	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	43	327	0	0	211	36	0	0	0	39	746	63
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	0.85	0.15	0.00	0.00	0.00	0.14	2.64	0.22
Final Sat.:	1598	1700	0	0	1452	248	0	0	0	235	4487	379
Capacity Analysis Module:												
Vol/Sat:	0.03	0.19	0.00	0.00	0.15	0.15	0.00	0.00	0.00	0.02	0.17	0.17
Crit Moves:		****		****							****	

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #24 Bush St (N/S) / 5th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.458
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	22	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 0	1 0	1	0 1	0 0	0	1 1	1 0	0	0 0	0 0
Volume Module:												
Base Vol:	0	315	67	29	269	0	46	731	65	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	315	67	29	269	0	46	731	65	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	315	67	29	269	0	46	731	65	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	315	67	29	269	0	46	731	65	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	315	67	29	269	0	46	731	65	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	315	67	29	269	0	46	731	65	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00	0.94	1.00	0.94
Lanes:	0.00	0.82	0.18	1.00	1.00	0.00	0.16	2.61	0.23	0.00	0.00	0.00
Final Sat.:	0	1402	298	1598	1700	0	279	4428	394	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.22	0.02	0.16	0.00	0.03	0.17	0.17	0.00	0.00	0.00
Crit Moves:		****		****				****				

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #25 Bush St (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.504
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	24	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0 1	0	1	0	0	0	1! 0	0	0	1! 0 0
Volume Module:												
Base Vol:	20	317	26	43	229	12	13	292	28	19	309	42
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	317	26	43	229	12	13	292	28	19	309	42
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	317	26	43	229	12	13	292	28	19	309	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	317	26	43	229	12	13	292	28	19	309	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	317	26	43	229	12	13	292	28	19	309	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	317	26	43	229	12	13	292	28	19	309	42
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.92	0.08	1.00	0.95	0.05	0.04	0.88	0.08	0.05	0.84	0.11
Final Sat.:	1598	1571	129	1598	1615	85	66	1491	143	87	1420	193
Capacity Analysis Module:												
Vol/Sat:	0.01	0.20	0.20	0.03	0.14	0.14	0.01	0.20	0.20	0.01	0.22	0.22
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #26 Spurgeon St (N/S) / 1st St (E/W)

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: C[17.1]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0	0 0	0	0	0 0 1	0	0	3 0 0	0	0	2 1 0
Volume Module:												
Base Vol:	0	0	0	0	0	163	0	1710	0	0	1648	72
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	163	0	1710	0	0	1648	72
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	163	0	1710	0	0	1648	72
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	163	0	1710	0	0	1648	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	163	0	1710	0	0	1648	72
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	585	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	459	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	459	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.36	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	1.6	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	17.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	C	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			17.1			xxxxxx			xxxxxx		
ApproachLOS:	*			C			*			*		

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #27 French St (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 5.9 Worst Case Level Of Service: C[20.8]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0 0	0	0	0	1 0	0	0	0	0 0	0	1	0	1 0
Volume Module:																
Base Vol:	94	77	0	0	81	30	0	0	0	23	641	7				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	94	77	0	0	81	30	0	0	0	23	641	7				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	94	77	0	0	81	30	0	0	0	23	641	7				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	94	77	0	0	81	30	0	0	0	23	641	7				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	94	77	0	0	81	30	0	0	0	23	641	7				
Critical Gap Module:																
Critical Gp:	7.1	6.5	xxxxx	xxxxx	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx				
FollowUpTim:	3.5	4.0	xxxxx	xxxxx	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	407	694	xxxxx	xxxx	691	324	xxxx	xxxx	xxxxx	0	xxxx	xxxxx				
Potent Cap.:	558	369	xxxxx	xxxx	371	722	xxxx	xxxx	xxxxx	900	xxxx	xxxxx				
Move Cap.:	434	359	xxxxx	xxxx	361	722	xxxx	xxxx	xxxxx	900	xxxx	xxxxx				
Volume/Cap:	0.22	0.21	xxxx	xxxx	0.22	0.04	xxxx	xxxx	xxxx	0.03	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	397	xxxx	xxxxx	xxxx	xxxx	417	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	2.1	xxxx	xxxxx	xxxxx	xxxx	1.1	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx				
Shrd ConDel:	20.8	xxxx	xxxxx	xxxxx	xxxx	16.7	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx				
Shared LOS:	C	*	*	*	*	C	*	*	*	A	*	*				
ApproachDel:	20.8			16.7			xxxxx			xxxxx						
ApproachLOS:	C			C			*			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #28 French St (N/S) / 4th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.499
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 24 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	0	1!	0 0	1	0	0	1 0	0	0	1!	0 0	0	1	0	0 1
Volume Module:																
Base Vol:	20	75	78		138	66	80		57	211	34		79	307	68	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	20	75	78		138	66	80		57	211	34		79	307	68	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	20	75	78		138	66	80		57	211	34		79	307	68	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	20	75	78		138	66	80		57	211	34		79	307	68	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	20	75	78		138	66	80		57	211	34		79	307	68	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	20	75	78		138	66	80		57	211	34		79	307	68	
Saturation Flow Module:																
Sat/Lane:	1700	1700	1700		1700	1700	1700		1700	1700	1700		1700	1700	1700	
Adjustment:	1.00	1.00	1.00		0.94	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.94	
Lanes:	0.12	0.43	0.45		1.00	0.45	0.55		0.19	0.70	0.11		0.20	0.80	1.00	
Final Sat.:	197	737	766		1598	768	932		321	1188	191		348	1352	1598	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.10	0.10		0.09	0.09	0.09		0.03	0.18	0.18		0.05	0.23	0.04	
Crit Moves:		****			****				****					****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #29 Lacy St (N/S) / Civic Center Dr (E/W)

Average Delay (sec/veh): 6.8 Worst Case Level Of Service: E[44.8]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	0	0	1! 0	0	0	0	1! 0	0
Volume Module:																
Base Vol:	20	16	42		87	36	21		16	639	50		9	221	71	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	20	16	42		87	36	21		16	639	50		9	221	71	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	20	16	42		87	36	21		16	639	50		9	221	71	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	20	16	42		87	36	21		16	639	50		9	221	71	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	20	16	42		87	36	21		16	639	50		9	221	71	
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	999	1006	664		1000	996	257		292	xxxx	xxxxx		689	xxxx	xxxxx	
Potent Cap.:	224	243	464		224	247	787		1281	xxxx	xxxxx		915	xxxx	xxxxx	
Move Cap.:	190	238	464		190	241	787		1281	xxxx	xxxxx		915	xxxx	xxxxx	
Volume/Cap:	0.11	0.07	0.09		0.46	0.15	0.03		0.01	xxxx	xxxx		0.01	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		0.0	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		7.8	xxxx	xxxxx		9.0	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		A	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	296	xxxxx		xxxx	227	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	1.0	xxxxx		xxxxx	3.8	xxxxx		xxxxx	xxxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	21.4	xxxxx		xxxxx	44.8	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*		*	E	*		*	*	*		*	*	*	
ApproachDel:	21.4				44.8				xxxxxx				xxxxxx			
ApproachLOS:	C				E				*				*			

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #30 Lacy st (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 35.7 Worst Case Level Of Service: F[412.6]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	1	0	0	1 0	1	0	0	1 0
Volume Module:																
Base Vol:	17	42	22		34	59	14		3	775	8		75	733	11	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	17	42	22		34	59	14		3	775	8		75	733	11	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	17	42	22		34	59	14		3	775	8		75	733	11	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	17	42	22		34	59	14		3	775	8		75	733	11	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	17	42	22		34	59	14		3	775	8		75	733	11	
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1710	1679	779		1706	1678	739		744	xxxx	xxxxx		783	xxxx	xxxxx	
Potent Cap.:	72	96	399		73	96	421		873	xxxx	xxxxx		844	xxxx	xxxxx	
Move Cap.:	30	87	399		40	87	421		873	xxxx	xxxxx		844	xxxx	xxxxx	
Volume/Cap:	0.57	0.48	0.06		0.85	0.68	0.03		0.00	xxxx	xxxx		0.09	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		0.3	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.1	xxxx	xxxxx		9.7	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		A	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	73	xxxxx		xxxx	69	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	6.0	xxxxx		xxxxx	9.2	xxxxx		xxxxx	xxxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	237	xxxxx		xxxxx	413	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	F	*		*	F	*		*	*	*		*	*	*	
ApproachDel:	236.6				412.6				xxxxxx				xxxxxx			
ApproachLOS:	F				F				*				*			

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #31 Lacy St (N/S) / Brown St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.263
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	8.3
Optimal Cycle:	0	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	0
Volume Module:												
Base Vol:	67	102	56	6	110	13	8	17	10	19	30	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	67	102	56	6	110	13	8	17	10	19	30	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	67	102	56	6	110	13	8	17	10	19	30	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	67	102	56	6	110	13	8	17	10	19	30	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	67	102	56	6	110	13	8	17	10	19	30	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	67	102	56	6	110	13	8	17	10	19	30	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.30	0.45	0.25	0.05	0.85	0.10	0.23	0.48	0.29	0.39	0.61	0.00
Final Sat.:	254	387	213	38	702	83	168	356	210	275	434	0
Capacity Analysis Module:												
Vol/Sat:	0.26	0.26	0.26	0.16	0.16	0.16	0.05	0.05	0.05	0.07	0.07	xxxx
Crit Moves:		****				****	****			****		
Delay/Veh:	8.6	8.6	8.6	8.0	8.0	8.0	7.8	7.8	7.8	8.1	8.1	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.6	8.6	8.6	8.0	8.0	8.0	7.8	7.8	7.8	8.1	8.1	0.0
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	*
ApproachDel:		8.6			8.0			7.8			8.1	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		8.6			8.0			7.8			8.1	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.3	0.3	0.3	0.2	0.2	0.2	0.0	0.0	0.0	0.1	0.1	0.1

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #32 Lacy St (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.634
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1	0 0	1 0	1	0 1	0
Volume Module:												
Base Vol:	45	81	68	147	33	5	28	462	25	151	622	123
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	45	81	68	147	33	5	28	462	25	151	622	123
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	45	81	68	147	33	5	28	462	25	151	622	123
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	45	81	68	147	33	5	28	462	25	151	622	123
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	81	68	147	33	5	28	462	25	151	622	123
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	45	81	68	147	33	5	28	462	25	151	622	123
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	0.23	0.42	0.35	0.79	0.18	0.03	1.00	0.95	0.05	1.00	1.00	1.00
Final Sat.:	394	710	596	1351	303	46	1598	1613	87	1598	1700	1598
Capacity Analysis Module:												
Vol/Sat:	0.03	0.11	0.11	0.09	0.11	0.11	0.02	0.29	0.29	0.09	0.37	0.08
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #33 Lacy St (N/S) / 1st St (E/W)

Average Delay (sec/veh): 30.0 Worst Case Level Of Service: F[1427.9]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1	0 0	0	0	1!	0 0	1	0	3	0 0	0	0	2	1 0
Volume Module:																
Base Vol:	0	2	0		10	1	130		184	1516	0		0	1572	40	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	2	0		10	1	130		184	1516	0		0	1572	40	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	2	0		10	1	130		184	1516	0		0	1572	40	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	2	0		10	1	130		184	1516	0		0	1572	40	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	2	0		10	1	130		184	1516	0		0	1572	40	
Critical Gap Module:																
Critical Gp:	xxxxx	6.5	xxxxx		7.5	6.5	6.9		4.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
FollowUpTim:	xxxxx	4.0	xxxxx		3.5	4.0	3.3		2.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	3496	xxxxx		2466	3476	544		1612	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	xxxx	6	xxxxx		16	7	488		410	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap.:	xxxx	4	xxxxx		6	4	488		410	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	xxxx	0.56	xxxx		1.66	0.27	0.27		0.45	xxxx	xxxx		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	0.8	xxxxx		xxxx	xxxx	xxxxx		2.3	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Control Del:	xxxxx	1428	xxxxx		xxxxx	xxxx	xxxxx		20.7	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	F	*		*	*	*		C	*	*		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	64	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	13.5	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	688	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	F	*		*	*	*		*	*	*	
ApproachDel:	1427.9				688.5				xxxxxx				xxxxxx			
ApproachLOS:	F				F				*				*			

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #34 Santiago St (N/S) / Washington Av (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.995
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): 34.5
Optimal Cycle: 0 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0	1	0 1	1	0	1	0 1	0	0	1!	0 0	0	0	1!	0 0
Volume Module:																
Base Vol:	67	315	171		24	295	125		260	190	28		58	146	36	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	67	315	171		24	295	125		260	190	28		58	146	36	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	67	315	171		24	295	125		260	190	28		58	146	36	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	67	315	171		24	295	125		260	190	28		58	146	36	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	67	315	171		24	295	125		260	190	28		58	146	36	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	67	315	171		24	295	125		260	190	28		58	146	36	
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	1.00	1.00		1.00	1.00	1.00		0.54	0.40	0.06		0.24	0.61	0.15	
Final Sat.:	412	438	479		405	429	468		261	191	28		103	259	64	
Capacity Analysis Module:																
Vol/Sat:	0.16	0.72	0.36		0.06	0.69	0.27		0.99	0.99	0.99		0.56	0.56	0.56	
Crit Moves:		****				****				****			****			
Delay/Veh:	13.0	28.4	14.1		12.0	26.6	12.9		67.2	67.2	67.2		20.7	20.7	20.7	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	13.0	28.4	14.1		12.0	26.6	12.9		67.2	67.2	67.2		20.7	20.7	20.7	
LOS by Move:	B	D	B		B	D	B		F	F	F		C	C	C	
ApproachDel:	22.1				22.0				67.2				20.7			
Delay Adj:	1.00				1.00				1.00				1.00			
ApprAdjDel:	22.1				22.0				67.2				20.7			
LOS by Appr:	C				C				F				C			
AllWayAvgQ:	0.2	2.1	0.5		0.1	1.9	0.3		7.6	7.6	7.6		1.1	1.1	1.1	

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #35 Santiago St (N/S) / Civic Center Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	1.021
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	42.6
Optimal Cycle:	0	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	1 0	1 0	0	1 0	0 1	0	0 1	0 0	1! 0	0
Volume Module:												
Base Vol:	210	265	31	15	323	148	323	58	434	42	36	13
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	265	31	15	323	148	323	58	434	42	36	13
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	210	265	31	15	323	148	323	58	434	42	36	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	210	265	31	15	323	148	323	58	434	42	36	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	265	31	15	323	148	323	58	434	42	36	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	210	265	31	15	323	148	323	58	434	42	36	13
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.90	0.10	1.00	0.69	0.31	0.85	0.15	1.00	0.46	0.40	0.14
Final Sat.:	423	406	48	412	316	145	375	67	513	175	150	54
Capacity Analysis Module:												
Vol/Sat:	0.50	0.65	0.65	0.04	1.02	1.02	0.86	0.86	0.85	0.24	0.24	0.24
Crit Moves:		****			****		****				****	
Delay/Veh:	19.1	24.0	24.0	11.5	75.3	75.3	43.7	43.7	37.1	15.1	15.1	15.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.1	24.0	24.0	11.5	75.3	75.3	43.7	43.7	37.1	15.1	15.1	15.1
LOS by Move:	C	C	C	B	F	F	E	E	E	C	C	C
ApproachDel:	22.0			73.3			40.2			15.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	22.0			73.3			40.2			15.1		
LOS by Appr:	C			F			E			C		
AllWayAvgQ:	0.9	1.7	1.7	0.0	8.3	8.3	4.0	4.0	3.9	0.3	0.3	0.3

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #36 Santiago St (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.694
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	0 1	1 0	2	0 1	1 0	1	1 0	1 0	2	0 1
Volume Module:												
Base Vol:	49	111	79	395	295	135	82	818	104	121	789	322
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	49	111	79	395	295	135	82	818	104	121	789	322
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	49	111	79	395	295	135	82	818	104	121	789	322
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	49	111	79	395	295	135	82	818	104	121	789	322
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	49	111	79	395	295	135	82	818	104	121	789	322
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	49	111	79	395	295	135	82	818	104	121	789	322
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.77	0.23	1.00	2.00	1.00
Final Sat.:	1598	3400	1598	1598	3400	1598	1598	3016	384	1598	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.05	0.25	0.09	0.08	0.05	0.27	0.27	0.08	0.23	0.20
Crit Moves:			****	****				****		****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #37 Santiago St (N/S) / Brown St (E/W)

Average Delay (sec/veh): 3.0 Worst Case Level Of Service: B[13.9]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	1	1 0	0	1	1	1 0	1	0	0	1 0	0	0	0	0 0
Volume Module:																
Base Vol:	57	228	0	0	380	140	98	0	79	0	0	0				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	57	228	0	0	380	140	98	0	79	0	0	0				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	57	228	0	0	380	140	98	0	79	0	0	0				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	57	228	0	0	380	140	98	0	79	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	57	228	0	0	380	140	98	0	79	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	520	xxxx	xxxxx	xxxx	xxxx	xxxxx	640	792	197	xxxx	xxxx	xxxxx				
Potent Cap.:	1056	xxxx	xxxxx	xxxx	xxxx	xxxxx	412	324	818	xxxx	xxxx	xxxxx				
Move Cap.:	1056	xxxx	xxxxx	xxxx	xxxx	xxxxx	395	306	818	xxxx	xxxx	xxxxx				
Volume/Cap:	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	0.25	0.00	0.10	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.0	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	8.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	17.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	A	*	*	*	*	*	C	*	*	*	*	*				
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT						
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	818	xxxx	xxxx	xxxxx				
SharedQueue:	0.2	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	0.3	xxxxx	xxxx	xxxxx				
Shrd ConDel:	8.6	xxxx	xxxxx	9.0	xxxx	xxxxx	xxxxx	xxxx	9.9	xxxxx	xxxx	xxxxx				
Shared LOS:	A	*	*	A	*	*	*	*	A	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			13.9			xxxxxx						
ApproachLOS:	*			*			B			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #38 Santiago St (N/S) / 6th St (E/W)

Average Delay (sec/veh): 2.8 Worst Case Level Of Service: B[13.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	1	1 0	0	1	1	1 0	1	0	0	0 1	0	0	0	0 0
Volume Module:																
Base Vol:	59	199	0	0	330	129	86	0	60	0	0	0				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	59	199	0	0	330	129	86	0	60	0	0	0				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	59	199	0	0	330	129	86	0	60	0	0	0				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	59	199	0	0	330	129	86	0	60	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	59	199	0	0	330	129	86	0	60	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	459	xxxx	xxxxx	xxxx	xxxx	xxxxx	579	xxxx	175	xxxx	xxxx	xxxxx				
Potent Cap.:	1113	xxxx	xxxxx	xxxx	xxxx	xxxxx	451	xxxx	845	xxxx	xxxx	xxxxx				
Move Cap.:	1113	xxxx	xxxxx	xxxx	xxxx	xxxxx	432	xxxx	845	xxxx	xxxx	xxxxx				
Volume/Cap:	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	0.20	xxxx	0.07	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.7	xxxx	0.2	xxxx	xxxx	xxxxx				
Control Del:	8.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	15.4	xxxx	9.6	xxxxx	xxxx	xxxxx				
LOS by Move:	A	*	*	*	*	*	C	*	A	*	*	*				
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT						
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	0.2	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	8.4	xxxx	xxxxx	9.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	A	*	*	A	*	*	*	*	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			13.0			xxxxxx						
ApproachLOS:	*			*			B			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #39 Santiago St (N/S) / 4th (E/W)

Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	1	1	1	0		1	0	2	1	0		0	1	0	1	0		0	1	0	1	0	
Volume Module:																								
Base Vol:	96	176	146				5	277	113				58	1052	58				195	728	147			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	96	176	146				5	277	113				58	1052	58				195	728	147			
Added Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	96	176	146				5	277	113				58	1052	58				195	728	147			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Volume:	96	176	146				5	277	113				58	1052	58				195	728	147			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	96	176	146				5	277	113				58	1052	58				195	728	147			
Critical Gap Module:																								
Critical Gp:	4.1	xxxx	xxxxx				4.1	xxxx	xxxxx				7.5	6.5	6.9				7.5	6.5	6.9			
FollowUpTim:	2.2	xxxx	xxxxx				2.2	xxxx	xxxxx				3.5	4.0	3.3				3.5	4.0	3.3			
Capacity Module:																								
Cnflict Vol:	390	xxxx	xxxxx				322	xxxx	xxxxx				958	858	149				1069	841	132			
Potent Cap.:	1180	xxxx	xxxxx				1249	xxxx	xxxxx				215	297	877				178	303	900			
Move Cap.:	1180	xxxx	xxxxx				1249	xxxx	xxxxx				0	268	877				0	274	900			
Volume/Cap:	0.08	xxxx	xxxx				0.00	xxxx	xxxx				xxxx	3.93	0.07				xxxx	2.66	0.16			
Level Of Service Module:																								
2Way95thQ:	0.3	xxxx	xxxxx				0.0	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Control Del:	8.3	xxxx	xxxxx				7.9	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
LOS by Move:	A	*	*				A	*	*				*	*	*				*	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0	xxxx	278				0	xxxx	310			
SharedQueue:	0.3	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	107.9				xxxxx	xxxx	75.0			
Shrd ConDel:	8.3	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	1383				xxxxx	xxxx	854.4			
Shared LOS:	A	*	*				*	*	*				*	*	F				*	*	F			
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						xxxxxx					
ApproachLOS:	*						*						F						F					

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #40 Standard Av (N/S) / 1st St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.858
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 68 Level Of Service: D

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Permitted						Permitted						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	0	0	0				0	0	0				0	0	0				0	0	0			
Lanes:	1	0	0	1	0		0	0	1!	0	0		1	0	1	1	0		1	0	1	1	0	
Volume Module:																								
Base Vol:	215	319	149				19	243	28				86	1405	88				102	1478	13			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	215	319	149				19	243	28				86	1405	88				102	1478	13			
Added Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	215	319	149				19	243	28				86	1405	88				102	1478	13			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Volume:	215	319	149				19	243	28				86	1405	88				102	1478	13			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	215	319	149				19	243	28				86	1405	88				102	1478	13			
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
FinalVolume:	215	319	149				19	243	28				86	1405	88				102	1478	13			
Saturation Flow Module:																								
Sat/Lane:	1700	1700	1700				1700	1700	1700				1700	1700	1700				1700	1700	1700			
Adjustment:	0.94	1.00	1.00				1.00	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00			
Lanes:	1.00	0.68	0.32				0.06	0.84	0.10				1.00	1.88	0.12				1.00	1.98	0.02			
Final Sat.:	1598	1159	541				111	1424	164				1598	3200	200				1598	3370	30			
Capacity Analysis Module:																								
Vol/Sat:	0.13	0.28	0.28				0.01	0.17	0.17				0.05	0.44	0.44				0.06	0.44	0.44			
Crit Moves:	****							****						****						****				

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #41 U-24 (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: F[52.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			1 0 0 0 1			1 0 2 1 0			1 0 2 1 0		
Volume Module:												
Base Vol:	0	0	0	20	0	10	25	1261	0	0	1287	53
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	20	0	10	25	1261	0	0	1287	53
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	20	0	10	25	1261	0	0	1287	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	20	0	10	25	1261	0	0	1287	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	20	0	10	25	1261	0	0	1287	53
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1784	xxxx	456	1340	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	75	xxxx	557	521	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	72	xxxx	557	521	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.28	xxxx	0.02	0.05	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	1.0	xxxx	0.1	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	73.5	xxxx	11.6	12.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	F	*	B	B	*	*	*	*	*
Movement:	LT	-	LTR - RT	LT	-	LTR - RT	LT	-	LTR - RT	LT	-	LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			52.8			xxxxxx			xxxxxx		
ApproachLOS:	*			F			*			*		

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #42 Grand Av (N/S) / Santa Ana Bl (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.991
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	1 0	1 0	3	0 2	2 0	1	0 2	0 1	0	1 0
Volume Module:												
Base Vol:	300	2038	13	53	968	965	433	120	444	43	210	81
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	300	2038	13	53	968	965	433	120	444	43	210	81
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	300	2038	13	53	968	965	433	120	444	43	210	81
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	300	2038	13	53	968	965	433	120	444	43	210	81
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	300	2038	13	53	968	965	433	120	444	43	210	81
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	300	2038	13	53	968	965	433	120	444	43	210	81
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	2.98	0.02	1.00	3.00	2.00	2.00	1.00	2.00	0.26	1.26	0.48
Final Sat.:	1598	5068	32	1598	5100	3196	3196	1700	3196	438	2138	825
Capacity Analysis Module:												
Vol/Sat:	0.19	0.40	0.40	0.03	0.19	0.30	0.14	0.07	0.14	0.10	0.10	0.10
Crit Moves:			****			****			****	****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #43 Grand Av (N/S) / 4th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.768
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 46 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3 0 1	1	0	2 1 0	1	0	1 1 0	1	0	2 0 1
Volume Module:												
Base Vol:	254	1205	84	140	836	88	178	630	107	257	857	173
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	254	1205	84	140	836	88	178	630	107	257	857	173
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	254	1205	84	140	836	88	178	630	107	257	857	173
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	254	1205	84	140	836	88	178	630	107	257	857	173
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	254	1205	84	140	836	88	178	630	107	257	857	173
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	254	1205	84	140	836	88	178	630	107	257	857	173
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	1.00	3.00	1.00	1.00	2.71	0.29	1.00	1.71	0.29	1.00	2.00	1.00
Final Sat.:	1598	5100	1598	1598	4614	486	1598	2906	494	1598	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.16	0.24	0.05	0.09	0.18	0.18	0.11	0.22	0.22	0.16	0.25	0.11
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #44 Grand Av (N/S) / 1st St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.822
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 57 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	2 1 0	2	0	3 0 1	2	0	2 1 0	2	0	2 0 1
Volume Module:												
Base Vol:	170	1512	159	106	1089	98	197	1283	144	244	1190	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	1512	159	106	1089	98	197	1283	144	244	1190	63
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	170	1512	159	106	1089	98	197	1283	144	244	1190	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	1512	159	106	1089	98	197	1283	144	244	1190	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	1512	159	106	1089	98	197	1283	144	244	1190	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	170	1512	159	106	1089	98	197	1283	144	244	1190	63
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	2.00	2.71	0.29	2.00	3.00	1.00	2.00	2.70	0.30	2.00	2.00	1.00
Final Sat.:	3196	4615	485	3196	5100	1598	3196	4585	515	3196	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.05	0.33	0.33	0.03	0.21	0.06	0.06	0.28	0.28	0.08	0.35	0.04
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #45 Penn Way (NS) at I-5 SB Ramps (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.473
Loss Time (sec):	12 (Y+R=4.0 sec)	Average Delay (sec/veh):	23.8
Optimal Cycle:	39	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	1	2	0	2	0	0	0	0	0	0	1	0	0	0	0	2
Volume Module:												
Base Vol:	0	193	173	617	147	0	0	0	0	194	0	257
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	193	173	617	147	0	0	0	0	194	0	257
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	193	173	617	147	0	0	0	0	194	0	257
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	193	173	617	147	0	0	0	0	194	0	257
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	193	173	617	147	0	0	0	0	194	0	257
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	193	173	617	147	0	0	0	0	194	0	257
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.92	0.95	1.00	1.00	1.00	1.00	0.77	1.00	0.75
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	2.00
Final Sat.:	0	3610	1615	3502	3610	0	0	0	0	1461	0	2842
Capacity Analysis Module:												
Vol/Sat:	0.00	0.05	0.11	0.18	0.04	0.00	0.00	0.00	0.00	0.13	0.00	0.09
Crit Moves:			****	****						****		
Green/Cycle:	0.00	0.23	0.23	0.37	0.37	0.00	0.00	0.00	0.00	0.28	0.00	0.65
Volume/Cap:	0.00	0.24	0.47	0.47	0.11	0.00	0.00	0.00	0.00	0.47	0.00	0.14
Delay/Veh:	0.0	31.8	34.5	24.2	20.6	0.0	0.0	0.0	0.0	30.7	0.0	6.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	31.8	34.5	24.2	20.6	0.0	0.0	0.0	0.0	30.7	0.0	6.6
LOS by Move:	A	C	C	C	C	A	A	A	A	C	A	A
HCM2kAvgQ:	0	3	5	8	2	0	0	0	0	5	0	2

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #46 I-5 SB Ramps (NS) / Santa Ana Bl (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.690
Loss Time (sec):	12 (Y+R=4.0 sec)	Average Delay (sec/veh):	31.5
Optimal Cycle:	58	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	2	0	0	0	1	2	0	3	0	0	0	0	2	1	0
Volume Module:												
Base Vol:	0	0	0	295	0	276	459	820	0	0	1172	237
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	295	0	276	459	820	0	0	1172	237
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	295	0	276	459	820	0	0	1172	237
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	295	0	276	459	820	0	0	1172	237
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	295	0	276	459	820	0	0	1172	237
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	295	0	276	459	820	0	0	1172	237
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.85	0.92	0.91	1.00	1.00	0.89	0.89
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	2.00	3.00	0.00	0.00	2.50	0.50
Final Sat.:	0	0	0	3502	0	1615	3502	5187	0	0	4207	851
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.08	0.00	0.17	0.13	0.16	0.00	0.00	0.28	0.28
Crit Moves:						****		****			****	
Green/Cycle:	0.00	0.00	0.00	0.25	0.00	0.25	0.23	0.23	0.00	0.00	0.40	0.40
Volume/Cap:	0.00	0.00	0.00	0.34	0.00	0.69	0.57	0.69	0.00	0.00	0.69	0.69
Delay/Veh:	0.0	0.0	0.0	31.2	0.0	39.2	35.2	37.1	0.0	0.0	25.7	25.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	31.2	0.0	39.2	35.2	37.1	0.0	0.0	25.7	25.7
LOS by Move:	A	A	A	C	A	D	D	D	A	A	C	C
HCM2kAvgQ:	0	0	0	4	0	9	7	10	0	0	14	14

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #47 I-5 NB Ramps (NS) / 17th St. (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.960
Loss Time (sec): 16 (Y+R=4.0 sec) Average Delay (sec/veh): 40.9
Optimal Cycle: 100 Level Of Service: D

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Split Phase						Split Phase						Protected						Protected					
Rights:	Include						Include						Ignore						Include					
Min. Green:	0	0	0				0	0	0				0	0	0				0	0	0			
Lanes:	1	1	0	0	1		1	0	0	0	1		1	0	3	0	1		0	0	2	1	0	
Volume Module:																								
Base Vol:	806	73		31	118		0	119		142	1338		387			0	2025		96					
Growth Adj:	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00			1.00	1.00		1.00					
Initial Bse:	806	73		31	118		0	119		142	1338		387			0	2025		96					
Added Vol:	0	0		0	0		0	0		0	0		0			0	0		0					
PasserByVol:	0	0		0	0		0	0		0	0		0			0	0		0					
Initial Fut:	806	73		31	118		0	119		142	1338		387			0	2025		96					
User Adj:	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00			1.00	1.00		1.00					
PHF Adj:	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00			1.00	1.00		1.00					
PHF Volume:	806	73		31	118		0	119		142	1338		0			0	2025		96					
Reduct Vol:	0	0		0	0		0	0		0	0		0			0	0		0					
Reduced Vol:	806	73		31	118		0	119		142	1338		0			0	2025		96					
PCE Adj:	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00			1.00	1.00		1.00					
MLF Adj:	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00			1.00	1.00		1.00					
FinalVolume:	806	73		31	118		0	119		142	1338		0			0	2025		96					
Saturation Flow Module:																								
Sat/Lane:	1900	1900		1900	1900		1900	1900		1900	1900		1900			1900	1900		1900					
Adjustment:	0.96	0.96		0.85	0.95		1.00	0.85		0.95	0.91		1.00			1.00	0.90		0.90					
Lanes:	1.83	0.17		1.00	1.00		0.00	1.00		1.00	3.00		1.00			0.00	2.86		0.14					
Final Sat.:	3331	302		1615	1805		0	1615		1805	5187		1900			0	4918		233					
Capacity Analysis Module:																								
Vol/Sat:	0.24	0.24		0.02	0.07		0.00	0.07		0.08	0.26		0.00			0.00	0.41		0.41					
Crit Moves:		****						****		****							****							
Green/Cycle:	0.25	0.25		0.25	0.08		0.00	0.08		0.08	0.51		0.00			0.00	0.43		0.43					
Volume/Cap:	0.96	0.96		0.08	0.85		0.00	0.96		0.96	0.50		0.00			0.00	0.96		0.96					
Delay/Veh:	57.4	57.4		28.6	82.2		0.0	114.0		107.3	16.3		0.0			0.0	38.9		38.9					
User DelAdj:	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00			1.00	1.00		1.00					
AdjDel/Veh:	57.4	57.4		28.6	82.2		0.0	114.0		107.3	16.3		0.0			0.0	38.9		38.9					
LOS by Move:	E	E		C	F		A	F		F	B		A			A	D		D					
HCM2kAvgQ:	18	18		1	6		0	7		8	10		0			0	29		29					

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #48 I-5 NB Ramps (NS) / Grand Ave (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 1.052
Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh): 50.8
Optimal Cycle: 100 Level Of Service: D

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Split Phase						Split Phase					
Rights:	Ignore						Include						Include						Include					
Min. Green:	0	0	0				0	0	0				0	0	0				0	0	0			
Lanes:	0	0	3	0	1		1	0	3	0	0		0	0	0	0	0		2	0	0	0	1	
Volume Module:																								
Base Vol:	0	2009		701	43		1297	0		0	0		0			720	0		831					
Growth Adj:	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00			1.00	1.00		1.00					
Initial Bse:	0	2009		701	43		1297	0		0	0		0			720	0		831					
Added Vol:	0	0		0	0		0	0		0	0		0			0	0		0					
PasserByVol:	0	0		0	0		0	0		0	0		0			0	0		0					
Initial Fut:	0	2009		701	43		1297	0		0	0		0			720	0		831					
User Adj:	1.00	1.00		0.00	1.00		1.00	1.00		1.00	1.00		1.00			1.00	1.00		1.00					
PHF Adj:	1.00	1.00		0.00	1.00		1.00	1.00		1.00	1.00		1.00			1.00	1.00		1.00					
PHF Volume:	0	2009		0	43		1297	0		0	0		0			720	0		831					
Reduct Vol:	0	0		0	0		0	0		0	0		0			0	0		0					
Reduced Vol:	0	2009		0	43		1297	0		0	0		0			720	0		831					
PCE Adj:	1.00	1.00		0.00	1.00		1.00	1.00		1.00	1.00		1.00			1.00	1.00		1.00					
MLF Adj:	1.00	1.00		0.00	1.00		1.00	1.00		1.00	1.00		1.00			1.00	1.00		1.00					
FinalVolume:	0	2009		0	43		1297	0		0	0		0			720	0		831					
Saturation Flow Module:																								
Sat/Lane:	1900	1900		1900	1900		1900	1900		1900	1900		1900			1900	1900		1900					
Adjustment:	1.00	0.91		1.00	0.95		0.91	1.00		1.00	1.00		1.00			0.92	1.00		0.85					
Lanes:	0.00	3.00		1.00	1.00		3.00	0.00		0.00	0.00		0.00			2.00	0.00		1.00					
Final Sat.:	0	5187		1900	1805		5187	0		0	0		0			3502	0		1615					
Capacity Analysis Module:																								
Vol/Sat:	0.00	0.39		0.00	0.02		0.25	0.00		0.00	0.00		0.00			0.21	0.00		0.51					
Crit Moves:		****			****														****					
Green/Cycle:	0.00	0.37		0.00	0.02		0.39	0.00		0.00	0.00		0.00			0.49	0.00		0.49					
Volume/Cap:	0.00	1.05		0.00	1.05		0.64	0.00		0.00	0.00		0.00			0.42	0.00		1.05					
Delay/Veh:	0.0	67.4		0.0	205.4		25.4	0.0		0.0	0.0		0.0			16.6	0.0		72.1					
User DelAdj:	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00			1.00	1.00		1.00					
AdjDel/Veh:	0.0	67.4		0.0	205.4		25.4	0.0		0.0	0.0		0.0			16.6	0.0		72.1					
LOS by Move:	A	E		A	F		C	A		A	A		A			B	A		E					
HCM2kAvgQ:	0	33		0	4		12	0		0	0		0			7	0		36					

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #49 Mortimer (N/S) / Santa Ana Blvd (E/W)

Average Delay (sec/veh): 12.0 Worst Case Level Of Service: D[25.1]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	0	0	0	0 0	1	0	0	1 0
Volume Module:																
Base Vol:	1	0	700		1	0	2		0	0	0		62	545	7	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	1	0	700		1	0	2		0	0	0		62	545	7	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	1	0	700		1	0	2		0	0	0		62	545	7	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	1	0	700		1	0	2		0	0	0		62	545	7	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	1	0	700		1	0	2		0	0	0		62	545	7	
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2		xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	674	676	0		673	673	549		xxxx	xxxx	xxxxx		0	xxxx	xxxxx	
Potent Cap.:	371	378	900		372	379	540		xxxx	xxxx	xxxxx		900	xxxx	xxxxx	
Move Cap.:	351	352	900		78	353	540		xxxx	xxxx	xxxxx		900	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.78		0.01	0.00	0.00		xxxx	xxxx	xxxx		0.07	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.3	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		*	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	898	xxxxx		xxxx	182	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	8.0	xxxxx		xxxxx	0.1	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	21.7	xxxxx		xxxxx	25.1	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*		*	D	*		*	*	*		*	*	*	
ApproachDel:	21.7				25.1				xxxxxx				xxxxxx			
ApproachLOS:	C				D				*				*			

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #50 Mortimer (N/S) / 5th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 1.030
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 44.1
Optimal Cycle: 0 Level Of Service: E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	0	0	1 0	0	0	1! 0	0	1	0	0	1 0	0	0	1! 0	0
Volume Module:																
Base Vol:	0	187	6		6	30	14		641	89	53		11	0	47	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	187	6		6	30	14		641	89	53		11	0	47	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	187	6		6	30	14		641	89	53		11	0	47	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	187	6		6	30	14		641	89	53		11	0	47	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	187	6		6	30	14		641	89	53		11	0	47	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	0	187	6		6	30	14		641	89	53		11	0	47	
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.00	0.97	0.03		0.12	0.60	0.28		1.00	0.63	0.37		0.19	0.00	0.81	
Final Sat.:	0	584	19		70	348	162		622	450	268		127	0	541	
Capacity Analysis Module:																
Vol/Sat:	xxxx	0.32	0.32		0.09	0.09	0.09		1.03	0.20	0.20		0.09	xxxx	0.09	
Crit Moves:		****				****			****				****			
Delay/Veh:	0.0	11.7	11.7		9.6	9.6	9.6		67.5	9.0	9.0		8.7	0.0	8.7	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	11.7	11.7		9.6	9.6	9.6		67.5	9.0	9.0		8.7	0.0	8.7	
LOS by Move:	*	B	B		A	A	A		F	A	A		A	*	A	
ApproachDel:		11.7				9.6				56.9				8.7		
Delay Adj:		1.00				1.00				1.00				1.00		
ApprAdjDel:		11.7				9.6				56.9				8.7		
LOS by Appr:		B				A				F				A		
AllWayAvgQ:	0.5	0.5	0.5		0.1	0.1	0.1		10.2	0.2	0.2		0.1	0.1	0.1	

Note: Queue reported is the number of cars per lane.

APPENDIX I
2035 With Project Conditions Analysis Worksheets

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Scenario Report

Scenario:	2035WPAM
Command:	2035WP AM
Volume:	2035WPAM
Geometry:	Future WP
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Flower St (NS)/ Civic Center D	C	xxxxx	0.784	C	xxxxx	0.784	+ 0.000 V/C
# 2 Flower St (N/S) / Santa Ana Bl	B	xxxxx	0.689	B	xxxxx	0.689	+ 0.000 V/C
# 3 Parton St (E/W) / Santa Ana Bl	A	xxxxx	0.313	A	xxxxx	0.313	+ 0.000 V/C
# 4 Ross St (N/S) / Civic Center D	B	xxxxx	0.655	B	xxxxx	0.655	+ 0.000 V/C
# 5 Ross St (N/S) / Santa Ana Bl (	A	xxxxx	0.582	A	xxxxx	0.582	+ 0.000 V/C
# 6 Ross St (N/S) / 4th St (E/W)	B	11.9	0.000	B	11.9	0.000	+ 0.000 D/V
# 7 Broadway (N/S) / Civic Center	C	xxxxx	0.743	C	xxxxx	0.743	+ 0.000 V/C
# 8 Broadway (N/S) / Santa Ana Bl	B	xxxxx	0.619	B	xxxxx	0.619	+ 0.000 V/C
# 9 Broadway (N/S) / 5th St (E/W)	A	xxxxx	0.404	A	xxxxx	0.404	+ 0.000 V/C
# 10 Broadway (N/S) / 4th St (E/W)	A	xxxxx	0.477	A	xxxxx	0.477	+ 0.000 V/C
# 11 Broadway (N/S)/ 3rd st (E/W)	A	xxxxx	0.409	A	xxxxx	0.409	+ 0.000 V/C
# 12 Broadway (N/S) / 1st St (E/W)	C	xxxxx	0.779	C	xxxxx	0.779	+ 0.000 V/C
# 13 Sycamore St (N/S) / Civic Cent	A	xxxxx	0.505	A	xxxxx	0.505	+ 0.000 V/C
# 14 Sycamore St (N/S) / Santa Ana	D	32.7	0.000	D	32.7	0.000	+ 0.000 D/V
# 15 Sycamore St (N/S) / 5th St (E/	C	19.7	0.000	C	19.7	0.000	+ 0.000 D/V
# 16 Sycamore St (N/S) / 4th St (E/	A	8.6	0.300	A	8.6	0.300	+ 0.000 V/C
# 17 Main St (N/S) / Civic Center D	E	xxxxx	0.906	E	xxxxx	0.906	+ 0.000 V/C
# 18 Main St (N/S) / Santa Ana Dr (	D	xxxxx	0.816	D	xxxxx	0.816	+ 0.000 V/C
# 19 Main St (N/S) / 5th St (E/W)	B	xxxxx	0.630	B	xxxxx	0.630	+ 0.000 V/C
# 20 Main St (N/S) / 4th St (E/W)	B	xxxxx	0.671	B	xxxxx	0.671	+ 0.000 V/C
# 21 Main St (N/S) / 3rd St (E/W)	A	xxxxx	0.559	A	xxxxx	0.559	+ 0.000 V/C
# 22 Main St (N/S) / 1st St (E/W)	E	xxxxx	0.931	E	xxxxx	0.931	+ 0.000 V/C
# 23 Bush St (N/S) / Santa Ana Bl (	A	xxxxx	0.346	A	xxxxx	0.346	+ 0.000 V/C
# 24 Bush St (N/S) / 5th St (E/W)	A	xxxxx	0.296	A	xxxxx	0.296	+ 0.000 V/C

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Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 25 Bush St (N/S) / 4th St (E/W)	A	xxxxx	0.370	A	xxxxx	0.370	+ 0.000 V/C
# 26 Spurgeon St (N/S) / 1st St (E/	B	11.7	0.000	B	11.7	0.000	+ 0.000 D/V
# 27 French St (N/S) / Santa Ana Bl	D	27.2	0.000	D	27.2	0.000	+ 0.000 D/V
# 28 French St (N/S) / 4th St (E/W)	A	xxxxx	0.367	A	xxxxx	0.367	+ 0.000 V/C
# 29 Lacy St (N/S) / Civic Center D	E	37.9	0.000	E	37.9	0.000	+ 0.000 D/V
# 30 Lacy st (N/S) / Santa Ana Bl (	F	57.8	0.000	F	57.8	0.000	+ 0.000 D/V
# 31 Lacy St (N/S) / Brown St (E/W)	A	7.4	0.131	A	7.4	0.131	+ 0.000 V/C
# 32 Lacy St (N/S) / 4th St (E/W)	A	xxxxx	0.465	A	xxxxx	0.465	+ 0.000 V/C
# 33 Lacy St (N/S) / 1st St (E/W)	F	104.6	0.000	F	104.6	0.000	+ 0.000 D/V
# 34 Santiago St (N/S) / Washington	F	112.3	1.466	F	112.3	1.466	+ 0.000 V/C
# 35 Santiago St (N/S) / Civic Cent	F	263.9	2.252	F	263.9	2.252	+ 0.000 V/C
# 36 Santiago St (N/S) / Santa Ana	D	xxxxx	0.865	D	xxxxx	0.865	+ 0.000 V/C
# 37 Santiago St (N/S) / Brown St (	C	16.7	0.000	C	16.7	0.000	+ 0.000 D/V
# 38 Santiago St (N/S) / 6th St (E/	B	13.7	0.000	B	13.7	0.000	+ 0.000 D/V
# 39 Santiago St (N/S) / 4th (E/W)	F	OVRFL	0.000	F	OVRFL	0.000	+ 0.000 D/V
# 40 Standard Av (N/S) / 1st St (E/	E	xxxxx	0.964	E	xxxxx	0.964	+ 0.000 V/C
# 41 U-24 (N/S) / Santa Ana Bl (E/W	F	80.8	0.000	F	80.8	0.000	+ 0.000 D/V
# 42 Grand Av (N/S) / Santa Ana Bl	E	xxxxx	0.977	E	xxxxx	0.977	+ 0.000 V/C
# 43 Grand Av (N/S) / 4th St (E/W)	C	xxxxx	0.755	C	xxxxx	0.755	+ 0.000 V/C
# 44 Grand Av (N/S) / 1st St (E/W)	E	xxxxx	0.923	E	xxxxx	0.923	+ 0.000 V/C
# 45 Penn Way (NS) at I-5 SB Ramps	C	25.0	0.546	C	25.0	0.546	+ 0.000 D/V
# 46 I-5 SB Ramps (NS) / Santa Ana	C	30.6	0.671	C	30.6	0.671	+ 0.000 D/V
# 47 I-5 NB Ramps (NS) / 17th St. (	D	39.7	0.901	D	39.7	0.901	+ 0.000 D/V
# 48 I-5 NB Ramps (NS) / Grand Ave	F	80.5	1.145	F	80.5	1.145	+ 0.000 D/V
# 49 Mortimer (N/S) / Santa Ana Blv	D	25.3	0.000	D	25.3	0.000	+ 0.000 D/V

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Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 50 Mortimer (N/S) / 5th St (E/W)	A	9.6	0.359	A	9.6	0.359	+ 0.000 V/C

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Flower St (NS)/ Civic Center Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.784
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	182	802	190	138	738	210	155	629	184	164	591	69
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	182	802	190	138	738	210	155	629	184	164	591	69
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	182	802	190	138	738	210	155	629	184	164	591	69
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	182	802	190	138	738	210	155	629	184	164	591	69
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	182	802	190	138	738	210	155	629	184	164	591	69
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	182	802	190	138	738	210	155	629	184	164	591	69
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.62	0.38	1.00	1.56	0.44	1.00	1.55	0.45	1.00	1.79	0.21
Final Sat.:	1598	2749	651	1598	2647	753	1598	2631	769	1598	3045	355
Capacity Analysis Module:												
Vol/Sat:	0.11	0.29	0.29	0.09	0.28	0.28	0.10	0.24	0.24	0.10	0.19	0.19
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Flower St (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.689
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	0 1	1 0	2	0 1	1 0	3	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	84	1114	70	191	1005	100	121	618	223	93	395	137
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	84	1114	70	191	1005	100	121	618	223	93	395	137
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	84	1114	70	191	1005	100	121	618	223	93	395	137
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	84	1114	70	191	1005	100	121	618	223	93	395	137
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	84	1114	70	191	1005	100	121	618	223	93	395	137
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	84	1114	70	191	1005	100	121	618	223	93	395	137
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00
Final Sat.:	1598	3400	1598	1598	3400	1598	1598	5100	1598	1598	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.05	0.33	0.04	0.12	0.30	0.06	0.08	0.12	0.14	0.06	0.12	0.09
Crit Moves:		****		****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Parton St (E/W) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.313
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	18	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0	1 0	0 1	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	17	6	37	24	8	26	36	679	133	87	648	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	17	6	37	24	8	26	36	679	133	87	648	98
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	17	6	37	24	8	26	36	679	133	87	648	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	17	6	37	24	8	26	36	679	133	87	648	98
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	6	37	24	8	26	36	679	133	87	648	98
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	17	6	37	24	8	26	36	679	133	87	648	98
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.28	0.10	0.62	0.75	0.25	1.00	1.00	2.51	0.49	1.00	2.61	0.39
Final Sat.:	482	170	1048	1275	425	1598	1598	4265	835	1598	4430	670
Capacity Analysis Module:												
Vol/Sat:	0.01	0.04	0.04	0.01	0.02	0.02	0.02	0.16	0.16	0.05	0.15	0.15
Crit Moves:		****		****				****		****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Ross St (N/S) / Civic Center Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.655
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	0 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	133	228	78	74	253	85	61	687	118	77	909	59
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	133	228	78	74	253	85	61	687	118	77	909	59
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	133	228	78	74	253	85	61	687	118	77	909	59
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	133	228	78	74	253	85	61	687	118	77	909	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	133	228	78	74	253	85	61	687	118	77	909	59
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	133	228	78	74	253	85	61	687	118	77	909	59
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.75	0.25	1.00	1.71	0.29	1.00	1.88	0.12
Final Sat.:	1598	1700	1598	1598	1272	428	1598	2902	498	1598	3193	207
Capacity Analysis Module:												
Vol/Sat:	0.08	0.13	0.05	0.05	0.20	0.20	0.04	0.24	0.24	0.05	0.28	0.28
Crit Moves:	****				****		****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Ross St (N/S) / Santa Ana Bl (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.582
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 28 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	0 1	1	0 1	0 1	1	0 2	0 1	1	0 3	0 1
Volume Module:												
Base Vol:	88	246	112	69	199	163	89	656	38	242	603	118
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	88	246	112	69	199	163	89	656	38	242	603	118
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	88	246	112	69	199	163	89	656	38	242	603	118
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	88	246	112	69	199	163	89	656	0	242	603	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	88	246	112	69	199	163	89	656	0	242	603	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	88	246	112	69	199	163	89	656	0	242	603	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00
Final Sat.:	1598	1700	1598	1598	1700	1598	1598	3400	1598	1598	5100	1598
Capacity Analysis Module:												
Vol/Sat:	0.06	0.14	0.07	0.04	0.12	0.10	0.06	0.19	0.00	0.15	0.12	0.00
Crit Moves:		****		****				****		****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Ross St (N/S) / 4th St (E/W)

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: B[11.9]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	1	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	1
Volume Module:																				
Base Vol:	0	303		2		50	237		0		0	0		2		30		0		66
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00
Initial Bse:	0	303		2		50	237		0		0	0		2		30		0		66
Added Vol:	0	0		0		0	0		0		0	0		0		0		0		0
PasserByVol:	0	0		0		0	0		0		0	0		0		0		0		0
Initial Fut:	0	303		2		50	237		0		0	0		2		30		0		66
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00
PHF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00
PHF Volume:	0	303		2		50	237		0		0	0		2		30		0		66
Reduct Vol:	0	0		0		0	0		0		0	0		0		0		0		0
FinalVolume:	0	303		2		50	237		0		0	0		2		30		0		66
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	xxxxx	xxxx		6.2		7.1	xxxx		6.2				
FollowUpTim:	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	xxxxx	xxxx		3.3		3.5	xxxx		3.3				
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx		305	xxxx	xxxxx	xxxx	xxxx		237		642	xxxx		304				
Potent Cap.:	xxxx	xxxx	xxxxx		1267	xxxx	xxxxx	xxxx	xxxx		807		390	xxxx		740				
Move Cap.:	xxxx	xxxx	xxxxx		1267	xxxx	xxxxx	xxxx	xxxx		807		377	xxxx		740				
Volume/Cap:	xxxx	xxxx	xxxx		0.04	xxxx	xxxx	xxxx	xxxx		0.00		0.08	xxxx		0.09				
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx		0.1	xxxx	xxxxx	xxxx	xxxx		0.0		0.3	xxxx		0.3				
Control Del:	xxxxx	xxxx	xxxxx		8.0	xxxx	xxxxx	xxxxx	xxxx		9.5		15.4	xxxx		10.3				
LOS by Move:	*	*	*		A	*	*	*	*		A		C	*		B				
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx					
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx					
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx					
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*					
ApproachDel:	xxxxxx				xxxxxx				9.5				11.9							
ApproachLOS:	*				*				A				B							

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Broadway (N/S) / Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.743
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 42 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Ignore			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	122	626	72	152	807	303	172	528	84	56	800	125
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	122	626	72	152	807	303	172	528	84	56	800	125
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	122	626	72	152	807	303	172	528	84	56	800	125
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	122	626	0	152	807	0	172	528	84	56	800	125
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	122	626	0	152	807	0	172	528	84	56	800	125
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	122	626	0	152	807	0	172	528	84	56	800	125
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.73	0.27	1.00	1.73	0.27
Final Sat.:	1598	3400	1598	1598	3400	1598	1598	2933	467	1598	2941	459
Capacity Analysis Module:												
Vol/Sat:	0.08	0.18	0.00	0.10	0.24	0.00	0.11	0.18	0.18	0.04	0.27	0.27
Crit Moves:	****			****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Broadway (N/S) / Santa Ana Bl (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.619
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 30 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 2	0 0	0	0 1	1 0	0	0 0	0 0	0	1 1	1 0
Volume Module:												
Base Vol:	65	769	0	0	836	239	0	0	0	51	898	134
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	65	769	0	0	836	239	0	0	0	51	898	134
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	65	769	0	0	836	239	0	0	0	51	898	134
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	65	769	0	0	836	239	0	0	0	51	898	134
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	65	769	0	0	836	239	0	0	0	51	898	134
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	65	769	0	0	836	239	0	0	0	51	898	134
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.56	0.44	0.00	0.00	0.00	0.14	2.49	0.37
Final Sat.:	1598	3400	0	0	2644	756	0	0	0	240	4229	631
Capacity Analysis Module:												
Vol/Sat:	0.04	0.23	0.00	0.00	0.32	0.32	0.00	0.00	0.00	0.03	0.21	0.21
Crit Moves:	****				****						****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Broadway (N/S) / 5th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.404
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	20	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	1 0	1 0	2	0 0	0 1	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	599	49	87	622	0	138	416	2	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	599	49	87	622	0	138	416	2	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	599	49	87	622	0	138	416	2	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	599	49	87	622	0	138	416	2	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	599	49	87	622	0	138	416	2	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	599	49	87	622	0	138	416	2	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00	0.94	1.00	0.94
Lanes:	0.00	1.85	0.15	1.00	2.00	0.00	0.74	2.25	0.01	0.00	0.00	0.00
Final Sat.:	0	3143	257	1598	3400	0	1266	3816	18	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.19	0.19	0.05	0.18	0.00	0.08	0.11	0.11	0.00	0.00	0.00
Crit Moves:		****		****				****				

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Broadway (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.477
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	23	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	66	876	89	14	555	92	26	56	50	50	122	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	66	876	89	14	555	92	26	56	50	50	122	30
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	66	876	89	14	555	92	26	56	50	50	122	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	66	876	89	14	555	92	26	56	50	50	122	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	66	876	89	14	555	92	26	56	50	50	122	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	66	876	89	14	555	92	26	56	50	50	122	30
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.82	0.18	1.00	1.72	0.28	0.20	0.42	0.38	0.25	0.60	0.15
Final Sat.:	1598	3086	314	1598	2917	483	335	721	644	421	1027	252
Capacity Analysis Module:												
Vol/Sat:	0.04	0.28	0.28	0.01	0.19	0.19	0.02	0.08	0.08	0.03	0.12	0.12
Crit Moves:		****		****				****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Broadway (N/S)/ 3rd st (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.409
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	20	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0 1	0	1	0 1	1	0	0 1	0	1	0
Volume Module:												
Base Vol:	28	440	9	29	407	31	41	59	20	11	43	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	28	440	9	29	407	31	41	59	20	11	43	43
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	28	440	9	29	407	31	41	59	20	11	43	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	28	440	9	29	407	31	41	59	20	11	43	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	440	9	29	407	31	41	59	20	11	43	43
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	28	440	9	29	407	31	41	59	20	11	43	43
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.98	0.02	1.00	1.00	1.00	1.00	0.75	0.25	1.00	0.50	0.50
Final Sat.:	1598	1666	34	1598	1700	1598	1598	1270	430	1598	850	850
Capacity Analysis Module:												
Vol/Sat:	0.02	0.26	0.26	0.02	0.24	0.02	0.03	0.05	0.05	0.01	0.05	0.05
Crit Moves:		****		****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Broadway (N/S) / 1st St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.779
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1 0 1	1	0	1 0 1	1	0	2 1 0	1	0	2 1 0
Volume Module:												
Base Vol:	69	405	119	87	392	95	216	1575	81	178	1200	119
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	69	405	119	87	392	95	216	1575	81	178	1200	119
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	69	405	119	87	392	95	216	1575	81	178	1200	119
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	69	405	119	87	392	95	216	1575	81	178	1200	119
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	69	405	119	87	392	95	216	1575	81	178	1200	119
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	69	405	119	87	392	95	216	1575	81	178	1200	119
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.85	0.15	1.00	2.73	0.27
Final Sat.:	1598	1700	1598	1598	1700	1598	1598	4851	249	1598	4640	460
Capacity Analysis Module:												
Vol/Sat:	0.04	0.24	0.07	0.05	0.23	0.06	0.14	0.32	0.32	0.11	0.26	0.26
Crit Moves:		****		****				****		****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Sycamore St (N/S) / Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.505
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 24 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1! 0	0	1	0	1	0	1
Volume Module:												
Base Vol:	30	102	32	33	24	26	80	505	72	33	882	102
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	102	32	33	24	26	80	505	72	33	882	102
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	30	102	32	33	24	26	80	505	72	33	882	102
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	102	32	33	24	26	80	505	72	33	882	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	102	32	33	24	26	80	505	72	33	882	102
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	102	32	33	24	26	80	505	72	33	882	102
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.18	0.62	0.20	0.40	0.29	0.31	1.00	1.75	0.25	1.00	1.79	0.21
Final Sat.:	311	1057	332	676	492	533	1598	2976	424	1598	3048	352
Capacity Analysis Module:												
Vol/Sat:	0.02	0.10	0.10	0.02	0.05	0.05	0.05	0.17	0.17	0.02	0.29	0.29
Crit Moves:		****		****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #14 Sycamore St (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 4.1 Worst Case Level Of Service: D[32.7]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	1	0
Volume Module:																				
Base Vol:	10	44		0		0	59		26		0	0		0		81	1010		33	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	10	44		0		0	59		26		0	0		0		81	1010		33	
Added Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
PasserByVol:	0	0		0		0	0		0		0	0		0		0	0		0	
Initial Fut:	10	44		0		0	59		26		0	0		0		81	1010		33	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Volume:	10	44		0		0	59		26		0	0		0		81	1010		33	
Reduct Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
FinalVolume:	10	44		0		0	59		26		0	0		0		81	1010		33	
Critical Gap Module:																				
Critical Gp:	7.1	6.5	xxxxx	xxxxx		6.5	6.2	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx						
FollowUpTim:	3.5	4.0	xxxxx	xxxxx		4.0	3.3	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx						
Capacity Module:																				
Cnflict Vol:	528	1205	xxxxx	xxxx	1189		353	xxxx	xxxx	xxxxx		0	xxxx	xxxxx						
Potent Cap.:	464	185	xxxxx	xxxx	190		695	xxxx	xxxx	xxxxx		900	xxxx	xxxxx						
Move Cap.:	305	168	xxxxx	xxxx	171		695	xxxx	xxxx	xxxxx		900	xxxx	xxxxx						
Volume/Cap:	0.03	0.26	xxxx	xxxx	0.34		0.04	xxxx	xxxx	xxxx		0.09	xxxx	xxxx						
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx	xxxxx		0.3	xxxx	xxxxx						
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx	xxxxx		9.4	xxxx	xxxxx						
LOS by Move:	*	*	*	*	*		*	*	*	*		A	*	*						
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	183	xxxx	xxxxx	xxxx	xxxx		223	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx						
SharedQueue:	1.2	xxxx	xxxxx	xxxxx	xxxx		1.7	xxxxx	xxxx	xxxxx		0.3	xxxx	xxxxx						
Shrd ConDel:	32.7	xxxx	xxxxx	xxxxx	xxxx		30.8	xxxxx	xxxx	xxxxx		9.4	xxxx	xxxxx						
Shared LOS:	D	*		*	*		D	*	*	*		A	*	*						
ApproachDel:	32.7			30.8			xxxxxx			xxxxxx										
ApproachLOS:	D			D			*			*										

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #15 Sycamore St (N/S) / 5th St (E/W)

Average Delay (sec/veh): 3.9 Worst Case Level Of Service: C[19.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 1 0			0 1 0 0 0			0 1 1 1 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	38	33	113	44	0	19	885	19	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	38	33	113	44	0	19	885	19	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	38	33	113	44	0	19	885	19	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	38	33	113	44	0	19	885	19	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	38	33	113	44	0	19	885	19	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	6.5	6.2	7.1	6.5	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	4.0	3.3	3.5	4.0	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	933	305	352	942	xxxxx	0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	268	740	607	265	xxxxx	900	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	263	740	507	259	xxxxx	900	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	0.14	0.04	0.22	0.17	xxxx	0.02	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	375	400	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	0.7	1.8	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	16.8	19.7	xxxx	xxxxx	9.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	C	C	*	*	A	*	*	*	*	*
ApproachDel:	16.8			19.7			xxxxxx			xxxxxx		
ApproachLOS:	C			C			*			*		

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #16 Sycamore St (N/S) / 4th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.300
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): 8.6
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	10	24	33	18	15	27	34	80	44	84	125	34
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	24	33	18	15	27	34	80	44	84	125	34
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	24	33	18	15	27	34	80	44	84	125	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	24	33	18	15	27	34	80	44	84	125	34
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	24	33	18	15	27	34	80	44	84	125	34
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	10	24	33	18	15	27	34	80	44	84	125	34
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.15	0.36	0.49	0.30	0.25	0.45	0.21	0.51	0.28	0.35	0.51	0.14
Final Sat.:	109	261	360	216	180	324	174	409	225	280	416	113
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.08	0.08	0.08	0.20	0.20	0.20	0.30	0.30	0.30
Crit Moves:	****			****					****		****	
Delay/Veh:	8.0	8.0	8.0	8.0	8.0	8.0	8.3	8.3	8.3	9.1	9.1	9.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.0	8.0	8.0	8.0	8.0	8.0	8.3	8.3	8.3	9.1	9.1	9.1
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	8.0			8.0			8.3			9.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	8.0			8.0			8.3			9.1		
LOS by Appr:	A			A			A			A		
AllWayAvgQ:	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.4	0.4	0.4

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Main St (N/S) / Civic Center Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.906
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	90	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	233	1132	98	116	1189	221	109	507	162	74	706	67
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	233	1132	98	116	1189	221	109	507	162	74	706	67
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	233	1132	98	116	1189	221	109	507	162	74	706	67
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	233	1132	98	116	1189	221	109	507	162	74	706	67
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	233	1132	98	116	1189	221	109	507	162	74	706	67
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	233	1132	98	116	1189	221	109	507	162	74	706	67
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.84	0.16	1.00	1.69	0.31	1.00	1.52	0.48	1.00	1.83	0.17
Final Sat.:	1598	3129	271	1598	2867	533	1598	2577	823	1598	3105	295
Capacity Analysis Module:												
Vol/Sat:	0.15	0.36	0.36	0.07	0.41	0.41	0.07	0.20	0.20	0.05	0.23	0.23
Crit Moves:	****			****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #18 Main St (N/S) / Santa Ana Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.816
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 2	0 0	0	0 1	1 0	0	0 0	0 0	0	1 1	1 0
Volume Module:												
Base Vol:	91	1232	0	0	1332	104	0	0	0	128	1225	108
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	91	1232	0	0	1332	104	0	0	0	128	1225	108
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	91	1232	0	0	1332	104	0	0	0	128	1225	108
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	91	1232	0	0	1332	104	0	0	0	128	1225	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	91	1232	0	0	1332	104	0	0	0	128	1225	108
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	91	1232	0	0	1332	104	0	0	0	128	1225	108
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.86	0.14	0.00	0.00	0.00	0.26	2.52	0.22
Final Sat.:	1598	3400	0	0	3154	246	0	0	0	447	4276	377
Capacity Analysis Module:												
Vol/Sat:	0.06	0.36	0.00	0.00	0.42	0.42	0.00	0.00	0.00	0.08	0.29	0.29
Crit Moves:	****				****						****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #19 Main St (N/S) / 5th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.630
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	1 0	1 0	2	0 0	0 1	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	1214	52	81	1238	0	115	618	65	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1214	52	81	1238	0	115	618	65	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1214	52	81	1238	0	115	618	65	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1214	52	81	1238	0	115	618	65	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1214	52	81	1238	0	115	618	65	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1214	52	81	1238	0	115	618	65	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00	0.94	1.00	0.94
Lanes:	0.00	1.92	0.08	1.00	2.00	0.00	0.43	2.33	0.24	0.00	0.00	0.00
Final Sat.:	0	3260	140	1598	3400	0	735	3950	415	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.37	0.37	0.05	0.36	0.00	0.07	0.16	0.16	0.00	0.00	0.00
Crit Moves:		****		****				****				

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #20 Main St (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.671
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	1 0	0 1	0	1 0	0 1!	0	0	0 0	1!	0 0
Volume Module:												
Base Vol:	5	1113	9	9	1348	24	7	142	146	41	216	96
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	1113	9	9	1348	24	7	142	146	41	216	96
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	1113	9	9	1348	24	7	142	146	41	216	96
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	1113	9	9	1348	24	7	142	146	41	216	96
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	1113	9	9	1348	24	7	142	146	41	216	96
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	5	1113	9	9	1348	24	7	142	146	41	216	96
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	1.97	0.02	0.01	1.96	0.03	0.02	0.48	0.50	0.12	0.61	0.27
Final Sat.:	15	3358	27	22	3319	59	40	818	841	197	1040	462
Capacity Analysis Module:												
Vol/Sat:	0.00	0.33	0.33	0.01	0.41	0.41	0.00	0.17	0.17	0.02	0.21	0.21
Crit Moves:	****				****		****				****	

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #21 Main St (N/S) / 3rd St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.559
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 26 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 1	1 0	0	1 0	1 0	1	0 0	1 0	1	0 0	1 0
Volume Module:												
Base Vol:	0	1105	18	1	1375	27	44	110	37	16	85	16
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1105	18	1	1375	27	44	110	37	16	85	16
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1105	18	1	1375	27	44	110	37	16	85	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1105	18	1	1375	27	44	110	37	16	85	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1105	18	1	1375	27	44	110	37	16	85	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1105	18	1	1375	27	44	110	37	16	85	16
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.00	1.97	0.03	0.01	1.96	0.03	1.00	0.75	0.25	1.00	0.84	0.16
Final Sat.:	0	3346	54	2	3332	65	1598	1272	428	1598	1431	269
Capacity Analysis Module:												
Vol/Sat:	0.00	0.33	0.33	0.00	0.41	0.41	0.03	0.09	0.09	0.01	0.06	0.06
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #22 Main St (N/S) / 1st St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.931
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	1 0	1	0 2	0 1	1	0 2	1 0	1	0 2	1 0
Volume Module:												
Base Vol:	227	882	95	207	1059	135	152	1671	128	119	1148	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	227	882	95	207	1059	135	152	1671	128	119	1148	90
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	227	882	95	207	1059	135	152	1671	128	119	1148	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	227	882	95	207	1059	135	152	1671	128	119	1148	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	227	882	95	207	1059	135	152	1671	128	119	1148	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	227	882	95	207	1059	135	152	1671	128	119	1148	90
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.81	0.19	1.00	2.00	1.00	1.00	2.79	0.21	1.00	2.78	0.22
Final Sat.:	1598	3069	331	1598	3400	1598	1598	4737	363	1598	4729	371
Capacity Analysis Module:												
Vol/Sat:	0.14	0.29	0.29	0.13	0.31	0.08	0.10	0.35	0.35	0.07	0.24	0.24
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #23 Bush St (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.346
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	18	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	0	0	0 0	1 0	0	0 0	0 0	0	1 1	1 0
Volume Module:												
Base Vol:	27	158	0	0	110	43	0	0	0	29	829	104
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	27	158	0	0	110	43	0	0	0	29	829	104
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	158	0	0	110	43	0	0	0	29	829	104
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	27	158	0	0	110	43	0	0	0	29	829	104
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	158	0	0	110	43	0	0	0	29	829	104
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	27	158	0	0	110	43	0	0	0	29	829	104
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	0.72	0.28	0.00	0.00	0.00	0.09	2.59	0.32
Final Sat.:	1598	1700	0	0	1222	478	0	0	0	154	4395	551
Capacity Analysis Module:												
Vol/Sat:	0.02	0.09	0.00	0.00	0.09	0.09	0.00	0.00	0.00	0.02	0.19	0.19
Crit Moves:	****				****						****	

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #24 Bush St (N/S) / 5th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.296
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	17	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 0	1 0	1	0 1	0 0	0	1 1	1 0	0	0 0	0 0
Volume Module:												
Base Vol:	0	149	39	34	128	0	50	501	31	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	149	39	34	128	0	50	501	31	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	149	39	34	128	0	50	501	31	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	149	39	34	128	0	50	501	31	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	149	39	34	128	0	50	501	31	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	149	39	34	128	0	50	501	31	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00	0.94	1.00	0.94
Lanes:	0.00	0.79	0.21	1.00	1.00	0.00	0.26	2.58	0.16	0.00	0.00	0.00
Final Sat.:	0	1347	353	1598	1700	0	438	4390	272	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.11	0.02	0.08	0.00	0.03	0.11	0.11	0.00	0.00	0.00
Crit Moves:		****		****				****				

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #25 Bush St (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.370
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	19	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 0	1 0	1	0 0	1 0	0	0 1!	0 0	0	0 1!	0 0
Volume Module:												
Base Vol:	9	158	10	20	113	17	31	138	13	13	288	23
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	158	10	20	113	17	31	138	13	13	288	23
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	158	10	20	113	17	31	138	13	13	288	23
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	158	10	20	113	17	31	138	13	13	288	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	158	10	20	113	17	31	138	13	13	288	23
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	9	158	10	20	113	17	31	138	13	13	288	23
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.94	0.06	1.00	0.87	0.13	0.17	0.76	0.07	0.04	0.89	0.07
Final Sat.:	1598	1599	101	1598	1478	222	290	1289	121	68	1511	121
Capacity Analysis Module:												
Vol/Sat:	0.01	0.10	0.10	0.01	0.08	0.08	0.02	0.11	0.11	0.01	0.19	0.19
Crit Moves:		****		****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #26 Spurgeon St (N/S) / 1st St (E/W)

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[11.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	0 0	0 0	1	0 0	3 0	0	0 0	2 1	0
Volume Module:												
Base Vol:	0	0	0	0	0	97	0	2086	0	0	1070	27
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	97	0	2086	0	0	1070	27
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	97	0	2086	0	0	1070	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	97	0	2086	0	0	1070	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	97	0	2086	0	0	1070	27
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	370	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	633	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	633	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.15	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.5	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	11.7	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			11.7			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #27 French St (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 3.9 Worst Case Level Of Service: D[27.2]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0 0	0	0	0	1 0	0	0	0	0 0	0	1	0	1 0
Volume Module:																
Base Vol:	67	41	0	0	41	55	0	0	0	16	1057	13				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	67	41	0	0	41	55	0	0	0	16	1057	13				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	67	41	0	0	41	55	0	0	0	16	1057	13				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	67	41	0	0	41	55	0	0	0	16	1057	13				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	67	41	0	0	41	55	0	0	0	16	1057	13				
Critical Gap Module:																
Critical Gp:	7.1	6.5	xxxxx	xxxxx	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx				
FollowUpTim:	3.5	4.0	xxxxx	xxxxx	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	581	1102	xxxxx	xxxx	1096	535	xxxx	xxxx	xxxxx	0	xxxx	xxxxx				
Potent Cap.:	428	213	xxxxx	xxxx	215	549	xxxx	xxxx	xxxxx	900	xxxx	xxxxx				
Move Cap.:	323	210	xxxxx	xxxx	211	549	xxxx	xxxx	xxxxx	900	xxxx	xxxxx				
Volume/Cap:	0.21	0.20	xxxx	xxxx	0.19	0.10	xxxx	xxxx	xxxx	0.02	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	268	xxxx	xxxxx	xxxx	xxxx	326	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	1.9	xxxx	xxxxx	xxxxx	xxxx	1.2	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx				
Shrd ConDel:	27.2	xxxx	xxxxx	xxxxx	xxxx	20.6	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx				
Shared LOS:	D	*	*	*	*	C	*	*	*	A	*	*				
ApproachDel:	27.2			20.6			xxxxx			xxxxx						
ApproachLOS:	D			C			*			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #28 French St (N/S) / 4th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.367
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 19 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	0	1!	0 0	1	0	0	1 0	0	0	1!	0 0	0	1	0	0 1
Volume Module:																
Base Vol:	3	22	39		76	43	30		48	103	6		48	298	56	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	3	22	39		76	43	30		48	103	6		48	298	56	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	3	22	39		76	43	30		48	103	6		48	298	56	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	3	22	39		76	43	30		48	103	6		48	298	56	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	3	22	39		76	43	30		48	103	6		48	298	56	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	3	22	39		76	43	30		48	103	6		48	298	56	
Saturation Flow Module:																
Sat/Lane:	1700	1700	1700		1700	1700	1700		1700	1700	1700		1700	1700	1700	
Adjustment:	1.00	1.00	1.00		0.94	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.94	
Lanes:	0.05	0.34	0.61		1.00	0.59	0.41		0.30	0.66	0.04		0.14	0.86	1.00	
Final Sat.:	80	584	1036		1598	1001	699		520	1115	65		236	1464	1598	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.04	0.04		0.05	0.04	0.04		0.03	0.09	0.09		0.03	0.20	0.04	
Crit Moves:		****			****				****					****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #29 Lacy St (N/S) / Civic Center Dr (E/W)

Average Delay (sec/veh): 4.9 Worst Case Level Of Service: E[37.9]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0 1! 0	0		0	0 1! 0	0		0	0 1! 0	0		0	0 1! 0	0	
Volume Module:																
Base Vol:	49	36	38		29	7	38		7	444	11		8	512	180	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	49	36	38		29	7	38		7	444	11		8	512	180	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	49	36	38		29	7	38		7	444	11		8	512	180	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	49	36	38		29	7	38		7	444	11		8	512	180	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	49	36	38		29	7	38		7	444	11		8	512	180	
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1104	1172	450		1119	1087	602		692	xxxx	xxxxx		455	xxxx	xxxxx	
Potent Cap.:	190	194	614		186	218	503		912	xxxx	xxxxx		1116	xxxx	xxxxx	
Move Cap.:	169	191	614		147	215	503		912	xxxx	xxxxx		1116	xxxx	xxxxx	
Volume/Cap:	0.29	0.19	0.06		0.20	0.03	0.08		0.01	xxxx	xxxx		0.01	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		0.0	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.0	xxxx	xxxxx		8.2	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		A	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	228	xxxxx		xxxx	243	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	2.9	xxxxx		xxxxx	1.2	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	37.9	xxxxx		xxxxx	26.2	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	E	*		*	D	*		*	*	*		*	*	*	
ApproachDel:		37.9				26.2				xxxxxx				xxxxxx		
ApproachLOS:		E				D				*				*		

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #30 Lacy st (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 5.7 Worst Case Level Of Service: F[57.8]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0 1! 0	0		0	0 1! 0	0		1	0 0 1	0		1	0 0 1	0	
Volume Module:																
Base Vol:	4	58	67		6	16	21		11	463	11		7	1000	52	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	4	58	67		6	16	21		11	463	11		7	1000	52	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	4	58	67		6	16	21		11	463	11		7	1000	52	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	4	58	67		6	16	21		11	463	11		7	1000	52	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	4	58	67		6	16	21		11	463	11		7	1000	52	
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1549	1557	469		1593	1536	1026		1052	xxxx	xxxxx		474	xxxx	xxxxx	
Potent Cap.:	94	114	599		87	117	288		669	xxxx	xxxxx		1099	xxxx	xxxxx	
Move Cap.:	76	111	599		45	115	288		669	xxxx	xxxxx		1099	xxxx	xxxxx	
Volume/Cap:	0.05	0.52	0.11		0.13	0.14	0.07		0.02	xxxx	xxxx		0.01	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.1	xxxx	xxxxx		0.0	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		10.5	xxxx	xxxxx		8.3	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		B	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	188	xxxxx		xxxx	124	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	4.2	xxxxx		xxxxx	1.4	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	57.8	xxxxx		xxxxx	48.6	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	F	*		*	E	*		*	*	*		*	*	*	
ApproachDel:		57.8				48.6				xxxxxx				xxxxxx		
ApproachLOS:		F				E				*				*		

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #31 Lacy St (N/S) / Brown St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.131
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	7.4
Optimal Cycle:	0	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	27	46	48	6	6	2	2	8	9	17	20	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	27	46	48	6	6	2	2	8	9	17	20	6
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	46	48	6	6	2	2	8	9	17	20	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	27	46	48	6	6	2	2	8	9	17	20	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	46	48	6	6	2	2	8	9	17	20	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	27	46	48	6	6	2	2	8	9	17	20	6
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.22	0.38	0.40	0.43	0.43	0.14	0.11	0.42	0.47	0.40	0.46	0.14
Final Sat.:	206	351	366	366	366	122	93	372	418	330	389	117
Capacity Analysis Module:												
Vol/Sat:	0.13	0.13	0.13	0.02	0.02	0.02	0.02	0.02	0.02	0.05	0.05	0.05
Crit Moves:		****		****				****			****	
Delay/Veh:	7.4	7.4	7.4	7.2	7.2	7.2	7.0	7.0	7.0	7.4	7.4	7.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.4	7.4	7.4	7.2	7.2	7.2	7.0	7.0	7.0	7.4	7.4	7.4
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:		7.4			7.2			7.0			7.4	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		7.4			7.2			7.0			7.4	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #32 Lacy St (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.465
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	22	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1	0 0	1 0	1	0 1	0 1
Volume Module:												
Base Vol:	23	36	94	13	30	47	13	365	28	13	526	67
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	23	36	94	13	30	47	13	365	28	13	526	67
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	36	94	13	30	47	13	365	28	13	526	67
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	23	36	94	13	30	47	13	365	28	13	526	67
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	36	94	13	30	47	13	365	28	13	526	67
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	23	36	94	13	30	47	13	365	28	13	526	67
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	0.15	0.24	0.61	0.14	0.33	0.53	1.00	0.93	0.07	1.00	1.00	1.00
Final Sat.:	256	400	1044	246	567	888	1598	1579	121	1598	1700	1598
Capacity Analysis Module:												
Vol/Sat:	0.01	0.09	0.09	0.01	0.05	0.05	0.01	0.23	0.23	0.01	0.31	0.04
Crit Moves:		****		****				****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #33 Lacy St (N/S) / 1st St (E/W)

Average Delay (sec/veh): 4.2 Worst Case Level Of Service: F[104.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 1! 0 0			1 0 3 0 0			0 0 2 1 0		
Volume Module:												
Base Vol:	0	0	0	11	1	98	204	1901	0	0	1200	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	11	1	98	204	1901	0	0	1200	29
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	11	1	98	204	1901	0	0	1200	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	11	1	98	204	1901	0	0	1200	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	11	1	98	204	1901	0	0	1200	29
Critical Gap Module:												
Critical Gp:	7.5	6.5	6.9	6.8	6.5	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	2710	3538	634	2256	3524	415	1229	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	10	6	427	36	6	592	574	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	5	4	427	26	4	592	574	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	0.00	0.00	0.42	0.25	0.17	0.36	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.6	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	14.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	0	xxxxx	xxxx	131	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	5.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	105	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			104.6			xxxxxx			xxxxxx		
ApproachLOS:	*			F			*			*		

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #34 Santiago St (N/S) / Washington Av (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 1.466
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): 112.3
Optimal Cycle: 0 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	0 1		1 0 1	0 1		0 0 1!	0 0		0 0 1!	0 0	
Volume Module:												
Base Vol:	67	341	145	26	593	170	147	125	69	193	256	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	67	341	145	26	593	170	147	125	69	193	256	36
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	67	341	145	26	593	170	147	125	69	193	256	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	67	341	145	26	593	170	147	125	69	193	256	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	67	341	145	26	593	170	147	125	69	193	256	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	67	341	145	26	593	170	147	125	69	193	256	36
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.43	0.37	0.20	0.40	0.53	0.07
Final Sat.:	377	398	431	383	404	439	173	147	81	166	220	31
Capacity Analysis Module:												
Vol/Sat:	0.18	0.86	0.34	0.07	1.47	0.39	0.85	0.85	0.85	1.16	1.16	1.16
Crit Moves:		****			****				****		****	
Delay/Veh:	14.3	46.3	15.2	12.8	246	16.0	44.7	44.7	44.7	125.0	125	125.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.3	46.3	15.2	12.8	246	16.0	44.7	44.7	44.7	125.0	125	125.0
LOS by Move:	B	E	C	B	F	C	E	E	E	F	F	F
ApproachDel:	34.3			188.5			44.7			125.0		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	34.3			188.5			44.7			125.0		
LOS by Appr:	D			F			E			F		
AllWayAvgQ:	0.2	3.8	0.5	0.1	26.3	0.6	3.7	3.7	3.7	13.1	13.1	13.1

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #35 Santiago St (N/S) / Civic Center Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	2.252
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	263.9
Optimal Cycle:	0	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	412	455	28	21	758	266	169	59	245	52	69	17
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	412	455	28	21	758	266	169	59	245	52	69	17
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	412	455	28	21	758	266	169	59	245	52	69	17
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	412	455	28	21	758	266	169	59	245	52	69	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	412	455	28	21	758	266	169	59	245	52	69	17
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	412	455	28	21	758	266	169	59	245	52	69	17
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.94	0.06	1.00	0.74	0.26	0.74	0.26	1.00	0.38	0.50	0.12
Final Sat.:	441	445	27	411	337	118	308	108	474	145	192	47
Capacity Analysis Module:												
Vol/Sat:	0.93	1.02	1.02	0.05	2.25	2.25	0.55	0.55	0.52	0.36	0.36	0.36
Crit Moves:		****			****		****				****	
Delay/Veh:	56.4	74.7	74.7	11.8	588	587.9	21.2	21.2	17.9	17.2	17.2	17.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	56.4	74.7	74.7	11.8	588	587.9	21.2	21.2	17.9	17.2	17.2	17.2
LOS by Move:	F	F	F	B	F	F	C	C	C	C	C	C
ApproachDel:		66.2			576.3			19.5			17.2	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		66.2			576.3			19.5			17.2	
LOS by Appr:		F			F			C			C	
AllWayAvgQ:	5.6	8.4	8.4	0.1	72.9	72.9	1.1	1.1	1.0	0.5	0.5	0.5

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #36 Santiago St (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.865
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	0 1	1 0	2	0 1	1 0	1	1 0	1 0	2	0 1
Volume Module:												
Base Vol:	63	291	106	382	306	332	177	710	44	148	1090	606
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	63	291	106	382	306	332	177	710	44	148	1090	606
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	63	291	106	382	306	332	177	710	44	148	1090	606
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	63	291	106	382	306	332	177	710	44	148	1090	606
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	291	106	382	306	332	177	710	44	148	1090	606
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	63	291	106	382	306	332	177	710	44	148	1090	606
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.88	0.12	1.00	2.00	1.00
Final Sat.:	1598	3400	1598	1598	3400	1598	1598	3202	198	1598	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.04	0.09	0.07	0.24	0.09	0.21	0.11	0.22	0.22	0.09	0.32	0.38
Crit Moves:		****		****			****					****

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #37 Santiago St (N/S) / Brown St (E/W)

Average Delay (sec/veh): 3.8 Worst Case Level Of Service: C[16.7]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	1	1	0	0	1	1	1	0	1	0	0	1	0	0
Volume Module:																
Base Vol:	75	204	0		0	388	110		130	0	50		0	0	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	75	204	0		0	388	110		130	0	50		0	0	0	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	75	204	0		0	388	110		130	0	50		0	0	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	75	204	0		0	388	110		130	0	50		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	75	204	0		0	388	110		130	0	50		0	0	0	
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.8	6.5	6.9	xxxxx	xxxx	xxxxx		
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5	4.0	3.3	xxxxx	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	498	xxxx	xxxxx		xxxx	xxxx	xxxxx		661	797	184		xxxx	xxxx	xxxxx	
Potent Cap.:	1076	xxxx	xxxxx		xxxx	xxxx	xxxxx		400	322	833		xxxx	xxxx	xxxxx	
Move Cap.:	1076	xxxx	xxxxx		xxxx	xxxx	xxxxx		378	298	833		xxxx	xxxx	xxxxx	
Volume/Cap:	0.07	xxxx	xxxx		xxxx	xxxx	xxxx		0.34	0.00	0.06		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	0.2	xxxx	xxxxx		xxxx	xxxx	xxxxx		1.5	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Control Del:	8.6	xxxx	xxxxx		xxxxx	xxxx	xxxxx		19.4	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	A	*	*		*	*	*		C	*	*		*	*	*	
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	833		xxxx	xxxx	xxxxx	
SharedQueue:	0.2	xxxx	xxxxx		0.0	xxxx	xxxxx		xxxxx	xxxx	0.2		xxxxx	xxxx	xxxxx	
Shrd ConDel:	8.6	xxxx	xxxxx		9.0	xxxx	xxxxx		xxxxx	xxxx	9.6		xxxxx	xxxx	xxxxx	
Shared LOS:	A	*	*		A	*	*		*	*	A		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				16.7				xxxxxx			
ApproachLOS:	*				*				C				*			

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #38 Santiago St (N/S) / 6th St (E/W)

Average Delay (sec/veh): 3.6 Worst Case Level Of Service: B[13.7]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	1	1	0	0	1	1	1	0	1	0	0	1	0	0
Volume Module:																
Base Vol:	38	141	0		0	320	118		138	0	50		0	0	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	38	141	0		0	320	118		138	0	50		0	0	0	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	38	141	0		0	320	118		138	0	50		0	0	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	38	141	0		0	320	118		138	0	50		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	38	141	0		0	320	118		138	0	50		0	0	0	
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.8	xxxx	6.9	xxxxx	xxxx	xxxxx		
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5	xxxx	3.3	xxxxx	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	438	xxxx	xxxxx		xxxx	xxxx	xxxxx		502	xxxx	166		xxxx	xxxx	xxxxx	
Potent Cap.:	1133	xxxx	xxxxx		xxxx	xxxx	xxxxx		504	xxxx	856		xxxx	xxxx	xxxxx	
Move Cap.:	1133	xxxx	xxxxx		xxxx	xxxx	xxxxx		490	xxxx	856		xxxx	xxxx	xxxxx	
Volume/Cap:	0.03	xxxx	xxxx		xxxx	xxxx	xxxx		0.28	xxxx	0.06		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx		xxxx	xxxx	xxxxx		1.1	xxxx	0.2		xxxx	xxxx	xxxxx	
Control Del:	8.3	xxxx	xxxxx		xxxxx	xxxx	xxxxx		15.2	xxxx	9.5		xxxxx	xxxx	xxxxx	
LOS by Move:	A	*	*		*	*	*		C	*	A		*	*	*	
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	0.1	xxxx	xxxxx		0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	8.3	xxxx	xxxxx		9.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	A	*	*		A	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				13.7				xxxxxx			
ApproachLOS:	*				*				B				*			

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #39 Santiago St (N/S) / 4th (E/W)

Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	1	1 0	1 0	2	1 0	0 1	0	1 0	0 1	0	1 0
Volume Module:												
Base Vol:	64	98	264	19	137	214	10	960	73	12	505	71
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	64	98	264	19	137	214	10	960	73	12	505	71
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	64	98	264	19	137	214	10	960	73	12	505	71
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	64	98	264	19	137	214	10	960	73	12	505	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	64	98	264	19	137	214	10	960	73	12	505	71
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	351	xxxx	xxxxx	362	xxxx	xxxxx	695	772	153	922	747	165
Potent Cap.:	1219	xxxx	xxxxx	1208	xxxx	xxxxx	332	333	872	228	344	857
Move Cap.:	1219	xxxx	xxxxx	1208	xxxx	xxxxx	0	306	872	0	317	857
Volume/Cap:	0.05	xxxx	xxxx	0.02	xxxx	xxxx	xxxx	3.13	0.08	xxxx	1.59	0.08
Level Of Service Module:												
2Way95thQ:	0.2	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.1	xxxx	xxxxx	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0	xxxx	321	0	xxxx	343
SharedQueue:	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	93.2	xxxxx	xxxx	35.2
Shrd ConDel:	8.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	1030	xxxxx	xxxx	344.4
Shared LOS:	A	*	*	*	*	*	*	*	F	*	*	F
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			F			F		

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #40 Standard Av (N/S) / 1st St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.964
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1	0	1	1	0
Volume Module:												
Base Vol:	85	200	141	49	323	8	107	1821	172	81	1228	14
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	85	200	141	49	323	8	107	1821	172	81	1228	14
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	85	200	141	49	323	8	107	1821	172	81	1228	14
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	85	200	141	49	323	8	107	1821	172	81	1228	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	200	141	49	323	8	107	1821	172	81	1228	14
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	85	200	141	49	323	8	107	1821	172	81	1228	14
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.59	0.41	0.13	0.85	0.02	1.00	1.83	0.17	1.00	1.98	0.02
Final Sat.:	1598	997	703	219	1445	36	1598	3107	293	1598	3362	38
Capacity Analysis Module:												
Vol/Sat:	0.05	0.20	0.20	0.03	0.22	0.22	0.07	0.59	0.59	0.05	0.37	0.37
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #41 U-24 (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 1.9 Worst Case Level Of Service: F[80.8]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign			Stop Sign			Uncontrolled						Uncontrolled					
Rights:	Include			Include			Include						Include					
Lanes:	0	0	0	0	0	1	0	0	0	1	1	0	2	1	0	1	0	2	1	0
Volume Module:																				
Base Vol:	0	0	0	44	0	13	10	1017	0	0	1379	28								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	0	0	0	44	0	13	10	1017	0	0	1379	28								
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	0	0	0	44	0	13	10	1017	0	0	1379	28								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	0	0	0	44	0	13	10	1017	0	0	1379	28								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	0	0	0	44	0	13	10	1017	0	0	1379	28								
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx	1752	xxxx	474	1407	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Potent Cap.:	xxxx	xxxx	xxxxx	78	xxxx	542	491	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Move Cap.:	xxxx	xxxx	xxxxx	77	xxxx	542	491	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Volume/Cap:	xxxx	xxxx	xxxx	0.57	xxxx	0.02	0.02	xxxx	xxxx	xxxx	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	2.5	xxxx	0.1	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	101.2	xxxx	11.8	12.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
LOS by Move:	*	*	*	F	*	B	B	*	*	*	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*								
ApproachDel:	xxxxxx			80.8			xxxxxx			xxxxxx										
ApproachLOS:	*			F			*			*										

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #42 Grand Av (N/S) / Santa Ana Bl (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.977
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: E

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Split Phase					Split Phase					Split Phase					Split Phase				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	1	0	1	0	3	0	2	2	0	1	0	2	0	1	0	1	0
Volume Module:																				
Base Vol:	192	1052		31		140	2161		1203		448	231		765		27	113		34	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	192	1052		31		140	2161		1203		448	231		765		27	113		34	
Added Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
PasserByVol:	0	0		0		0	0		0		0	0		0		0	0		0	
Initial Fut:	192	1052		31		140	2161		1203		448	231		765		27	113		34	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Volume:	192	1052		31		140	2161		1203		448	231		765		27	113		34	
Reduct Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
Reduced Vol:	192	1052		31		140	2161		1203		448	231		765		27	113		34	
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
FinalVolume:	192	1052		31		140	2161		1203		448	231		765		27	113		34	
Saturation Flow Module:																				
Sat/Lane:	1700	1700		1700		1700	1700		1700		1700	1700		1700		1700	1700		1700	
Adjustment:	0.94	1.00		1.00		0.94	1.00		0.94		0.94	1.00		0.94		1.00	1.00		1.00	
Lanes:	1.00	2.91		0.09		1.00	3.00		2.00		2.00	1.00		2.00		0.31	1.30		0.39	
Final Sat.:	1598	4954		146		1598	5100		3196		3196	1700		3196		528	2208		664	
Capacity Analysis Module:																				
Vol/Sat:	0.12	0.21		0.21		0.09	0.42		0.38		0.14	0.14		0.24		0.05	0.05		0.05	
Crit Moves:		****					****							****			****			

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #43 Grand Av (N/S) / 4th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.755
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 44 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 3	0 1	1	0 2	1 0	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	85	338	137	152	598	107	127	1303	183	139	383	147
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	85	338	137	152	598	107	127	1303	183	139	383	147
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	85	338	137	152	598	107	127	1303	183	139	383	147
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	85	338	137	152	598	107	127	1303	183	139	383	147
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	338	137	152	598	107	127	1303	183	139	383	147
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	85	338	137	152	598	107	127	1303	183	139	383	147
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	1.00	3.00	1.00	1.00	2.54	0.46	1.00	1.75	0.25	1.00	2.00	1.00
Final Sat.:	1598	5100	1598	1598	4326	774	1598	2981	419	1598	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.05	0.07	0.09	0.10	0.14	0.14	0.08	0.44	0.44	0.09	0.11	0.09
Crit Moves:			****	****				****		****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #44 Grand Av (N/S) / 1st St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.923
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0 2	1 0	2	0 3	0 1	2	0 2	1 0	2	0 2	0 1
Volume Module:												
Base Vol:	364	695	89	148	1620	137	354	1291	353	382	789	74
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	364	695	89	148	1620	137	354	1291	353	382	789	74
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	364	695	89	148	1620	137	354	1291	353	382	789	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	364	695	89	148	1620	137	354	1291	353	382	789	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	364	695	89	148	1620	137	354	1291	353	382	789	74
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	364	695	89	148	1620	137	354	1291	353	382	789	74
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	2.00	2.66	0.34	2.00	3.00	1.00	2.00	2.36	0.64	2.00	2.00	1.00
Final Sat.:	3196	4521	579	3196	5100	1598	3196	4005	1095	3196	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.11	0.15	0.15	0.05	0.32	0.09	0.11	0.32	0.32	0.12	0.23	0.05
Crit Moves:	****				****			****		****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #45 Penn Way (NS) at I-5 SB Ramps (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.546
Loss Time (sec):	12 (Y+R=4.0 sec)	Average Delay (sec/veh):	25.0
Optimal Cycle:	44	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	1	2	0	2	0	0	0	0	0	0	1	0	0	0	0	2
Volume Module:												
Base Vol:	0	273	133	736	289	0	0	0	0	274	0	252
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	273	133	736	289	0	0	0	0	274	0	252
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	273	133	736	289	0	0	0	0	274	0	252
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	273	133	736	289	0	0	0	0	274	0	252
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	273	133	736	289	0	0	0	0	274	0	252
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	273	133	736	289	0	0	0	0	274	0	252
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.92	0.95	1.00	1.00	1.00	1.00	0.77	1.00	0.75
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	2.00
Final Sat.:	0	3610	1615	3502	3610	0	0	0	0	1461	0	2842
Capacity Analysis Module:												
Vol/Sat:	0.00	0.08	0.08	0.21	0.08	0.00	0.00	0.00	0.00	0.19	0.00	0.09
Crit Moves:			****	****						****		
Green/Cycle:	0.00	0.15	0.15	0.39	0.39	0.00	0.00	0.00	0.00	0.34	0.00	0.73
Volume/Cap:	0.00	0.50	0.55	0.55	0.21	0.00	0.00	0.00	0.00	0.55	0.00	0.12
Delay/Veh:	0.0	39.7	41.8	24.4	20.6	0.0	0.0	0.0	0.0	27.8	0.0	4.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	39.7	41.8	24.4	20.6	0.0	0.0	0.0	0.0	27.8	0.0	4.1
LOS by Move:	A	D	D	C	C	A	A	A	A	C	A	A
HCM2kAvgQ:	0	5	5	9	3	0	0	0	0	7	0	1

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #46 I-5 SB Ramps (NS) / Santa Ana Bl (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.671
Loss Time (sec):	12 (Y+R=4.0 sec)	Average Delay (sec/veh):	30.6
Optimal Cycle:	56	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	2	0	0	0	1	2	0	3	0	0	0	0	2	1	0
Volume Module:												
Base Vol:	0	0	0	508	0	122	341	850	0	0	1207	219
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	508	0	122	341	850	0	0	1207	219
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	508	0	122	341	850	0	0	1207	219
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	508	0	122	341	850	0	0	1207	219
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	508	0	122	341	850	0	0	1207	219
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	508	0	122	341	850	0	0	1207	219
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.85	0.92	0.91	1.00	1.00	0.89	0.89
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	2.00	3.00	0.00	0.00	2.54	0.46
Final Sat.:	0	0	0	3502	0	1615	3502	5187	0	0	4289	778
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.15	0.00	0.08	0.10	0.16	0.00	0.00	0.28	0.28
Crit Moves:				****				****			****	
Green/Cycle:	0.00	0.00	0.00	0.22	0.00	0.22	0.24	0.24	0.00	0.00	0.42	0.42
Volume/Cap:	0.00	0.00	0.00	0.67	0.00	0.35	0.40	0.67	0.00	0.00	0.67	0.67
Delay/Veh:	0.0	0.0	0.0	38.3	0.0	33.8	31.9	35.6	0.0	0.0	24.3	24.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	38.3	0.0	33.8	31.9	35.6	0.0	0.0	24.3	24.3
LOS by Move:	A	A	A	D	A	C	C	D	A	A	C	C
HCM2kAvgQ:	0	0	0	8	0	3	5	10	0	0	14	14

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #47 I-5 NB Ramps (NS) / 17th St. (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.901
Loss Time (sec):	16 (Y+R=4.0 sec)	Average Delay (sec/veh):	39.7
Optimal Cycle:	100	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	1 0	0 1	1	0 0	0 1	1	0 3	0 1	0	0 2	1 0
Volume Module:												
Base Vol:	767	99	44	44	0	226	150	1055	310	0	1468	59
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	767	99	44	44	0	226	150	1055	310	0	1468	59
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	767	99	44	44	0	226	150	1055	310	0	1468	59
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	767	99	44	44	0	226	150	1055	0	0	1468	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	767	99	44	44	0	226	150	1055	0	0	1468	59
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	767	99	44	44	0	226	150	1055	0	0	1468	59
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.96	0.96	0.85	0.95	1.00	0.85	0.95	0.91	1.00	1.00	0.90	0.90
Lanes:	1.77	0.23	1.00	1.00	0.00	1.00	1.00	3.00	1.00	0.00	2.88	0.12
Final Sat.:	3224	416	1615	1805	0	1615	1805	5187	1900	0	4957	199
Capacity Analysis Module:												
Vol/Sat:	0.24	0.24	0.03	0.02	0.00	0.14	0.08	0.20	0.00	0.00	0.30	0.30
Crit Moves:	****					****	****				****	
Green/Cycle:	0.26	0.26	0.26	0.16	0.00	0.16	0.09	0.42	0.00	0.00	0.33	0.33
Volume/Cap:	0.90	0.90	0.10	0.16	0.00	0.90	0.90	0.48	0.00	0.00	0.90	0.90
Delay/Veh:	47.0	47.0	28.0	36.8	0.0	73.5	87.4	21.2	0.0	0.0	39.1	39.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.0	47.0	28.0	36.8	0.0	73.5	87.4	21.2	0.0	0.0	39.1	39.1
LOS by Move:	D	D	C	D	A	E	F	C	A	A	D	D
HCM2kAvgQ:	17	17	1	1	0	10	8	9	0	0	20	20

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #48 I-5 NB Ramps (NS) / Grand Ave (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	1.145
Loss Time (sec):	12 (Y+R=4.0 sec)	Average Delay (sec/veh):	80.5
Optimal Cycle:	100	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	1 2	0 1	1	0 3	0 0	0	0 0	0 0	2	0 0	0 1
Volume Module:												
Base Vol:	4	1063	566	108	2692	0	0	0	0	991	0	321
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	1063	566	108	2692	0	0	0	0	991	0	321
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	4	1063	566	108	2692	0	0	0	0	991	0	321
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	1063	0	108	2692	0	0	0	0	991	0	321
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	1063	0	108	2692	0	0	0	0	991	0	321
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	4	1063	0	108	2692	0	0	0	0	991	0	321
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	0.95	0.91	1.00	1.00	1.00	1.00	0.92	1.00	0.85
Lanes:	0.01	2.99	1.00	1.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	19	5168	1900	1805	5187	0	0	0	0	3502	0	1615
Capacity Analysis Module:												
Vol/Sat:	0.21	0.21	0.00	0.06	0.52	0.00	0.00	0.00	0.00	0.28	0.00	0.20
Crit Moves:	****				****					****		
Green/Cycle:	0.18	0.49	0.00	0.14	0.45	0.00	0.00	0.00	0.00	0.25	0.00	0.25
Volume/Cap:	1.15	0.42	0.00	0.42	1.15	0.00	0.00	0.00	0.00	1.15	0.00	0.80
Delay/Veh:	119.1	16.5	0.0	40.2	98.2	0.0	0.0	0.0	0.0	116.5	0.0	46.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	119.1	16.5	0.0	40.2	98.2	0.0	0.0	0.0	0.0	116.5	0.0	46.7
LOS by Move:	F	B	A	D	F	A	A	A	A	F	A	D
HCM2kAvgQ:	22	8	0	3	49	0	0	0	0	27	0	11

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #49 Mortimer (N/S) / Santa Ana Blvd (E/W)

Average Delay (sec/veh): 2.4 Worst Case Level Of Service: D[25.3]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	1		0	0	1!	0	0		0	0	0	0	0		1	0	0	1	0	
Volume Module:																								
Base Vol:	0	0	235				3	6	1				0	0	0				43	993	3			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	0	0	235				3	6	1				0	0	0				43	993	3			
Added Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	0	0	235				3	6	1				0	0	0				43	993	3			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Volume:	0	0	235				3	6	1				0	0	0				43	993	3			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	0	0	235				3	6	1				0	0	0				43	993	3			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	6.2				7.1	6.5	6.2	xxxxx	xxxx	xxxxx							4.1	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	3.3				3.5	4.0	3.3	xxxxx	xxxx	xxxxx							2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	0				1081	1081	995	xxxx	xxxx	xxxxx							0	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	900				197	220	300	xxxx	xxxx	xxxxx							900	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	900				140	209	300	xxxx	xxxx	xxxxx							900	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	0.26				0.02	0.03	0.00	xxxx	xxxx	xxxx							0.05	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	1.0				xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx							0.2	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	10.4				xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							9.2	xxxx	xxxxx			
LOS by Move:	*	*	B				*	*	*	*	*	*							A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx		187	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				xxxxx		0.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx				xxxxx		25.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*				*		D	*	*	*	*	*	*	*			*	*	*			
ApproachDel:	10.4						25.3			xxxxxx									xxxxxx					
ApproachLOS:	B						D			*									*					

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #50 Mortimer (N/S) / 5th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.359
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 9.6
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound							South Bound							East Bound							West Bound						
Movement:	L	-	T	-	R			L	-	T	-	R			L	-	T	-	R			L	-	T	-	R		
Control:	Stop Sign							Stop Sign							Stop Sign							Stop Sign						
Rights:	Include							Include							Include							Include						
Min. Green:	0	0	0					0	0	0					0	0	0					0	0	0				
Lanes:	0	0	0	1	0			0	0	1!	0	0			1	0	0	1	0			0	0	1!	0	0		
Volume Module:																												
Base Vol:	0	150	6					4	22	7					232	32	43					7	0	11				
Growth Adj:	1.00	1.00	1.00					1.00	1.00	1.00					1.00	1.00	1.00					1.00	1.00	1.00				
Initial Bse:	0	150	6					4	22	7					232	32	43					7	0	11				
Added Vol:	0	0	0					0	0	0					0	0	0					0	0	0				
PasserByVol:	0	0	0					0	0	0					0	0	0					0	0	0				
Initial Fut:	0	150	6					4	22	7					232	32	43					7	0	11				
User Adj:	1.00	1.00	1.00					1.00	1.00	1.00					1.00	1.00	1.00					1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00					1.00	1.00	1.00					1.00	1.00	1.00					1.00	1.00	1.00				
PHF Volume:	0	150	6					4	22	7					232	32	43					7	0	11				
Reduct Vol:	0	0	0					0	0	0					0	0	0					0	0	0				
Reduced Vol:	0	150	6					4	22	7					232	32	43					7	0	11				
PCE Adj:	1.00	1.00	1.00					1.00	1.00	1.00					1.00	1.00	1.00					1.00	1.00	1.00				
MLF Adj:	1.00	1.00	1.00					1.00	1.00	1.00					1.00	1.00	1.00					1.00	1.00	1.00				
FinalVolume:	0	150	6					4	22	7					232	32	43					7	0	11				
Saturation Flow Module:																												
Adjustment:	1.00	1.00	1.00					1.00	1.00	1.00					1.00	1.00	1.00					1.00	1.00	1.00				
Lanes:	0.00	0.96	0.04					0.12	0.67	0.21					1.00	0.43	0.57					0.39	0.00	0.61				
Final Sat.:	0	702	28					86	472	150					646	329	442					295	0	463				
Capacity Analysis Module:																												
Vol/Sat:	xxxx	0.21	0.21					0.05	0.05	0.05					0.36	0.10	0.10					0.02	xxxx	0.02				
Crit Moves:		****								****		****										****						
Delay/Veh:	0.0	8.9	8.9					8.0	8.0	8.0					11.1	7.7	7.7					7.6	0.0	7.6				
Delay Adj:	1.00	1.00	1.00					1.00	1.00	1.00					1.00	1.00	1.00					1.00	1.00	1.00				
AdjDel/Veh:	0.0	8.9	8.9					8.0	8.0	8.0					11.1	7.7	7.7					7.6	0.0	7.6				
LOS by Move:	*	A	A					A	A	A					B	A	A					A	*	A				
ApproachDel:	8.9							8.0							10.3							7.6						
Delay Adj:	1.00							1.00							1.00							1.00						
ApprAdjDel:	8.9							8.0							10.3							7.6						
LOS by Appr:	A							A							B							A						
AllWayAvgQ:	0.2	0.2	0.2	0.0	0.0	0.0	0.5	0.1	0.1	0.0	0.0	0.0																

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Scenario Report

Scenario:	2035WPPM
Command:	2035WP PM
Volume:	2035WPPM
Geometry:	Future WP
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Del/ Veh	V/ C	Future LOS	Del/ Veh	V/ C	Change in
# 1 Flower St (NS)/ Civic Center D	F	xxxxx	1.146	F	xxxxx	1.146	+ 0.000 V/C
# 2 Flower St (N/S) / Santa Ana Bl	C	xxxxx	0.704	C	xxxxx	0.704	+ 0.000 V/C
# 3 Parton St (E/W) / Santa Ana Bl	A	xxxxx	0.435	A	xxxxx	0.435	+ 0.000 V/C
# 4 Ross St (N/S) / Civic Center D	A	xxxxx	0.598	A	xxxxx	0.598	+ 0.000 V/C
# 5 Ross St (N/S) / Santa Ana Bl (	B	xxxxx	0.695	B	xxxxx	0.695	+ 0.000 V/C
# 6 Ross St (N/S) / 4th St (E/W)	B	13.8	0.000	B	13.8	0.000	+ 0.000 D/V
# 7 Broadway (N/S) / Civic Center	C	xxxxx	0.757	C	xxxxx	0.757	+ 0.000 V/C
# 8 Broadway (N/S) / Santa Ana Bl	B	xxxxx	0.626	B	xxxxx	0.626	+ 0.000 V/C
# 9 Broadway (N/S) / 5th St (E/W)	B	xxxxx	0.646	B	xxxxx	0.646	+ 0.000 V/C
# 10 Broadway (N/S) / 4th St (E/W)	B	xxxxx	0.659	B	xxxxx	0.659	+ 0.000 V/C
# 11 Broadway (N/S)/ 3rd st (E/W)	D	xxxxx	0.833	D	xxxxx	0.833	+ 0.000 V/C
# 12 Broadway (N/S) / 1st St (E/W)	D	xxxxx	0.870	D	xxxxx	0.870	+ 0.000 V/C
# 13 Sycamore St (N/S) / Civic Cent	B	xxxxx	0.607	B	xxxxx	0.607	+ 0.000 V/C
# 14 Sycamore St (N/S) / Santa Ana	D	35.0	0.000	D	35.0	0.000	+ 0.000 D/V
# 15 Sycamore St (N/S) / 5th St (E/	C	18.2	0.000	C	18.2	0.000	+ 0.000 D/V
# 16 Sycamore St (N/S) / 4th St (E/	B	10.5	0.464	B	10.5	0.464	+ 0.000 V/C
# 17 Main St (N/S) / Civic Center D	E	xxxxx	0.952	E	xxxxx	0.952	+ 0.000 V/C
# 18 Main St (N/S) / Santa Ana Dr (	D	xxxxx	0.879	D	xxxxx	0.879	+ 0.000 V/C
# 19 Main St (N/S) / 5th St (E/W)	D	xxxxx	0.852	D	xxxxx	0.852	+ 0.000 V/C
# 20 Main St (N/S) / 4th St (E/W)	D	xxxxx	0.880	D	xxxxx	0.880	+ 0.000 V/C
# 21 Main St (N/S) / 3rd St (E/W)	C	xxxxx	0.730	C	xxxxx	0.730	+ 0.000 V/C
# 22 Main St (N/S) / 1st St (E/W)	F	xxxxx	1.101	F	xxxxx	1.101	+ 0.000 V/C
# 23 Bush St (N/S) / Santa Ana Bl (	A	xxxxx	0.467	A	xxxxx	0.467	+ 0.000 V/C
# 24 Bush St (N/S) / 5th St (E/W)	A	xxxxx	0.577	A	xxxxx	0.577	+ 0.000 V/C

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Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 25 Bush St (N/S) / 4th St (E/W)	B	xxxxx	0.616	B	xxxxx	0.616	+ 0.000 V/C
# 26 Spurgeon St (N/S) / 1st St (E/	C	23.6	0.000	C	23.6	0.000	+ 0.000 D/V
# 27 French St (N/S) / Santa Ana Bl	D	31.0	0.000	D	31.0	0.000	+ 0.000 D/V
# 28 French St (N/S) / 4th St (E/W)	A	xxxxx	0.580	A	xxxxx	0.580	+ 0.000 V/C
# 29 Lacy St (N/S) / Civic Center D	F	113.5	0.000	F	113.5	0.000	+ 0.000 D/V
# 30 Lacy st (N/S) / Santa Ana Bl (	F	OVRFL	0.000	F	OVRFL	0.000	+ 0.000 D/V
# 31 Lacy St (N/S) / Brown St (E/W)	A	8.6	0.302	A	8.6	0.302	+ 0.000 V/C
# 32 Lacy St (N/S) / 4th St (E/W)	D	xxxxx	0.815	D	xxxxx	0.815	+ 0.000 V/C
# 33 Lacy St (N/S) / 1st St (E/W)	F	OVRFL	0.000	F	OVRFL	0.000	+ 0.000 D/V
# 34 Santiago St (N/S) / Washington	F	164.9	1.471	F	164.9	1.471	+ 0.000 V/C
# 35 Santiago St (N/S) / Civic Cent	F	266.2	2.021	F	266.2	2.021	+ 0.000 V/C
# 36 Santiago St (N/S) / Santa Ana	E	xxxxx	0.925	E	xxxxx	0.925	+ 0.000 V/C
# 37 Santiago St (N/S) / Brown St (	C	17.9	0.000	C	17.9	0.000	+ 0.000 D/V
# 38 Santiago St (N/S) / 6th St (E/	C	19.1	0.000	C	19.1	0.000	+ 0.000 D/V
# 39 Santiago St (N/S) / 4th (E/W)	F	OVRFL	0.000	F	OVRFL	0.000	+ 0.000 D/V
# 40 Standard Av (N/S) / 1st St (E/	E	xxxxx	0.995	E	xxxxx	0.995	+ 0.000 V/C
# 41 U-24 (N/S) / Santa Ana Bl (E/W	F	136.5	0.000	F	136.5	0.000	+ 0.000 D/V
# 42 Grand Av (N/S) / Santa Ana Bl	F	xxxxx	1.246	F	xxxxx	1.246	+ 0.000 V/C
# 43 Grand Av (N/S) / 4th St (E/W)	D	xxxxx	0.876	D	xxxxx	0.876	+ 0.000 V/C
# 44 Grand Av (N/S) / 1st St (E/W)	F	xxxxx	1.005	F	xxxxx	1.005	+ 0.000 V/C
# 45 Penn Way (NS) at I-5 SB Ramps	C	29.0	0.672	C	29.0	0.672	+ 0.000 D/V
# 46 I-5 SB Ramps (NS) / Santa Ana	C	33.9	0.786	C	33.9	0.786	+ 0.000 D/V
# 47 I-5 NB Ramps (NS) / 17th St. (	E	73.3	1.110	E	73.3	1.110	+ 0.000 D/V
# 48 I-5 NB Ramps (NS) / Grand Ave	F	183.9	1.673	F	183.9	1.673	+ 0.000 D/V
# 49 Mortimer (N/S) / Santa Ana Blv	E	39.8	0.000	E	39.8	0.000	+ 0.000 D/V

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Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 50 Mortimer (N/S) / 5th St (E/W)	F	69.7	1.167	F	69.7	1.167	+ 0.000 V/C

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Flower St (NS)/ Civic Center Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	1.146
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	244	1246	116	242	1268	114	275	1069	141	239	1070	171
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	244	1246	116	242	1268	114	275	1069	141	239	1070	171
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	244	1246	116	242	1268	114	275	1069	141	239	1070	171
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	244	1246	116	242	1268	114	275	1069	141	239	1070	171
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	244	1246	116	242	1268	114	275	1069	141	239	1070	171
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	244	1246	116	242	1268	114	275	1069	141	239	1070	171
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.83	0.17	1.00	1.84	0.16	1.00	1.77	0.23	1.00	1.72	0.28
Final Sat.:	1598	3110	290	1598	3120	280	1598	3004	396	1598	2932	468
Capacity Analysis Module:												
Vol/Sat:	0.15	0.40	0.40	0.15	0.41	0.41	0.17	0.36	0.36	0.15	0.36	0.37
Crit Moves:	****			****			****					****

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Flower St (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.704
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	0 3	0 1	1	0 2	0 1
Volume Module:												
Base Vol:	184	931	77	112	708	58	135	607	131	231	768	233
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	184	931	77	112	708	58	135	607	131	231	768	233
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	184	931	77	112	708	58	135	607	131	231	768	233
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	184	931	77	112	708	58	135	607	131	231	768	233
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	184	931	77	112	708	58	135	607	131	231	768	233
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	184	931	77	112	708	58	135	607	131	231	768	233
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00
Final Sat.:	1598	3400	1598	1598	3400	1598	1598	5100	1598	1598	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.12	0.27	0.05	0.07	0.21	0.04	0.08	0.12	0.08	0.14	0.23	0.15
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Parton St (E/W) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.435
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	21	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1	0	0	2	1	0	
Volume Module:												
Base Vol:	92	6	110	57	9	32	6	746	59	37	1127	22
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	92	6	110	57	9	32	6	746	59	37	1127	22
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	92	6	110	57	9	32	6	746	59	37	1127	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	92	6	110	57	9	32	6	746	59	37	1127	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	6	110	57	9	32	6	746	59	37	1127	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	92	6	110	57	9	32	6	746	59	37	1127	22
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.44	0.03	0.53	0.86	0.14	1.00	1.00	2.78	0.22	1.00	2.94	0.06
Final Sat.:	752	49	899	1468	232	1598	1598	4726	374	1598	5002	98
Capacity Analysis Module:												
Vol/Sat:	0.05	0.12	0.12	0.03	0.04	0.02	0.00	0.16	0.16	0.02	0.23	0.23
Crit Moves:		****		****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Ross St (N/S) / Civic Center Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.598
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1 0	1	0	0	1	0	1	0	1	0
Volume Module:												
Base Vol:	97	284	149	92	171	107	68	898	77	58	751	113
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	97	284	149	92	171	107	68	898	77	58	751	113
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	97	284	149	92	171	107	68	898	77	58	751	113
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	97	284	149	92	171	107	68	898	77	58	751	113
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	97	284	149	92	171	107	68	898	77	58	751	113
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	97	284	149	92	171	107	68	898	77	58	751	113
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.62	0.38	1.00	1.84	0.16	1.00	1.74	0.26
Final Sat.:	1598	1700	1598	1598	1046	654	1598	3131	269	1598	2955	445
Capacity Analysis Module:												
Vol/Sat:	0.06	0.17	0.09	0.06	0.16	0.16	0.04	0.29	0.29	0.04	0.25	0.25
Crit Moves:		****		****				****		****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Ross St (N/S) / Santa Ana Bl (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.695
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 37 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	0 1	1	0 1	0 1	1	0 2	0 1	1	0 3	0 1
Volume Module:												
Base Vol:	140	323	186	79	248	127	97	1124	138	130	792	118
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	323	186	79	248	127	97	1124	138	130	792	118
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	140	323	186	79	248	127	97	1124	138	130	792	118
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	140	323	186	79	248	127	97	1124	0	130	792	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	323	186	79	248	127	97	1124	0	130	792	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	140	323	186	79	248	127	97	1124	0	130	792	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	0.94
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00
Final Sat.:	1598	1700	1598	1598	1700	1598	1598	3400	1598	1598	5100	1598
Capacity Analysis Module:												
Vol/Sat:	0.09	0.19	0.12	0.05	0.15	0.08	0.06	0.33	0.00	0.08	0.16	0.00
Crit Moves:	****				****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Ross St (N/S) / 4th St (E/W)

Average Delay (sec/veh): 2.8 Worst Case Level Of Service: B[13.8]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	1
Volume Module:																				
Base Vol:	0	364		46		90	282		0		0		0		0	47		0		88
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	364		46		90	282		0		0		0		0	47		0		88
Added Vol:	0	0		0		0	0		0		0		0		0	0		0		0
PasserByVol:	0	0		0		0	0		0		0		0		0	0		0		0
Initial Fut:	0	364		46		90	282		0		0		0		0	47		0		88
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Volume:	0	364		46		90	282		0		0		0		0	47		0		88
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
FinalVolume:	0	364		46		90	282		0		0		0		0	47		0		88
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.4	xxxx		6.2					
FollowUpTim:	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	xxxx		3.3					
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx		410	xxxx	xxxxx	xxxx	xxxx	xxxxx		849	xxxx		387					
Potent Cap.:	xxxx	xxxx	xxxxx		1160	xxxx	xxxxx	xxxx	xxxx	xxxxx		334	xxxx		665					
Move Cap.:	xxxx	xxxx	xxxxx		1160	xxxx	xxxxx	xxxx	xxxx	xxxxx		314	xxxx		665					
Volume/Cap:	xxxx	xxxx	xxxx		0.08	xxxx	xxxx	xxxx	xxxx	xxxx		0.15	xxxx		0.13					
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx		0.3	xxxx	xxxxx	xxxx	xxxx	xxxxx		0.5	xxxx		0.5					
Control Del:	xxxxx	xxxx	xxxxx		8.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx		18.5	xxxx		11.2					
LOS by Move:	*	*	*		A	*	*	*	*	*		C	*		B					
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT					
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx					
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx					
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx					
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*					
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				13.8							
ApproachLOS:	*				*				*				B							

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Broadway (N/S) / Civic Center Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.757
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Ignore			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	88	740	72	166	846	208	252	992	89	49	637	139
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	88	740	72	166	846	208	252	992	89	49	637	139
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	88	740	72	166	846	208	252	992	89	49	637	139
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	88	740	0	166	846	0	252	992	89	49	637	139
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	88	740	0	166	846	0	252	992	89	49	637	139
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	88	740	0	166	846	0	252	992	89	49	637	139
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.84	0.16	1.00	1.64	0.36
Final Sat.:	1598	3400	1598	1598	3400	1598	1598	3120	280	1598	2791	609
Capacity Analysis Module:												
Vol/Sat:	0.06	0.22	0.00	0.10	0.25	0.00	0.16	0.32	0.32	0.03	0.23	0.23
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Broadway (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.626
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	1 1	0
Volume Module:												
Base Vol:	59	825	0	0	810	168	0	0	0	69	1049	162
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	59	825	0	0	810	168	0	0	0	69	1049	162
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	59	825	0	0	810	168	0	0	0	69	1049	162
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	59	825	0	0	810	168	0	0	0	69	1049	162
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	825	0	0	810	168	0	0	0	69	1049	162
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	59	825	0	0	810	168	0	0	0	69	1049	162
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.66	0.34	0.00	0.00	0.00	0.16	2.46	0.38
Final Sat.:	1598	3400	0	0	2816	584	0	0	0	275	4180	645
Capacity Analysis Module:												
Vol/Sat:	0.04	0.24	0.00	0.00	0.29	0.29	0.00	0.00	0.00	0.04	0.25	0.25
Crit Moves:	****				****						****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Broadway (N/S) / 5th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.646
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	0	1 0	2	0 0	0 1	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	687	149	172	843	0	226	972	41	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	687	149	172	843	0	226	972	41	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	687	149	172	843	0	226	972	41	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	687	149	172	843	0	226	972	41	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	687	149	172	843	0	226	972	41	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	687	149	172	843	0	226	972	41	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00	0.94	1.00	0.94
Lanes:	0.00	1.64	0.36	1.00	2.00	0.00	0.55	2.35	0.10	0.00	0.00	0.00
Final Sat.:	0	2794	606	1598	3400	0	930	4001	169	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.25	0.11	0.25	0.00	0.13	0.24	0.24	0.00	0.00	0.00
Crit Moves:		****		****				****				

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Broadway (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.659
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	96	933	266	50	712	36	65	141	82	95	156	54
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	96	933	266	50	712	36	65	141	82	95	156	54
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	96	933	266	50	712	36	65	141	82	95	156	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	96	933	266	50	712	36	65	141	82	95	156	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	96	933	266	50	712	36	65	141	82	95	156	54
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	96	933	266	50	712	36	65	141	82	95	156	54
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.56	0.44	1.00	1.90	0.10	0.23	0.49	0.28	0.31	0.51	0.18
Final Sat.:	1598	2646	754	1598	3236	164	384	832	484	530	870	301
Capacity Analysis Module:												
Vol/Sat:	0.06	0.35	0.35	0.03	0.22	0.22	0.04	0.17	0.17	0.06	0.18	0.18
Crit Moves:		****		****				****		****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Broadway (N/S)/ 3rd st (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.833
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0 1	0	1	0 1	1	0	0 1	0	1	0
Volume Module:												
Base Vol:	65	796	57	79	699	70	85	134	26	22	175	128
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	65	796	57	79	699	70	85	134	26	22	175	128
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	65	796	57	79	699	70	85	134	26	22	175	128
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	65	796	57	79	699	70	85	134	26	22	175	128
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	65	796	57	79	699	70	85	134	26	22	175	128
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	65	796	57	79	699	70	85	134	26	22	175	128
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.93	0.07	1.00	1.00	1.00	1.00	0.84	0.16	1.00	0.58	0.42
Final Sat.:	1598	1586	114	1598	1700	1598	1598	1424	276	1598	982	718
Capacity Analysis Module:												
Vol/Sat:	0.04	0.50	0.50	0.05	0.41	0.04	0.05	0.09	0.09	0.01	0.18	0.18
Crit Moves:		****		****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Broadway (N/S) / 1st St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.870
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	72	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1 0 1	1	0	1 0 1	1	0	2 1 0	1	0	2 1 0
Volume Module:												
Base Vol:	108	437	130	83	466	190	195	1489	81	153	1726	91
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	108	437	130	83	466	190	195	1489	81	153	1726	91
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	108	437	130	83	466	190	195	1489	81	153	1726	91
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	108	437	130	83	466	190	195	1489	81	153	1726	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	108	437	130	83	466	190	195	1489	81	153	1726	91
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	108	437	130	83	466	190	195	1489	81	153	1726	91
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.85	0.15	1.00	2.85	0.15
Final Sat.:	1598	1700	1598	1598	1700	1598	1598	4837	263	1598	4845	255
Capacity Analysis Module:												
Vol/Sat:	0.07	0.26	0.08	0.05	0.27	0.12	0.12	0.31	0.31	0.10	0.36	0.36
Crit Moves:	****				****		****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Sycamore St (N/S) / Civic Center Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.607
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	1	0	1 0	1	0
Volume Module:												
Base Vol:	32	61	28	110	110	118	27	1111	25	9	595	39
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	32	61	28	110	110	118	27	1111	25	9	595	39
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	61	28	110	110	118	27	1111	25	9	595	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	32	61	28	110	110	118	27	1111	25	9	595	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	61	28	110	110	118	27	1111	25	9	595	39
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	32	61	28	110	110	118	27	1111	25	9	595	39
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.26	0.51	0.23	0.32	0.33	0.35	1.00	1.96	0.04	1.00	1.88	0.12
Final Sat.:	450	857	393	553	553	593	1598	3325	75	1598	3191	209
Capacity Analysis Module:												
Vol/Sat:	0.02	0.07	0.07	0.06	0.20	0.20	0.02	0.33	0.33	0.01	0.19	0.19
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #14 Sycamore St (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 8.2 Worst Case Level Of Service: D[35.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0 1	0	0	0	0 0	0	1	0	0 0	0	0	0	0 1	1	1	0
Volume Module:																
Base Vol:	64	94	0	0	104	49	0	0	0	0	0	0	49	830	31	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	64	94	0	0	104	49	0	0	0	0	0	0	49	830	31	
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:	64	94	0	0	104	49	0	0	0	0	0	0	49	830	31	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	64	94	0	0	104	49	0	0	0	0	0	0	49	830	31	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FinalVolume:	64	94	0	0	104	49	0	0	0	0	0	0	49	830	31	
Critical Gap Module:																
Critical Gp:	7.1	6.5	xxxxx	xxxxx	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx				
FollowUpTim:	3.5	4.0	xxxxx	xxxxx	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	427	959	xxxxx	xxxx	944	292	xxxx	xxxx	xxxxx	0	xxxx	xxxxx				
Potent Cap.:	542	259	xxxxx	xxxx	264	752	xxxx	xxxx	xxxxx	900	xxxx	xxxxx				
Move Cap.:	328	244	xxxxx	xxxx	249	752	xxxx	xxxx	xxxxx	900	xxxx	xxxxx				
Volume/Cap:	0.20	0.38	xxxx	xxxx	0.42	0.07	xxxx	xxxx	xxxx	0.05	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*				
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT						
Shared Cap.:	272	xxxx	xxxxx	xxxx	xxxx	317	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	3.4	xxxx	xxxxx	xxxxx	xxxx	2.5	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx				
Shrd ConDel:	35.0	xxxx	xxxxx	xxxxx	xxxx	26.5	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx				
Shared LOS:	D	*	*	*	*	D	*	*	*	A	*	*				
ApproachDel:	35.0			26.5			xxxxxx			xxxxxx						
ApproachLOS:	D			D			*			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #15 Sycamore St (N/S) / 5th St (E/W)

Average Delay (sec/veh): 4.3 Worst Case Level Of Service: C[18.2]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	1	0		0	1	0	0	0		0	1	1	1	0		0	0	0	0	0	
Volume Module:																								
Base Vol:	0	11		30			95	50		0			75	616		18			0	0		0		
Growth Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
Initial Bse:	0	11		30			95	50		0			75	616		18			0	0		0		
Added Vol:	0	0		0			0	0		0			0	0		0			0	0		0		
PasserByVol:	0	0		0			0	0		0			0	0		0			0	0		0		
Initial Fut:	0	11		30			95	50		0			75	616		18			0	0		0		
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
PHF Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
PHF Volume:	0	11		30			95	50		0			75	616		18			0	0		0		
Reduct Vol:	0	0		0			0	0		0			0	0		0			0	0		0		
FinalVolume:	0	11		30			95	50		0			75	616		18			0	0		0		
Critical Gap Module:																								
Critical Gp:	xxxxx	6.5		6.2			7.1	6.5	xxxxx				4.1	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
FollowUpTim:	xxxxx	4.0		3.3			3.5	4.0	xxxxx				2.2	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	775		214			361	784	xxxxx				0	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Potent Cap.:	xxxx	331		831			599	327	xxxxx				900	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Move Cap.:	xxxx	302		831			523	299	xxxxx				900	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Volume/Cap:	xxxx	0.04		0.04			0.18	0.17	xxxx				0.08	xxxx	xxxx				xxxx	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.3	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				9.4	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				*	*	*			
Movement:	LT - LTR - RT						LT - LTR - RT						LT - LTR - RT						LT - LTR - RT					
Shared Cap.:	xxxx	xxxx		565			416	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx		0.2			1.5	xxxx	xxxxx				0.3	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	xxxx		11.9			18.2	xxxx	xxxxx				9.4	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*		B			C	*	*				A	*	*				*	*	*			
ApproachDel:		11.9						18.2						xxxxxx						xxxxxx				
ApproachLOS:		B						C						*						*				

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #16 Sycamore St (N/S) / 4th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.464
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): 10.5
Optimal Cycle: 0 Level Of Service: B

Approach:	North Bound							South Bound							East Bound							West Bound						
Movement:	L	-	T	-	R			L	-	T	-	R			L	-	T	-	R			L	-	T	-	R		
Control:	Stop Sign							Stop Sign							Stop Sign							Stop Sign						
Rights:	Include							Include							Include							Include						
Min. Green:	0	0		0				0	0		0				0	0		0				0	0		0			
Lanes:	0	0	1!	0	0			0	0	1!	0	0			0	0	1!	0	0			0	0	1!	0	0		
Volume Module:																												
Base Vol:	9	10		94				22	11		39				40	204		25				101	219		26			
Growth Adj:	1.00	1.00		1.00				1.00	1.00		1.00				1.00	1.00		1.00				1.00	1.00		1.00			
Initial Bse:	9	10		94				22	11		39				40	204		25				101	219		26			
Added Vol:	0	0		0				0	0		0				0	0		0				0	0		0			
PasserByVol:	0	0		0				0	0		0				0	0		0				0	0		0			
Initial Fut:	9	10		94				22	11		39				40	204		25				101	219		26			
User Adj:	1.00	1.00		1.00				1.00	1.00		1.00				1.00	1.00		1.00				1.00	1.00		1.00			
PHF Adj:	1.00	1.00		1.00				1.00	1.00		1.00				1.00	1.00		1.00				1.00	1.00		1.00			
PHF Volume:	9	10		94				22	11		39				40	204		25				101	219		26			
Reduct Vol:	0	0		0				0	0		0				0	0		0				0	0		0			
Reduced Vol:	9	10		94				22	11		39				40	204		25				101	219		26			
PCE Adj:	1.00	1.00		1.00				1.00	1.00		1.00				1.00	1.00		1.00				1.00	1.00		1.00			
MLF Adj:	1.00	1.00		1.00				1.00	1.00		1.00				1.00	1.00		1.00				1.00	1.00		1.00			
FinalVolume:	9	10		94				22	11		39				40	204		25				101	219		26			
Saturation Flow Module:																												
Adjustment:	1.00	1.00		1.00				1.00	1.00		1.00				1.00	1.00		1.00				1.00	1.00		1.00			
Lanes:	0.08	0.09		0.83				0.31	0.15		0.54				0.15	0.76		0.09				0.29	0.63		0.08			
Final Sat.:	53	58		549				189	95		335				109	556		68				218	472		56			
Capacity Analysis Module:																												
Vol/Sat:	0.17	0.17		0.17				0.12	0.12		0.12				0.37	0.37		0.37				0.46	0.46		0.46			
Crit Moves:	****										****				****							****						
Delay/Veh:	8.8	8.8		8.8				8.8	8.8		8.8				10.3	10.3		10.3				11.5	11.5		11.5			
Delay Adj:	1.00	1.00		1.00				1.00	1.00		1.00				1.00	1.00		1.00				1.00	1.00		1.00			
AdjDel/Veh:	8.8	8.8		8.8				8.8	8.8		8.8				10.3	10.3		10.3				11.5	11.5		11.5			
LOS by Move:	A	A		A				A	A		A				B	B		B				B	B		B			
ApproachDel:		8.8							8.8							10.3							11.5					
Delay Adj:		1.00							1.00							1.00							1.00					
ApprAdjDel:		8.8							8.8							10.3							11.5					
LOS by Appr:		A							A							B							B					
AllWayAvgQ:	0.2	0.2		0.2				0.1	0.1		0.1				0.5	0.5		0.5				0.8	0.8		0.8			

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Main St (N/S) / Civic Center Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.952
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0
Volume Module:												
Base Vol:	164	1258	107	98	1252	103	161	998	198	78	478	86
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	164	1258	107	98	1252	103	161	998	198	78	478	86
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	164	1258	107	98	1252	103	161	998	198	78	478	86
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	164	1258	107	98	1252	103	161	998	198	78	478	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	164	1258	107	98	1252	103	161	998	198	78	478	86
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	164	1258	107	98	1252	103	161	998	198	78	478	86
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.84	0.16	1.00	1.85	0.15	1.00	1.67	0.33	1.00	1.70	0.30
Final Sat.:	1598	3133	267	1598	3142	258	1598	2837	563	1598	2882	518
Capacity Analysis Module:												
Vol/Sat:	0.10	0.40	0.40	0.06	0.40	0.40	0.10	0.35	0.35	0.05	0.17	0.17
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #18 Main St (N/S) / Santa Ana Dr (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.879
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 76 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 2	0	0	0	1 1	0	0	0	0	1	1 0
Volume Module:												
Base Vol:	118	1566	0	0	1601	98	0	0	0	99	1081	125
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	118	1566	0	0	1601	98	0	0	0	99	1081	125
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	118	1566	0	0	1601	98	0	0	0	99	1081	125
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	118	1566	0	0	1601	98	0	0	0	99	1081	125
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	118	1566	0	0	1601	98	0	0	0	99	1081	125
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	118	1566	0	0	1601	98	0	0	0	99	1081	125
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.88	0.12	0.00	0.00	0.00	0.23	2.48	0.29
Final Sat.:	1598	3400	0	0	3204	196	0	0	0	387	4225	489
Capacity Analysis Module:												
Vol/Sat:	0.07	0.46	0.00	0.00	0.50	0.50	0.00	0.00	0.00	0.06	0.26	0.26
Crit Moves:	****				****						****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #19 Main St (N/S) / 5th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.852
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	66	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1 1	0	1 0	2 0	0	0 1	1 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	1553	35	99	1555	0	188	1063	140	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1553	35	99	1555	0	188	1063	140	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1553	35	99	1555	0	188	1063	140	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1553	35	99	1555	0	188	1063	140	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1553	35	99	1555	0	188	1063	140	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1553	35	99	1555	0	188	1063	140	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00	0.94	1.00	0.94
Lanes:	0.00	1.96	0.04	1.00	2.00	0.00	0.41	2.29	0.30	0.00	0.00	0.00
Final Sat.:	0	3325	75	1598	3400	0	689	3897	513	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.47	0.47	0.06	0.46	0.00	0.11	0.27	0.27	0.00	0.00	0.00
Crit Moves:		****		****				****				

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #20 Main St (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.880
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	77	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 1	0	0 1	0 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	20	1534	145	33	1521	68	6	268	77	34	360	129
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	1534	145	33	1521	68	6	268	77	34	360	129
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	1534	145	33	1521	68	6	268	77	34	360	129
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	1534	145	33	1521	68	6	268	77	34	360	129
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	1534	145	33	1521	68	6	268	77	34	360	129
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	1534	145	33	1521	68	6	268	77	34	360	129
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.02	1.81	0.17	0.04	1.88	0.08	0.02	0.76	0.22	0.06	0.69	0.25
Final Sat.:	40	3070	290	69	3188	143	29	1298	373	111	1170	419
Capacity Analysis Module:												
Vol/Sat:	0.01	0.50	0.50	0.02	0.48	0.48	0.00	0.21	0.21	0.02	0.31	0.31
Crit Moves:		****		****				****			****	

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #21 Main St (N/S) / 3rd St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.730
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 41 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 1	1 0	0	1 0	1 0	1	0 0	1 0	1	0 0	1 0
Volume Module:												
Base Vol:	0	1596	51	1	1540	68	54	191	50	48	226	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1596	51	1	1540	68	54	191	50	48	226	48
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1596	51	1	1540	68	54	191	50	48	226	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1596	51	1	1540	68	54	191	50	48	226	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1596	51	1	1540	68	54	191	50	48	226	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1596	51	1	1540	68	54	191	50	48	226	48
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.00	1.94	0.06	0.01	1.91	0.08	1.00	0.79	0.21	1.00	0.82	0.18
Final Sat.:	0	3295	105	2	3254	144	1598	1347	353	1598	1402	298
Capacity Analysis Module:												
Vol/Sat:	0.00	0.48	0.48	0.00	0.47	0.47	0.03	0.14	0.14	0.03	0.16	0.16
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #22 Main St (N/S) / 1st St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 1.101
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	1 0	1	0 2	0 1	1	0 2	1 0	1	0 2	1 0
Volume Module:												
Base Vol:	253	1227	122	275	1126	193	226	1451	112	144	1540	199
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	253	1227	122	275	1126	193	226	1451	112	144	1540	199
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	253	1227	122	275	1126	193	226	1451	112	144	1540	199
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	253	1227	122	275	1126	193	226	1451	112	144	1540	199
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	253	1227	122	275	1126	193	226	1451	112	144	1540	199
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	253	1227	122	275	1126	193	226	1451	112	144	1540	199
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.82	0.18	1.00	2.00	1.00	1.00	2.79	0.21	1.00	2.66	0.34
Final Sat.:	1598	3093	307	1598	3400	1598	1598	4735	365	1598	4516	584
Capacity Analysis Module:												
Vol/Sat:	0.16	0.40	0.40	0.17	0.33	0.12	0.14	0.31	0.31	0.09	0.34	0.34
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #23 Bush St (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.467
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	22	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	0	0	0 0 1	0	0	0 0 0	0	0	1 1 1	0
Volume Module:												
Base Vol:	50	381	0	0	246	42	0	0	0	45	866	73
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	381	0	0	246	42	0	0	0	45	866	73
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	50	381	0	0	246	42	0	0	0	45	866	73
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	381	0	0	246	42	0	0	0	45	866	73
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	381	0	0	246	42	0	0	0	45	866	73
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	381	0	0	246	42	0	0	0	45	866	73
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	0.85	0.15	0.00	0.00	0.00	0.14	2.64	0.22
Final Sat.:	1598	1700	0	0	1452	248	0	0	0	233	4488	378
Capacity Analysis Module:												
Vol/Sat:	0.03	0.22	0.00	0.00	0.17	0.17	0.00	0.00	0.00	0.03	0.19	0.19
Crit Moves:		****		****							****	

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #24 Bush St (N/S) / 5th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.577
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 0 1	0	1	0 1 0	0	0	1 1 1	0	0	0 0 0	0
Volume Module:												
Base Vol:	0	382	77	33	321	0	100	991	112	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	382	77	33	321	0	100	991	112	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	382	77	33	321	0	100	991	112	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	382	77	33	321	0	100	991	112	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	382	77	33	321	0	100	991	112	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	382	77	33	321	0	100	991	112	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	1.00	1.00	1.00	0.94	1.00	0.94
Lanes:	0.00	0.83	0.17	1.00	1.00	0.00	0.25	2.47	0.28	0.00	0.00	0.00
Final Sat.:	0	1415	285	1598	1700	0	424	4201	475	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.27	0.02	0.19	0.00	0.06	0.24	0.24	0.00	0.00	0.00
Crit Moves:		****		****				****				

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #25 Bush St (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.616
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0 1	0	1	0	0	0	1! 0	0	0	1! 0 0
Volume Module:												
Base Vol:	23	369	53	72	266	70	16	365	32	22	377	49
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	23	369	53	72	266	70	16	365	32	22	377	49
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	369	53	72	266	70	16	365	32	22	377	49
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	23	369	53	72	266	70	16	365	32	22	377	49
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	369	53	72	266	70	16	365	32	22	377	49
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	23	369	53	72	266	70	16	365	32	22	377	49
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.87	0.13	1.00	0.79	0.21	0.04	0.88	0.08	0.05	0.84	0.11
Final Sat.:	1598	1486	214	1598	1346	354	66	1502	132	83	1431	186
Capacity Analysis Module:												
Vol/Sat:	0.01	0.25	0.25	0.05	0.20	0.20	0.01	0.24	0.24	0.01	0.26	0.26
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #26 Spurgeon St (N/S) / 1st St (E/W)

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: C[23.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0 0 0	0	0	0 0 1	0	0	3 0 0	0	0	2 1 0
Volume Module:												
Base Vol:	0	0	0	0	0	202	0	1976	0	0	1902	114
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	202	0	1976	0	0	1902	114
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	202	0	1976	0	0	1902	114
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	202	0	1976	0	0	1902	114
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	202	0	1976	0	0	1902	114
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	691	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	392	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	392	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.52	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	2.9	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	23.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	C	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			23.6			xxxxxx			xxxxxx		
ApproachLOS:	*			C			*			*		

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #27 French St (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 8.2 Worst Case Level Of Service: D[31.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	1 0	0	0	0	0 0	1	0	0	0 0	0	0	0	1 0	1	0
Volume Module:																
Base Vol:	110	92	0	0	94	31	0	0	0	27	746	8				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	110	92	0	0	94	31	0	0	0	27	746	8				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	110	92	0	0	94	31	0	0	0	27	746	8				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	110	92	0	0	94	31	0	0	0	27	746	8				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	110	92	0	0	94	31	0	0	0	27	746	8				
Critical Gap Module:																
Critical Gp:	7.1	6.5	xxxxx	xxxxx	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx				
FollowUpTim:	3.5	4.0	xxxxx	xxxxx	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	474	808	xxxxx	xxxx	804	377	xxxx	xxxx	xxxxx	0	xxxx	xxxxx				
Potent Cap.:	504	317	xxxxx	xxxx	319	674	xxxx	xxxx	xxxxx	900	xxxx	xxxxx				
Move Cap.:	360	307	xxxxx	xxxx	309	674	xxxx	xxxx	xxxxx	900	xxxx	xxxxx				
Volume/Cap:	0.31	0.30	xxxx	xxxx	0.30	0.05	xxxx	xxxx	xxxx	0.03	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	334	xxxx	xxxxx	xxxx	xxxx	357	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	3.7	xxxx	xxxxx	xxxxx	xxxx	1.5	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx				
Shrd ConDel:	31.0	xxxx	xxxxx	xxxxx	xxxx	20.4	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx				
Shared LOS:	D	*	*	*	*	C	*	*	*	A	*	*				
ApproachDel:	31.0			20.4			xxxxxx			xxxxxx						
ApproachLOS:	D			C			*			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #28 French St (N/S) / 4th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.580
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 28 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	0 1!	0	0	1	0 0	1	0	0	0 1!	0	0	0	1 0	0	1
Volume Module:																
Base Vol:	23	87	91		160	76	107		76	301	40		92	361	79	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	23	87	91		160	76	107		76	301	40		92	361	79	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	23	87	91		160	76	107		76	301	40		92	361	79	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	23	87	91		160	76	107		76	301	40		92	361	79	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	23	87	91		160	76	107		76	301	40		92	361	79	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	23	87	91		160	76	107		76	301	40		92	361	79	
Saturation Flow Module:																
Sat/Lane:	1700	1700	1700		1700	1700	1700		1700	1700	1700		1700	1700	1700	
Adjustment:	1.00	1.00	1.00		0.94	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.94	
Lanes:	0.11	0.43	0.46		1.00	0.42	0.58		0.18	0.72	0.10		0.20	0.80	1.00	
Final Sat.:	195	736	770		1598	706	994		310	1227	163		345	1355	1598	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.12	0.12		0.10	0.11	0.11		0.04	0.25	0.25		0.05	0.27	0.05	
Crit Moves:		****				****				****				****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #29 Lacy St (N/S) / Civic Center Dr (E/W)

Average Delay (sec/veh): 15.2 Worst Case Level Of Service: F[113.5]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0 1! 0	0		0	0 1! 0	0		0	0 1! 0	0		0	0 1! 0	0	
Volume Module:																
Base Vol:	24	20	49		101	39	23		19	742	54		10	255	81	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	24	20	49		101	39	23		19	742	54		10	255	81	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	24	20	49		101	39	23		19	742	54		10	255	81	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	24	20	49		101	39	23		19	742	54		10	255	81	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	24	20	49		101	39	23		19	742	54		10	255	81	
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1154	1163	769		1157	1150	296		336	xxxx	xxxxx		796	xxxx	xxxxx	
Potent Cap.:	176	196	404		175	200	749		1235	xxxx	xxxxx		835	xxxx	xxxxx	
Move Cap.:	141	191	404		138	195	749		1235	xxxx	xxxxx		835	xxxx	xxxxx	
Volume/Cap:	0.17	0.10	0.12		0.73	0.20	0.03		0.02	xxxx	xxxx		0.01	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		0.0	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		8.0	xxxx	xxxxx		9.4	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		A	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	235	xxxxx		xxxx	170	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	1.8	xxxxx		xxxxx	7.4	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	30.0	xxxxx		xxxxx	113	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	D	*		*	F	*		*	*	*		*	*	*	
ApproachDel:	30.0				113.5				xxxxxx				xxxxxx			
ApproachLOS:	D				F				*				*			

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #30 Lacy st (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0 1! 0	0		0	0 1! 0	0		1	0 0	1 0		1	0 0	1 0	
Volume Module:																
Base Vol:	20	49	25		39	62	17		3	901	9		79	861	14	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	20	49	25		39	62	17		3	901	9		79	861	14	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	20	49	25		39	62	17		3	901	9		79	861	14	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	20	49	25		39	62	17		3	901	9		79	861	14	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	20	49	25		39	62	17		3	901	9		79	861	14	
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1977	1945	906		1975	1942	868		875	xxxx	xxxxx		910	xxxx	xxxxx	
Potent Cap.:	47	66	338		47	66	355		780	xxxx	xxxxx		757	xxxx	xxxxx	
Move Cap.:	0	59	338		12	59	355		780	xxxx	xxxxx		757	xxxx	xxxxx	
Volume/Cap:	xxxx	0.84	0.07		3.22	1.05	0.05		0.00	xxxx	xxxx		0.10	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		0.3	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.6	xxxx	xxxxx		10.3	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		A	*	*		B	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	0	xxxxx		xxxx	27	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	14.4	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	1788	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	F	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				1788.5				xxxxxx				xxxxxx			
ApproachLOS:	F				F				*				*			

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #31 Lacy St (N/S) / Brown St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.302
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	8.6
Optimal Cycle:	0	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	0
Volume Module:												
Base Vol:	78	112	65	7	116	16	9	19	11	22	34	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	78	112	65	7	116	16	9	19	11	22	34	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	78	112	65	7	116	16	9	19	11	22	34	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	78	112	65	7	116	16	9	19	11	22	34	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	112	65	7	116	16	9	19	11	22	34	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	78	112	65	7	116	16	9	19	11	22	34	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.31	0.44	0.25	0.05	0.83	0.12	0.23	0.49	0.28	0.39	0.61	0.00
Final Sat.:	259	371	215	41	677	93	165	347	201	272	420	0
Capacity Analysis Module:												
Vol/Sat:	0.30	0.30	0.30	0.17	0.17	0.17	0.05	0.05	0.05	0.08	0.08	xxxx
Crit Moves:			****		****			****			****	
Delay/Veh:	8.9	8.9	8.9	8.2	8.2	8.2	7.9	7.9	7.9	8.2	8.2	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.9	8.9	8.9	8.2	8.2	8.2	7.9	7.9	7.9	8.2	8.2	0.0
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	*
ApproachDel:		8.9			8.2			7.9			8.2	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		8.9			8.2			7.9			8.2	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.4	0.4	0.4	0.2	0.2	0.2	0.0	0.0	0.0	0.1	0.1	0.1

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #32 Lacy St (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.815
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1	0 0	1 0	1	0 1	0
Volume Module:												
Base Vol:	52	94	80	156	38	3	39	703	30	175	725	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	52	94	80	156	38	3	39	703	30	175	725	140
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	52	94	80	156	38	3	39	703	30	175	725	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	52	94	80	156	38	3	39	703	30	175	725	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	52	94	80	156	38	3	39	703	30	175	725	140
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	52	94	80	156	38	3	39	703	30	175	725	140
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	0.23	0.42	0.35	0.79	0.19	0.02	1.00	0.96	0.04	1.00	1.00	1.00
Final Sat.:	391	707	602	1346	328	26	1598	1630	70	1598	1700	1598
Capacity Analysis Module:												
Vol/Sat:	0.03	0.13	0.13	0.09	0.12	0.12	0.02	0.43	0.43	0.11	0.43	0.09
Crit Moves:		****			****				****		****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #33 Lacy St (N/S) / 1st St (E/W)

Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1	0 0	0	0	1!	0 0	1	0	3	0 0	0	0	2	1 0
Volume Module:																
Base Vol:	0	2	0	11	1	151	216	1780	0	0	1849	47				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	0	2	0	11	1	151	216	1780	0	0	1849	47				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	0	2	0	11	1	151	216	1780	0	0	1849	47				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	0	2	0	11	1	151	216	1780	0	0	1849	47				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	0	2	0	11	1	151	216	1780	0	0	1849	47				
Critical Gap Module:																
Critical Gp:	xxxxx	6.5	xxxxx	7.5	6.5	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	4.0	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	xxxx	4108	xxxxx	2899	4085	640	1896	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	2	xxxxx	7	3	423	319	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	1	xxxxx	0	1	423	319	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	2.48	xxxx	xxxx	1.20	0.36	0.68	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	0.9	xxxxx	xxxx	xxxx	xxxxx	4.6	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	xxxxx	7073	xxxxx	xxxxx	xxxx	xxxxx	37.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	F	*	*	*	*	E	*	*	*	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*				
ApproachDel:	7073.4			xxxxxx			xxxxxx			xxxxxx						
ApproachLOS:	F			F			*			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #34 Santiago St (N/S) / Washington Av (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 1.471
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): 164.9
Optimal Cycle: 0 Level Of Service: F

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0	1	0 1	1	0	1	0 1	0	0	1!	0 0	0	0	1!	0 0
Volume Module:																
Base Vol:	96	591	248		30	539	155		333	222	49		103	171	46	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	96	591	248		30	539	155		333	222	49		103	171	46	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	96	591	248		30	539	155		333	222	49		103	171	46	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	96	591	248		30	539	155		333	222	49		103	171	46	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	96	591	248		30	539	155		333	222	49		103	171	46	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	96	591	248		30	539	155		333	222	49		103	171	46	
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	1.00	1.00		1.00	1.00	1.00		0.55	0.37	0.08		0.32	0.54	0.14	
Final Sat.:	381	402	436		378	399	432		227	151	33		127	211	57	
Capacity Analysis Module:																
Vol/Sat:	0.25	1.47	0.57		0.08	1.35	0.36		1.47	1.47	1.47		0.81	0.81	0.81	
Crit Moves:		****				****				****					****	
Delay/Veh:	15.3	249	21.3		13.0	199	15.6		247.0	247	247.0		41.0	41.0	41.0	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	15.3	249	21.3		13.0	199	15.6		247.0	247	247.0		41.0	41.0	41.0	
LOS by Move:	C	F	C		B	F	C		F	F	F		E	E	E	
ApproachDel:	164.4				152.1				247.0				41.0			
Delay Adj:	1.00				1.00				1.00				1.00			
ApprAdjDel:	164.4				152.1				247.0				41.0			
LOS by Appr:	F				F				F				E			
AllWayAvgQ:	0.3	26.4	1.3		0.1	20.8	0.5		26.9	26.9	26.9		3.2	3.2	3.2	

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #35 Santiago St (N/S) / Civic Center Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	2.021
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	266.2
Optimal Cycle:	0	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	265	719	61	26	666	179	375	68	500	58	42	21
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	265	719	61	26	666	179	375	68	500	58	42	21
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	265	719	61	26	666	179	375	68	500	58	42	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	265	719	61	26	666	179	375	68	500	58	42	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	265	719	61	26	666	179	375	68	500	58	42	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	265	719	61	26	666	179	375	68	500	58	42	21
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.92	0.08	1.00	0.79	0.21	0.85	0.15	1.00	0.48	0.35	0.17
Final Sat.:	412	406	34	387	329	89	355	64	482	178	129	64
Capacity Analysis Module:												
Vol/Sat:	0.64	1.77	1.77	0.07	2.02	2.02	1.06	1.06	1.04	0.33	0.33	0.33
Crit Moves:			****		****		****				****	
Delay/Veh:	25.9	377	376.5	12.6	487	487.3	89.1	89.1	77.9	17.4	17.4	17.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	25.9	377	376.5	12.6	487	487.3	89.1	89.1	77.9	17.4	17.4	17.4
LOS by Move:	D	F	F	B	F	F	F	F	F	C	C	C
ApproachDel:	287.6			473.2			83.2			17.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	287.6			473.2			83.2			17.4		
LOS by Appr:	F			F			F			C		
AllWayAvgQ:	1.7	44.7	44.7	0.1	55.3	55.3	9.1	9.1	9.1	0.5	0.5	0.5

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #36 Santiago St (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.925
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	0 1	1 0	2	0 1	1 0	1	0	1 0	2	0 1
Volume Module:												
Base Vol:	55	291	115	461	369	308	295	1029	126	148	921	506
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	55	291	115	461	369	308	295	1029	126	148	921	506
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	55	291	115	461	369	308	295	1029	126	148	921	506
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	55	291	115	461	369	308	295	1029	126	148	921	506
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	55	291	115	461	369	308	295	1029	126	148	921	506
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	55	291	115	461	369	308	295	1029	126	148	921	506
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.78	0.22	1.00	2.00	1.00
Final Sat.:	1598	3400	1598	1598	3400	1598	1598	3029	371	1598	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.03	0.09	0.07	0.29	0.11	0.19	0.18	0.34	0.34	0.09	0.27	0.32
Crit Moves:		****		****			****					****

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #37 Santiago St (N/S) / Brown St (E/W)

Average Delay (sec/veh): 3.3 Worst Case Level Of Service: C[17.9]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	1 1	1	0	0	1 1	1	0	1	0 0	1	0	0	0 0	0	0
Volume Module:																
Base Vol:	83	333	0	0	469	174	102	0	82	0	0	0				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	83	333	0	0	469	174	102	0	82	0	0	0				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	83	333	0	0	469	174	102	0	82	0	0	0				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	83	333	0	0	469	174	102	0	82	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	83	333	0	0	469	174	102	0	82	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	643	xxxx	xxxxx	xxxx	xxxx	xxxxx	833	1055	243	xxxx	xxxx	xxxxx				
Potent Cap.:	951	xxxx	xxxxx	xxxx	xxxx	xxxxx	311	227	763	xxxx	xxxx	xxxxx				
Move Cap.:	951	xxxx	xxxxx	xxxx	xxxx	xxxxx	289	207	763	xxxx	xxxx	xxxxx				
Volume/Cap:	0.09	xxxx	xxxx	xxxx	xxxx	xxxx	0.35	0.00	0.11	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.3	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.5	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	9.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	24.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	A	*	*	*	*	*	C	*	*	*	*	*				
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT						
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	763	xxxx	xxxx	xxxxx				
SharedQueue:	0.3	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	0.4	xxxxx	xxxx	xxxxx				
Shrd ConDel:	9.1	xxxx	xxxxx	9.0	xxxx	xxxxx	xxxxx	xxxx	10.3	xxxxx	xxxx	xxxxx				
Shared LOS:	A	*	*	A	*	*	*	*	B	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			17.9			xxxxxx						
ApproachLOS:	*			*			C			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #38 Santiago St (N/S) / 6th St (E/W)

Average Delay (sec/veh): 3.6 Worst Case Level Of Service: C[19.1]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	1 1	1	0	0	1 1	1	0	1	0 0	0	1	0	0 0	0	0
Volume Module:																
Base Vol:	140	326	0	0	397	154	90	0	62	0	0	0				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	140	326	0	0	397	154	90	0	62	0	0	0				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	140	326	0	0	397	154	90	0	62	0	0	0				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	140	326	0	0	397	154	90	0	62	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	140	326	0	0	397	154	90	0	62	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	551	xxxx	xxxxx	xxxx	xxxx	xxxxx	863	xxxx	209	xxxx	xxxx	xxxxx				
Potent Cap.:	1029	xxxx	xxxxx	xxxx	xxxx	xxxxx	298	xxxx	803	xxxx	xxxx	xxxxx				
Move Cap.:	1029	xxxx	xxxxx	xxxx	xxxx	xxxxx	264	xxxx	803	xxxx	xxxx	xxxxx				
Volume/Cap:	0.14	xxxx	xxxx	xxxx	xxxx	xxxx	0.34	xxxx	0.08	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.5	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.5	xxxx	0.3	xxxx	xxxx	xxxxx				
Control Del:	9.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	25.5	xxxx	9.9	xxxxx	xxxx	xxxxx				
LOS by Move:	A	*	*	*	*	*	D	*	A	*	*	*				
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT						
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	0.5	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	9.0	xxxx	xxxxx	9.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	A	*	*	A	*	*	*	*	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			19.1			xxxxxx						
ApproachLOS:	*			*			C			*						

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #39 Santiago St (N/S) / 4th (E/W)

Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 1 1 0			1 0 2 1 0			0 1 0 1 0			0 1 0 1 0		
Volume Module:												
Base Vol:	1	326	133	112	204	170	50	911	40	205	835	169
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	326	133	112	204	170	50	911	40	205	835	169
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	326	133	112	204	170	50	911	40	205	835	169
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	326	133	112	204	170	50	911	40	205	835	169
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	1	326	133	112	204	170	50	911	40	205	835	169
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	374	xxxx	xxxxx	459	xxxx	xxxxx	1041	974	153	1142	993	175
Potent Cap.:	1196	xxxx	xxxxx	1113	xxxx	xxxxx	187	254	872	158	248	844
Move Cap.:	1196	xxxx	xxxxx	1113	xxxx	xxxxx	0	228	872	0	222	844
Volume/Cap:	0.00	xxxx	xxxx	0.10	xxxx	xxxx	xxxx	3.99	0.05	xxxx	3.75	0.20
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.0	xxxx	xxxxx	8.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0	xxxx	235	0	xxxx	254
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	93.3	xxxxx	xxxx	97.6
Shrd ConDel:	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	1409	xxxxx	xxxx	1367
Shared LOS:	A	*	*	*	*	*	*	*	F	*	*	F
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			F			F		

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #40 Standard Av (N/S) / 1st St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.995
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	1	0	0	1! 0	0	1	0	1	1	0
Volume Module:												
Base Vol:	248	370	173	22	284	32	100	1655	102	119	1739	15
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	248	370	173	22	284	32	100	1655	102	119	1739	15
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	248	370	173	22	284	32	100	1655	102	119	1739	15
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	248	370	173	22	284	32	100	1655	102	119	1739	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	248	370	173	22	284	32	100	1655	102	119	1739	15
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	248	370	173	22	284	32	100	1655	102	119	1739	15
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.68	0.32	0.07	0.84	0.09	1.00	1.88	0.12	1.00	1.98	0.02
Final Sat.:	1598	1158	542	111	1428	161	1598	3203	197	1598	3371	29
Capacity Analysis Module:												
Vol/Sat:	0.16	0.32	0.32	0.01	0.20	0.20	0.06	0.52	0.52	0.07	0.52	0.52
Crit Moves:	****				****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #41 U-24 (N/S) / Santa Ana Bl (E/W)

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: F[136.5]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign			Stop Sign			Uncontrolled						Uncontrolled					
Rights:	Include			Include			Include						Include					
Lanes:	0	0	0	0	0	1	0	0	0	1	1	0	2	1	0	1	0	2	1	0
Volume Module:																				
Base Vol:	0	0	0	22	0	11	32	1573	0	0	1578	65								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	0	0	0	22	0	11	32	1573	0	0	1578	65								
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	0	0	0	22	0	11	32	1573	0	0	1578	65								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	0	0	0	22	0	11	32	1573	0	0	1578	65								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	0	0	0	22	0	11	32	1573	0	0	1578	65								
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx	2199	xxxx	559	1643	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Potent Cap.:	xxxx	xxxx	xxxxx	39	xxxx	478	399	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Move Cap.:	xxxx	xxxx	xxxxx	37	xxxx	478	399	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Volume/Cap:	xxxx	xxxx	xxxx	0.60	xxxx	0.02	0.08	xxxx	xxxx	xxxx	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	2.1	xxxx	0.1	0.3	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	198.4	xxxx	12.7	14.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
LOS by Move:	*	*	*	F	*	B	B	*	*	*	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*								
ApproachDel:	xxxxxx			136.5			xxxxxx			xxxxxx										
ApproachLOS:	*			F			*			*										

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #42 Grand Av (N/S) / Santa Ana Bl (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 1.246
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: F

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Split Phase					Split Phase					Split Phase					Split Phase				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	1	0	1	0	3	0	2	2	0	1	0	2	0	1	0	1	0
Volume Module:																				
Base Vol:	346	2707		59		186	1425		1111		527	242		515		109	246		124	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	346	2707		59		186	1425		1111		527	242		515		109	246		124	
Added Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
PasserByVol:	0	0		0		0	0		0		0	0		0		0	0		0	
Initial Fut:	346	2707		59		186	1425		1111		527	242		515		109	246		124	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Volume:	346	2707		59		186	1425		1111		527	242		515		109	246		124	
Reduct Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
Reduced Vol:	346	2707		59		186	1425		1111		527	242		515		109	246		124	
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
FinalVolume:	346	2707		59		186	1425		1111		527	242		515		109	246		124	
Saturation Flow Module:																				
Sat/Lane:	1700	1700		1700		1700	1700		1700		1700	1700		1700		1700	1700		1700	
Adjustment:	0.94	1.00		1.00		0.94	1.00		0.94		0.94	1.00		0.94		1.00	1.00		1.00	
Lanes:	1.00	2.94		0.06		1.00	3.00		2.00		2.00	1.00		2.00		0.45	1.03		0.52	
Final Sat.:	1598	4991		109		1598	5100		3196		1700	3196		1700		774	1746		880	
Capacity Analysis Module:																				
Vol/Sat:	0.22	0.54		0.54		0.12	0.28		0.35		0.16	0.14		0.16		0.14	0.14		0.14	
Crit Moves:		****							****		****								****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #43 Grand Av (N/S) / 4th St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.876
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	75	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 3	0 1	1	0 2	1 0	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	281	1397	98	162	973	102	208	734	121	300	992	202
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	281	1397	98	162	973	102	208	734	121	300	992	202
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	281	1397	98	162	973	102	208	734	121	300	992	202
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	281	1397	98	162	973	102	208	734	121	300	992	202
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	281	1397	98	162	973	102	208	734	121	300	992	202
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	281	1397	98	162	973	102	208	734	121	300	992	202
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	1.00	3.00	1.00	1.00	2.72	0.28	1.00	1.72	0.28	1.00	2.00	1.00
Final Sat.:	1598	5100	1598	1598	4616	484	1598	2919	481	1598	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.18	0.27	0.06	0.10	0.21	0.21	0.13	0.25	0.25	0.19	0.29	0.13
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #44 Grand Av (N/S) / 1st St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	1.005
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0 2	1 0	2	0 3	0 1	2	0 2	1 0	2	0 2	0 1
Volume Module:												
Base Vol:	537	2022	185	123	1317	113	230	1506	319	284	1400	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	537	2022	185	123	1317	113	230	1506	319	284	1400	70
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	537	2022	185	123	1317	113	230	1506	319	284	1400	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	537	2022	185	123	1317	113	230	1506	319	284	1400	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	537	2022	185	123	1317	113	230	1506	319	284	1400	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	537	2022	185	123	1317	113	230	1506	319	284	1400	70
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	0.94
Lanes:	2.00	2.75	0.25	2.00	3.00	1.00	2.00	2.48	0.52	2.00	2.00	1.00
Final Sat.:	3196	4672	428	3196	5100	1598	3196	4209	891	3196	3400	1598
Capacity Analysis Module:												
Vol/Sat:	0.17	0.43	0.43	0.04	0.26	0.07	0.07	0.36	0.36	0.09	0.41	0.04
Crit Moves:		****		****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #45 Penn Way (NS) at I-5 SB Ramps (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.672
Loss Time (sec):	12 (Y+R=4.0 sec)	Average Delay (sec/veh):	29.0
Optimal Cycle:	56	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	1	2	0	2	0	0	0	0	0	0	1	0	0	0	0	2
Volume Module:												
Base Vol:	0	421	292	713	305	0	0	0	0	303	0	297
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	421	292	713	305	0	0	0	0	303	0	297
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	421	292	713	305	0	0	0	0	303	0	297
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	421	292	713	305	0	0	0	0	303	0	297
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	421	292	713	305	0	0	0	0	303	0	297
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	421	292	713	305	0	0	0	0	303	0	297
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.92	0.95	1.00	1.00	1.00	1.00	0.77	1.00	0.75
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	2.00
Final Sat.:	0	3610	1615	3502	3610	0	0	0	0	1461	0	2842
Capacity Analysis Module:												
Vol/Sat:	0.00	0.12	0.18	0.20	0.08	0.00	0.00	0.00	0.00	0.21	0.00	0.10
Crit Moves:			****	****						****		
Green/Cycle:	0.00	0.27	0.27	0.30	0.30	0.00	0.00	0.00	0.00	0.31	0.00	0.61
Volume/Cap:	0.00	0.43	0.67	0.67	0.28	0.00	0.00	0.00	0.00	0.67	0.00	0.17
Delay/Veh:	0.0	30.6	36.7	32.2	26.7	0.0	0.0	0.0	0.0	34.1	0.0	8.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	30.6	36.7	32.2	26.7	0.0	0.0	0.0	0.0	34.1	0.0	8.5
LOS by Move:	A	C	D	C	C	A	A	A	A	C	A	A
HCM2kAvgQ:	0	6	9	11	4	0	0	0	0	9	0	2

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #46 I-5 SB Ramps (NS) / Santa Ana Bl (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.786
Loss Time (sec):	12 (Y+R=4.0 sec)	Average Delay (sec/veh):	33.9
Optimal Cycle:	74	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	2	0	0	0	1	2	0	3	0	0	0	0	2	1	0
Volume Module:												
Base Vol:	0	0	0	351	0	306	528	953	0	0	1337	273
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	351	0	306	528	953	0	0	1337	273
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	351	0	306	528	953	0	0	1337	273
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	351	0	306	528	953	0	0	1337	273
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	351	0	306	528	953	0	0	1337	273
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	351	0	306	528	953	0	0	1337	273
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.85	0.92	0.91	1.00	1.00	0.89	0.89
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	2.00	3.00	0.00	0.00	2.49	0.51
Final Sat.:	0	0	0	3502	0	1615	3502	5187	0	0	4200	858
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.10	0.00	0.19	0.15	0.18	0.00	0.00	0.32	0.32
Crit Moves:						****		****				****
Green/Cycle:	0.00	0.00	0.00	0.24	0.00	0.24	0.23	0.23	0.00	0.00	0.41	0.41
Volume/Cap:	0.00	0.00	0.00	0.42	0.00	0.79	0.64	0.79	0.00	0.00	0.79	0.79
Delay/Veh:	0.0	0.0	0.0	32.3	0.0	45.7	36.4	39.4	0.0	0.0	28.0	28.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	32.3	0.0	45.7	36.4	39.4	0.0	0.0	28.0	28.0
LOS by Move:	A	A	A	C	A	D	D	D	A	A	C	C
HCM2kAvgQ:	0	0	0	5	0	11	8	12	0	0	17	17

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #47 I-5 NB Ramps (NS) / 17th St. (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	1.110
Loss Time (sec):	16 (Y+R=4.0 sec)	Average Delay (sec/veh):	73.3
Optimal Cycle:	100	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 1	0	0 1	1	0 0	0 1	1	0 3	0 1	0	0 2	1 0
Volume Module:												
Base Vol:	934	84	36	135	0	138	164	1545	447	0	2338	111
Growth Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
Initial Bse:	934	84	36	135	0	138	164	1545	447	0	2338	111
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	934	84	36	135	0	138	164	1545	447	0	2338	111
User Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		0.00	1.00 1.00		1.00
PHF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		0.00	1.00 1.00		1.00
PHF Volume:	934	84	36	135	0	138	164	1545	0	0	2338	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	934	84	36	135	0	138	164	1545	0	0	2338	111
PCE Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		0.00	1.00 1.00		1.00
MLF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		0.00	1.00 1.00		1.00
FinalVolume:	934	84	36	135	0	138	164	1545	0	0	2338	111
Saturation Flow Module:												
Sat/Lane:	1900 1900		1900	1900 1900		1900	1900 1900		1900	1900 1900		1900
Adjustment:	0.96 0.96		0.85	0.95 1.00		0.85	0.95 0.91		1.00	1.00 0.90		0.90
Lanes:	1.83 0.17		1.00	1.00 0.00		1.00	1.00 3.00		1.00	0.00 2.86		0.14
Final Sat.:	3333	300	1615	1805	0	1615	1805	5187	1900	0	4917	233
Capacity Analysis Module:												
Vol/Sat:	0.28 0.28		0.02	0.07 0.00		0.09	0.09 0.30		0.00	0.00 0.48		0.48
Crit Moves:	****					****	****				****	
Green/Cycle:	0.25 0.25		0.25	0.08 0.00		0.08	0.08 0.51		0.00	0.00 0.43		0.43
Volume/Cap:	1.11 1.11		0.09	0.97 0.00		1.11	1.11 0.58		0.00	0.00 1.11		1.11
Delay/Veh:	101.9	102	28.7	113.3	0.0	159.3	152.3	17.4	0.0	0.0	85.1	85.1
User DelAdj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
AdjDel/Veh:	101.9	102	28.7	113.3	0.0	159.3	152.3	17.4	0.0	0.0	85.1	85.1
LOS by Move:	F	F	C	F	A	F	F	B	A	A	F	F
HCM2kAvgQ:	26	26	1	8	0	9	10	12	0	0	42	42

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #48 I-5 NB Ramps (NS) / Grand Ave (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	1.673
Loss Time (sec):	12 (Y+R=4.0 sec)	Average Delay (sec/veh):	183.9
Optimal Cycle:	100	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	2	0 1	1	0 3	0 0	0	0 0	0 0	2	0 0	0 1
Volume Module:												
Base Vol:	1	2758	805	53	1736	0	0	0	0	812	0	978
Growth Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
Initial Bse:	1	2758	805	53	1736	0	0	0	0	812	0	978
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	2758	805	53	1736	0	0	0	0	812	0	978
User Adj:	1.00 1.00		0.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Adj:	1.00 1.00		0.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Volume:	1	2758	0	53	1736	0	0	0	0	812	0	978
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	2758	0	53	1736	0	0	0	0	812	0	978
PCE Adj:	1.00 1.00		0.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
MLF Adj:	1.00 1.00		0.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
FinalVolume:	1	2758	0	53	1736	0	0	0	0	812	0	978
Saturation Flow Module:												
Sat/Lane:	1900 1900		1900	1900 1900		1900	1900 1900		1900	1900 1900		1900
Adjustment:	0.91 0.91		1.00	0.95 0.91		1.00	1.00 1.00		1.00	0.92 1.00		0.85
Lanes:	0.01 2.99		1.00	1.00 3.00		0.00	0.00 0.00		0.00	2.00 0.00		1.00
Final Sat.:	2	5185	1900	1805	5187	0	0	0	0	3502	0	1615
Capacity Analysis Module:												
Vol/Sat:	0.53 0.53		0.00	0.03 0.33		0.00	0.00 0.00		0.00	0.23 0.00		0.61
Crit Moves:	****				****							****
Green/Cycle:	0.32 0.49		0.00	0.03 0.20		0.00	0.00 0.00		0.00	0.36 0.00		0.36
Volume/Cap:	1.67 1.08		0.00	1.08 1.67		0.00	0.00 0.00		0.00	0.64 0.00		1.67
Delay/Veh:	339.6	70.7	0.0	202.7	347	0.0	0.0	0.0	0.0	27.6	0.0	342.2
User DelAdj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
AdjDel/Veh:	339.6	70.7	0.0	202.7	347	0.0	0.0	0.0	0.0	27.6	0.0	342.2
LOS by Move:	F	E	A	F	F	A	A	A	A	C	A	F
HCM2kAvgQ:	81	45	0	4	52	0	0	0	0	11	0	79

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #49 Mortimer (N/S) / Santa Ana Blvd (E/W)

Average Delay (sec/veh): 15.5 Worst Case Level Of Service: E[39.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 1! 0 0			0 0 0 0 0			1 0 0 1 0		
Volume Module:												
Base Vol:	1	0	774	1	0	2	0	0	0	82	607	8
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	0	774	1	0	2	0	0	0	82	607	8
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	774	1	0	2	0	0	0	82	607	8
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	0	774	1	0	2	0	0	0	82	607	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	1	0	774	1	0	2	0	0	0	82	607	8
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	776	779	0	775	775	611	xxxx	xxxx	xxxxx	0	xxxx	xxxxx
Potent Cap.:	317	330	900	318	331	497	xxxx	xxxx	xxxxx	900	xxxx	xxxxx
Move Cap.:	294	299	900	41	301	497	xxxx	xxxx	xxxxx	900	xxxx	xxxxx
Volume/Cap:	0.00	0.00	0.86	0.02	0.00	0.00	xxxx	xxxx	xxxx	0.09	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.4	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	- RT
Shared Cap.:	xxxx	898	xxxxx	xxxx	106	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	11.0	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	28.3	xxxxx	xxxxx	39.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	D	*	*	E	*	*	*	*	*	*	*
ApproachDel:	28.3			39.8			xxxxxx			xxxxxx		
ApproachLOS:	D			E			*			*		

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #50 Mortimer (N/S) / 5th St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 1.167
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 69.7
Optimal Cycle: 0 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 1 0			0 0 1! 0 0			1 0 0 1 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	0	218	7	7	34	26	706	104	61	13	0	56
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	218	7	7	34	26	706	104	61	13	0	56
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	218	7	7	34	26	706	104	61	13	0	56
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	218	7	7	34	26	706	104	61	13	0	56
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	218	7	7	34	26	706	104	61	13	0	56
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	218	7	7	34	26	706	104	61	13	0	56
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.97	0.03	0.10	0.51	0.39	1.00	0.63	0.37	0.19	0.00	0.81
Final Sat.:	0	578	19	60	292	223	605	437	256	121	0	519
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.38	0.38	0.12	0.12	0.12	1.17	0.24	0.24	0.11	xxxx	0.11
Crit Moves:		****			****			****			****	
Delay/Veh:	0.0	12.5	12.5	9.9	9.9	9.9	113.6	9.5	9.5	9.0	0.0	9.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	12.5	12.5	9.9	9.9	9.9	113.6	9.5	9.5	9.0	0.0	9.0
LOS by Move:	*	B	B	A	A	A	F	A	A	A	*	A
ApproachDel:		12.5			9.9			93.9			9.0	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		12.5			9.9			93.9			9.0	
LOS by Appr:		B			A			F			A	
AllWayAvgQ:	0.6	0.6	0.6	0.1	0.1	0.1	17.6	0.3	0.3	0.1	0.1	0.1

Note: Queue reported is the number of cars per lane.

APPENDIX J
Mitigation Analysis Worksheets
For 2030 and 2035 With Project Conditions

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Scenario Report

Scenario:	2030WPAM
Command:	2030WP AM
Volume:	2030WPAM
Geometry:	Future WP
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in V/C
# 42 Grand Av (N/S) / Santa Ana Bl	B	xxxxx	0.625	B	xxxxx	0.625	+ 0.000

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #42 Grand Av (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.625
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Ovl				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0 2	1	0	1	0 3	0	2	2	0 1	0	2	0	1 0	1	0
Volume Module:																
Base Vol:	164	895	15		69	1368	1022		361	162	659		23	97	15	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	164	895	15		69	1368	1022		361	162	659		23	97	15	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	164	895	15		69	1368	1022		361	162	659		23	97	15	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	164	895	15		69	1368	1022		361	162	659		23	97	15	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	164	895	15		69	1368	1022		361	162	659		23	97	15	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	164	895	15		69	1368	1022		361	162	659		23	97	15	
OvlAdjVol:											331					
Saturation Flow Module:																
Sat/Lane:	1700	1700	1700		1700	1700	1700		1700	1700	1700		1700	1700	1700	
Adjustment:	0.94	1.00	1.00		0.94	1.00	0.94		0.94	1.00	0.94		1.00	1.00	1.00	
Lanes:	1.00	2.95	0.05		1.00	3.00	2.00		2.00	1.00	2.00		0.34	1.44	0.22	
Final Sat.:	1598	5016	84		1598	5100	3196		3196	1700	3196		579	2443	378	
Capacity Analysis Module:																
Vol/Sat:	0.10	0.18	0.18		0.04	0.27	0.32		0.11	0.10	0.21		0.04	0.04	0.04	
OvlAdjV/S:											0.10					
Crit Moves:	****						****		****					****		

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Scenario Report

Scenario:	2030WPPM
Command:	2030WP PM
Volume:	2030WPPM
Geometry:	Future WP
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in V/C
# 42 Grand Av (N/S) / Santa Ana Bl	C	xxxxx	0.773	C	xxxxx	0.773	+ 0.000

Santa Ana Renaissance Specific Plan Traffic Study
2030 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #42 Grand Av (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.773
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Ovl				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1 0	2	1 0		1 0	3 0	2		2 0	1 0	2		0 1	0	1 0	
Volume Module:																
Base Vol:	300	2038	13		53	968	965		433	120	444		43	210	81	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	300	2038	13		53	968	965		433	120	444		43	210	81	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	300	2038	13		53	968	965		433	120	444		43	210	81	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	300	2038	13		53	968	965		433	120	444		43	210	81	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	300	2038	13		53	968	965		433	120	444		43	210	81	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	300	2038	13		53	968	965		433	120	444		43	210	81	
OvlAdjVol:											0					
Saturation Flow Module:																
Sat/Lane:	1700	1700	1700		1700	1700	1700		1700	1700	1700		1700	1700	1700	
Adjustment:	0.94	1.00	1.00		0.94	1.00	0.94		0.94	1.00	0.94		1.00	1.00	1.00	
Lanes:	1.00	2.98	0.02		1.00	3.00	2.00		2.00	1.00	2.00		0.26	1.26	0.48	
Final Sat.:	1598	5068	32		1598	5100	3196		3196	1700	3196		438	2138	825	
Capacity Analysis Module:																
Vol/Sat:	0.19	0.40	0.40		0.03	0.19	0.30		0.14	0.07	0.14		0.10	0.10	0.10	
OvlAdjV/S:											0.00					
Crit Moves:	****						****		****				****			

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM
With Mitigation

Scenario Report

Scenario:	2035WPAM
Command:	2035WP AM
Volume:	2035WPAM
Geometry:	Future WP
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM
With Mitigation

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 22 Main St (N/S) / 1st St (E/W)	D	xxxxx	0.860	D	xxxxx	0.860	+ 0.000 V/C
# 30 Lacy st (N/S) / Santa Ana Bl (	C	xxxxx	0.753	C	xxxxx	0.753	+ 0.000 V/C
# 33 Lacy St (N/S) / 1st St (E/W)	A	xxxxx	0.483	A	xxxxx	0.483	+ 0.000 V/C
# 34 Santiago St (N/S) / Washington	C	xxxxx	0.705	C	xxxxx	0.705	+ 0.000 V/C
# 35 Santiago St (N/S) / Civic Cent	C	xxxxx	0.788	C	xxxxx	0.788	+ 0.000 V/C
# 39 Santiago St (N/S) / 4th (E/W)	A	xxxxx	0.538	A	xxxxx	0.538	+ 0.000 V/C
# 40 Standard Av (N/S) / 1st St (E/	C	xxxxx	0.768	C	xxxxx	0.768	+ 0.000 V/C
# 42 Grand Av (N/S) / Santa Ana Bl	C	xxxxx	0.785	C	xxxxx	0.785	+ 0.000 V/C
# 44 Grand Av (N/S) / 1st St (E/W)	D	xxxxx	0.843	D	xxxxx	0.843	+ 0.000 V/C
# 48 I-5 NB Ramps (NS) / Grand Ave	C	25.5	0.911	C	25.5	0.911	+ 0.000 D/V

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM
With Mitigation

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #22 Main St (N/S) / 1st St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.860
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	68	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0 2	0 1	2	0 2	0 1	1	0 2	1 0	1	0 2	1 0
Volume Module:												
Base Vol:	227	882	95	207	1059	135	152	1671	128	119	1148	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	227	882	95	207	1059	135	152	1671	128	119	1148	90
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	227	882	95	207	1059	135	152	1671	128	119	1148	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	227	882	95	207	1059	135	152	1671	128	119	1148	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	227	882	95	207	1059	135	152	1671	128	119	1148	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	227	882	95	207	1059	135	152	1671	128	119	1148	90
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	1.00	2.79	0.21	1.00	2.78	0.22
Final Sat.:	3196	3400	1598	3196	3400	1598	1598	4737	363	1598	4729	371
Capacity Analysis Module:												
Vol/Sat:	0.07	0.26	0.06	0.06	0.31	0.08	0.10	0.35	0.35	0.07	0.24	0.24
Crit Moves:	****				****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM
With Mitigation

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #30 Lacy st (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.753
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 0	1 0	1	0 0	1 0	1	0 0	1 0	1	0 0	1 0
Volume Module:												
Base Vol:	4	58	67	6	16	21	11	463	11	7	1000	52
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	58	67	6	16	21	11	463	11	7	1000	52
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	4	58	67	6	16	21	11	463	11	7	1000	52
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	58	67	6	16	21	11	463	11	7	1000	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	58	67	6	16	21	11	463	11	7	1000	52
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	4	58	67	6	16	21	11	463	11	7	1000	52
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.46	0.54	1.00	0.43	0.57	1.00	0.98	0.02	1.00	0.95	0.05
Final Sat.:	1598	789	911	1598	735	965	1598	1661	39	1598	1616	84
Capacity Analysis Module:												
Vol/Sat:	0.00	0.07	0.07	0.00	0.02	0.02	0.01	0.28	0.28	0.00	0.62	0.62
Crit Moves:		****			****			****			****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM
With Mitigation

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #33 Lacy St (N/S) / 1st St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.483
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 23 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Permitted				Permitted				Protected				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1!	0 0	0	0	1!	0 0	1	0	3	0 0	0	0	2	1 0
Volume Module:																
Base Vol:	0	0	0	11	1	98	204	1901	0	0	1200	29				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	0	0	0	11	1	98	204	1901	0	0	1200	29				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	0	0	0	11	1	98	204	1901	0	0	1200	29				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	0	0	0	11	1	98	204	1901	0	0	1200	29				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Reduced Vol:	0	0	0	11	1	98	204	1901	0	0	1200	29				
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
FinalVolume:	0	0	0	11	1	98	204	1901	0	0	1200	29				
Saturation Flow Module:																
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700				
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00	0.94	0.94	1.00	1.00				
Lanes:	0.00	1.00	0.00	0.10	0.01	0.89	1.00	3.00	0.00	0.00	2.93	0.07				
Final Sat.:	0	1700	0	170	15	1515	1598	5100	0	0	4980	120				
Capacity Analysis Module:																
Vol/Sat:	0.00	0.00	0.00	0.01	0.06	0.06	0.13	0.37	0.00	0.00	0.24	0.24				
Crit Moves:					****		****				****					

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM
With Mitigation

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #34 Santiago St (N/S) / Washington Av (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.705
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 38 Level Of Service: C

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Permitted					Permitted				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	0	1	1	0	1	0	1	1	0	0	1	0	1	0	0	1	0
Volume Module:																				
Base Vol:	67	341	145	26	593	170	147	125	69	193	256	36								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	67	341	145	26	593	170	147	125	69	193	256	36								
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	67	341	145	26	593	170	147	125	69	193	256	36								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	67	341	145	26	593	170	147	125	69	193	256	36								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	67	341	145	26	593	170	147	125	69	193	256	36								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
FinalVolume:	67	341	145	26	593	170	147	125	69	193	256	36								
Saturation Flow Module:																				
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700								
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00								
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.64	0.36	1.00	0.88	0.12								
Final Sat.:	1598	1700	1598	1598	1700	1598	1598	1095	605	1598	1490	210								
Capacity Analysis Module:																				
Vol/Sat:	0.04	0.20	0.09	0.02	0.35	0.11	0.09	0.11	0.11	0.12	0.17	0.17								
Crit Moves:	****				****		****				****									

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM
With Mitigation

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #35 Santiago St (N/S) / Civic Center Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.788
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	412	455	28	21	758	266	169	59	245	52	69	17
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	412	455	28	21	758	266	169	59	245	52	69	17
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	412	455	28	21	758	266	169	59	245	52	69	17
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	412	455	28	21	758	266	169	59	245	52	69	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	412	455	28	21	758	266	169	59	245	52	69	17
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	412	455	28	21	758	266	169	59	245	52	69	17
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.88	0.12	1.00	1.48	0.52	1.00	0.19	0.81	1.00	0.80	0.20
Final Sat.:	1598	3203	197	1598	2517	883	1598	330	1370	1598	1364	336
Capacity Analysis Module:												
Vol/Sat:	0.26	0.14	0.14	0.01	0.30	0.30	0.11	0.18	0.18	0.03	0.05	0.05
Crit Moves:	****				****			****				

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM
With Mitigation

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #39 Santiago St (N/S) / 4th (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.538
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0 1	0	1 0	1	0
Volume Module:												
Base Vol:	64	98	264	19	137	214	10	960	73	12	505	71
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	64	98	264	19	137	214	10	960	73	12	505	71
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	64	98	264	19	137	214	10	960	73	12	505	71
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	64	98	264	19	137	214	10	960	73	12	505	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	64	98	264	19	137	214	10	960	73	12	505	71
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	64	98	264	19	137	214	10	960	73	12	505	71
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.86	0.14	1.00	1.75	0.25
Final Sat.:	1598	1700	1598	1598	1700	1598	1598	3160	240	1598	2981	419
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.17	0.01	0.08	0.13	0.01	0.30	0.30	0.01	0.17	0.17
Crit Moves:			****	****				****		****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM
With Mitigation

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #40 Standard Av (N/S) / 1st St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.768
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 46 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Permitted				Permitted				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0	0	1 0	0	0	1!	0 0	1	0	2	1 0	1	0	2	1 0
Volume Module:																
Base Vol:	85	200	141		49	323	8		107	1821	172		81	1228	14	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	85	200	141		49	323	8		107	1821	172		81	1228	14	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	85	200	141		49	323	8		107	1821	172		81	1228	14	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	85	200	141		49	323	8		107	1821	172		81	1228	14	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	85	200	141		49	323	8		107	1821	172		81	1228	14	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	85	200	141		49	323	8		107	1821	172		81	1228	14	
Saturation Flow Module:																
Sat/Lane:	1700	1700	1700		1700	1700	1700		1700	1700	1700		1700	1700	1700	
Adjustment:	0.94	1.00	1.00		1.00	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	0.59	0.41		0.13	0.85	0.02		1.00	2.74	0.26		1.00	2.97	0.03	
Final Sat.:	1598	997	703		219	1445	36		1598	4660	440		1598	5043	57	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.20	0.20		0.03	0.22	0.22		0.07	0.39	0.39		0.05	0.24	0.24	
Crit Moves:	****					****				****				****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM
With Mitigation

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #42 Grand Av (N/S) / Santa Ana Bl (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.785
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 49 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Ovl				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0	2	1 0	1	0	3	0 2	2	0	1	0 2	0	1	0	1 0
Volume Module:																
Base Vol:	192	1052	31		140	2161	1203		448	231	765		27	113	34	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	192	1052	31		140	2161	1203		448	231	765		27	113	34	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	192	1052	31		140	2161	1203		448	231	765		27	113	34	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	192	1052	31		140	2161	1203		448	231	765		27	113	34	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	192	1052	31		140	2161	1203		448	231	765		27	113	34	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	192	1052	31		140	2161	1203		448	231	765		27	113	34	
OvlAdjVol:											381					
Saturation Flow Module:																
Sat/Lane:	1700	1700	1700		1700	1700	1700		1700	1700	1700		1700	1700	1700	
Adjustment:	0.94	1.00	1.00		0.94	1.00	0.94		0.94	1.00	0.94		1.00	1.00	1.00	
Lanes:	1.00	2.91	0.09		1.00	3.00	2.00		2.00	1.00	2.00		0.31	1.30	0.39	
Final Sat.:	1598	4954	146		1598	5100	3196		3196	1700	3196		528	2208	664	
Capacity Analysis Module:																
Vol/Sat:	0.12	0.21	0.21		0.09	0.42	0.38		0.14	0.14	0.24		0.05	0.05	0.05	
OvlAdjV/S:											0.12					
Crit Moves:	****					****			****					****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM
With Mitigation

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #44 Grand Av (N/S) / 1st St (E/W)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.843
Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 63 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	2	0 3	0	1	2	0 3	0	1	2	0 3	1	0	2	0 2	1	0
Volume Module:																
Base Vol:	364	695	89		148	1620	137		354	1291	353		382	789	74	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	364	695	89		148	1620	137		354	1291	353		382	789	74	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	364	695	89		148	1620	137		354	1291	353		382	789	74	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	364	695	89		148	1620	137		354	1291	353		382	789	74	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	364	695	89		148	1620	137		354	1291	353		382	789	74	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	364	695	89		148	1620	137		354	1291	353		382	789	74	
Saturation Flow Module:																
Sat/Lane:	1700	1700	1700		1700	1700	1700		1700	1700	1700		1700	1700	1700	
Adjustment:	0.94	1.00	0.94		0.94	1.00	0.94		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	2.00	3.00	1.00		2.00	3.00	1.00		2.00	3.14	0.86		2.00	2.74	0.26	
Final Sat.:	3196	5100	1598		3196	5100	1598		3196	5340	1460		3196	4663	437	
Capacity Analysis Module:																
Vol/Sat:	0.11	0.14	0.06		0.05	0.32	0.09		0.11	0.24	0.24		0.12	0.17	0.17	
Crit Moves:	****					****				****				****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project AM
With Mitigation

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #48 I-5 NB Ramps (NS) / Grand Ave (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.911
Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh): 25.5
Optimal Cycle: 100 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Permitted				Permitted				Split Phase				Split Phase			
Rights:	Ignore				Include				Include				Ovl			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	1 2	0	1	1	0 3	0	0	0	0 0	0	0	2	0 0	0	2
Volume Module:																
Base Vol:	4	1063	566		108	2692	0		0	0	0		991	0	321	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	4	1063	566		108	2692	0		0	0	0		991	0	321	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	4	1063	566		108	2692	0		0	0	0		991	0	321	
User Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	4	1063	0		108	2692	0		0	0	0		991	0	321	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	4	1063	0		108	2692	0		0	0	0		991	0	321	
PCE Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	4	1063	0		108	2692	0		0	0	0		991	0	321	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.83	0.83	1.00		0.23	0.91	1.00		1.00	1.00	1.00		0.92	1.00	0.75	
Lanes:	0.01	2.99	1.00		1.00	3.00	0.00		0.00	0.00	0.00		2.00	0.00	2.00	
Final Sat.:	18	4702	1900		435	5187	0		0	0	0		3502	0	2842	
Capacity Analysis Module:																
Vol/Sat:	0.23	0.23	0.00		0.25	0.52	0.00		0.00	0.00	0.00		0.28	0.00	0.11	
Crit Moves:						****								****		
Green/Cycle:	0.57	0.57	0.00		0.57	0.57	0.00		0.00	0.00	0.00		0.31	0.00	0.31	
Volume/Cap:	0.40	0.40	0.00		0.44	0.91	0.00		0.00	0.00	0.00		0.91	0.00	0.36	
Delay/Veh:	12.1	12.1	0.0		13.6	24.1	0.0		0.0	0.0	0.0		44.5	0.0	27.1	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	12.1	12.1	0.0		13.6	24.1	0.0		0.0	0.0	0.0		44.5	0.0	27.1	
LOS by Move:	B	B	A		B	C	A		A	A	A		D	A	C	
HCM2kAvgQ:	7	7	0		2	31	0		0	0	0		19	0	5	

Note: Queue reported is the number of cars per lane.

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Scenario Report

Scenario:	2035WPPM
Command:	2035WP PM
Volume:	2035WPPM
Geometry:	Future WP
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Del/ Veh	V/ C	Future LOS	Del/ Veh	V/ C	Change in
# 22 Main St (N/S) / 1st St (E/W)	E	xxxxx	0.979	E	xxxxx	0.979	+ 0.000 V/C
# 30 Lacy st (N/S) / Santa Ana Bl (	B	xxxxx	0.694	B	xxxxx	0.694	+ 0.000 V/C
# 33 Lacy St (N/S) / 1st St (E/W)	B	xxxxx	0.653	B	xxxxx	0.653	+ 0.000 V/C
# 34 Santiago St (N/S) / Washington	C	xxxxx	0.763	C	xxxxx	0.763	+ 0.000 V/C
# 35 Santiago St (N/S) / Civic Cent	C	xxxxx	0.798	C	xxxxx	0.798	+ 0.000 V/C
# 39 Santiago St (N/S) / 4th (E/W)	B	xxxxx	0.663	B	xxxxx	0.663	+ 0.000 V/C
# 40 Standard Av (N/S) / 1st St (E/	D	xxxxx	0.823	D	xxxxx	0.823	+ 0.000 V/C
# 42 Grand Av (N/S) / Santa Ana Bl	F	xxxxx	1.015	F	xxxxx	1.015	+ 0.000 V/C
# 44 Grand Av (N/S) / 1st St (E/W)	D	xxxxx	0.842	D	xxxxx	0.842	+ 0.000 V/C
# 48 I-5 NB Ramps (NS) / Grand Ave	C	35.0	0.995	C	35.0	0.995	+ 0.000 D/V

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #22 Main St (N/S) / 1st St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.979
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0 2	0 1	2	0 2	0 1	1	0 2	1 0	1	0 2	1 0
Volume Module:												
Base Vol:	253	1227	122	275	1126	193	226	1451	112	144	1540	199
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	253	1227	122	275	1126	193	226	1451	112	144	1540	199
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	253	1227	122	275	1126	193	226	1451	112	144	1540	199
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	253	1227	122	275	1126	193	226	1451	112	144	1540	199
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	253	1227	122	275	1126	193	226	1451	112	144	1540	199
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	253	1227	122	275	1126	193	226	1451	112	144	1540	199
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	1.00	2.79	0.21	1.00	2.66	0.34
Final Sat.:	3196	3400	1598	3196	3400	1598	1598	4735	365	1598	4516	584
Capacity Analysis Module:												
Vol/Sat:	0.08	0.36	0.08	0.09	0.33	0.12	0.14	0.31	0.31	0.09	0.34	0.34
Crit Moves:		****		****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #30 Lacy st (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.694
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 0	1 0	1	0 0	1 0	1	0 0	1 0	1	0 0	1 0
Volume Module:												
Base Vol:	20	49	25	39	62	17	3	901	9	79	861	14
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	49	25	39	62	17	3	901	9	79	861	14
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	49	25	39	62	17	3	901	9	79	861	14
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	49	25	39	62	17	3	901	9	79	861	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	49	25	39	62	17	3	901	9	79	861	14
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	49	25	39	62	17	3	901	9	79	861	14
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.66	0.34	1.00	0.78	0.22	1.00	0.99	0.01	1.00	0.98	0.02
Final Sat.:	1598	1126	574	1598	1334	366	1598	1683	17	1598	1673	27
Capacity Analysis Module:												
Vol/Sat:	0.01	0.04	0.04	0.02	0.05	0.05	0.00	0.54	0.54	0.05	0.51	0.51
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #33 Lacy St (N/S) / 1st St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.653
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	0 0	0 0	1!	0 0	1 0	3	0 0	0 0	2	1 0
Volume Module:												
Base Vol:	0	2	0	11	1	151	216	1780	0	0	1849	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2	0	11	1	151	216	1780	0	0	1849	47
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	2	0	11	1	151	216	1780	0	0	1849	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2	0	11	1	151	216	1780	0	0	1849	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2	0	11	1	151	216	1780	0	0	1849	47
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2	0	11	1	151	216	1780	0	0	1849	47
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	1.00	1.00	1.00	0.94	1.00	0.94	0.94	1.00	1.00
Lanes:	0.00	1.00	0.00	0.07	0.01	0.92	1.00	3.00	0.00	0.00	2.93	0.07
Final Sat.:	0	1700	0	115	10	1575	1598	5100	0	0	4974	126
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.01	0.10	0.10	0.14	0.35	0.00	0.00	0.37	0.37
Crit Moves:	****			****			****				****	

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #34 Santiago St (N/S) / Washington Av (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.763
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	0 1	1 0	1	0 1	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	96	591	248	30	539	155	333	222	49	103	171	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	96	591	248	30	539	155	333	222	49	103	171	46
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	96	591	248	30	539	155	333	222	49	103	171	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	96	591	248	30	539	155	333	222	49	103	171	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	96	591	248	30	539	155	333	222	49	103	171	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	96	591	248	30	539	155	333	222	49	103	171	46
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.82	0.18	1.00	0.79	0.21
Final Sat.:	1598	1700	1598	1598	1700	1598	1598	1393	307	1598	1340	360
Capacity Analysis Module:												
Vol/Sat:	0.06	0.35	0.16	0.02	0.32	0.10	0.21	0.16	0.16	0.06	0.13	0.13
Crit Moves:	****				****		****				****	

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #35 Santiago St (N/S) / Civic Center Dr (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.798
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	265	719	61	26	666	179	375	68	500	58	42	21
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	265	719	61	26	666	179	375	68	500	58	42	21
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	265	719	61	26	666	179	375	68	500	58	42	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	265	719	61	26	666	179	375	68	500	58	42	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	265	719	61	26	666	179	375	68	500	58	42	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	265	719	61	26	666	179	375	68	500	58	42	21
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.84	0.16	1.00	1.58	0.42	1.00	0.12	0.88	1.00	0.67	0.33
Final Sat.:	1598	3134	266	1598	2680	720	1598	204	1496	1598	1133	567
Capacity Analysis Module:												
Vol/Sat:	0.17	0.23	0.23	0.02	0.25	0.25	0.23	0.33	0.33	0.04	0.04	0.04
Crit Moves:	****			****			****					

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #39 Santiago St (N/S) / 4th (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.663
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	1	326	133	112	204	170	50	911	40	205	835	169
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	326	133	112	204	170	50	911	40	205	835	169
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	326	133	112	204	170	50	911	40	205	835	169
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	326	133	112	204	170	50	911	40	205	835	169
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	326	133	112	204	170	50	911	40	205	835	169
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	326	133	112	204	170	50	911	40	205	835	169
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.42	0.58	1.00	1.09	0.91	1.00	1.92	0.08	1.00	1.66	0.34
Final Sat.:	1598	2415	985	1598	1855	1545	1598	3257	143	1598	2828	572
Capacity Analysis Module:												
Vol/Sat:	0.00	0.14	0.13	0.07	0.11	0.11	0.03	0.28	0.28	0.13	0.30	0.30
Crit Moves:		****		****				****		****		

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #40 Standard Av (N/S) / 1st St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.823
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	1 0	0 0	1! 0	0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	248	370	173	22	284	32	100	1655	102	119	1739	15
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	248	370	173	22	284	32	100	1655	102	119	1739	15
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	248	370	173	22	284	32	100	1655	102	119	1739	15
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	248	370	173	22	284	32	100	1655	102	119	1739	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	248	370	173	22	284	32	100	1655	102	119	1739	15
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	248	370	173	22	284	32	100	1655	102	119	1739	15
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.68	0.32	0.07	0.84	0.09	1.00	2.83	0.17	1.00	2.97	0.03
Final Sat.:	1598	1158	542	111	1428	161	1598	4804	296	1598	5056	44
Capacity Analysis Module:												
Vol/Sat:	0.16	0.32	0.32	0.01	0.20	0.20	0.06	0.34	0.34	0.07	0.34	0.34
Crit Moves:	****			****			****			****		

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #42 Grand Av (N/S) / Santa Ana Bl (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	1.015
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	1 0	1 0	3	0 2	2	0	1 0 2	0	1	0 1 0
Volume Module:												
Base Vol:	346	2707	59	186	1425	1111	527	242	515	109	246	124
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	346	2707	59	186	1425	1111	527	242	515	109	246	124
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	346	2707	59	186	1425	1111	527	242	515	109	246	124
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	346	2707	59	186	1425	1111	527	242	515	109	246	124
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	346	2707	59	186	1425	1111	527	242	515	109	246	124
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	346	2707	59	186	1425	1111	527	242	515	109	246	124
OvlAdjVol:									0			
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	1.00	0.94	1.00	0.94	0.94	1.00	0.94	1.00	1.00	1.00
Lanes:	1.00	2.94	0.06	1.00	3.00	2.00	2.00	1.00	2.00	0.45	1.03	0.52
Final Sat.:	1598	4991	109	1598	5100	3196	3196	1700	3196	774	1746	880
Capacity Analysis Module:												
Vol/Sat:	0.22	0.54	0.54	0.12	0.28	0.35	0.16	0.14	0.16	0.14	0.14	0.14
OvlAdjV/S:									0.00			
Crit Moves:		****			****			****				****

Santa Ana Renaissance Specific Plan Traffic Study
2035 With Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #44 Grand Av (N/S) / 1st St (E/W)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.842
Loss Time (sec):	5 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0 3	0 1	2	0 3	0 1	2	0 3	1 0	2	0 2	1 0
Volume Module:												
Base Vol:	537	2022	185	123	1317	113	230	1506	319	284	1400	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	537	2022	185	123	1317	113	230	1506	319	284	1400	70
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	537	2022	185	123	1317	113	230	1506	319	284	1400	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	537	2022	185	123	1317	113	230	1506	319	284	1400	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	537	2022	185	123	1317	113	230	1506	319	284	1400	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	537	2022	185	123	1317	113	230	1506	319	284	1400	70
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	1.00	0.94	0.94	1.00	0.94	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.30	0.70	2.00	2.86	0.14
Final Sat.:	3196	5100	1598	3196	5100	1598	3196	5611	1189	3196	4857	243
Capacity Analysis Module:												
Vol/Sat:	0.17	0.40	0.12	0.04	0.26	0.07	0.07	0.27	0.27	0.09	0.29	0.29
Crit Moves:		****		****				****		****		

Santa Ana Renaissance Specific Plan Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #48 I-5 NB Ramps (NS) / Grand Ave (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.995
Loss Time (sec):	12 (Y+R=4.0 sec)	Average Delay (sec/veh):	35.0
Optimal Cycle:	100	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Ignore			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 3	0 1	1	0 3	0 0	0	0 0	0 0	2	0 0	0 2
Volume Module:												
Base Vol:	0	2758	805	53	1736	0	0	0	0	812	0	978
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2758	805	53	1736	0	0	0	0	812	0	978
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	2758	805	53	1736	0	0	0	0	812	0	978
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2758	0	53	1736	0	0	0	0	812	0	978
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2758	0	53	1736	0	0	0	0	812	0	978
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2758	0	53	1736	0	0	0	0	812	0	978
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	1.00	0.08	0.91	1.00	1.00	1.00	1.00	0.92	1.00	0.75
Lanes:	0.00	3.00	1.00	1.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
Final Sat.:	0	5187	1900	143	5187	0	0	0	0	3502	0	2842
Capacity Analysis Module:												
Vol/Sat:	0.00	0.53	0.00	0.37	0.33	0.00	0.00	0.00	0.00	0.23	0.00	0.34
Crit Moves:		****										****
Green/Cycle:	0.00	0.53	0.00	0.53	0.53	0.00	0.00	0.00	0.00	0.35	0.00	0.35
Volume/Cap:	0.00	1.00	0.00	0.70	0.63	0.00	0.00	0.00	0.00	0.67	0.00	1.00
Delay/Veh:	0.0	39.1	0.0	41.8	16.8	0.0	0.0	0.0	0.0	29.3	0.0	60.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	39.1	0.0	41.8	16.8	0.0	0.0	0.0	0.0	29.3	0.0	60.1
LOS by Move:	A	D	A	D	B	A	A	A	A	C	A	E
HCM2kAvgQ:	0	39	0	3	14	0	0	0	0	12	0	24

Note: Queue reported is the number of cars per lane.

APPENDIX K
Intersection Improvements

Table K-1 – Intersection Improvements

Intersection	Approach	Existing					2030 Without Project					2030 With Project					2035 Without Project					2035 With Project				
		Approach Lanes					Approach Lanes					Approach Lanes					Approach Lanes					Approach Lanes				
		L	TL	T	TR	R	L	TL	T	TR	R	L	TL	T	TR	R	L	TL	T	TR	R	L	TL	T	TR	R
Grand Avenue at I-5 NB Ramps	NB	0	0	2	0	1	0	0	3	0	1	0	0	3	0	1	0	0	3	0	1	0	0	3	0	1
	SB	1	0	3	0	0	1	0	3	0	0	1	0	3	0	0	1	0	3	0	0	1	0	3	0	0
	EB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	WB	2	0	0	0	1	2	0	0	0	1	2	0	0	0	1	2	0	0	0	1	2	0	0	0	1
Grand Avenue at Santa Ana Boulevard	NB	1	0	2	1	0	1	0	2	1	0	1	0	2	1	0	1	0	2	1	0	1	0	2	1	0
	SB	1	0	2	0	2	1	0	3	0	2	1	0	3	0	2	1	0	3	0	2	1	0	3	0	2
	EB	2	0	1	0	2	2	0	1	0	2	2	0	1	0	2	2	0	1	0	2	2	0	1	0	2
	WB	0	1	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1	0	1	0
Grand Avenue at 4th Street	NB	1	0	2	0	1	1	0	3	0	1	1	0	3	0	1	1	0	3	0	1	1	0	3	0	1
	SB	1	0	2	0	1	1	0	2	1	0	1	0	2	1	0	1	0	2	1	0	1	0	2	1	0
	EB	1	0	1	1	0	1	0	1	1	0	1	0	1	1	0	1	0	1	1	0	1	0	1	1	0
	WB	1	0	2	0	1	1	0	2	0	1	1	0	2	0	1	1	0	2	0	1	1	0	2	0	1
Grand Avenue at 1st Street	NB	1	0	2	0	1	2	0	2	1	0	2	0	2	1	0	2	0	2	1	0	2	0	2	1	0
	SB	1	0	2	0	1	2	0	3	0	1	2	0	3	0	1	2	0	3	0	1	2	0	3	0	1
	EB	2	0	2	1	0	2	0	2	1	0	2	0	2	1	0	2	0	2	1	0	2	0	2	1	0
	WB	2	0	1	1	0	2	0	2	0	1	2	0	2	0	1	2	0	2	0	1	2	0	2	0	1
Santiago Street at Santa Ana Boulevard	NB	1	0	1	0	1	1	0	1	0	1	1	0	2	0	1	1	0	1	0	1	1	0	2	0	1
	SB	1	0	1	0	1	1	0	1	0	1	1	0	2	0	1	1	0	1	0	1	1	0	2	0	1
	EB	1	0	1	1	0	1	0	1	1	0	1	0	1	1	0	1	0	1	1	0	1	0	1	1	0
	WB	1	0	2	0	1	1	0	2	0	1	1	0	2	0	1	1	0	2	0	1	1	0	2	0	1
Santiago Street at Brown Street	NB	0	0	0	1	0	0	0	0	1	0	0	1	1	1	0	0	0	0	1	0	0	1	1	1	0
	SB	0	0	0	1	0	0	0	0	1	0	0	1	1	1	0	0	0	0	1	0	0	1	1	1	0
	EB	0	0	0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	0	1	1	0	0	1	0
	WB	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1
Santiago Street at 6th Street	NB	0	0	0	0	0	0	1	0	1	0	0	1	1	1	0	0	1	0	1	0	0	1	1	1	0
	SB	0	0	0	0	0	0	1	0	1	0	0	1	1	1	0	0	1	0	1	0	0	1	1	1	0
	EB	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1
	WB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santiago Street at 4th Street	NB	0	1			0	0	1			0	0	1	1	1	0	0	1			0	0	1	1	1	0
	SB	0	0	0	0	0	0	0	0	0	0	1	0	2	1	0	0	0	0	0	0	1	0	2	1	0
	EB	0	1	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1	0	1	0
	WB	0	1	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1	0	1	0

APPENDIX L
Alternative Scenarios

Table L-1 – Determination of Significant Impacts
Future 2035 Peak Hour Intersection Conditions
(ICU Method) – 25% Trip Reduction

Intersection	AM Peak Hour				PM Peak Hour			
	2035 NP (ICU / Level of Service)	2035 WP (ICU / Level of Service)	Increase / Decrease	Significant Impact	2035 NP (ICU / Level of Service)	2035 WP (ICU / Level of Service)	Increase / Decrease	Significant Impact
Signalized Intersections (Using ICU Method)								
Flower St. at Civic Center Dr.	0.789 / C	0.785 / C	-0.004	NO	1.138 / F	1.144 / F	0.006	NO
Flower St. at Santa Ana Blvd.	0.685 / B	0.692 / B	0.007	NO	0.694 / B	0.7 / C	0.006	NO
Parton St. at Santa Ana Blvd.	0.316 / A	0.314 / A	-0.002	NO	0.428 / A	0.432 / A	0.004	NO
Ross St. at Civic Center Dr.	0.634 / B	0.648 / B	0.014	NO	0.564 / A	0.586 / A	0.022	NO
Ross St. at Santa Ana Blvd.	0.581 / A	0.582 / A	0.001	NO	0.668 / B	0.684 / B	0.016	NO
Broadway at Civic Center Dr.	0.721 / C	0.736 / C	0.015	NO	0.743 / C	0.752 / C	0.009	NO
Broadway at Santa Ana Blvd.	0.595 / A	0.612 / B	0.017	NO	0.612 / B	0.622 / B	0.010	NO
Broadway at 5th St.	0.399 / A	0.403 / A	0.004	NO	0.620 / B	0.639 / B	0.019	NO
Broadway at 4th St.	0.449 / A	0.47 / A	0.021	NO	0.610 / B	0.641 / B	0.031	NO
Broadway at 3rd St.	0.406 / A	0.408 / A	0.002	NO	0.803 / D	0.825 / D	0.022	NO
Broadway at 1st St.	0.779 / C	0.778 / C	-0.001	NO	0.844 / D	0.862 / D	0.018	NO
Sycamore St. at Civic Center Dr.	0.484 / A	0.498 / A	0.014	NO	0.573 / A	0.596 / A	0.023	NO
Main St. at Civic Center Dr.	0.875 / D	0.893 / D	0.018	NO	0.883 / D	0.923 / E	0.040	NO
Main St. at Santa Ana Blvd.	0.799 / C	0.807 / D	0.008	NO	0.836 / D	0.86 / D	0.024	NO
Main St. at 5th St.	0.611 / B	0.62 / B	0.009	NO	0.812 / D	0.835 / D	0.023	NO
Main St. at 4th St.	0.613 / B	0.644 / B	0.031	NO	0.776 / C	0.828 / D	0.052	NO
Main St. at 3rd St.	0.533 / A	0.552 / A	0.019	NO	0.694 / B	0.712 / C	0.018	NO
Main St. at 1st St.	0.918 / E	0.925 / E	0.007	NO	1.013 / F	1.077 / F	0.064	**YES**
Bush St. at Santa Ana Blvd.	0.335 / A	0.343 / A	0.008	NO	0.462 / A	0.466 / A	0.004	NO
Bush St. at 5th St.	0.297 / A	0.296 / A	-0.001	NO	0.560 / A	0.573 / A	0.013	NO
Bush St. at 4th St.	0.347 / A	0.355 / A	0.008	NO	0.576 / A	0.596 / A	0.020	NO
French St. at 4th St.	0.342 / A	0.354 / A	0.012	NO	0.543 / A	0.562 / A	0.019	NO
Lacy St. at 4th St.	0.508 / A	0.475 / A	-0.033	NO	0.751 / C	0.798 / C	0.047	NO
Santiago St. at Santa Ana Blvd.	0.904 / E	0.858 / D	-0.046	NO	0.993 / E	0.922 / E	-0.071	NO
Standard St. at 1st St.	0.940 / E	0.953 / E	0.013	**YES**	0.970 / E	0.984 / E	0.014	**YES**

Intersection	AM Peak Hour				PM Peak Hour			
	2035 NP (ICU / Level of Service)	**2035 WP (ICU / Level of Service)**	**Increase / Decrease**	**Significant Impact**	**2035 NP (ICU / Level of Service)**	**2035 WP (ICU / Level of Service)**	**Increase / Decrease**	**Significant Impact**
Grand Ave. at Santa Ana Blvd.	0.966 / E	0.974 / E	0.008	NO	1.172 / F	1.217 / F	0.045	**YES**
Grand Ave. at 4th St.	0.747 / C	0.76 / C	0.013	NO	0.841 / D	0.856 / D	0.015	NO
Grand Ave. at 1st St.	0.894 / D	0.912 / E	0.018	**YES**	0.960 / E	0.989 / E	0.029	**YES**

Table L-2 – Determination of Significant Impacts
Future 2035 Peak Hour Intersection Conditions
(HCM Method) – 25% Trip Reduction

Intersection	AM Peak Hour			PM Peak Hour		
	2035 NP (Average/Worst Case Delay)	2035 WP (Average/Worst Case Delay)	Significant Impact	2035 NP (Average/Worst Case Delay)	2035 WP (Average/Worst Case Delay)	Significant Impact
Unsignalized Intersections						
Ross St. at 4th St.	11.7 / B	11.8 / B	NO	13.6 / B	13.7 / B	NO
Sycamore St. at Santa Ana Blvd.	28.7 / D	31.5 / D	NO	29.8 / D	33.2 / D	NO
Sycamore St. at 5th St.	19.2 / C	19.5 / C	NO	15.7 / C	17.4 / C	NO
Sycamore St. at 4th St.	8.4 / A	8.6 / A	NO	9.8 / A	10.3 / B	NO
Spurgeon St. at 1st St.	11.3 / B	11.3 / B	NO	18.7 / C	19.6 / C	NO
French St. at Santa Ana Blvd.	24.5 / C	25.0 / D	NO	24.0 / C	28.0 / D	NO
Lacy St. at Civic Center Dr.	28.6 / D	35.1 / E	**YES**	69.9 / F	99.5 / F	**YES**
Lacy St. at Santa Ana Blvd.	122.1 / F	65.2 / F	**YES**	179.1 / F	OVRFL / F	**YES**
Lacy St. at 6th St.	7.3 / A	7.3 / A	NO	8.1 / A	8.4 / A	NO
Lacy St. at 1st St.	45.3 / E	95.1 / F	**YES**	410.8 / F	OVRFL / F	**YES**
Santiago St. at Washington Ave.	126.8 / F	115.8 / F	**YES**	143.1 / F	158.8 / F	**YES**
Santiago St. at Civic Center Dr.	280 / F	268.2 / F	**YES**	221.7 / F	255.1 / F	**YES**
Santiago St. at Brown St.	N/A	16.9 / C	NO	N/A	17.0 / C	NO
Santiago St. at 6th St.	N/A	13.6 / B	NO	N/A	19.1 / C	NO
Santiago St. at 4th St.	N/A	OVRFL / F	**YES**	N/A	OVRFL / F	**YES**
Mortimer St. at 5th St	9.5 / A	9.5 / A	NO	33.5 / D	55.5 / F	**YES**
Mortimer St. at Santa Ana Blvd.	23.1 / A	324.2 / F	**YES**	23.0 / C	31.1 / D	NO
U2-4 at Santa Ana Blvd.	N/A	81.0 / F	**YES**	N/A	99.6 / F	**YES**
Signalized Intersections (Caltrans, Using HCM)						
Penn Way at I-5 SB	25.1 / C	25.0 / C	NO	28.5 / C	28.9 / C	NO
Santa Ana Blvd. at I-5 SB	29.2 / C	30.3 / C	NO	29.7 / C	32.5 / C	NO
17t St. at I-5 NB	39.9 / D	39.7 / D	NO	73.0 / E	73.3 / E	**YES**
Grand Ave at I-5 NB	30.2 / C	79.9 / E	**YES**	119.9 / F	181.4 / F	**YES**