Appendix T
Traffic Counts

Appendix T-1
2008 Existing Traffic Counts

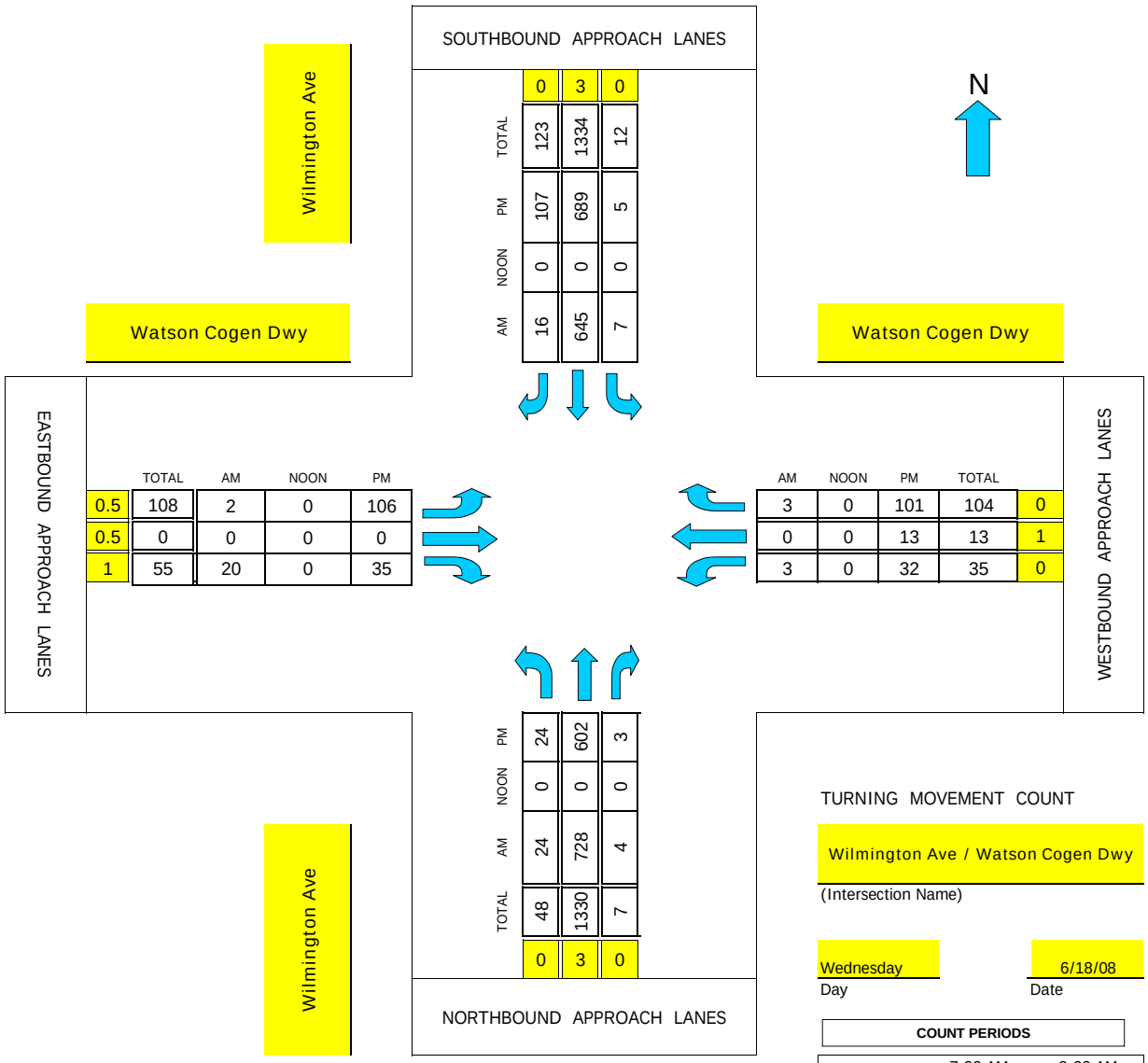
Intersection Turning Movement

Prepared by:

National Data & Surveying Services

TMC Summary of Wilmington Ave/Watson Cogen Dwy

Project #: 08-2302-001



	TOTAL	AM	NOON	PM
0	123	16	0	107
3	1334	645	0	689
0	12	7	0	5

	TOTAL	AM	NOON	PM
0.5	108	2	0	106
0.5	0	0	0	0
1	55	20	0	35

AM	NOON	PM	TOTAL	
3	0	101	104	0
0	0	13	13	1
3	0	32	35	0

	TOTAL	AM	NOON	PM
0	48	24	0	24
3	1330	728	0	602
0	7	4	0	3

TURNING MOVEMENT COUNT

Wilmington Ave / Watson Cogen Dwy

(Intersection Name)

Wednesday — Day

6/18/08 — Date

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

AM PEAK HOUR	715 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	400 PM

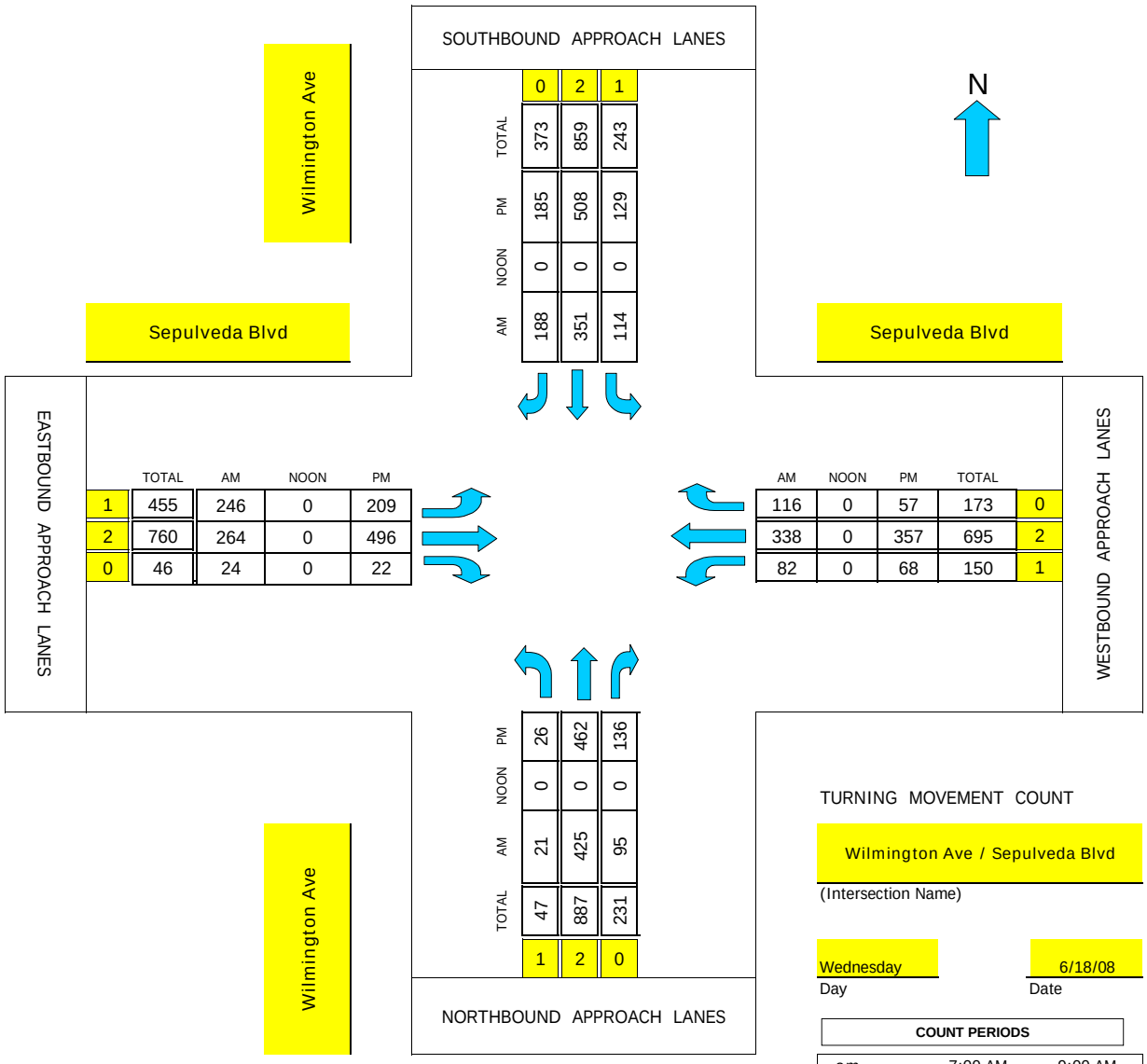
Intersection Turning Movement

Prepared by:

National Data & Surveying Services

TMC Summary of Wilmington Ave/Sepulveda Blvd

Project #: 08-2302-002



	TOTAL	AM	NOON	PM
0	373	188	0	185
2	859	351	0	508
1	243	114	0	129

	TOTAL	AM	NOON	PM
1	455	246	0	209
2	760	264	0	496
0	46	24	0	22

	AM	NOON	PM	TOTAL
0	116	0	57	173
2	338	0	357	695
1	82	0	68	150

	TOTAL	AM	NOON	PM
1	47	21	0	26
2	887	425	0	462
0	231	95	0	136

TURNING MOVEMENT COUNT

Wilmington Ave / Sepulveda Blvd

(Intersection Name)

Wednesday — Day

6/18/08 — Date

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

AM PEAK HOUR	745 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	500 PM

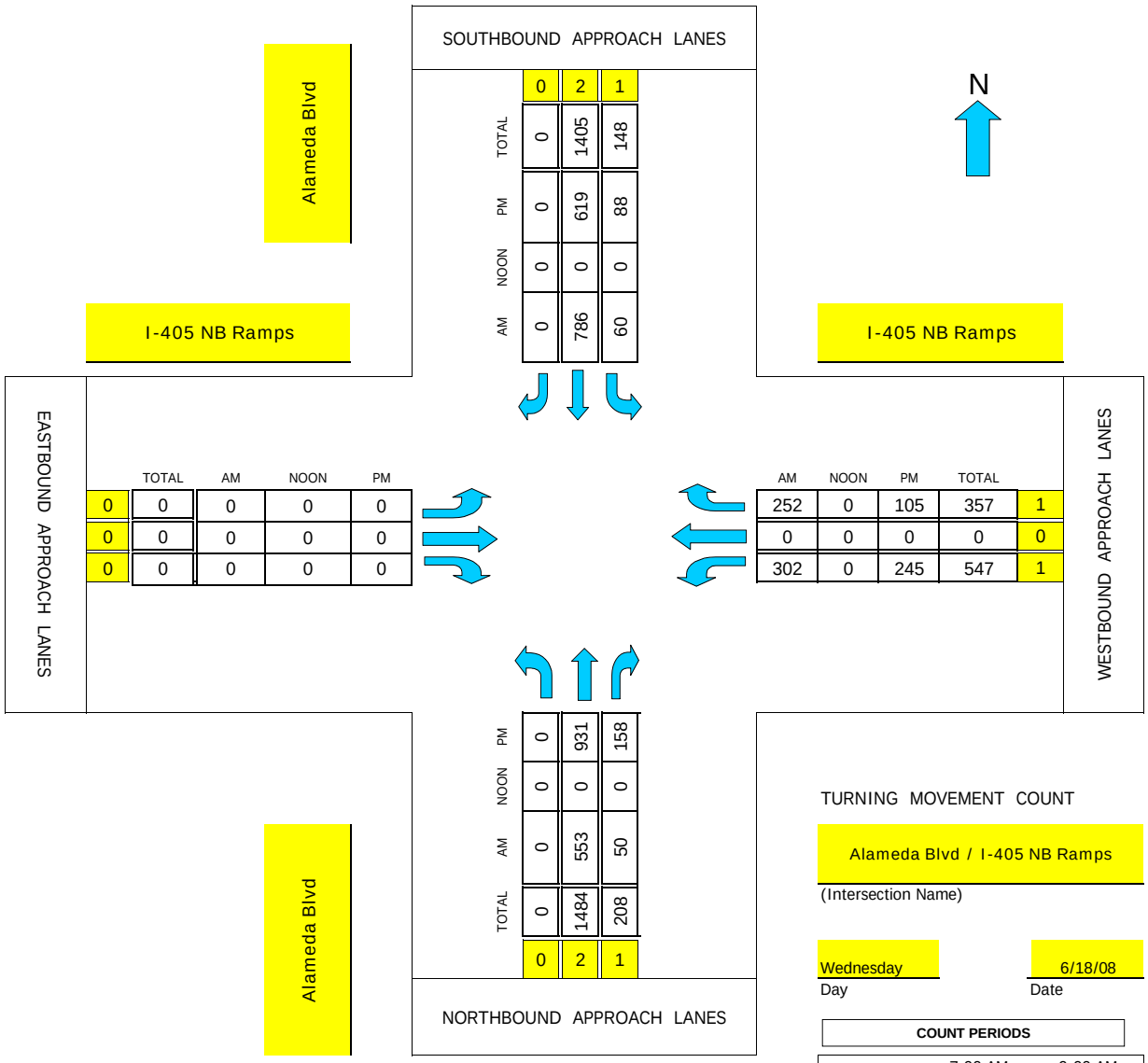
Intersection Turning Movement

Prepared by:

National Data & Surveying Services

TMC Summary of Alameda Blvd / I-405 NB Ramps

Project #: 08-2302-003



		0	2	1	
TOTAL		0	1405	148	
PM		0	619	88	
NOON		0	0	0	
AM		0	786	60	

	TOTAL	AM	NOON	PM
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

AM	NOON	PM	TOTAL	
252	0	105	357	1
0	0	0	0	0
302	0	245	547	1

PM		0	931	158
NOON		0	0	0
AM		0	553	50
TOTAL		0	1484	208
		0	2	1

TURNING MOVEMENT COUNT

Alameda Blvd / I-405 NB Ramps

(Intersection Name)

Wednesday — Day

6/18/08 — Date

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

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

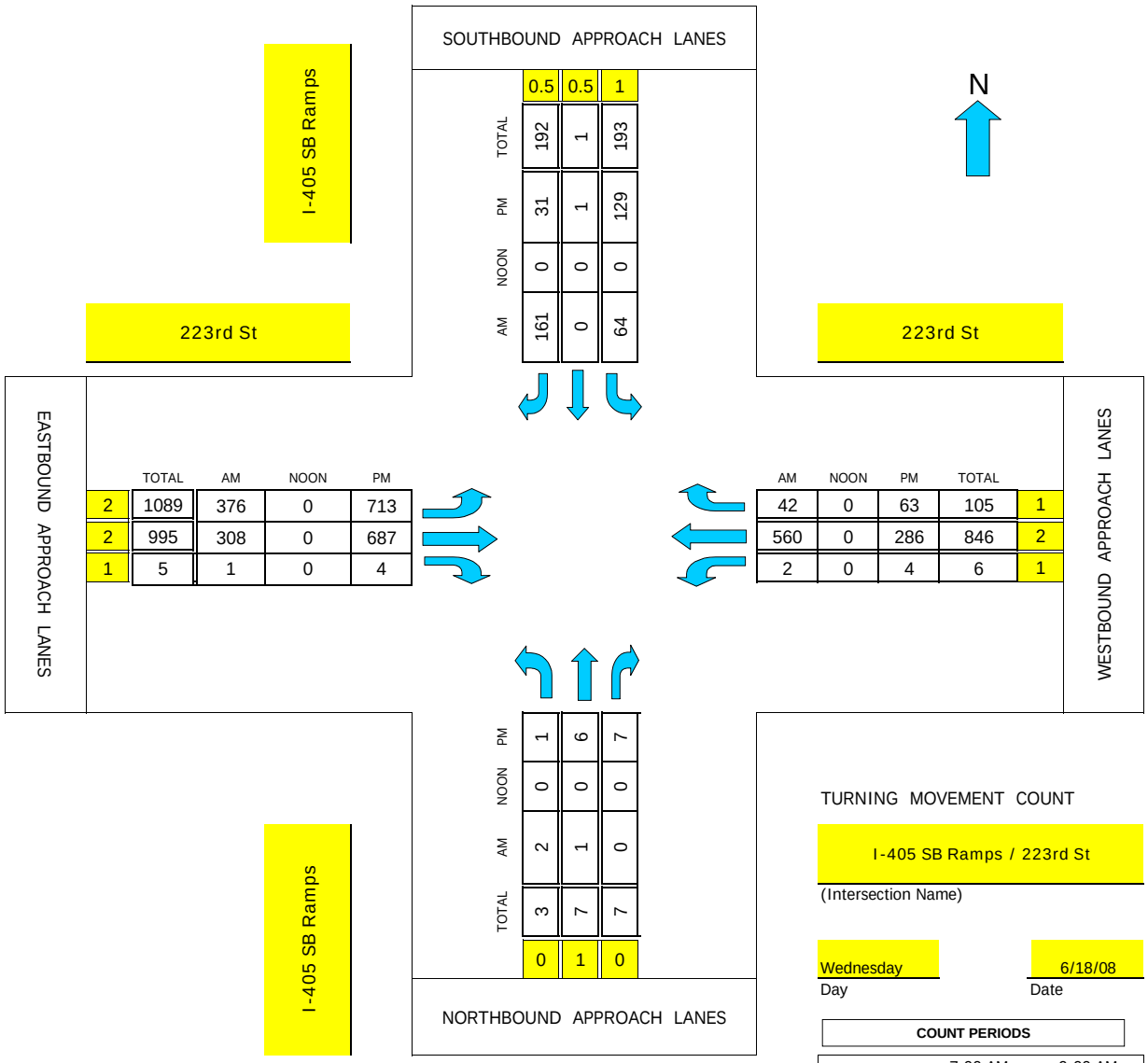
Intersection Turning Movement

Prepared by:

National Data & Surveying Services

TMC Summary of I-405 SB Ramps/223rd St

Project #: 08-2302-004



	TOTAL	AM	NOON	PM
0.5	192	161	0	31
0.5	1	0	0	1
1	193	64	0	129

	TOTAL	AM	NOON	PM
2	1089	376	0	713
2	995	308	0	687
1	5	1	0	4

	AM	NOON	PM	TOTAL
42	0	63	105	1
560	0	286	846	2
2	0	4	6	1

	TOTAL	AM	NOON	PM
1	3	2	0	1
6	7	1	0	6
7	7	0	0	7
0	1	0		

TURNING MOVEMENT COUNT

I-405 SB Ramps / 223rd St

(Intersection Name)

Wednesday — Day

6/18/08 — Date

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

AM PEAK HOUR	700 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	500 PM

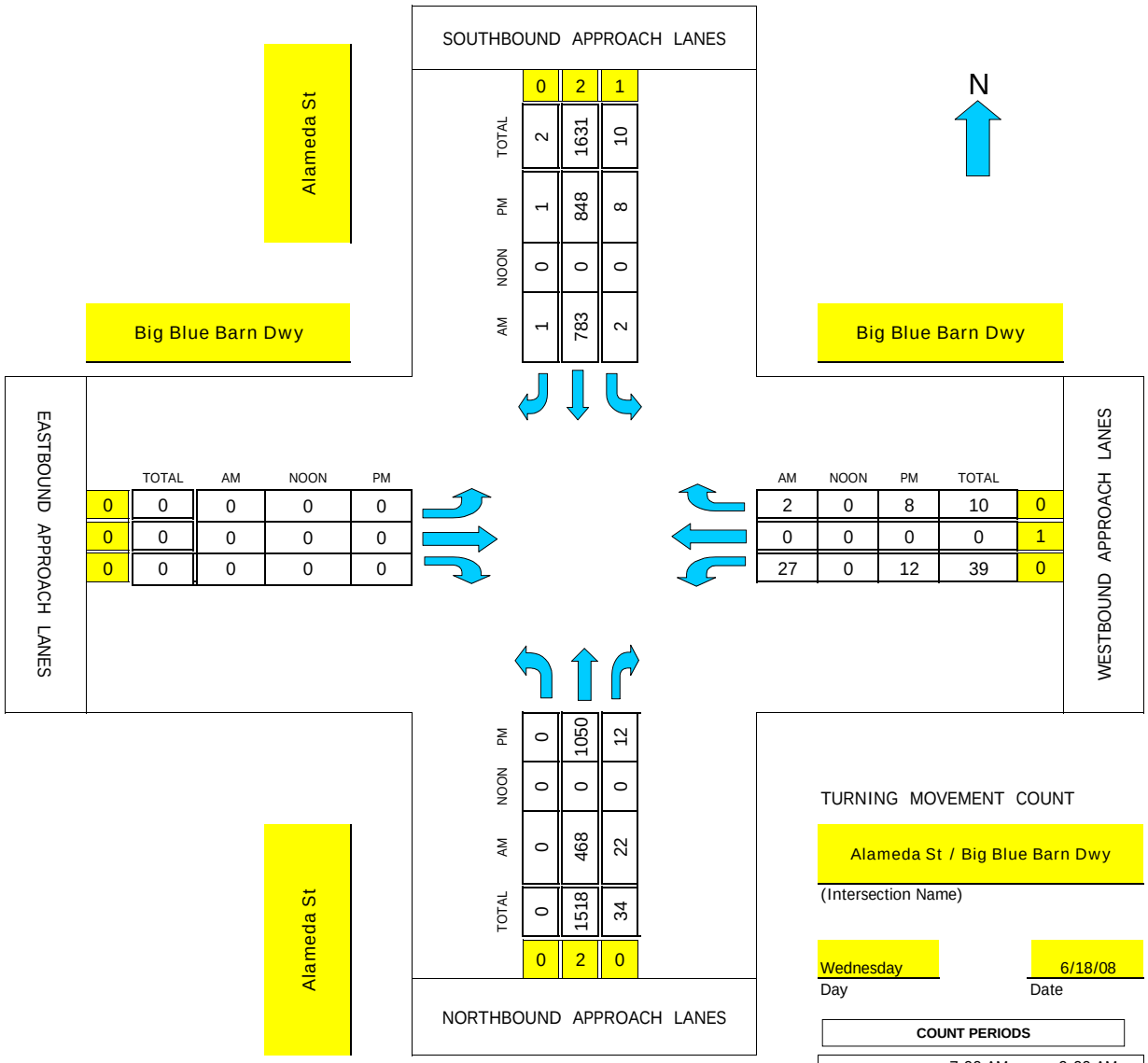
Intersection Turning Movement

Prepared by:

National Data & Surveying Services

TMC Summary of Alameda St/Big Blue Barn Dwy

Project #: 08-2302-005



	TOTAL	AM	NOON	PM
0	2	1	0	1
2	1631	783	0	848
1	10	2	0	8

	TOTAL	AM	NOON	PM
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

	AM	NOON	PM	TOTAL
2	0	8	10	0
0	0	0	0	1
27	0	12	39	0

	TOTAL	AM	NOON	PM
0	0	0	0	0
2	1518	468	0	1050
0	34	22	0	12

TURNING MOVEMENT COUNT

Alameda St / Big Blue Barn Dwy

(Intersection Name)

Wednesday — Day

6/18/08 — Date

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

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

WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

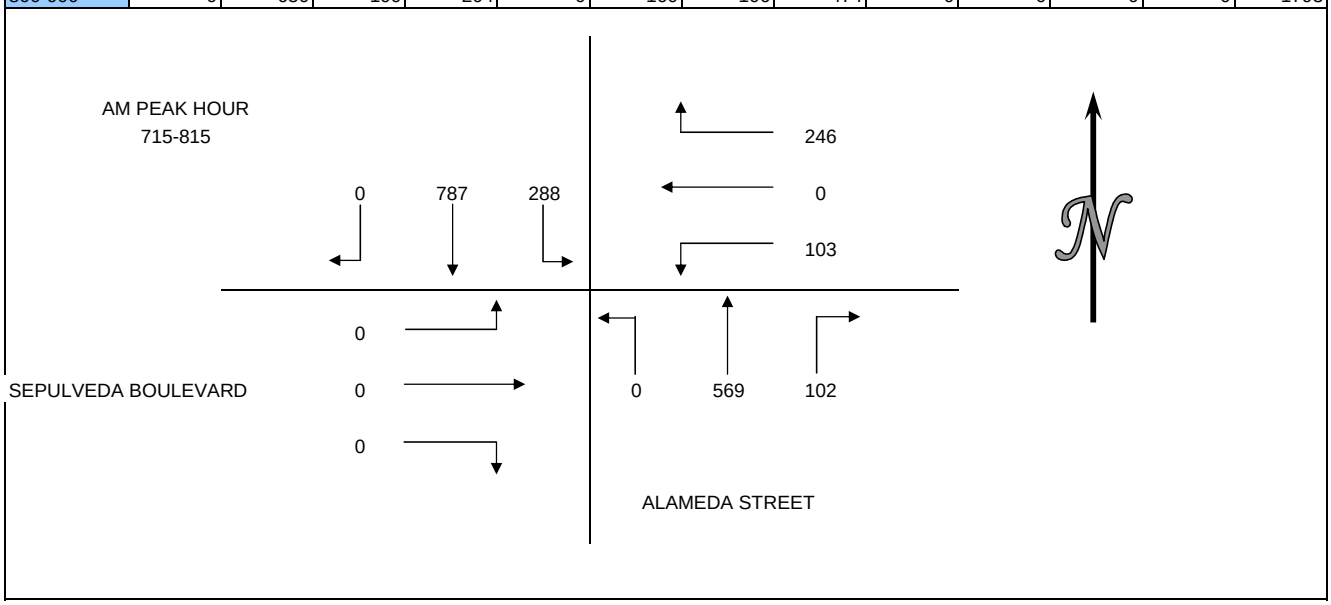
CLIENT:		URS CORPORATION
PROJECT:		I-710 CORRIDOR EIR/EIS STUDY
DATE:		TUESDAY, JUNE 3, 2008
PERIOD:		7:00 AM TO 9:00 AM
INTERSECTION:	N/S	ALAMEDA STREET
	E/W	SEPULVEDA BOULEVARD
CITY:		CARSON

15 MIN COUNTS

PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	0	170	69	46	0	17	15	126	0	0	0	0	443
715-730	0	173	85	48	0	15	24	120	0	0	0	0	465
730-745	0	210	68	63	0	29	25	147	0	0	0	0	542
745-800	0	236	81	81	0	22	26	148	0	0	0	0	594
800-815	0	168	54	54	0	37	27	154	0	0	0	0	494
815-830	0	160	54	56	0	34	29	120	0	0	0	0	453
830-845	0	156	43	49	0	40	24	104	0	0	0	0	416
845-900	0	166	48	45	0	49	26	96	0	0	0	0	430

HOUR TOTALS

PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	0	789	303	238	0	83	90	541	0	0	0	0	2044
715-815	0	787	288	246	0	103	102	569	0	0	0	0	2095
730-830	0	774	257	254	0	122	107	569	0	0	0	0	2083
745-845	0	720	232	240	0	133	106	526	0	0	0	0	1957
800-900	0	650	199	204	0	160	106	474	0	0	0	0	1793



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INTERSECTION TURNING MOVEMENT COUNT SUMMARY

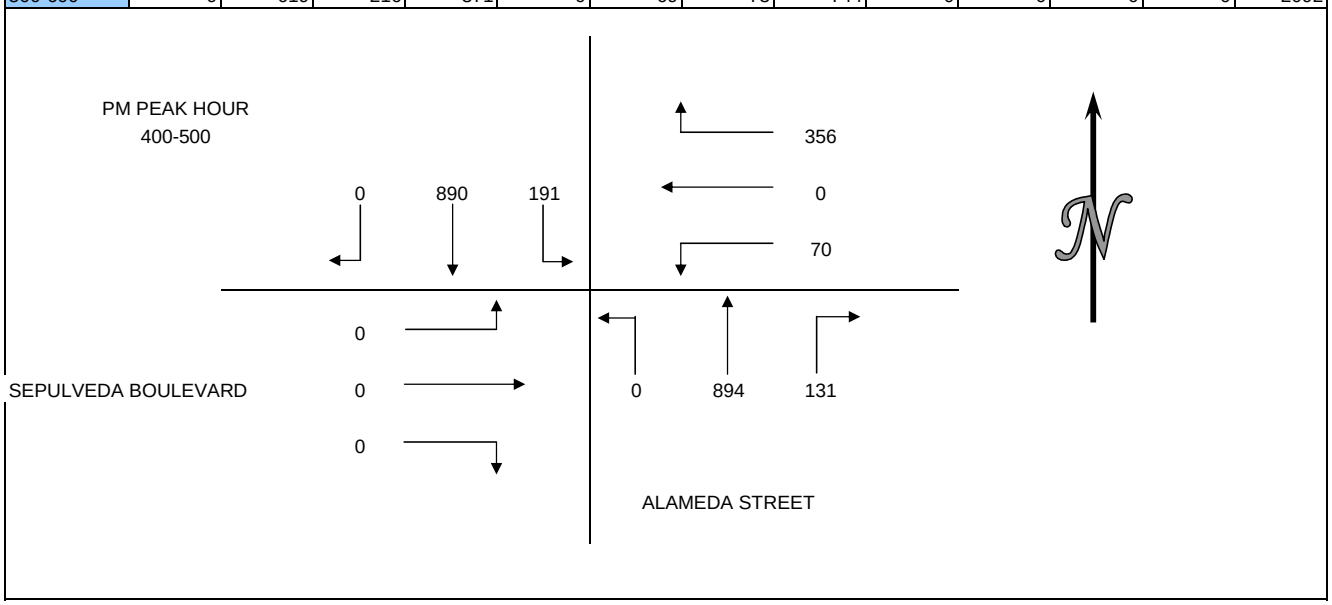
CLIENT:		URS CORPORATION
PROJECT:		I-710 CORRIDOR EIR/EIS STUDY
DATE:		TUESDAY, JUNE 3, 2008
PERIOD:		4:00 PM TO 6:00 PM
INTERSECTION:	N/S	ALAMEDA STREET
	E/W	SEPULVEDA BOULEVARD
CITY:		CARSON

15 MIN COUNTS

PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-415	0	209	38	83	0	20	37	225	0	0	0	0	612
415-430	0	224	42	87	0	15	35	226	0	0	0	0	629
430-445	0	230	53	96	0	23	37	234	0	0	0	0	673
445-500	0	227	58	90	0	12	22	209	0	0	0	0	618
500-515	0	187	54	109	0	16	20	179	0	0	0	0	565
515-530	0	164	60	93	0	28	21	196	0	0	0	0	562
530-545	0	137	52	99	0	15	18	196	0	0	0	0	517
545-600	0	131	50	70	0	10	14	173	0	0	0	0	448

HOUR TOTALS

PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-500	0	890	191	356	0	70	131	894	0	0	0	0	2532
415-515	0	868	207	382	0	66	114	848	0	0	0	0	2485
430-530	0	808	225	388	0	79	100	818	0	0	0	0	2418
445-545	0	715	224	391	0	71	81	780	0	0	0	0	2262
500-600	0	619	216	371	0	69	73	744	0	0	0	0	2092



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INTERSECTION TURNING MOVEMENT COUNT SUMMARY

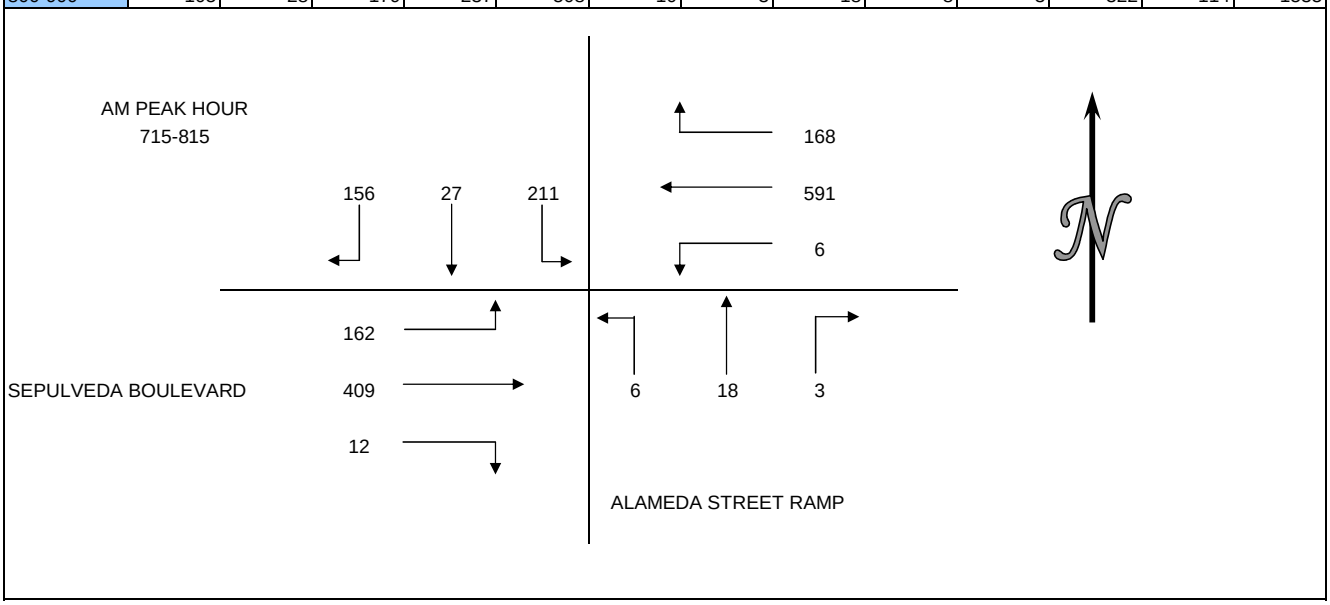
CLIENT:		URS CORPORATION
PROJECT:		I-710 CORRIDOR EIR/EIS STUDY
DATE:		TUESDAY, JUNE 3, 2008
PERIOD:		7:00 AM TO 9:00 AM
INTERSECTION:	N/S	ALAMEDA STREET RAMP
	E/W	SEPULVEDA BOULEVARD
CITY:		CARSON

15 MIN COUNTS

PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	35	8	46	26	156	3	0	1	2	2	89	23	391
715-730	35	9	58	45	153	1	1	4	1	1	93	32	433
730-745	53	3	57	50	144	2	1	4	1	3	103	42	463
745-800	42	9	47	41	139	0	0	5	2	6	111	47	449
800-815	26	6	49	32	155	3	1	5	2	2	102	41	424
815-830	31	3	41	66	140	3	0	5	1	1	89	35	415
830-845	25	13	48	71	114	2	2	4	2	0	72	28	381
845-900	23	6	41	68	99	2	0	4	3	0	59	10	315

HOUR TOTALS

PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	165	29	208	162	592	6	2	14	6	12	396	144	1736
715-815	156	27	211	168	591	6	3	18	6	12	409	162	1769
730-830	152	21	194	189	578	8	2	19	6	12	405	165	1751
745-845	124	31	185	210	548	8	3	19	7	9	374	151	1669
800-900	105	28	179	237	508	10	3	18	8	3	322	114	1535



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INTERSECTION TURNING MOVEMENT COUNT SUMMARY

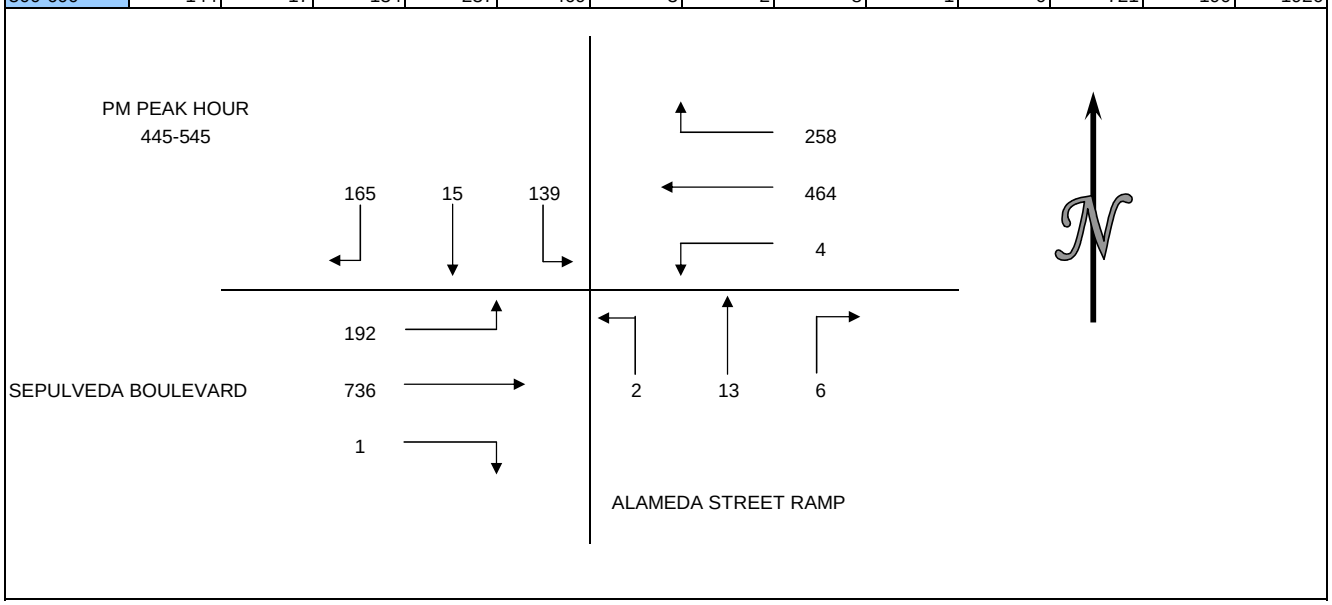
CLIENT:		URS CORPORATION
PROJECT:		I-710 CORRIDOR EIR/EIS STUDY
DATE:		TUESDAY, JUNE 3, 2008
PERIOD:		4:00 PM TO 6:00 PM
INTERSECTION:	N/S	ALAMEDA STREET RAMP
	E/W	SEPULVEDA BOULEVARD
CITY:		CARSON

15 MIN COUNTS

PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-415	45	11	43	62	120	2	2	5	1	0	153	41	485
415-430	25	3	25	52	112	0	5	5	0	0	165	30	422
430-445	43	3	35	58	116	0	2	6	5	0	199	58	525
445-500	58	1	37	71	97	1	5	6	1	1	182	40	500
500-515	47	6	46	67	119	1	0	2	0	0	167	60	515
515-530	27	1	27	58	108	2	0	2	0	0	178	48	451
530-545	33	7	29	62	140	0	1	3	1	0	209	44	529
545-600	37	3	32	50	102	0	1	1	0	0	167	38	431

HOUR TOTALS

PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-500	171	18	140	243	445	3	14	22	7	1	699	169	1932
415-515	173	13	143	248	444	2	12	19	6	1	713	188	1962
430-530	175	11	145	254	440	4	7	16	6	1	726	206	1991
445-545	165	15	139	258	464	4	6	13	2	1	736	192	1995
500-600	144	17	134	237	469	3	2	8	1	0	721	190	1926



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Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

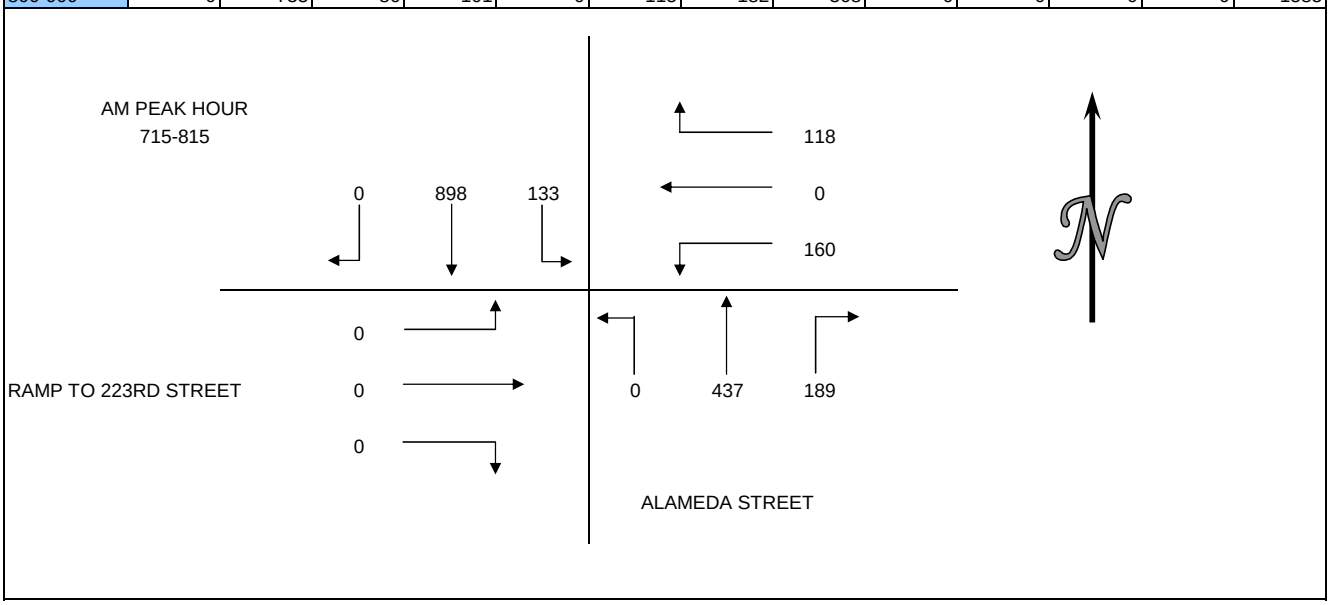
CLIENT:		URS CORPORATION
PROJECT:		I-710 CORRIDOR EIR/EIS STUDY
DATE:		THURSDAY JUNE 19, 2008
PERIOD:		7:00 AM TO 9:00 AM
INTERSECTION:	N/S	ALAMEDA STREET
	E/W	RAMP TO 223RD STREET
CITY:		CARSON

15 MIN COUNTS

PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	0	173	22	28	0	35	43	70	0	0	0	0	371
715-730	0	236	33	20	0	49	42	91	0	0	0	0	471
730-745	0	219	35	28	0	35	51	102	0	0	0	0	470
745-800	0	249	42	38	0	40	45	136	0	0	0	0	550
800-815	0	194	23	32	0	36	51	108	0	0	0	0	444
815-830	0	179	19	32	0	23	30	77	0	0	0	0	360
830-845	0	174	19	25	0	25	50	84	0	0	0	0	377
845-900	0	186	25	12	0	31	51	99	0	0	0	0	404

HOUR TOTALS

PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	0	877	132	114	0	159	181	399	0	0	0	0	1862
715-815	0	898	133	118	0	160	189	437	0	0	0	0	1935
730-830	0	841	119	130	0	134	177	423	0	0	0	0	1824
745-845	0	796	103	127	0	124	176	405	0	0	0	0	1731
800-900	0	733	86	101	0	115	182	368	0	0	0	0	1585



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INTERSECTION TURNING MOVEMENT COUNT SUMMARY

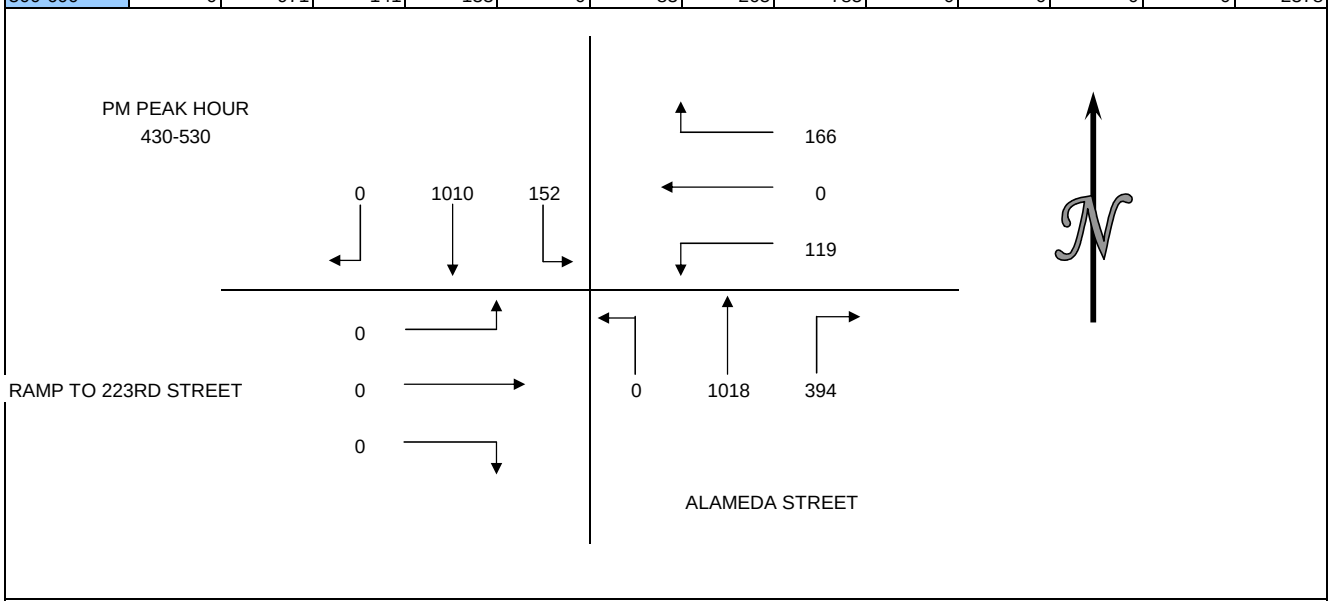
CLIENT:		URS CORPORATION
PROJECT:		I-710 CORRIDOR EIR/EIS STUDY
DATE:		THURSDAY JUNE 19, 2008
PERIOD:		4:00 PM TO 6:00 PM
INTERSECTION:	N/S	ALAMEDA STREET
	E/W	RAMP TO 223RD STREET
CITY:		CARSON

15 MIN COUNTS

PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-415	0	219	39	40	0	34	67	178	0	0	0	0	577
415-430	0	233	38	31	0	22	89	201	0	0	0	0	614
430-445	0	262	30	40	0	28	107	270	0	0	0	0	737
445-500	0	255	48	56	0	40	117	289	0	0	0	0	805
500-515	0	251	31	35	0	30	88	258	0	0	0	0	693
515-530	0	242	43	35	0	21	82	201	0	0	0	0	624
530-545	0	263	34	37	0	17	63	177	0	0	0	0	591
545-600	0	215	33	26	0	15	32	149	0	0	0	0	470

HOUR TOTALS

PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-500	0	969	155	167	0	124	380	938	0	0	0	0	2733
415-515	0	1001	147	162	0	120	401	1018	0	0	0	0	2849
430-530	0	1010	152	166	0	119	394	1018	0	0	0	0	2859
445-545	0	1011	156	163	0	108	350	925	0	0	0	0	2713
500-600	0	971	141	133	0	83	265	785	0	0	0	0	2378



WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

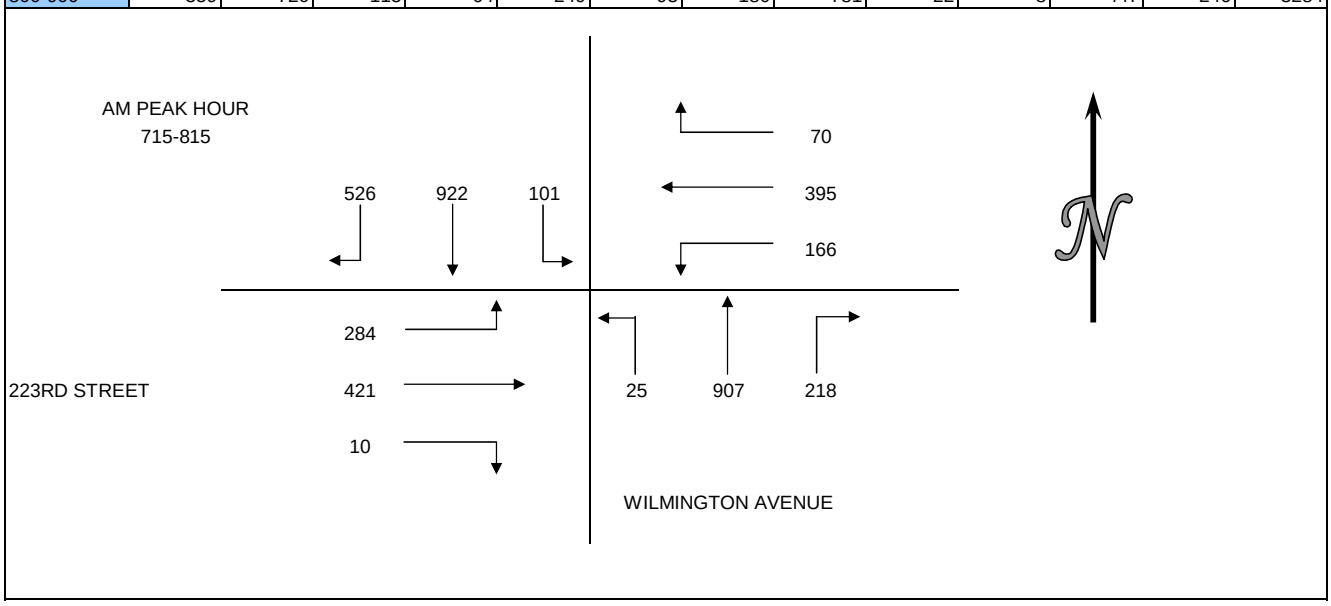
CLIENT:		URS CORPORATION
PROJECT:		I-710 CORRIDOR EIR/EIS STUDY
DATE:		THURSDAY JUNE 19, 2008
PERIOD:		7:00 AM TO 9:00 AM
INTERSECTION:	N/S	WILMINGTON AVENUE
	E/W	223RD STREET
CITY:		CARSON

15 MIN COUNTS

PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	108	225	36	12	66	36	58	182	3	4	72	60	862
715-730	142	224	21	13	96	57	36	207	5	6	91	83	981
730-745	133	264	29	20	99	35	48	249	6	4	102	67	1056
745-800	123	225	20	21	105	47	82	241	4	0	109	70	1047
800-815	128	209	31	16	95	27	52	210	10	0	119	64	961
815-830	89	197	22	13	48	21	56	231	3	3	104	54	841
830-845	72	188	34	24	57	24	39	195	1	1	122	63	820
845-900	70	126	28	11	49	21	33	145	8	4	102	65	662

HOUR TOTALS

PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	506	938	106	66	366	175	224	879	18	14	374	280	3946
715-815	526	922	101	70	395	166	218	907	25	10	421	284	4045
730-830	473	895	102	70	347	130	238	931	23	7	434	255	3905
745-845	412	819	107	74	305	119	229	877	18	4	454	251	3669
800-900	359	720	115	64	249	93	180	781	22	8	447	246	3284



WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

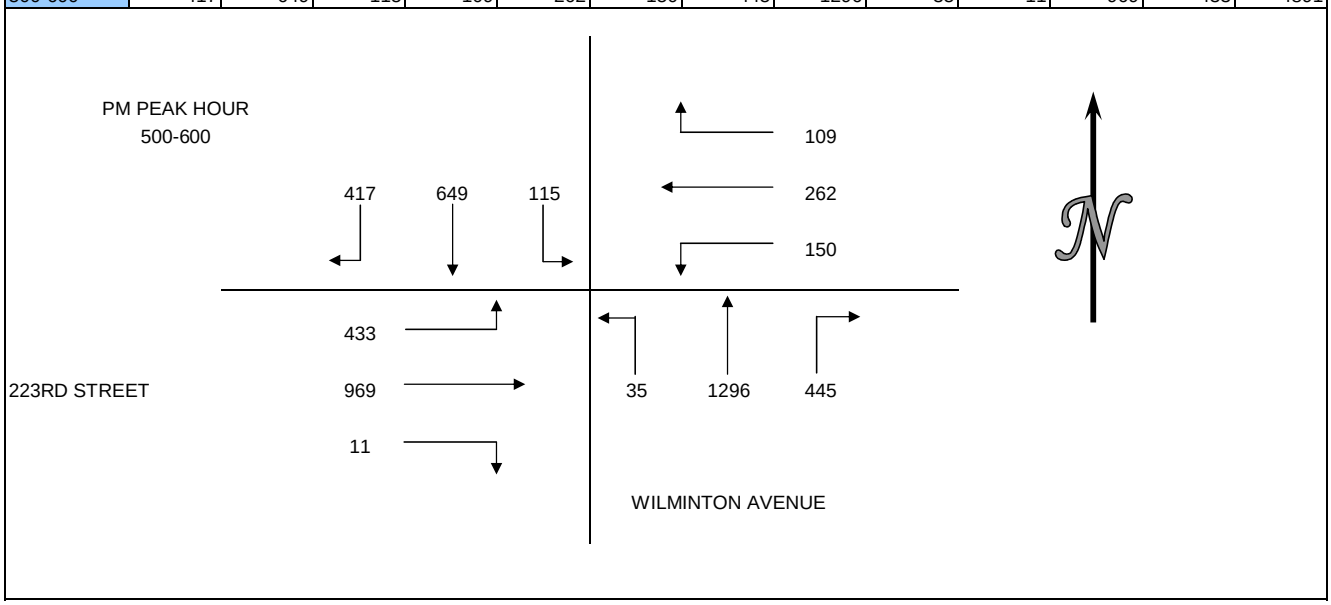
CLIENT:		URS CORPORATION
PROJECT:		I-710 CORRIDOR EIR/EIS STUDY
DATE:		THURSDAY JUNE 19, 2008
PERIOD:		4:00 PM TO 6:00 PM
INTERSECTION:	N/S	WILMINTON AVENUE
	E/W	223RD STREET
CITY:		CARSON

15 MIN COUNTS

PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-415	94	147	50	24	67	35	105	254	5	3	179	90	1053
415-430	89	173	25	49	71	32	170	297	5	1	203	118	1233
430-445	83	144	30	69	81	44	115	273	4	2	238	80	1163
445-500	73	148	32	49	87	43	110	297	6	5	205	75	1130
500-515	122	176	24	36	63	44	125	326	13	3	235	95	1262
515-530	99	195	40	23	72	32	117	317	4	3	257	107	1266
530-545	112	132	29	30	56	30	114	325	12	2	229	110	1181
545-600	84	146	22	20	71	44	89	328	6	3	248	121	1182

HOUR TOTALS

PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-500	339	612	137	191	306	154	500	1121	20	11	825	363	4579
415-515	367	641	111	203	302	163	520	1193	28	11	881	368	4788
430-530	377	663	126	177	303	163	467	1213	27	13	935	357	4821
445-545	406	651	125	138	278	149	466	1265	35	13	926	387	4839
500-600	417	649	115	109	262	150	445	1296	35	11	969	433	4891



Volumes for: Thursday, June 19, 2008 City: Carson Project #: 08-2301-001

Location: 223rd St W/o Alameda St

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			19		15			12:00			143		106		
00:15			23		20			12:15			130		84		
00:30			9		15			12:30			147		112		
00:45			19	70	31	81	151	12:45			126	546	118	420	966
01:00			10		16			13:00			104		92		
01:15			10		12			13:15			149		98		
01:30			12		8			13:30			124		112		
01:45			15	47	20	56	103	13:45			128	505	82	384	889
02:00			12		12			14:00			135		110		
02:15			8		13			14:15			154		112		
02:30			6		30			14:30			209		110		
02:45			8	34	25	80	114	14:45			176	674	108	440	1114
03:00			9		30			15:00			241		115		
03:15			15		21			15:15			216		126		
03:30			16		44			15:30			239		128		
03:45			14	54	24	119	173	15:45			290	986	108	477	1463
04:00			27		21			16:00			264		118		
04:15			28		38			16:15			341		139		
04:30			42		38			16:30			326		220		
04:45			28	125	45	142	267	16:45			262	1193	184	661	1854
05:00			43		37			17:00			294		132		
05:15			69		69			17:15			282		122		
05:30			93		120			17:30			297		104		
05:45			88	293	106	332	625	17:45			238	1111	109	467	1578
06:00			53		70			18:00			209		85		
06:15			96		85			18:15			205		87		
06:30			85		92			18:30			118		77		
06:45			123	357	77	324	681	18:45			141	673	70	319	992
07:00			140		85			19:00			124		64		
07:15			135		84			19:15			93		60		
07:30			170		95			19:30			80		66		
07:45			177	622	106	370	992	19:45			75	372	48	238	610
08:00			162		116			20:00			66		52		
08:15			173		133			20:15			51		77		
08:30			140		138			20:30			77		45		
08:45			120	595	100	487	1082	20:45			52	246	41	215	461
09:00			102		120			21:00			75		39		
09:15			94		86			21:15			57		41		
09:30			113		112			21:30			40		31		
09:45			95	404	120	438	842	21:45			42	214	43	154	368
10:00			86		89			22:00			39		44		
10:15			135		91			22:15			43		23		
10:30			76		76			22:30			41		47		
10:45			114	411	110	366	777	22:45			30	153	29	143	296
11:00			100		77			23:00			35		21		
11:15			103		110			23:15			26		17		
11:30			131		104			23:30			22		18		
11:45			118	452	99	390	842	23:45			24	107	28	84	191
Total Vol.				3464		3185	6649					6780		4002	10782

			Daily Totals		
	NB	SB	EB	WB	Combined
			10244	7187	17431
			PM		
Split %			62.9%	37.1%	61.9%

	AM		
Split %	52.1%	47.9%	38.1%
Peak Hour	07:30	07:45	07:45
Volume	682	493	1145
P.H.F.	0.96	0.89	0.94

Volumes for: Thursday, June 19, 2008 City: Carson Project #: 08-2301-002

Location: Sepulveda Blvd W/o Alameda St

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			29		59			12:00			131		152		
00:15			41		45			12:15			133		122		
00:30			38		23			12:30			121		99		
00:45			12	120	46	173	293	12:45			102	487	93	466	953
01:00			33		36			13:00			131		114		
01:15			25		41			13:15			139		87		
01:30			18		24			13:30			124		108		
01:45			18	94	41	142	236	13:45			176	570	138	447	1017
02:00			16		31			14:00			145		115		
02:15			9		36			14:15			148		128		
02:30			13		20			14:30			127		120		
02:45			5	43	32	119	162	14:45			121	541	128	491	1032
03:00			9		20			15:00			154		128		
03:15			8		10			15:15			144		144		
03:30			11		11			15:30			182		181		
03:45			18	46	15	56	102	15:45			178	658	156	609	1267
04:00			23		22			16:00			195		110		
04:15			17		25			16:15			156		135		
04:30			29		21			16:30			187		161		
04:45			36	105	25	93	198	16:45			150	688	150	556	1244
05:00			53		25			17:00			199		151		
05:15			50		49			17:15			175		133		
05:30			90		83			17:30			147		128		
05:45			85	278	67	224	502	17:45			154	675	110	522	1197
06:00			76		68			18:00			162		79		
06:15			98		84			18:15			130		96		
06:30			144		150			18:30			126		93		
06:45			122	440	164	466	906	18:45			115	533	102	370	903
07:00			126		124			19:00			127		87		
07:15			131		175			19:15			117		82		
07:30			168		199			19:30			98		76		
07:45			181	606	167	665	1271	19:45			94	436	45	290	726
08:00			132		101			20:00			66		58		
08:15			121		120			20:15			73		57		
08:30			112		113			20:30			64		60		
08:45			136	501	99	433	934	20:45			48	251	76	251	502
09:00			124		124			21:00			70		65		
09:15			121		125			21:15			63		78		
09:30			110		149			21:30			64		97		
09:45			109	464	128	526	990	21:45			63	260	57	297	557
10:00			120		132			22:00			83		59		
10:15			97		105			22:15			53		38		
10:30			104		147			22:30			55		40		
10:45			115	436	139	523	959	22:45			31	222	30	167	389
11:00			120		139			23:00			29		23		
11:15			132		142			23:15			38		31		
11:30			110		171			23:30			41		29		
11:45			109	471	161	613	1084	23:45			28	136	28	111	247
Total Vol.				3604		4033	7637					5457		4577	10034

	NB	SB	Daily Totals EB	WB	Combined
			9061	8610	17671

	AM			PM		
Split %	47.2%	52.8%	43.2%	54.4%	45.6%	56.8%
Peak Hour	07:15	07:00	07:00	15:45	15:00	16:30
Volume	612	665	1271	716	609	1306
P.H.F.	0.85	0.84	0.87	0.92	0.84	0.93

Volumes for: Thursday, June 19, 2008 City: Carson Project #: 08-2301-003

Location: Alameda St S/o Blue Barn

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	48		61					12:00	234		138				
00:15	54		86					12:15	203		125				
00:30	41		104					12:30	196		150				
00:45	32	175	111	362			537	12:45	153	786	128	541			1327
01:00	27		78					13:00	123		113				
01:15	19		74					13:15	138		140				
01:30	30		51					13:30	166		163				
01:45	18	94	24	227			321	13:45	210	637	132	548			1185
02:00	44		32					14:00	245		147				
02:15	34		41					14:15	229		138				
02:30	51		50					14:30	317		175				
02:45	31	160	58	181			341	14:45	355	1146	172	632			1778
03:00	29		52					15:00	278		146				
03:15	16		32					15:15	352		179				
03:30	18		45					15:30	290		194				
03:45	17	80	30	159			239	15:45	388	1308	190	709			2017
04:00	25		30					16:00	352		217				
04:15	35		28					16:15	277		204				
04:30	35		48					16:30	314		233				
04:45	34	129	53	159			288	16:45	254	1197	192	846			2043
05:00	44		52					17:00	304		207				
05:15	52		64					17:15	216		194				
05:30	80		127					17:30	209		170				
05:45	66	242	152	395			637	17:45	158	887	139	710			1597
06:00	57		120					18:00	146		147				
06:15	76		140					18:15	148		118				
06:30	81		186					18:30	105		125				
06:45	82	296	152	598			894	18:45	105	504	113	503			1007
07:00	100		179					19:00	107		102				
07:15	109		168					19:15	122		78				
07:30	124		184					19:30	103		77				
07:45	145	478	197	728			1206	19:45	93	425	85	342			767
08:00	130		219					20:00	114		60				
08:15	123		169					20:15	115		73				
08:30	99		174					20:30	84		61				
08:45	111	463	160	722			1185	20:45	106	419	78	272			691
09:00	122		160					21:00	71		54				
09:15	146		159					21:15	79		64				
09:30	135		162					21:30	100		77				
09:45	182	585	125	606			1191	21:45	93	343	64	259			602
10:00	165		134					22:00	79		45				
10:15	170		130					22:15	46		58				
10:30	171		148					22:30	51		49				
10:45	192	698	133	545			1243	22:45	48	224	48	200			424
11:00	186		140					23:00	38		37				
11:15	205		156					23:15	32		46				
11:30	173		138					23:30	49		42				
11:45	190	754	151	585			1339	23:45	37	156	35	160			316
Total Vol.		4154		5267			9421			8032		5722			13754

Daily Totals	NB	SB	EB	WB	Combined
	12186	10989			23175

	AM			PM		
Split %	44.1%	55.9%	40.7%	58.4%	41.6%	59.3%
Peak Hour	11:45	07:30	11:45	15:15	16:00	15:45
Volume	823	769	1387	1382	846	2175
P.H.F.	0.88	0.88	0.93	0.91	0.91	0.94

Volumes for: Thursday, June 19, 2008 City: Carson Project #: 08-2301-004

Location: Wilmington South Watson Cogen Plant

AM Period	NB		SB		EB		WB		PM Period	NB		SB		EB		WB	
00:00	48		29						12:00	120		178					
00:15	33		25						12:15	167		208					
00:30	28		23						12:30	105		135					
00:45	26	135	28	105				240	12:45	106	498	195	716				1214
01:00	37		28						13:00	104		146					
01:15	17		20						13:15	107		189					
01:30	23		24						13:30	102		150					
01:45	37	114	29	101				215	13:45	122	435	140	625				1060
02:00	25		21						14:00	130		236					
02:15	26		26						14:15	155		156					
02:30	35		27						14:30	195		187					
02:45	32	118	25	99				217	14:45	143	623	166	745				1368
03:00	29		16						15:00	175		162					
03:15	14		24						15:15	132		198					
03:30	31		22						15:30	187		226					
03:45	26	100	30	92				192	15:45	225	719	254	840				1559
04:00	51		39						16:00	222		212					
04:15	46		56						16:15	161		213					
04:30	67		45						16:30	192		159					
04:45	53	217	44	184				401	16:45	132	707	178	762				1469
05:00	51		69						17:00	182		178					
05:15	97		103						17:15	155		194					
05:30	140		116						17:30	181		160					
05:45	134	422	107	395				817	17:45	138	656	160	692				1348
06:00	99		86						18:00	164		157					
06:15	120		104						18:15	130		147					
06:30	134		118						18:30	102		118					
06:45	166	519	143	451				970	18:45	106	502	111	533				1035
07:00	168		143						19:00	86		88					
07:15	158		148						19:15	75		86					
07:30	176		178						19:30	88		101					
07:45	234	736	175	644				1380	19:45	88	337	105	380				717
08:00	198		164						20:00	93		105					
08:15	193		160						20:15	66		76					
08:30	174		158						20:30	80		95					
08:45	157	722	154	636				1358	20:45	83	322	95	371				693
09:00	140		158						21:00	83		93					
09:15	140		115						21:15	71		71					
09:30	152		99						21:30	57		70					
09:45	133	565	131	503				1068	21:45	63	274	75	309				583
10:00	123		130						22:00	76		72					
10:15	160		125						22:15	60		69					
10:30	107		113						22:30	67		60					
10:45	172	562	109	477				1039	22:45	44	247	76	277				524
11:00	159		122						23:00	69		69					
11:15	126		110						23:15	43		46					
11:30	148		124						23:30	35		34					
11:45	154	587	148	504				1091	23:45	25	172	18	167				339
Total Vol.		4797		4191				8988			5492		6417				11909

Daily Totals	NB	SB	EB	WB	Combined
	10289	10608			20897

	AM			PM		
Split %	53.4%	46.6%	43.0%	46.1%	53.9%	57.0%
Peak Hour	07:30	07:30	07:30	15:45	15:30	15:30
Volume	801	677	1478	800	905	1700
P.H.F.	0.86	0.95	0.90	0.85	0.89	0.89

Appendix T-2
2008 Existing Intersection LOS

Kinder Morgan Project
Near Term AM Peak Hour Conditions - Deppressed Area Fill

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 I-405 SB Ramps/223rd St	A	xxxxx	0.469	A	xxxxx	0.469	+ 0.000 V/C
# 2 Wilmington Ave/223rd St	C	xxxxx	0.745	C	xxxxx	0.745	+ 0.000 V/C
# 3 Wilmington Avenue/Sepulveda Bo	B	xxxxx	0.692	B	xxxxx	0.692	+ 0.000 V/C
# 4 Sepulveda Boulevard/Alameda St	A	xxxxx	0.596	A	xxxxx	0.596	+ 0.000 V/C
# 5 Alameda Street/KMEP Driveway E	A	xxxxx	0.510	A	xxxxx	0.510	+ 0.000 V/C
# 6 Alameda Street/223rd Connector	A	xxxxx	0.460	A	xxxxx	0.460	+ 0.000 V/C
# 7 Alameda Street/I-405 NB Ramps	A	xxxxx	0.553	A	xxxxx	0.553	+ 0.000 V/C
# 8 Alameda St/Lay Down Area Acces	D	0.6	0.000	D	0.6	0.000	+ 0.000 D/V
# 9 Wilmington Ave/Watson Cogen Ac	C	0.3	0.000	C	0.3	0.000	+ 0.000 D/V

Kinder Morgan Project
Near Term AM Peak Hour Conditions - Deppressed Area Fill

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

Intersection #1 I-405 SB Ramps/223rd St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.469
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	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						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:	0	1	0	0	0		1	0	0	1	0		2	0	2	0	1		1	0	2	1	0	
Volume Module:																								
Base Vol:	2	1	0			64	0	161			376	308	1			2	560	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:	2	1	0			64	0	161			376	308	1			2	560	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:	0.93	0.93	0.93			0.93	0.93	0.93			0.93	0.93	0.93			0.93	0.93	0.93						
PHF Volume:	2	1	0			68	0	172			402	329	1			2	599	45						
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0						
Reduced Vol:	2	1	0			68	0	172			402	329	1			2	599	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						
Final Vol.:	2	1	0			68	0	172			402	329	1			2	599	45						
Saturation Flow Module:																								
Sat/Lane:	1600	1600	1600			1600	1600	1600			1600	1600	1600			1600	1600	1600						
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:	0.67	0.33	0.00			1.00	0.00	1.00			2.00	2.00	1.00			1.00	2.79	0.21						
Final Sat.:	1067	533	0			1600	0	1600			3200	3200	1600			1600	4465	335						
Capacity Analysis Module:																								
Vol/Sat:	0.00	0.00	0.00			0.04	0.00	0.11			0.13	0.10	0.00			0.00	0.13	0.13						
Crit Moves:	****							****			****						****						

Kinder Morgan Project
Near Term AM Peak Hour Conditions - Deppressed Area Fill

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

Intersection #2 Wilmington Ave/223rd St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.745
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
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:	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 2 0 1			1 0 2 0 1		
Volume Module:												
Base Vol:	25	907	218	101	922	526	284	421	10	166	395	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:	25	907	218	101	922	526	284	421	10	166	395	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:	25	907	218	101	922	526	284	421	10	166	395	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	907	218	101	922	526	284	421	10	166	395	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
Final Vol.:	25	907	218	101	922	526	284	421	10	166	395	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.28	0.14	0.06	0.29	0.33	0.18	0.13	0.01	0.10	0.12	0.04
Crit Moves:	****					****	****				****	

Kinder Morgan Project
Near Term AM Peak Hour Conditions - Deppressed Area Fill

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

Intersection #3 Wilmington Avenue/Sepulveda Boulevard

Cycle (sec):	100	Critical Vol./Cap. (X):	0.692
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	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:	21	425	95	114	351	188	246	264	24	82	338	116
Growth Adj:	1.00	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	425	95	114	351	188	246	264	24	82	338	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	23	475	106	127	392	210	275	295	27	92	378	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	475	106	127	392	210	275	295	27	92	378	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	23	475	106	127	392	210	275	295	27	92	378	130
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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	1.63	0.37	1.00	1.30	0.70	1.00	1.83	0.17	1.00	1.49	0.51
Final Sat.:	1600	2615	585	1600	2084	1116	1600	2933	267	1600	2382	818
Capacity Analysis Module:												
Vol/Sat:	0.01	0.18	0.18	0.08	0.19	0.19	0.17	0.10	0.10	0.06	0.16	0.16
Crit Moves:		****			****			****			****	

Kinder Morgan Project
Near Term AM Peak Hour Conditions - Deppressed Area Fill

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

Intersection #4 Sepulveda Boulevard/Alameda St Connector

Cycle (sec):	100	Critical Vol./Cap. (X):	0.596
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	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:	Split Phase			Split Phase			Protected			Protected		
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	1 1	0 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	6	18	3	211	27	156	162	409	12	6	591	168
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	18	3	211	27	156	162	409	12	6	591	168
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	7	20	3	236	30	174	181	457	13	7	660	188
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	20	3	236	30	174	181	457	13	7	660	188
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	7	20	3	236	30	174	181	457	13	7	660	188
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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:	0.44	1.34	0.22	1.77	0.23	1.00	1.00	1.94	0.06	1.00	1.56	0.44
Final Sat.:	711	2133	356	2837	363	1600	1600	3109	91	1600	2492	708
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.08	0.08	0.11	0.11	0.15	0.15	0.00	0.26	0.26
Crit Moves:	****					****	****				****	

Kinder Morgan Project
Near Term AM Peak Hour Conditions - Deppressed Area Fill

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

Intersection #5 Alameda Street/KMEP Driveway Ext

Cycle (sec):	100	Critical Vol./Cap. (X):	0.510
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	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			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 1	0	0 0	1! 0	0	1 0	0 1	1
Volume Module:												
Base Vol:	0	569	102	288	787	0	0	0	0	103	0	246
Growth Adj:	1.00	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	569	102	288	787	0	0	0	0	103	0	246
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	0	588	105	298	813	0	0	0	0	106	0	254
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	588	105	298	813	0	0	0	0	106	0	254
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	588	105	298	813	0	0	0	0	106	0	254
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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	2.54	0.46	1.00	3.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00
Final Sat.:	1600	4070	730	1600	4800	0	0	1600	0	1600	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.14	0.14	0.19	0.17	0.00	0.00	0.00	0.00	0.07	0.00	0.08
Crit Moves:		****		****								****

Kinder Morgan Project
Near Term AM Peak Hour Conditions - Deppressed Area Fill

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

Intersection #6 Alameda Street/223rd Connector

Cycle (sec):	100	Critical Vol./Cap. (X):	0.460
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	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				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	1	0	1	0 3	0	0	0	0 0	0	0	1	0 0	0	1
Volume Module:																
Base Vol:	0	437	189		133	898	0		0	0	0		160	0	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:	0	437	189		133	898	0		0	0	0		160	0	118	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.87	0.87	0.87		0.87	0.87	0.87		0.87	0.87	0.87		0.87	0.87	0.87	
PHF Volume:	0	502	217		153	1031	0		0	0	0		184	0	135	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	502	217		153	1031	0		0	0	0		184	0	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	
Final Vol.:	0	502	217		153	1031	0		0	0	0		184	0	135	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
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	2.09	0.91		1.00	3.00	0.00		0.00	0.00	0.00		1.00	0.00	1.00	
Final Sat.:	0	3351	1449		1600	4800	0		0	0	0		1600	0	1600	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.15	0.15		0.10	0.21	0.00		0.00	0.00	0.00		0.11	0.00	0.08	
Crit Moves:		****			****								****			

Kinder Morgan Project
Near Term AM Peak Hour Conditions - Deppressed Area Fill

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

Intersection #7 Alameda Street/I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap. (X):	0.553
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	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						Split Phase						Split Phase					
Rights:	Ovl						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	0	0	0	0
Lanes:	0	0	2	0	1		1	0	2	0	0		0	0	0	0	0		1	0	0	0	1	
Volume Module:																								
Base Vol:	0	553		50		60	786		0		0		0		0		0	302		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		1.00		
Initial Bse:	0	553		50		60	786		0		0		0		0		0	302		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		1.00		
PHF Adj:	0.96	0.96		0.96		0.96	0.96		0.96		0.96		0.96		0.96		0.96	0.96		0.96		0.96		
PHF Volume:	0	576		52		63	819		0		0		0		0		0	315		0		263		
Reduct Vol:	0	0		0		0	0		0		0		0		0		0	0		0		0		
Reduced Vol:	0	576		52		63	819		0		0		0		0		0	315		0		263		
PCE Adj:	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		
MLF Adj:	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		
Final Vol.:	0	576		52		63	819		0		0		0		0		0	315		0		263		
Saturation Flow Module:																								
Sat/Lane:	1600	1600		1600		1600	1600		1600		1600		1600		1600		1600	1600		1600		1600		
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		1.00		
Lanes:	0.00	2.00		1.00		1.00	2.00		0.00		0.00		0.00		0.00		0.00	1.00		0.00		1.00		
Final Sat.:	0	3200		1600		1600	3200		0		0		0		0		0	1600		0		1600		
Capacity Analysis Module:																								
Vol/Sat:	0.00	0.18		0.03		0.04	0.26		0.00		0.00		0.00		0.00		0.00	0.20		0.00		0.16		
Crit Moves:							****											****						

Project Name
Existing PM Peak Hour Conditions

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 I-405 SB Ramps/223rd St	A	xxxxx	0.485	A	xxxxx	0.485	+ 0.000 V/C
# 2 Wilmington Ave/223rd St	E	xxxxx	0.973	E	xxxxx	0.973	+ 0.000 V/C
# 3 Wilmington Avenue/Sepulveda Bo	B	xxxxx	0.628	B	xxxxx	0.628	+ 0.000 V/C
# 4 Sepulveda Boulevard/Alameda St	A	xxxxx	0.555	A	xxxxx	0.555	+ 0.000 V/C
# 5 Alameda Street/KMEP Driveway E	A	xxxxx	0.544	A	xxxxx	0.544	+ 0.000 V/C
# 6 Alameda Street/223rd Connector	A	xxxxx	0.593	A	xxxxx	0.593	+ 0.000 V/C
# 7 Alameda Street/I-405 NB Ramps	B	xxxxx	0.669	B	xxxxx	0.669	+ 0.000 V/C
# 8 Alameda St/Lay Down Area Acces	E	0.5	0.000	E	0.5	0.000	+ 0.000 D/V
# 9 Wilmington Ave/Watson Cogen Ac	F	23.4	0.000	F	23.4	0.000	+ 0.000 D/V

Project Name
Existing PM Peak Hour Conditions

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

Intersection #1 I-405 SB Ramps/223rd St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.485
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	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			Protected			Protected		
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	2 0	2 0	1	1 0	2 1	0
Volume Module:												
Base Vol:	1	6	7	129	1	31	713	687	4	4	286	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:	1	6	7	129	1	31	713	687	4	4	286	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:	1	6	7	129	1	31	713	687	4	4	286	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	6	7	129	1	31	713	687	4	4	286	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
Final Vol.:	1	6	7	129	1	31	713	687	4	4	286	63
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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:	0.07	0.43	0.50	1.00	0.03	0.97	2.00	2.00	1.00	1.00	2.46	0.54
Final Sat.:	114	686	800	1600	50	1550	3200	3200	1600	1600	3934	866
Capacity Analysis Module:												
Vol/Sat:	0.00	0.01	0.01	0.08	0.02	0.02	0.22	0.21	0.00	0.00	0.07	0.07
Crit Moves:		****		****			****				****	

Project Name
Existing PM Peak Hour Conditions

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

Intersection #2 Wilmington Ave/223rd St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.973
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 158 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 2 0 1			1 0 2 0 1			1 0 2 0 1			1 0 2 0 1		
Volume Module:												
Base Vol:	35	1296	445	115	649	417	433	969	11	150	262	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:	35	1296	445	115	649	417	433	969	11	150	262	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:	35	1296	445	115	649	417	433	969	11	150	262	109
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	1296	445	115	649	417	433	969	11	150	262	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
Final Vol.:	35	1296	445	115	649	417	433	969	11	150	262	109
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.41	0.28	0.07	0.20	0.26	0.27	0.30	0.01	0.09	0.08	0.07
Crit Moves:		****		****				****		****		

Project Name
Existing PM Peak Hour Conditions

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

Intersection #3 Wilmington Avenue/Sepulveda Boulevard

Cycle (sec): 100 Critical Vol./Cap. (X): 0.628
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 42 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	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:	26	462	136	129	508	185	209	496	22	68	357	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:	26	462	136	129	508	185	209	496	22	68	357	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:	26	462	136	129	508	185	209	496	22	68	357	57				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Reduced Vol:	26	462	136	129	508	185	209	496	22	68	357	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				
Final Vol.:	26	462	136	129	508	185	209	496	22	68	357	57				
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600				
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	1.55	0.45	1.00	1.47	0.53	1.00	1.92	0.08	1.00	1.72	0.28				
Final Sat.:	1600	2472	728	1600	2346	854	1600	3064	136	1600	2759	441				
Capacity Analysis Module:																
Vol/Sat:	0.02	0.19	0.19	0.08	0.22	0.22	0.13	0.16	0.16	0.04	0.13	0.13				
Crit Moves:		****		****			****				****					

Project Name
Existing PM Peak Hour Conditions

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

Intersection #4 Sepulveda Boulevard/Alameda St Connector

Cycle (sec): 100 Critical Vol./Cap. (X): 0.555
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 37 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:	Split Phase						Split Phase						Protected						Protected					
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		1	1	0	0	1		1	0	1	1	0		1	0	1	1	0	
Volume Module:																								
Base Vol:	2	13		6			139	15		165			192	736		1			4	464		258		
Growth Adj:	1.00	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	13		6			139	15		165			192	736		1			4	464		258		
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
PHF Adj:	1.00	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	13		6			139	15		165			192	736		1			4	464		258		
Reduct Vol:	0	0		0			0	0		0			0	0		0			0	0		0		
Reduced Vol:	2	13		6			139	15		165			192	736		1			4	464		258		
PCE Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
MLF Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
Final Vol.:	2	13		6			139	15		165			192	736		1			4	464		258		
Saturation Flow Module:																								
Sat/Lane:	1600	1600		1600			1600	1600		1600			1600	1600		1600			1600	1600		1600		
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:	0.19	1.24		0.57			1.81	0.19		1.00			1.00	1.99		0.01			1.00	1.29		0.71		
Final Sat.:	305	1981		914			2888	312		1600			1600	3196		4			1600	2057		1143		
Capacity Analysis Module:																								
Vol/Sat:	0.01	0.01		0.01			0.05	0.05		0.10			0.12	0.23		0.23			0.00	0.23		0.23		
Crit Moves:	****									****			****							****				

Project Name
Existing PM Peak Hour Conditions

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

Intersection #5 Alameda Street/KMEP Driveway Ext

Cycle (sec):	100	Critical Vol./Cap. (X):	0.544
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	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			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 1	0	0 0	1! 0	0	1 0	0 1	1
Volume Module:												
Base Vol:	0	894	131	191	890	0	0	0	0	70	0	356
Growth Adj:	1.00	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	894	131	191	890	0	0	0	0	70	0	356
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	894	131	191	890	0	0	0	0	70	0	356
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	894	131	191	890	0	0	0	0	70	0	356
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	894	131	191	890	0	0	0	0	70	0	356
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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	2.62	0.38	1.00	3.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00
Final Sat.:	1600	4187	613	1600	4800	0	0	1600	0	1600	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.12	0.19	0.00	0.00	0.00	0.00	0.04	0.00	0.11
Crit Moves:		****		****								****

Project Name
Existing PM Peak Hour Conditions

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

Intersection #6 Alameda Street/223rd Connector

Cycle (sec): 100 Critical Vol./Cap. (X): 0.593
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 39 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			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 1 0			1 0 3 0 0			0 0 0 0 0			1 0 0 0 1		
Volume Module:												
Base Vol:	0	1018	394	152	1010	0	0	0	0	119	0	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	1018	394	152	1010	0	0	0	0	119	0	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	1018	394	152	1010	0	0	0	0	119	0	166
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1018	394	152	1010	0	0	0	0	119	0	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
Final Vol.:	0	1018	394	152	1010	0	0	0	0	119	0	166
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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	2.16	0.84	1.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3461	1339	1600	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.29	0.10	0.21	0.00	0.00	0.00	0.00	0.07	0.00	0.10
Crit Moves:		****		****								****

Project Name
Existing PM Peak Hour Conditions

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

Intersection #7 Alameda Street/I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap. (X):	0.669
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
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:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Ovl			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	2 0	0	0 0	0 0	0	1 0	0 0	1
Volume Module:												
Base Vol:	0	931	158	88	619	0	0	0	0	245	0	357
Growth Adj:	1.00	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	931	158	88	619	0	0	0	0	245	0	357
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	931	158	88	619	0	0	0	0	245	0	357
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	931	158	88	619	0	0	0	0	245	0	357
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	931	158	88	619	0	0	0	0	245	0	357
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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	2.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	1600	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.10	0.06	0.19	0.00	0.00	0.00	0.00	0.15	0.00	0.22
Crit Moves:		****		****								****

Appendix T-3
2011 No Project Intersection LOS

Carson Cogen AFC
2011 No Project

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
# 1 I-405 SB Ramps/223rd St	A	xxxxx	0.456	A	xxxxx	0.456	+ 0.000
# 2 Wilmington Ave/223rd St	B	xxxxx	0.673	B	xxxxx	0.673	+ 0.000
# 3 Wilmington Avenue/Sepulveda Bo	B	xxxxx	0.645	B	xxxxx	0.646	+ 0.001
# 4 Sepulveda Boulevard/Alameda St	A	xxxxx	0.558	A	xxxxx	0.558	+ 0.000
# 5 Alameda Street/KMEP Driveway E	A	xxxxx	0.509	A	xxxxx	0.509	+ 0.000
# 6 Alameda Street/223rd Connector	A	xxxxx	0.423	A	xxxxx	0.424	+ 0.001
# 7 Alameda Street/I-405 NB Ramps	A	xxxxx	0.547	A	xxxxx	0.548	+ 0.001

Carson Cogen AFC
2011 No Project

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

Intersection #1 I-405 SB Ramps/223rd St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.456
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	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			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	0	1 0	0 1	0	2 0	2 0	1	1 0	2 1	0
Volume Module:												
Base Vol:	2	1	0	64	0	161	376	308	1	2	560	42
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	2	1	0	66	0	166	387	317	1	2	577	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:	2	1	0	66	0	166	387	317	1	2	577	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	1	0	66	0	166	387	317	1	2	577	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
Final Vol.:	2	1	0	66	0	166	387	317	1	2	577	43
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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:	0.67	0.33	0.00	1.00	0.00	1.00	2.00	2.00	1.00	1.00	2.79	0.21
Final Sat.:	1067	533	0	1600	0	1600	3200	3200	1600	1600	4465	335
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.04	0.00	0.10	0.12	0.10	0.00	0.00	0.13	0.13
Crit Moves:		****				****	****				****	

Carson Cogen AFC
2011 No Project

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

Intersection #2 Wilmington Ave/223rd St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.673
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	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			2 0 2 0 1			2 0 2 0 1			2 0 2 0 1		
Volume Module:												
Base Vol:	25	907	218	101	922	526	284	421	10	166	395	70
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	26	934	225	104	950	542	293	434	10	171	407	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:	26	934	225	104	950	542	293	434	10	171	407	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	934	225	104	950	542	293	434	10	171	407	72
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	26	934	225	104	950	542	293	434	10	171	407	72
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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	2.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	1600	3200	1600	3200	3200	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.29	0.14	0.03	0.30	0.34	0.09	0.14	0.01	0.05	0.13	0.05
Crit Moves:	****					****	****				****	

Carson Cogen AFC
2011 No Project

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

Intersection #3 Wilmington Avenue/Sepulveda Boulevard

Cycle (sec): 100 Critical Vol./Cap. (X): 0.645
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 44 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:	21	425	95	114	351	188	246	264	24	82	338	116
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	22	438	98	117	362	194	253	272	25	84	348	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:	22	438	98	117	362	194	253	272	25	84	348	119
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	438	98	117	362	194	253	272	25	84	348	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
Final Vol.:	22	438	98	117	362	194	253	272	25	84	348	119
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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	1.63	0.37	1.00	1.30	0.70	1.00	1.83	0.17	1.00	1.49	0.51
Final Sat.:	1600	2615	585	1600	2084	1116	1600	2933	267	1600	2382	818
Capacity Analysis Module:												
Vol/Sat:	0.01	0.17	0.17	0.07	0.17	0.17	0.16	0.09	0.09	0.05	0.15	0.15
Crit Moves:		****			****		****				****	

Carson Cogen AFC
2011 No Project

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

Intersection #4 Sepulveda Boulevard/Alameda St Connector

Cycle (sec): 100 Critical Vol./Cap. (X): 0.558
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 37 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:	Split Phase			Split Phase			Protected			Protected		
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	1 0	1 1 0	0 1		1 0	1 1 0		1 0	1 1 0	
Volume Module:												
Base Vol:	6	18	3	211	27	156	162	409	12	6	591	168
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	6	19	3	217	28	161	167	421	12	6	609	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:	6	19	3	217	28	161	167	421	12	6	609	173
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	19	3	217	28	161	167	421	12	6	609	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
Final Vol.:	6	19	3	217	28	161	167	421	12	6	609	173
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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:	0.44	1.34	0.22	1.77	0.23	1.00	1.00	1.94	0.06	1.00	1.56	0.44
Final Sat.:	711	2133	356	2837	363	1600	1600	3109	91	1600	2492	708
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.08	0.08	0.10	0.10	0.14	0.14	0.00	0.24	0.24
Crit Moves:	****					****	****				****	

Carson Cogen AFC
2011 No Project

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

Intersection #5 Alameda Street/KMEP Driveway Ext

Cycle (sec):	100	Critical Vol./Cap. (X):	0.509
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	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			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 1	0	0 0	1! 0	0	1 0	0 1	1
Volume Module:												
Base Vol:	0	569	102	288	787	0	0	0	0	103	0	246
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	0	586	105	297	811	0	0	0	0	106	0	253
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	586	105	297	811	0	0	0	0	106	0	253
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	586	105	297	811	0	0	0	0	106	0	253
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	586	105	297	811	0	0	0	0	106	0	253
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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	2.54	0.46	1.00	3.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00
Final Sat.:	1600	4070	730	1600	4800	0	0	1600	0	1600	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.14	0.14	0.19	0.17	0.00	0.00	0.00	0.00	0.07	0.00	0.08
Crit Moves:		****		****								****

Carson Cogen AFC
2011 No Project

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

Intersection #6 Alameda Street/223rd Connector

Cycle (sec):	100	Critical Vol./Cap. (X):	0.423
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	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			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 1	0	1 0	3 0	0	0 0	0 0	0	1 0	0 0	1
Volume Module:												
Base Vol:	0	437	189	133	898	0	0	0	0	160	0	118
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	0	450	195	137	925	0	0	0	0	165	0	122
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	450	195	137	925	0	0	0	0	165	0	122
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	450	195	137	925	0	0	0	0	165	0	122
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	450	195	137	925	0	0	0	0	165	0	122
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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	2.09	0.91	1.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3351	1449	1600	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.13	0.13	0.09	0.19	0.00	0.00	0.00	0.00	0.10	0.00	0.08
Crit Moves:		****		****						****		

Carson Cogen AFC
2011 No Project

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

Intersection #7 Alameda Street/I-405 NB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.547
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 53 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			Split Phase			Split Phase		
Rights:	Ovl			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 2	0 0		0 0 0	0 0		1 0 0	0 1	
Volume Module:												
Base Vol:	0	553	50	60	786	0	0	0	0	302	0	252
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	0	570	52	62	810	0	0	0	0	311	0	260
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	570	52	62	810	0	0	0	0	311	0	260
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	570	52	62	810	0	0	0	0	311	0	260
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	570	52	62	810	0	0	0	0	311	0	260
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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	2.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	1600	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.18	0.03	0.04	0.25	0.00	0.00	0.00	0.00	0.19	0.00	0.16
Crit Moves:					****					****		

Carson Cogen AFC
2011 No Project

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
# 1 I-405 SB Ramps/223rd St	A	xxxxx	0.496	A	xxxxx	0.496	+ 0.000
# 2 Wilmington Ave/223rd St	E	xxxxx	0.914	E	xxxxx	0.925	+ 0.011
# 3 Wilmington Avenue/Sepulveda Bo	B	xxxxx	0.643	B	xxxxx	0.644	+ 0.001
# 4 Sepulveda Boulevard/Alameda St	A	xxxxx	0.569	A	xxxxx	0.569	+ 0.000
# 5 Alameda Street/KMEP Driveway E	A	xxxxx	0.557	A	xxxxx	0.557	+ 0.000
# 6 Alameda Street/223rd Connector	B	xxxxx	0.608	B	xxxxx	0.609	+ 0.001
# 7 Alameda Street/I-405 NB Ramps	B	xxxxx	0.686	B	xxxxx	0.687	+ 0.001

Carson Cogen AFC
2011 No Project

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

Intersection #1 I-405 SB Ramps/223rd St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.496
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	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			Protected			Protected		
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	2 0	2 0	1	1 0	2 1	0
Volume Module:												
Base Vol:	1	6	7	129	1	31	713	687	4	4	286	63
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	1	6	7	133	1	32	734	708	4	4	295	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:	1	6	7	133	1	32	734	708	4	4	295	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	6	7	133	1	32	734	708	4	4	295	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
Final Vol.:	1	6	7	133	1	32	734	708	4	4	295	65
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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:	0.07	0.43	0.50	1.00	0.03	0.97	2.00	2.00	1.00	1.00	2.46	0.54
Final Sat.:	114	686	800	1600	50	1550	3200	3200	1600	1600	3934	866
Capacity Analysis Module:												
Vol/Sat:	0.00	0.01	0.01	0.08	0.02	0.02	0.23	0.22	0.00	0.00	0.07	0.07
Crit Moves:		****		****			****				****	

Carson Cogen AFC
2011 No Project

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

Intersection #2 Wilmington Ave/223rd St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.914
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 108 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 2 0 1			2 0 2 0 1			2 0 2 0 1			2 0 2 0 1		
Volume Module:												
Base Vol:	35	1296	445	115	649	417	433	969	11	150	262	109
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	36	1335	458	118	668	430	446	998	11	155	270	112
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	1335	458	118	668	430	446	998	11	155	270	112
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	1335	458	118	668	430	446	998	11	155	270	112
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	36	1335	458	118	668	430	446	998	11	155	270	112
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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	2.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	1600	3200	1600	3200	3200	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.42	0.29	0.04	0.21	0.27	0.14	0.31	0.01	0.05	0.08	0.07
Crit Moves:		****		****				****		****		

Carson Cogen AFC
2011 No Project

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

Intersection #3 Wilmington Avenue/Sepulveda Boulevard

Cycle (sec): 100 Critical Vol./Cap. (X): 0.643
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 44 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:	26	462	136	129	508	185	209	496	22	68	357	57
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	27	476	140	133	523	191	215	511	23	70	368	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:	27	476	140	133	523	191	215	511	23	70	368	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	476	140	133	523	191	215	511	23	70	368	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
Final Vol.:	27	476	140	133	523	191	215	511	23	70	368	59
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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	1.55	0.45	1.00	1.47	0.53	1.00	1.92	0.08	1.00	1.72	0.28
Final Sat.:	1600	2472	728	1600	2346	854	1600	3064	136	1600	2759	441
Capacity Analysis Module:												
Vol/Sat:	0.02	0.19	0.19	0.08	0.22	0.22	0.13	0.17	0.17	0.04	0.13	0.13
Crit Moves:		****		****			****				****	

Carson Cogen AFC
2011 No Project

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

Intersection #4 Sepulveda Boulevard/Alameda St Connector

Cycle (sec):	100	Critical Vol./Cap. (X):	0.569
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	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:	Split Phase			Split Phase			Protected			Protected		
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	1 0	1 1 0	0 1		1 0	1 1 0		1 0	1 1 0	
Volume Module:												
Base Vol:	2	13	6	139	15	165	192	736	1	4	464	258
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	2	13	6	143	15	170	198	758	1	4	478	266
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	13	6	143	15	170	198	758	1	4	478	266
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	13	6	143	15	170	198	758	1	4	478	266
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	2	13	6	143	15	170	198	758	1	4	478	266
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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:	0.19	1.24	0.57	1.81	0.19	1.00	1.00	1.99	0.01	1.00	1.29	0.71
Final Sat.:	305	1981	914	2888	312	1600	1600	3196	4	1600	2057	1143
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.05	0.05	0.11	0.12	0.24	0.24	0.00	0.23	0.23
Crit Moves:	****					****	****				****	

Carson Cogen AFC
2011 No Project

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

Intersection #5 Alameda Street/KMEP Driveway Ext

Cycle (sec):	100	Critical Vol./Cap. (X):	0.557
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	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			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 1	0	0 0	1! 0	0	1 0	0 1	1
Volume Module:												
Base Vol:	0	894	131	191	890	0	0	0	0	70	0	356
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	0	921	135	197	917	0	0	0	0	72	0	367
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	921	135	197	917	0	0	0	0	72	0	367
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	921	135	197	917	0	0	0	0	72	0	367
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	921	135	197	917	0	0	0	0	72	0	367
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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	2.62	0.38	1.00	3.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00
Final Sat.:	1600	4187	613	1600	4800	0	0	1600	0	1600	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.22	0.12	0.19	0.00	0.00	0.00	0.00	0.05	0.00	0.11
Crit Moves:		****		****								****

Carson Cogen AFC
2011 No Project

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

Intersection #6 Alameda Street/223rd Connector

Cycle (sec):	100	Critical Vol./Cap. (X):	0.608
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	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			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	1 0		1 0 3	0 0		0 0 0	0 0		1 0 0	0 1	
Volume Module:												
Base Vol:	0	1018	394	152	1010	0	0	0	0	119	0	166
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	0	1049	406	157	1040	0	0	0	0	123	0	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:	0	1049	406	157	1040	0	0	0	0	123	0	171
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1049	406	157	1040	0	0	0	0	123	0	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
Final Vol.:	0	1049	406	157	1040	0	0	0	0	123	0	171
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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	2.16	0.84	1.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3461	1339	1600	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.30	0.30	0.10	0.22	0.00	0.00	0.00	0.00	0.08	0.00	0.11
Crit Moves:		****		****								****

Carson Cogen AFC
2011 No Project

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

Intersection #7 Alameda Street/I-405 NB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.686
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 48 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			Split Phase			Split Phase		
Rights:	Ovl			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 2	0	0	0 0 0	0	0	1 0 0	0	1
Volume Module:												
Base Vol:	0	931	158	88	619	0	0	0	0	245	0	357
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	0	959	163	91	638	0	0	0	0	252	0	368
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	959	163	91	638	0	0	0	0	252	0	368
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	959	163	91	638	0	0	0	0	252	0	368
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	959	163	91	638	0	0	0	0	252	0	368
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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	2.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	1600	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.30	0.10	0.06	0.20	0.00	0.00	0.00	0.00	0.16	0.00	0.23
Crit Moves:		****		****								****

Appendix T-4
2011 No Project Plus Project Construction Condition Intersection LOS

Carson Cogen AFC
2011 No Project Plus Project Const Condition

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
# 1 I-405 SB Ramps/223rd St	A	xxxxx	0.456	A	xxxxx	0.476	+ 0.021
# 2 Wilmington Ave/223rd St	B	xxxxx	0.673	B	xxxxx	0.673	+ 0.000
# 3 Wilmington Avenue/Sepulveda Bo	B	xxxxx	0.645	B	xxxxx	0.656	+ 0.011
# 4 Sepulveda Boulevard/Alameda St	A	xxxxx	0.558	A	xxxxx	0.572	+ 0.015
# 5 Alameda Street/KMEP Driveway E	A	xxxxx	0.509	A	xxxxx	0.519	+ 0.011
# 6 Alameda Street/223rd Connector	A	xxxxx	0.423	A	xxxxx	0.448	+ 0.025
# 7 Alameda Street/I-405 NB Ramps	A	xxxxx	0.547	A	xxxxx	0.569	+ 0.022

Carson Cogen AFC
2011 No Project Plus Project Const Condition

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

Intersection #1 I-405 SB Ramps/223rd St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.476
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 32 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			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1 0 0 0			1 0 0 1 0			2 0 2 0 1			1 0 2 1 0		
Volume Module:												
Base Vol:	2	1	0	64	0	161	376	308	1	2	560	42
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	2	1	0	66	0	166	387	317	1	2	577	43
Added Vol:	0	0	0	0	0	32	0	0	0	0	3	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	1	0	66	0	198	387	317	1	2	580	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:	2	1	0	66	0	198	387	317	1	2	580	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	1	0	66	0	198	387	317	1	2	580	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
Final Vol.:	2	1	0	66	0	198	387	317	1	2	580	43
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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:	0.67	0.33	0.00	1.00	0.00	1.00	2.00	2.00	1.00	1.00	2.79	0.21
Final Sat.:	1067	533	0	1600	0	1600	3200	3200	1600	1600	4467	333
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.04	0.00	0.12	0.12	0.10	0.00	0.00	0.13	0.13
Crit Moves:		****				****	****				****	

Carson Cogen AFC
2011 No Project Plus Project Const Condition

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

Intersection #2 Wilmington Ave/223rd St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.673
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 47 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			2 0 2 0 1			2 0 2 0 1			2 0 2 0 1		
Volume Module:												
Base Vol:	25	907	218	101	922	526	284	421	10	166	395	70
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	26	934	225	104	950	542	293	434	10	171	407	72
Added Vol:	0	0	0	2	37	0	0	2	1	3	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	934	225	106	987	542	293	436	11	174	407	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:	26	934	225	106	987	542	293	436	11	174	407	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	934	225	106	987	542	293	436	11	174	407	72
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	26	934	225	106	987	542	293	436	11	174	407	72
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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	2.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	1600	3200	1600	3200	3200	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.29	0.14	0.03	0.31	0.34	0.09	0.14	0.01	0.05	0.13	0.05
Crit Moves:	****					****	****				****	

Carson Cogen AFC
2011 No Project Plus Project Const Condition

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

Intersection #3 Wilmington Avenue/Sepulveda Boulevard

Cycle (sec): 100 Critical Vol./Cap. (X): 0.656
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 45 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:	21	425	95	114	351	188	246	264	24	82	338	116
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	22	438	98	117	362	194	253	272	25	84	348	119
Added Vol:	0	0	1	11	0	0	1	2	0	0	0	10
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	22	438	99	128	362	194	254	274	25	84	348	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:	22	438	99	128	362	194	254	274	25	84	348	129
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	438	99	128	362	194	254	274	25	84	348	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
Final Vol.:	22	438	99	128	362	194	254	274	25	84	348	129
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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	1.63	0.37	1.00	1.30	0.70	1.00	1.83	0.17	1.00	1.46	0.54
Final Sat.:	1600	2611	589	1600	2084	1116	1600	2935	265	1600	2332	868
Capacity Analysis Module:												
Vol/Sat:	0.01	0.17	0.17	0.08	0.17	0.17	0.16	0.09	0.09	0.05	0.15	0.15
Crit Moves:		****			****		****				****	

Carson Cogen AFC
2011 No Project Plus Project Const Condition

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

Intersection #4 Sepulveda Boulevard/Alameda St Connector

Cycle (sec): 100 Critical Vol./Cap. (X): 0.572
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 38 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:	Split Phase			Split Phase			Protected			Protected		
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		1 1 0	0 1		1 0 1	1 0		1 0 1	1 0	
Volume Module:												
Base Vol:	6	18	3	211	27	156	162	409	12	6	591	168
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	6	19	3	217	28	161	167	421	12	6	609	173
Added Vol:	0	0	0	0	0	9	13	0	0	0	1	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	19	3	217	28	170	180	421	12	6	610	175
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	6	19	3	217	28	170	180	421	12	6	610	175
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	19	3	217	28	170	180	421	12	6	610	175
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	6	19	3	217	28	170	180	421	12	6	610	175
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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:	0.44	1.34	0.22	1.77	0.23	1.00	1.00	1.94	0.06	1.00	1.55	0.45
Final Sat.:	711	2133	356	2837	363	1600	1600	3109	91	1600	2486	714
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.08	0.08	0.11	0.11	0.14	0.14	0.00	0.25	0.25
Crit Moves:		****				****	****				****	

Carson Cogen AFC
2011 No Project Plus Project Const Condition

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

Intersection #5 Alameda Street/KMEP Driveway Ext

Cycle (sec): 100 Critical Vol./Cap. (X): 0.519
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 34 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			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	1 0		0 0 1!	0 0		1 0 0	1 1	
Volume Module:												
Base Vol:	0	569	102	288	787	0	0	0	0	103	0	246
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	0	586	105	297	811	0	0	0	0	106	0	253
Added Vol:	0	1	0	9	0	0	0	0	0	0	0	15
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	587	105	306	811	0	0	0	0	106	0	268
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	587	105	306	811	0	0	0	0	106	0	268
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	587	105	306	811	0	0	0	0	106	0	268
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	587	105	306	811	0	0	0	0	106	0	268
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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	2.54	0.46	1.00	3.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00
Final Sat.:	1600	4071	729	1600	4800	0	0	1600	0	1600	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.14	0.14	0.19	0.17	0.00	0.00	0.00	0.00	0.07	0.00	0.08
Crit Moves:		****		****								****

Carson Cogen AFC
2011 No Project Plus Project Const Condition

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

Intersection #6 Alameda Street/223rd Connector

Cycle (sec): 100 Critical Vol./Cap. (X): 0.448
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 31 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			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 1 0			1 0 3 0 0			0 0 0 0 0			1 0 0 0 1		
Volume Module:												
Base Vol:	0	437	189	133	898	0	0	0	0	160	0	118
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	0	450	195	137	925	0	0	0	0	165	0	122
Added Vol:	0	0	0	2	35	0	0	0	0	38	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	450	195	139	960	0	0	0	0	203	0	122
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	450	195	139	960	0	0	0	0	203	0	122
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	450	195	139	960	0	0	0	0	203	0	122
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	450	195	139	960	0	0	0	0	203	0	122
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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	2.09	0.91	1.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3351	1449	1600	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.13	0.13	0.09	0.20	0.00	0.00	0.00	0.00	0.13	0.00	0.08
Crit Moves:		****		****						****		

Carson Cogen AFC
2011 No Project Plus Project Const Condition

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

Intersection #7 Alameda Street/I-405 NB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.569
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 57 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			Split Phase			Split Phase		
Rights:	Ovl			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 2	0 0		0 0 0	0 0		1 0 0	0 1	
Volume Module:												
Base Vol:	0	553	50	60	786	0	0	0	0	302	0	252
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	0	570	52	62	810	0	0	0	0	311	0	260
Added Vol:	0	0	0	0	5	0	0	0	0	32	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	570	52	62	815	0	0	0	0	343	0	260
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	570	52	62	815	0	0	0	0	343	0	260
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	570	52	62	815	0	0	0	0	343	0	260
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	570	52	62	815	0	0	0	0	343	0	260
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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	2.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	1600	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.18	0.03	0.04	0.25	0.00	0.00	0.00	0.00	0.21	0.00	0.16
Crit Moves:					****					****		

Carson Cogen AFC
2011 No Project Plus Project Const Condition

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 I-405 SB Ramps/223rd St	A	xxxxx	0.496	A	xxxxx	0.506	+ 0.010 V/C
# 2 Wilmington Ave/223rd St	E	xxxxx	0.914	E	xxxxx	0.926	+ 0.012 V/C
# 3 Wilmington Avenue/Sepulveda Bo	B	xxxxx	0.643	B	xxxxx	0.654	+ 0.010 V/C
# 4 Sepulveda Boulevard/Alameda St	A	xxxxx	0.569	A	xxxxx	0.583	+ 0.014 V/C
# 5 Alameda Street/KMEP Driveway E	A	xxxxx	0.557	A	xxxxx	0.570	+ 0.012 V/C
# 6 Alameda Street/223rd Connector	B	xxxxx	0.608	B	xxxxx	0.624	+ 0.016 V/C
# 7 Alameda Street/I-405 NB Ramps	B	xxxxx	0.686	B	xxxxx	0.688	+ 0.002 V/C

Carson Cogen AFC
2011 No Project Plus Project Const Condition

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

Intersection #1 I-405 SB Ramps/223rd St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.506
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 34 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			Protected			Protected		
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	2 0	2 0	1	1 0	2 1	0
Volume Module:												
Base Vol:	1	6	7	129	1	31	713	687	4	4	286	63
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	1	6	7	133	1	32	734	708	4	4	295	65
Added Vol:	0	0	0	0	0	0	32	3	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	6	7	133	1	32	766	711	4	4	295	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:	1	6	7	133	1	32	766	711	4	4	295	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	6	7	133	1	32	766	711	4	4	295	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
Final Vol.:	1	6	7	133	1	32	766	711	4	4	295	65
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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:	0.07	0.43	0.50	1.00	0.03	0.97	2.00	2.00	1.00	1.00	2.46	0.54
Final Sat.:	114	686	800	1600	50	1550	3200	3200	1600	1600	3934	866
Capacity Analysis Module:												
Vol/Sat:	0.00	0.01	0.01	0.08	0.02	0.02	0.24	0.22	0.00	0.00	0.07	0.07
Crit Moves:		****		****			****				****	

Carson Cogen AFC
2011 No Project Plus Project Const Condition

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

Intersection #2 Wilmington Ave/223rd St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.926
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 115 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 2 0 1			2 0 2 0 1			2 0 2 0 1			2 0 2 0 1		
Volume Module:												
Base Vol:	35	1296	445	115	649	417	433	969	11	150	262	109
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	36	1335	458	118	668	430	446	998	11	155	270	112
Added Vol:	1	37	3	0	0	0	0	0	0	0	2	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	37	1372	461	118	668	430	446	998	11	155	272	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:	37	1372	461	118	668	430	446	998	11	155	272	114
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	37	1372	461	118	668	430	446	998	11	155	272	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
Final Vol.:	37	1372	461	118	668	430	446	998	11	155	272	114
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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	2.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	1600	3200	1600	3200	3200	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.43	0.29	0.04	0.21	0.27	0.14	0.31	0.01	0.05	0.08	0.07
Crit Moves:		****		****				****		****		

Carson Cogen AFC
2011 No Project Plus Project Const Condition

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

Intersection #3 Wilmington Avenue/Sepulveda Boulevard

Cycle (sec): 100 Critical Vol./Cap. (X): 0.654
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 45 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:	26	462	136	129	508	185	209	496	22	68	357	57
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	27	476	140	133	523	191	215	511	23	70	368	59
Added Vol:	0	0	0	10	0	1	0	0	0	1	2	11
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	476	140	143	523	192	215	511	23	71	370	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:	27	476	140	143	523	192	215	511	23	71	370	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	476	140	143	523	192	215	511	23	71	370	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
Final Vol.:	27	476	140	143	523	192	215	511	23	71	370	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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	1.55	0.45	1.00	1.46	0.54	1.00	1.92	0.08	1.00	1.68	0.32
Final Sat.:	1600	2472	728	1600	2342	858	1600	3064	136	1600	2692	508
Capacity Analysis Module:												
Vol/Sat:	0.02	0.19	0.19	0.09	0.22	0.22	0.13	0.17	0.17	0.04	0.14	0.14
Crit Moves:		****		****			****				****	

Carson Cogen AFC
2011 No Project Plus Project Const Condition

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

Intersection #4 Sepulveda Boulevard/Alameda St Connector

Cycle (sec): 100 Critical Vol./Cap. (X): 0.583
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 39 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:	Split Phase			Split Phase			Protected			Protected		
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	1 1	0 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	2	13	6	139	15	165	192	736	1	4	464	258
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	2	13	6	143	15	170	198	758	1	4	478	266
Added Vol:	0	0	0	2	0	13	9	1	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	13	6	145	15	183	207	759	1	4	478	266
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	13	6	145	15	183	207	759	1	4	478	266
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	13	6	145	15	183	207	759	1	4	478	266
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	2	13	6	145	15	183	207	759	1	4	478	266
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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:	0.19	1.24	0.57	1.81	0.19	1.00	1.00	1.99	0.01	1.00	1.29	0.71
Final Sat.:	305	1981	914	2892	308	1600	1600	3196	4	1600	2057	1143
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.05	0.05	0.11	0.13	0.24	0.24	0.00	0.23	0.23
Crit Moves:	****					****	****				****	

Carson Cogen AFC
2011 No Project Plus Project Const Condition

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

Intersection #5 Alameda Street/KMEP Driveway Ext

Cycle (sec): 100 Critical Vol./Cap. (X): 0.570
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 38 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			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 1	0	0 0	1! 0	0	1 0	0 1	1
Volume Module:												
Base Vol:	0	894	131	191	890	0	0	0	0	70	0	356
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	0	921	135	197	917	0	0	0	0	72	0	367
Added Vol:	0	0	0	15	1	0	0	0	0	0	0	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	921	135	212	918	0	0	0	0	72	0	376
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	921	135	212	918	0	0	0	0	72	0	376
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	921	135	212	918	0	0	0	0	72	0	376
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	921	135	212	918	0	0	0	0	72	0	376
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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	2.62	0.38	1.00	3.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00
Final Sat.:	1600	4187	613	1600	4800	0	0	1600	0	1600	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.22	0.13	0.19	0.00	0.00	0.00	0.00	0.05	0.00	0.12
Crit Moves:		****		****								****

Carson Cogen AFC
2011 No Project Plus Project Const Condition

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

Intersection #6 Alameda Street/223rd Connector

Cycle (sec): 100 Critical Vol./Cap. (X): 0.624
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 42 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			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 1 0			1 0 3 0 0			0 0 0 0 0			1 0 0 0 1		
Volume Module:												
Base Vol:	0	1018	394	152	1010	0	0	0	0	119	0	166
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	0	1049	406	157	1040	0	0	0	0	123	0	171
Added Vol:	0	35	38	0	0	0	0	0	0	0	0	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1084	444	157	1040	0	0	0	0	123	0	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:	0	1084	444	157	1040	0	0	0	0	123	0	173
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1084	444	157	1040	0	0	0	0	123	0	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
Final Vol.:	0	1084	444	157	1040	0	0	0	0	123	0	173
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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	2.13	0.87	1.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3405	1395	1600	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.32	0.32	0.10	0.22	0.00	0.00	0.00	0.00	0.08	0.00	0.11
Crit Moves:		****		****								****

Carson Cogen AFC
2011 No Project Plus Project Const Condition

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

Intersection #7 Alameda Street/I-405 NB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.688
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 49 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			Split Phase			Split Phase		
Rights:	Ovl			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 2	0 0		0 0 0	0 0		1 0 0	0 1	
Volume Module:												
Base Vol:	0	931	158	88	619	0	0	0	0	245	0	357
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	0	959	163	91	638	0	0	0	0	252	0	368
Added Vol:	0	5	32	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	964	195	91	638	0	0	0	0	252	0	368
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	964	195	91	638	0	0	0	0	252	0	368
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	964	195	91	638	0	0	0	0	252	0	368
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	964	195	91	638	0	0	0	0	252	0	368
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
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	2.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	1600	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.30	0.12	0.06	0.20	0.00	0.00	0.00	0.00	0.16	0.00	0.23
Crit Moves:		****		****								****

Appendix T-5
Roadway Segment LOS

Carson Cogen AFC

EXISTING ROADWAY SEGMENT ANALYSIS

				AM						PM					
		Lanes	Capacity	Volume		V/C		LOS		Volume		V/C		LOS	
				EB,NB	WB,SB	EB,NB	WB,SB	EB,NB	WB,SB	EB,NB	WB,SB	EB,NB	WB,SB	EB,NB	WB,SB
E. Sepulveda Boulevard	Wilmington Avenue and S. Alameda Street	2	750	606	665	0.40	0.44	A	A	688	609	0.46	0.41	A	A
E. 223rd Steeet	S. Alameda Street and Wilmington Avenue	2	750	622	487	0.41	0.32	A	A	1193	661	0.80	0.44	C	A
S. Alameda Street	E. 223rd Street and Sepulveda Boulevard	3	750	754	728	0.34	0.32	A	A	1308	846	0.58	0.38	A	A
Wilmington Avenue	Sepulveda Boulevard and E.223rd	2	750	736	644	0.49	0.43	A	A	719	840	0.48	0.56	A	A

2011 NO PROJECT CONDITION

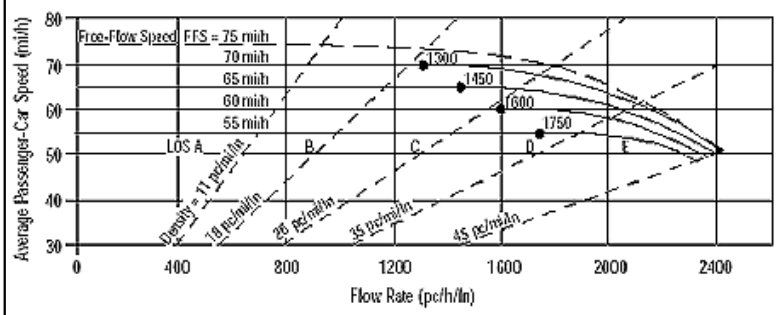
E. Sepulveda Boulevard	Wilmington Avenue and S. Alameda Street	2	750	624	685	0.42	0.46	A	A	709	627	0.47	0.42	A	A
E. 223rd Steeet	S. Alameda Street and Wilmington Avenue	2	750	641	502	0.43	0.33	A	A	1229	681	0.82	0.45	D	A
S. Alameda Street	E. 223rd Street and Sepulveda Boulevard	3	750	777	750	0.35	0.33	A	A	1347	871	0.60	0.39	A	A
Wilmington Avenue	Sepulveda Boulevard and E.223rd	2	750	758	663	0.51	0.44	A	A	741	865	0.49	0.58	A	A

2011 NO PROJECT CONDITION PLUS PROJECT CONSTRUCTION CONDITION

E. Sepulveda Boulevard	Wilmington Avenue and S. Alameda Street	2	750	637	695	0.42	0.46	A	A	719	640	0.48	0.43	A	A
E. 223rd Steeet	S. Alameda Street and Wilmington Avenue	2	750	645	505	0.43	0.34	A	A	1232	685	0.82	0.46	D	A
S. Alameda Street	E. 223rd Street and Sepulveda Boulevard	3	750	793	823	0.35	0.37	A	A	1420	887	0.63	0.39	B	A
Wilmington Avenue	Sepulveda Boulevard and E.223rd	2	750	770	674	0.51	0.45	A	A	752	877	0.50	0.58	A	A

Appendix T-6
2008 Freeway LOS

BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information		***Site Information***	
Analyst	*SM Alam*	Highway/Direction of Travel	*I-405 NB*
Agency or Company	*URS Corporation*	From/To	*Alameda to Wilmington*
Date Performed	*7/24/2008*	Jurisdiction	*LA County and City of Carson*
Analysis Time Period	*AM Peak Hour*	Analysis Year	*2008*

Project Description Carson Cogen AFC

○ Oper.(LOS) ○ Des.(N) ○ Planning Data

Flow Inputs				
Volume, V	*6931*	veh/h	Peak-Hour Factor, PHF	*0.90*
AADT		veh/day	%Trucks and Buses, P_T	*6*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
Driver type adjustment	*1.00*		Up/Down %	

Calculate Flow Adjustments			
f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.971*

Speed Inputs			**Calc Speed Adj and FFS**		
Lane Width	*12.0*	ft	f_{LW}		mi/h
Rt-Shoulder Lat. Clearance	*6.0*	ft	f_{LC}		mi/h
Interchange Density	*0.50*	I/mi	f_{ID}		mi/h
Number of Lanes, N	*4*		f_N		mi/h
FFS (measured)	*70.0*	mi/h	FFS	*70.0*	mi/h
Base free-flow Speed, BFFS		mi/h			

LOS and Performance Measures			**Design (N)**	
Operational (LOS)			Design (N)	
			Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1983*	pc/h/ln	v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h
S	*65.2*	mi/h	S	mi/h
D = v_p / S	*30.4*	pc/mi/ln	D = v_p / S	pc/mi/ln
LOS	*D*		Required Number of Lanes, N	

Glossary		**Factor Location**	
N - Number of lanes	S - Speed	E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
V - Hourly volume	D - Density	E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
v_p - Flow rate	FFS - Free-flow speed	f_p - Page 23-12	f_N - Exhibit 23-6
LOS - Level of service	BFFS - Base free-flow speed	LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7
DDHV - Directional design hour volume			

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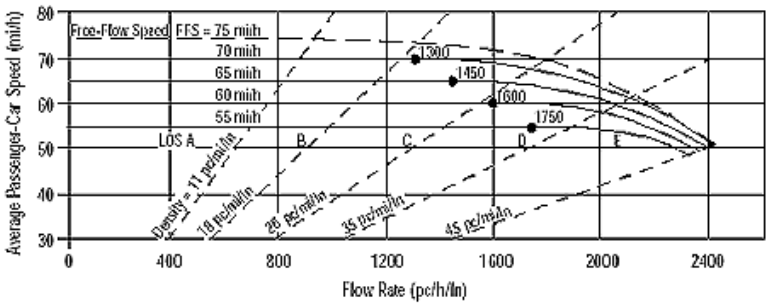
BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information / Site Information

General Information		Site Information	
Analyst	*SM Alam*	Highway/Direction of Travel	*I-405 SB*
Agency or Company	*URS Corporation*	From/To	*Alameda to Wilmington*
Date Performed	*7/24/2008*	Jurisdiction	*LA County and City of Carson*
Analysis Time Period	*AM Peak Hour*	Analysis Year	*2008*

Project Description Carson Cogen AFC

○ Oper.(LOS) ○ Des.(N) ○ Planning Data

Flow Inputs

Volume, V	*7171*	veh/h	Peak-Hour Factor, PHF	*0.90*
AADT		veh/day	%Trucks and Buses, P_T	*6*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
Driver type adjustment	*1.00*		Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.971*

Speed Inputs / Calc Speed Adj and FFS

Speed Inputs			Calc Speed Adj and FFS		
Lane Width	*12.0*	ft	f_{LW}		mi/h
Rt-Shoulder Lat. Clearance	*6.0*	ft	f_{LC}		mi/h
Interchange Density	*0.50*	I/mi	f_{ID}		mi/h
Number of Lanes, N	*4*		f_N		mi/h
FFS (measured)	*70.0*	mi/h	FFS	*70.0*	mi/h
Base free-flow Speed, BFFS		mi/h			

LOS and Performance Measures / Design (N)

LOS and Performance Measures			Design (N)		
Operational (LOS)			Design (N)		
			Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2052*	pc/h/ln	v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h
S	*63.8*	mi/h	S		mi/h
D = v_p / S	*32.2*	pc/mi/ln	D = v_p / S		pc/mi/ln
LOS	*D*		Required Number of Lanes, N		

Glossary / Factor Location

Glossary		Factor Location	
N - Number of lanes	S - Speed	E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
V - Hourly volume	D - Density	E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
v_p - Flow rate	FFS - Free-flow speed	f_p - Page 23-12	f_N - Exhibit 23-6
LOS - Level of service	BFFS - Base free-flow speed	LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7
DDHV - Directional design hour volume			

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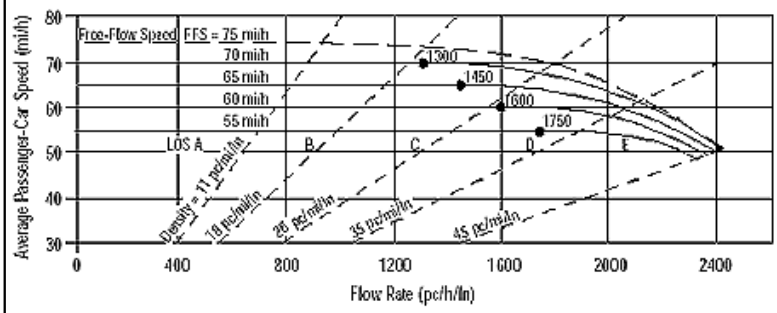
BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information		***Site Information***	
Analyst	*SM Alam*	Highway/Direction of Travel	*I-405 NB*
Agency or Company	*URS Corporation*	From/To	*Alameda to Wilmington*
Date Performed	*7/24/2008*	Jurisdiction	*LA County and City of Carson*
Analysis Time Period	*PM Peak Hour*	Analysis Year	*2008*

Project Description Carson Cogen AFC

○ Oper.(LOS) ○ Des.(N) ○ Planning Data

Flow Inputs				
Volume, V	*7048*	veh/h	Peak-Hour Factor, PHF	*0.90*
AADT		veh/day	%Trucks and Buses, P_T	*6*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
Driver type adjustment	*1.00*		Up/Down %	

Calculate Flow Adjustments			
f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.971*

Speed Inputs			**Calc Speed Adj and FFS**		
Lane Width	*12.0*	ft	f_{LW}		mi/h
Rt-Shoulder Lat. Clearance	*6.0*	ft	f_{LC}		mi/h
Interchange Density	*0.50*	I/mi	f_{ID}		mi/h
Number of Lanes, N	*4*		f_N		mi/h
FFS (measured)	*70.0*	mi/h	FFS	*70.0*	mi/h
Base free-flow Speed, BFFS		mi/h			

LOS and Performance Measures			**Design (N)**	
Operational (LOS)			Design (N)	
			Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2017*	pc/h/ln	v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h
S	*64.5*	mi/h	S	mi/h
D = v_p / S	*31.3*	pc/mi/ln	D = v_p / S	pc/mi/ln
LOS	*D*		Required Number of Lanes, N	

Glossary		**Factor Location**	
N - Number of lanes	S - Speed	E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
V - Hourly volume	D - Density	E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
v_p - Flow rate	FFS - Free-flow speed	f_p - Page 23-12	f_N - Exhibit 23-6
LOS - Level of service	BFFS - Base free-flow speed	LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7
DDHV - Directional design hour volume			

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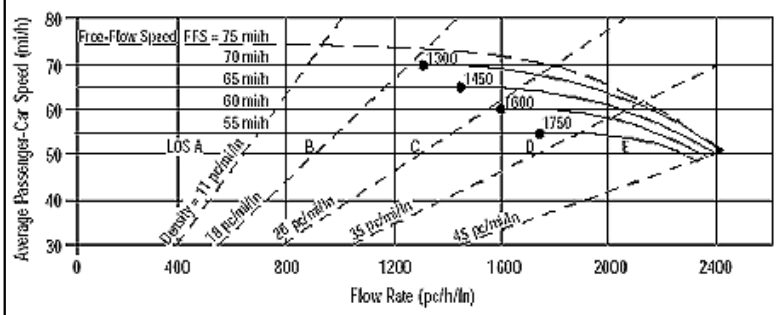
BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information		***Site Information***	
Analyst	*SM Alam*	Highway/Direction of Travel	
Agency or Company	*URS Corporation*	From/To	*Alameda to Wilmington*
Date Performed	*7/24/2008*	Jurisdiction	*LA County and City of Carson*
Analysis Time Period	*PM Peak Hour*	Analysis Year	*2008*

Project Description Carson Cogen AFC

○ Oper.(LOS) ○ Des.(N) ○ Planning Data

Flow Inputs				
Volume, V	*6081*	veh/h	Peak-Hour Factor, PHF	*0.90*
AADT		veh/day	%Trucks and Buses, P_T	*6*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
Driver type adjustment	*1.00*		Up/Down %	

Calculate Flow Adjustments			
f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.971*

Speed Inputs			**Calc Speed Adj and FFS**		
Lane Width	*12.0*	ft	f_{LW}		mi/h
Rt-Shoulder Lat. Clearance	*6.0*	ft	f_{LC}		mi/h
Interchange Density	*0.50*	I/mi	f_{ID}		mi/h
Number of Lanes, N	*4*		f_N		mi/h
FFS (measured)	*70.0*	mi/h	FFS	*70.0*	mi/h
Base free-flow Speed, BFFS		mi/h			

LOS and Performance Measures			**Design (N)**	
Operational (LOS)			Design (N)	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1740*	pc/h/ln	Design LOS	
S	*68.5*	mi/h	v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h
D = v_p / S	*25.4*	pc/mi/ln	S	mi/h
LOS	*C*		D = v_p / S	pc/mi/ln
			Required Number of Lanes, N	

Glossary		**Factor Location**	
N - Number of lanes	S - Speed	E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
V - Hourly volume	D - Density	E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
v_p - Flow rate	FFS - Free-flow speed	f_p - Page 23-12	f_N - Exhibit 23-6
LOS - Level of service	BFFS - Base free-flow speed	LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7
DDHV - Directional design hour volume			

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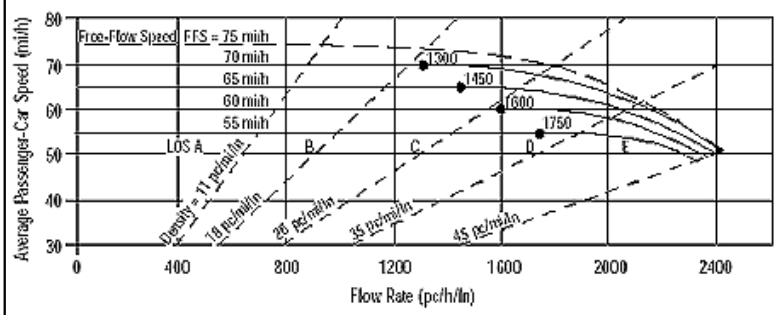

Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information		***Site Information***	
Analyst	*SM Alam*	Highway/Direction of Travel	*I-405 NB*
Agency or Company	*URS Corporation*	From/To	*Alameda to Wilmington*
Date Performed	*7/24/2008*	Jurisdiction	*LA County and City of Carson*
Analysis Time Period	*AM Peak Hour*	Analysis Year	*2011 No Project*

Project Description Carson Cogen AFC

○ Oper.(LOS) ○ Des.(N) ○ Planning Data

Flow Inputs				
Volume, V	*7140*	veh/h	Peak-Hour Factor, PHF	*0.90*
AADT		veh/day	%Trucks and Buses, P_T	*6*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
Driver type adjustment	*1.00*		Up/Down %	

Calculate Flow Adjustments			
f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.971*

Speed Inputs			**Calc Speed Adj and FFS**		
Lane Width	*12.0*	ft	f_{LW}		mi/h
Rt-Shoulder Lat. Clearance	*6.0*	ft	f_{LC}		mi/h
Interchange Density	*0.50*	I/mi	f_{ID}		mi/h
Number of Lanes, N	*4*		f_N		mi/h
FFS (measured)	*70.0*	mi/h	FFS	*70.0*	mi/h
Base free-flow Speed, BFFS		mi/h			

LOS and Performance Measures			**Design (N)**	
Operational (LOS)			Design (N)	
			Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2043*	pc/h/ln	v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h
S	*64.0*	mi/h	S	mi/h
D = v_p / S	*31.9*	pc/mi/ln	D = v_p / S	pc/mi/ln
LOS	*D*		Required Number of Lanes, N	

Glossary		**Factor Location**	
N - Number of lanes	S - Speed	E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
V - Hourly volume	D - Density	E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
v_p - Flow rate	FFS - Free-flow speed	f_p - Page 23-12	f_N - Exhibit 23-6
LOS - Level of service	BFFS - Base free-flow speed	LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7
DDHV - Directional design hour volume			

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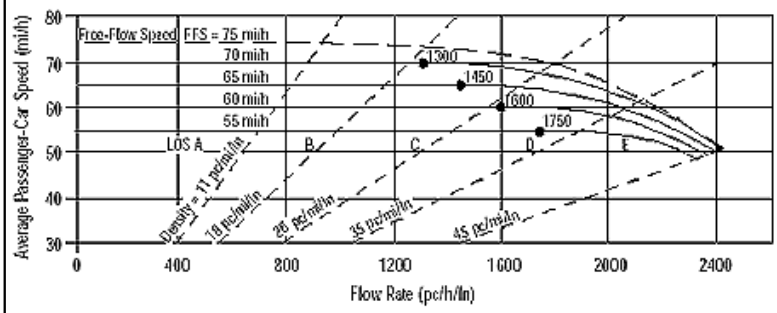

Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information		***Site Information***	
Analyst	*SM Alam*	Highway/Direction of Travel	*I-405 SB*
Agency or Company	*URS Corporation*	From/To	*Alameda to Wilmington*
Date Performed	*7/24/2008*	Jurisdiction	*LA County and City of Carson*
Analysis Time Period	*AM Peak Hour*	Analysis Year	*2011 No Project*

Project Description Carson Cogen AFC

○ Oper.(LOS) ○ Des.(N) ○ Planning Data

Flow Inputs				
Volume, V	*7386*	veh/h	Peak-Hour Factor, PHF	*0.90*
AADT		veh/day	%Trucks and Buses, P_T	*6*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
Driver type adjustment	*1.00*		Up/Down %	

Calculate Flow Adjustments			
f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.971*

Speed Inputs			**Calc Speed Adj and FFS**		
Lane Width	*12.0*	ft	f_{LW}		mi/h
Rt-Shoulder Lat. Clearance	*6.0*	ft	f_{LC}		mi/h
Interchange Density	*0.50*	I/mi	f_{ID}		mi/h
Number of Lanes, N	*4*		f_N		mi/h
FFS (measured)	*70.0*	mi/h	FFS	*70.0*	mi/h
Base free-flow Speed, BFFS		mi/h			

LOS and Performance Measures			**Design (N)**	
Operational (LOS)			Design (N)	
			Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2113*	pc/h/ln	v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h
S	*62.4*	mi/h	S	mi/h
D = v_p / S	*33.9*	pc/mi/ln	D = v_p / S	pc/mi/ln
LOS	*D*		Required Number of Lanes, N	

Glossary		**Factor Location**	
N - Number of lanes	S - Speed	E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
V - Hourly volume	D - Density	E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
v_p - Flow rate	FFS - Free-flow speed	f_p - Page 23-12	f_N - Exhibit 23-6
LOS - Level of service	BFFS - Base free-flow speed	LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7
DDHV - Directional design hour volume			

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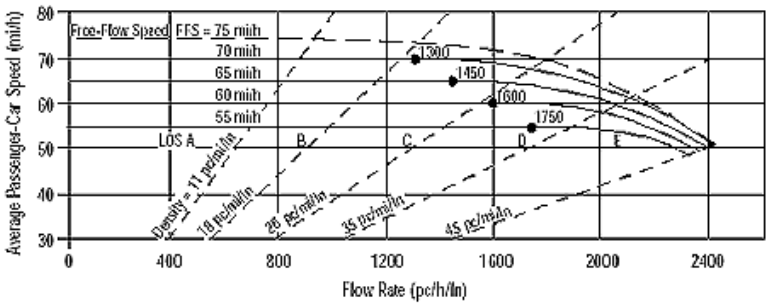

Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information		***Site Information***	
Analyst	*SM Alam*	Highway/Direction of Travel	*I-405 NB*
Agency or Company	*URS Corporation*	From/To	*Alameda to Wilmington*
Date Performed	*7/24/2008*	Jurisdiction	*LA County and City of Carson*
Analysis Time Period	*PM Peak Hour*	Analysis Year	*2011 No Project*

Project Description Carson Cogen AFC

○ Oper.(LOS) ○ Des.(N) ○ Planning Data

Flow Inputs				
Volume, V	*7260*	veh/h	Peak-Hour Factor, PHF	*0.90*
AADT		veh/day	%Trucks and Buses, P_T	*6*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
Driver type adjustment	*1.00*		Up/Down %	

Calculate Flow Adjustments			
f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.971*

Speed Inputs			**Calc Speed Adj and FFS**		
Lane Width	*12.0*	ft	f_{LW}		mi/h
Rt-Shoulder Lat. Clearance	*6.0*	ft	f_{LC}		mi/h
Interchange Density	*0.50*	I/mi	f_{ID}		mi/h
Number of Lanes, N	*4*		f_N		mi/h
FFS (measured)	*70.0*	mi/h	FFS	*70.0*	mi/h
Base free-flow Speed, BFFS		mi/h			

LOS and Performance Measures			**Design (N)**	
Operational (LOS)			Design (N)	
			Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2077*	pc/h/ln	v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h
S	*63.2*	mi/h	S	mi/h
D = v_p / S	*32.8*	pc/mi/ln	D = v_p / S	pc/mi/ln
LOS	*D*		Required Number of Lanes, N	

Glossary		**Factor Location**	
N - Number of lanes	S - Speed	E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
V - Hourly volume	D - Density	E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
v_p - Flow rate	FFS - Free-flow speed	f_p - Page 23-12	f_N - Exhibit 23-6
LOS - Level of service	BFFS - Base free-flow speed	LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7
DDHV - Directional design hour volume			

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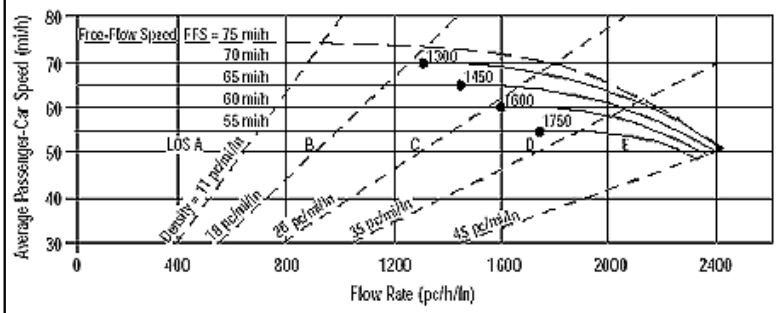

Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information		***Site Information***	
Analyst	*SM Alam*	Highway/Direction of Travel	*I-405 SB*
Agency or Company	*URS Corporation*	From/To	*Alameda to Wilmington*
Date Performed	*7/24/2008*	Jurisdiction	*LA County and City of Carson*
Analysis Time Period	*PM Peak Hour*	Analysis Year	*2011 No Project*

Project Description Carson Cogen AFC

○ Oper.(LOS) ○ Des.(N) ○ Planning Data

Flow Inputs				
Volume, V	*6263*	veh/h	Peak-Hour Factor, PHF	*0.90*
AADT		veh/day	%Trucks and Buses, P_T	*6*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
Driver type adjustment	*1.00*		Up/Down %	

Calculate Flow Adjustments			
f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.971*

Speed Inputs			**Calc Speed Adj and FFS**		
Lane Width	*12.0*	ft	f_{LW}		mi/h
Rt-Shoulder Lat. Clearance	*6.0*	ft	f_{LC}		mi/h
Interchange Density	*0.50*	I/mi	f_{ID}		mi/h
Number of Lanes, N	*4*		f_N		mi/h
FFS (measured)	*70.0*	mi/h	FFS	*70.0*	mi/h
Base free-flow Speed, BFFS		mi/h			

LOS and Performance Measures			**Design (N)**	
Operational (LOS)			Design (N)	
			Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1792*	pc/h/ln	v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h
S	*67.9*	mi/h	S	mi/h
D = v_p / S	*26.4*	pc/mi/ln	D = v_p / S	pc/mi/ln
LOS	*D*		Required Number of Lanes, N	

Glossary		**Factor Location**	
N - Number of lanes	S - Speed	E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
V - Hourly volume	D - Density	E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
v_p - Flow rate	FFS - Free-flow speed	f_p - Page 23-12	f_N - Exhibit 23-6
LOS - Level of service	BFFS - Base free-flow speed	LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7
DDHV - Directional design hour volume			

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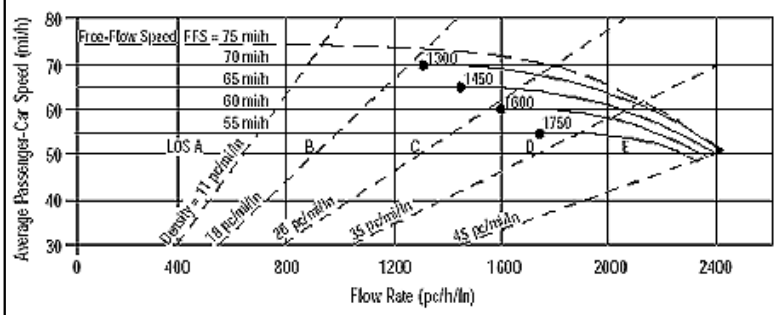

Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information		***Site Information***	
Analyst	*SM Alam*	Highway/Direction of Travel	*I-405 NB*
Agency or Company	*URS Corporation*	From/To	*Alameda to Wilmington*
Date Performed	*7/24/2008*	Jurisdiction	*LA County and City of Carson*
Analysis Time Period	*AM Peak Hour*	Analysis Year	*2011 With Project*

Project Description Carson Cogen AFC

○ Oper.(LOS) ○ Des.(N) ○ Planning Data

Flow Inputs				
Volume, V	*7157*	veh/h	Peak-Hour Factor, PHF	*0.90*
AADT		veh/day	%Trucks and Buses, P_T	*6*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
Driver type adjustment	*1.00*		Up/Down %	

Calculate Flow Adjustments			
f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.971*

Speed Inputs			**Calc Speed Adj and FFS**		
Lane Width	*12.0*	ft	f_{LW}		mi/h
Rt-Shoulder Lat. Clearance	*6.0*	ft	f_{LC}		mi/h
Interchange Density	*0.50*	I/mi	f_{ID}		mi/h
Number of Lanes, N	*4*		f_N		mi/h
FFS (measured)	*70.0*	mi/h	FFS	*70.0*	mi/h
Base free-flow Speed, BFFS		mi/h			

LOS and Performance Measures			**Design (N)**	
Operational (LOS)			Design (N)	
			Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2048*	pc/h/ln	v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h
S	*63.9*	mi/h	S	mi/h
D = v_p / S	*32.1*	pc/mi/ln	D = v_p / S	pc/mi/ln
LOS	*D*		Required Number of Lanes, N	

Glossary		**Factor Location**	
N - Number of lanes	S - Speed	E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
V - Hourly volume	D - Density	E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
v_p - Flow rate	FFS - Free-flow speed	f_p - Page 23-12	f_N - Exhibit 23-6
LOS - Level of service	BFFS - Base free-flow speed	LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7
DDHV - Directional design hour volume			

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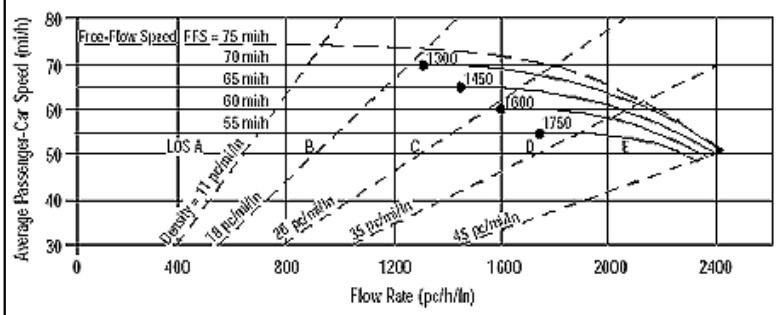

Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information		***Site Information***	
Analyst	*SM Alam*	Highway/Direction of Travel	*I-405 SB*
Agency or Company	*URS Corporation*	From/To	*Alameda to Wilmington*
Date Performed	*7/24/2008*	Jurisdiction	*LA County and City of Carson*
Analysis Time Period	*AM Peak Hour*	Analysis Year	*2011 With Project*

Project Description Carson Cogen AFC

○ Oper.(LOS) ○ Des.(N) ○ Planning Data

Flow Inputs				
Volume, V	*7418*	veh/h	Peak-Hour Factor, PHF	*0.90*
AADT		veh/day	%Trucks and Buses, P_T	*6*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
Driver type adjustment	*1.00*		Up/Down %	

Calculate Flow Adjustments			
f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.971*

Speed Inputs			**Calc Speed Adj and FFS**		
Lane Width	*12.0*	ft	f_{LW}		mi/h
Rt-Shoulder Lat. Clearance	*6.0*	ft	f_{LC}		mi/h
Interchange Density	*0.50*	I/mi	f_{ID}		mi/h
Number of Lanes, N	*4*		f_N		mi/h
FFS (measured)	*70.0*	mi/h	FFS	*70.0*	mi/h
Base free-flow Speed, BFFS		mi/h			

LOS and Performance Measures			**Design (N)**	
Operational (LOS)			Design (N)	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2122*	pc/h/ln	Design LOS	
S	*62.2*	mi/h	v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h
D = v_p / S	*34.1*	pc/mi/ln	S	mi/h
LOS	*D*		D = v_p / S	pc/mi/ln
			Required Number of Lanes, N	

Glossary		**Factor Location**	
N - Number of lanes	S - Speed	E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
V - Hourly volume	D - Density	E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
v_p - Flow rate	FFS - Free-flow speed	f_p - Page 23-12	f_N - Exhibit 23-6
LOS - Level of service	BFFS - Base free-flow speed	LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7
DDHV - Directional design hour volume			

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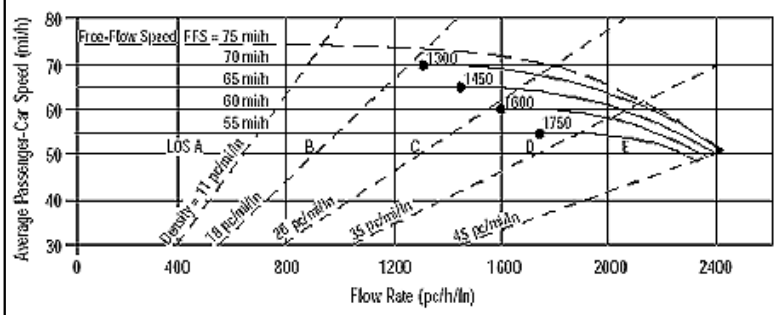
BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information		***Site Information***	
Analyst	*SM Alam*	Highway/Direction of Travel	*I-405 NB*
Agency or Company	*URS Corporation*	From/To	*Alameda to Wilmington*
Date Performed	*7/24/2008*	Jurisdiction	*LA County and City of Carson*
Analysis Time Period	*PM Peak Hour*	Analysis Year	*2011 With Project*

Project Description Carson Cogen AFC

○ Oper.(LOS) ○ Des.(N) ○ Planning Data

Flow Inputs				
Volume, V	*7292*	veh/h	Peak-Hour Factor, PHF	*0.90*
AADT		veh/day	%Trucks and Buses, P_T	*6*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
Driver type adjustment	*1.00*		Up/Down %	

Calculate Flow Adjustments			
f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.971*

Speed Inputs			**Calc Speed Adj and FFS**		
Lane Width	*12.0*	ft	f_{LW}		mi/h
Rt-Shoulder Lat. Clearance	*6.0*	ft	f_{LC}		mi/h
Interchange Density	*0.50*	I/mi	f_{ID}		mi/h
Number of Lanes, N	*4*		f_N		mi/h
FFS (measured)	*70.0*	mi/h	FFS	*70.0*	mi/h
Base free-flow Speed, BFFS		mi/h			

LOS and Performance Measures			**Design (N)**	
Operational (LOS)			Design (N)	
			Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2086*	pc/h/ln	v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h
S	*63.0*	mi/h	S	mi/h
D = v_p / S	*33.1*	pc/mi/ln	D = v_p / S	pc/mi/ln
LOS	*D*		Required Number of Lanes, N	

Glossary		**Factor Location**	
N - Number of lanes	S - Speed	E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
V - Hourly volume	D - Density	E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
v_p - Flow rate	FFS - Free-flow speed	f_p - Page 23-12	f_N - Exhibit 23-6
LOS - Level of service	BFFS - Base free-flow speed	LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7
DDHV - Directional design hour volume			

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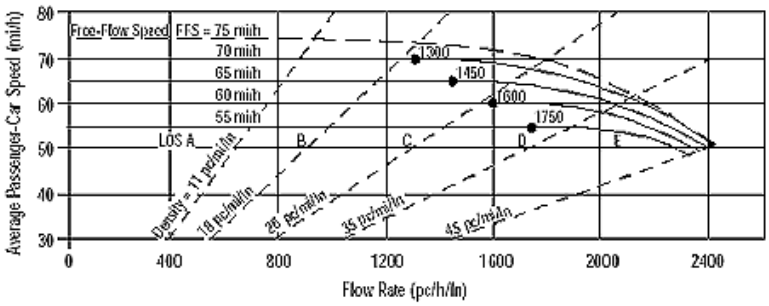
BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information		***Site Information***	
Analyst	*SM Alam*	Highway/Direction of Travel	
Agency or Company	*URS Corporation*	From/To	*Alameda to Wilmington*
Date Performed	*7/24/2008*	Jurisdiction	*LA County and City of Carson*
Analysis Time Period	*PM Peak Hour*	Analysis Year	*2011 No Project*

Project Description Carson Cogen AFC

○ Oper.(LOS) ○ Des.(N) ○ Planning Data

Flow Inputs				
Volume, V	*6280*	veh/h	Peak-Hour Factor, PHF	*0.90*
AADT		veh/day	%Trucks and Buses, P_T	*6*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
Driver type adjustment	*1.00*		Up/Down %	

Calculate Flow Adjustments			
f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.971*

Speed Inputs			**Calc Speed Adj and FFS**		
Lane Width	*12.0*	ft	f_{LW}		mi/h
Rt-Shoulder Lat. Clearance	*6.0*	ft	f_{LC}		mi/h
Interchange Density	*0.50*	I/mi	f_{ID}		mi/h
Number of Lanes, N	*4*		f_N		mi/h
FFS (measured)	*70.0*	mi/h	FFS	*70.0*	mi/h
Base free-flow Speed, BFFS		mi/h			

LOS and Performance Measures			**Design (N)**	
Operational (LOS)			Design (N)	
			Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1797*	pc/h/ln	v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h
S	*67.9*	mi/h	S	mi/h
D = v_p / S	*26.5*	pc/mi/ln	D = v_p / S	pc/mi/ln
LOS	*D*		Required Number of Lanes, N	

Glossary		**Factor Location**	
N - Number of lanes	S - Speed	E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
V - Hourly volume	D - Density	E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
v_p - Flow rate	FFS - Free-flow speed	f_p - Page 23-12	f_N - Exhibit 23-6
LOS - Level of service	BFFS - Base free-flow speed	LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7
DDHV - Directional design hour volume			

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