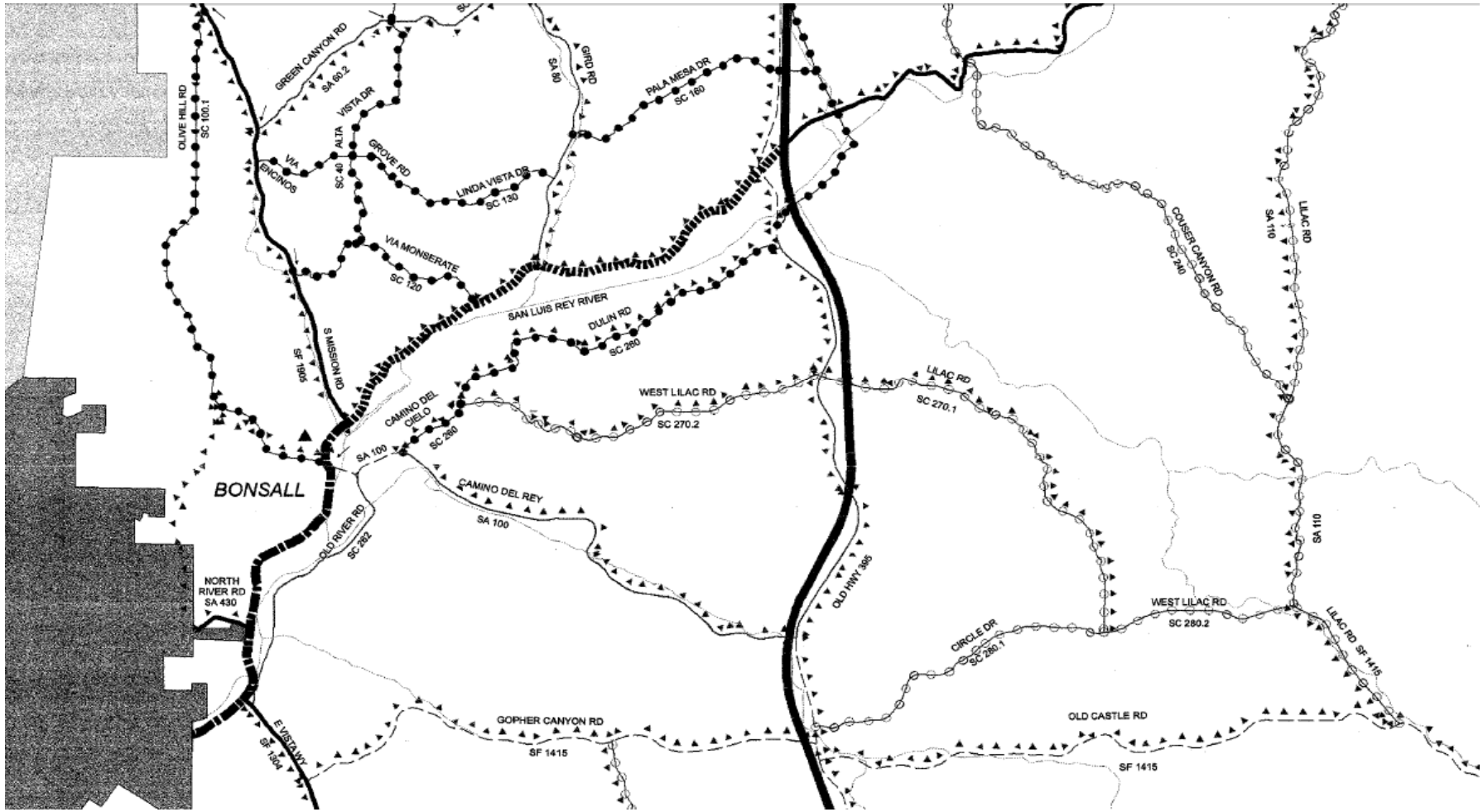
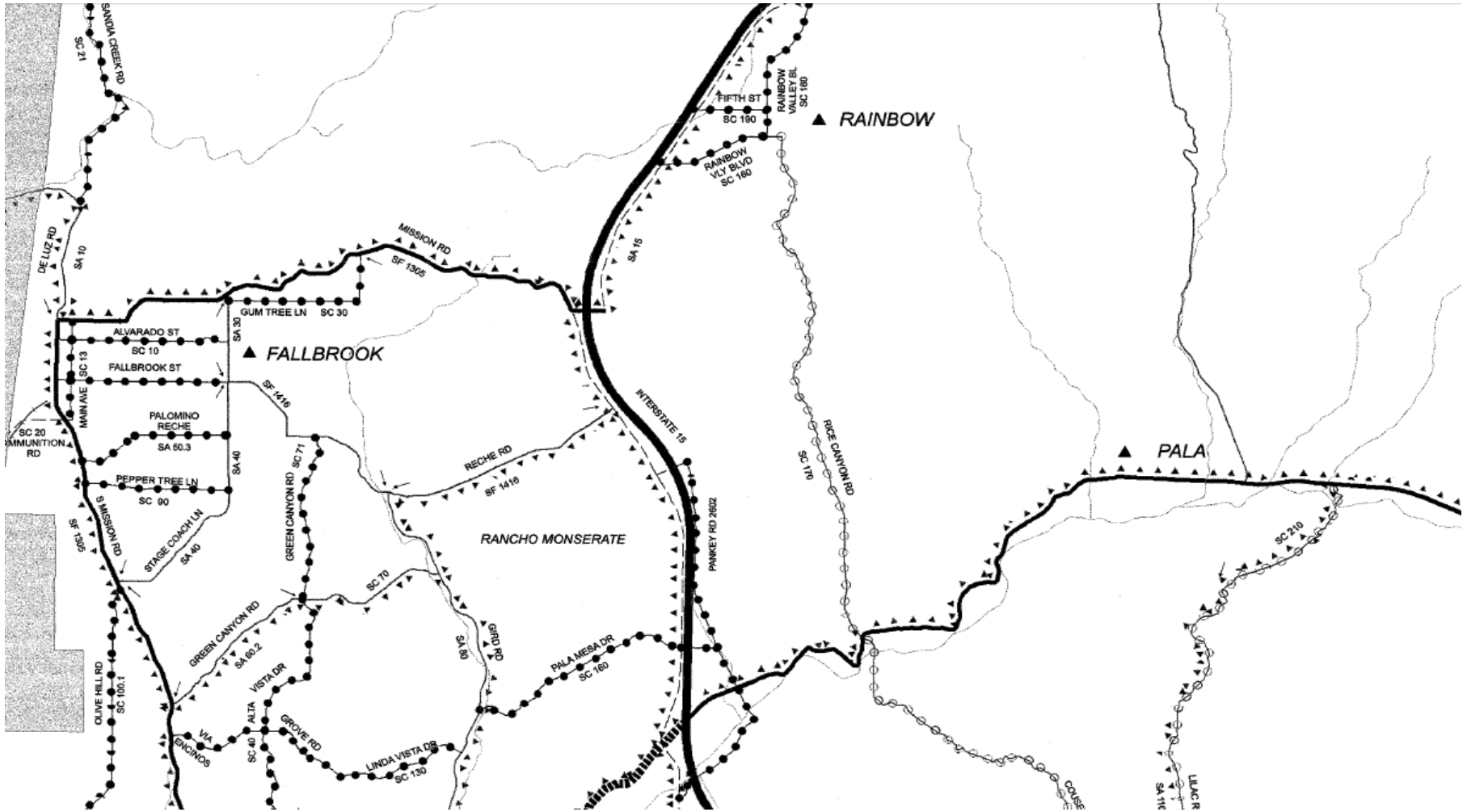
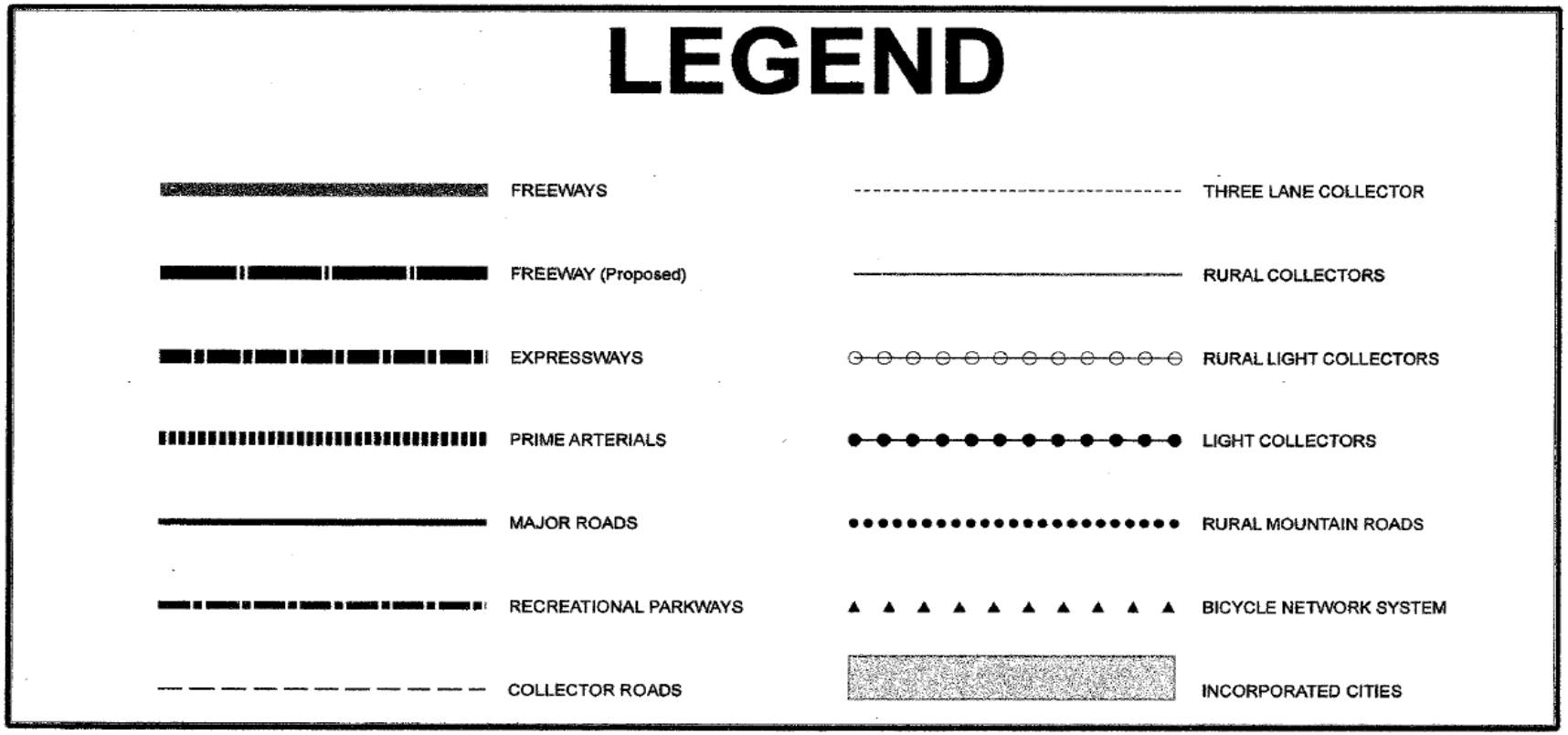
Appendix B

County of San Diego Circulation Element Classification


GREEN CANYON RD
SA 60.2
OLIVE HILL RD
SC 100.1
VISTA DR
ALTA
SC 40
VIA
ENCINOS
GROVE RD
LINDA VISTA DR
SC 130
SA 60
GIRD RD
PALA MESA DR
SC 160
VIA MONSERATE
SC 120
SAN LUIS REY RIVER
DULIN RD
SC 280
S MISSION RD
SF 1905
CAMINO DEL CIELO
SC 260
SA 100
BONSALL
CAMINO DEL REY
SA 100
OLD RIVER RD
SC 262
NORTH
RIVER RD
SA 430
E VISTAWY
SF 1904
GOPHER CANYON RD
SF 1415
WEST LILAC RD
SC 270.2
LILAC RD
SC 270.1
COUSER CANYON RD
SC 240
LILAC RD
SA 110
SA 110
OLD HWY 395
CIRCLE DR
SC 280.1
WEST LILAC RD
SC 280.2
LILAC RD SF 1415
OLD CASTLE RD
SF 1415


SANDIA CREEK RD
SC 21
DE LUZ RD
SA 10
MISSION RD
SF 1305
GUM TREE LN
SC 30
SA 30
ALVARADO ST
SC 10
FALLBROOK
FALLBROOK ST
SC 13
MAIN AVE
SF 1416
PALOMINO RECHE
SA 50.3
SC 20
MMUNITION RD
PEPPER TREE LN
SC 90
SA 40
S MISSION RD
SF 1305
STAGE COACH LN
SA 40
GREEN CANYON RD
SC 71
RECHE RD
SF 1416
RANCHO MONSERATE
INTERSTATE 15
PANKEY RD 2602
SA 15
FIFTH ST
SC 190
RAINBOW VALLEY BL
SC 160
RAINBOW
RAINBOW VLY BLVD
SC 160
RICE CANYON RD
SC 170
PALA
SC 210
SC 70
GREEN CANYON RD
SA 60.2
VISTA DR
SA 60
GIRD RD
PALA MESA DR
SC 160
OLIVE HILL RD
SC 100
VIA ENCINOS
ALTA
SC 40
GROVE RD
LINDA VISTA DR
SC 130
COUSE
LILAC R
SA 11


LEGEND
FREEWAYS
FREEWAY (Proposed)
EXPRESSWAYS
PRIME ARTERIALS
MAJOR ROADS
RECREATIONAL PARKWAYS
COLLECTOR ROADS
THREE LANE COLLECTOR
RURAL COLLECTORS
RURAL LIGHT COLLECTORS
LIGHT COLLECTORS
RURAL MOUNTAIN ROADS
BICYCLE NETWORK SYSTEM
INCORPORATED CITIES

CIRCULATION ELEMENT ROAD SEGMENTS AND CLASSIFICATIONS (ALPHABETICAL)

5/11/01

C = Collector

RD #	ROAD NAME	STUDIES	CLASS	LIMITS OF CLASSIFICATION FROM	TO	BEGIN T.B.	T.B. 2001
SF 1412	SOUTH SANTA FE AV	RL OC	M	CITY OF VISTA	CITY OF SAN MARCOS	15-E2	1108-B2
SA 210	SPLIT MOUNTAIN RD		C	SR 78	IMPERIAL COUNTY	406-F1	410-F10
SR 11	SR 11		F	HARVEST RD	MEXICAN BORDER		
SR 125	SR 125		F	CITY OF CHULA VISTA	CITY OF SAN DIEGO	70N-B4	1311-F5
SR 125	SR 125		F	CITY OF LEMON GROVE	SR 54	62-D4	1270-J7
SR 125	SR 125		PA	SWEETWATER RD	CITY OF CHULA VISTA	67-D4	1291-A6
SR 54	SR 54		E	CITY OF EL CAJON	SR 125	56-E6	1252-A7
SR 67	SR 67		C	RAMONA ST	DYE RD	33P-D1	1152-F7
SR 67	SR 67		F	WILLOW RD	CITY OF SANTEE	48-F1	1232-A1
SR 67	SR 67		M	DYE RD	WILLOW RD	33P-A3	1172-B4
SR 78	SR 78		M	G.S.O.S.R. OF 1849	IMPERIAL COUNTY	406-A2	410-A11
SR 79	SR 79		C	OLD HWY 80	I-8	51T-C3	1236-D3
SR 79	SR 79		M	RIVERSIDE COUNTY	SR 78	401-A1	409-G5
SR 79	SR 79		RM	MAIN ST (JULIAN)	OLD HWY 80	23T-D2	1136-B7
SR 94	SR 94		F	AVOCADO BL	SC 2118	63-B4	1271-F5
SR 94	SR 94		RLC	I-8	OLDE HWY 80	409-D4	1300-D5
SA 30	STAGE COACH LN	RL OC	RC	MISSION RD	FALLBROOK ST	5-E3	1027-J1
SA 40	STAGE COACH LN	RL OC	RC	FALLBROOK ST	MISSION RD	5-E4	1027-J3
SC 2050	STEELE CANYON RD	RL OC	C	WILLOW GLEN DR	SR 94	63-F4	1272-C5
SC 260.2	STEWART CYN RD	RL	C	OLD 395	PANKEY RD	5K-D5	1028-G4
SC 1110	SUMMIT DR/MARY LN	RL	LC	SR 78	PALMA VISTA CT	23-B4	1130-D4
SF 1404	SUNRISE HWY	use LC	RM	SR 79	I-8	405-E3	1176-G2
SC 1190	SUNSET DR	RL	C	CITY OF OCEANSIDE	CITY OF VISTA	14-F1	1107-D2
SC 1200	SUNSET DR/EMERALD DR		C	CITY OF OCEANSIDE	CITY OF OCEANSIDE	14-F1	1107-D2
SC 890	SUTHERLAND DAM RD	RL	C	BLACK CANYON RD	SUTHERLAND DR	405-B1	409-H11
SA 1170	SWEETWATER RD		C	PROSPECT ST	CITY OF NAT. CITY	69-D1	1310-B3
SC 2210	SWEETWATER RD		C	BONITA RD BRIDGE	WILLOW ST	67-D5	1310-J1
SF 1269	SWEETWATER RD	OC	C	CITY OF LEMON GROVE	SR 54	62-D4	1270-J7
SA 1170	SWEETWATER RD/WILLOW ST		M	CITY OF NAT. CITY	BONITA RD	69-F1	1310-E3
SA 970	SWEETWATER SPRINGS BL	OC	M	SR 94	JAMACHA BL	63-B4	1271-E5
SA 490	SYCAMORE AV/BUENA CREEK RD	OC SP	M	CITY OF VISTA	ORA AVO DR	15-F3	1108-C3
SA 380	TAVERN RD	RL	C	ARNOLD WAY	SOUTH GRADE RD	50-F5	1234-A6
SA 380	TAVERN RD	RL	M	I-8	ARNOLD WAY	50-F5	1233-J5
SA 380	TAVERN RD	RL	RM	SOUTH GRADE RD	DEHESA RD	58-F2	1254-A2
SC 1985	TAVERN RD/VICTORIA PARK TERR	RL	C	I-8	W VICTORIA DR	50-F5	1233-J5
SC 1160	TAYLOR ST/DOUGLAS DR		C	SANTA FE AV	ELEVADO RD	11-C2	1087-H2
SR 188	TECATE RD		M	SR 94	MEXICAN BORDER	406-D5	429-K10
SA 1140	TELEGRAPH CANYON RD		PA	CITY OF CHULA VISTA	OTAY LAKES RD	70-D5	1331-A1
SA 10	TENAJA/MARGARITA/CHRISTIANITOS RD		M	T8S R5W SEC13	I-5	403-D3	1409-A4
SC 960	THIRD ST (RAMONA)	RL OC	C	MAIN ST	KEYES RD	28P-F5	1152-H5
SC 610	TIERRA DEL SOL RD		RLC	OLDE HWY 80	SC 590	409-C5	1300-A6
SC 440	TILTING 'T' DR		C	BORREGO SPRINGS RD	BORREGO VALLEY RD	78-C3	1078-J6
SA 950.2	TROY ST/BANCROFT DR	RL OC	C	SWEETWATER RD	CITY OF LA MESA	62-D5	1270-J6
SC 990.2	TURNER HTS DR/MIRAR DEL VALLE	RL	C	MOUNTAIN MDWS RD	VALLEY CENTER RD	12L-B4	1089-E4
SC 1170	TWIN OAKS VALLEY RD	OC	C	SA 1414	DEER SPRINGS RD	12-D6	1088-H7
SA 1414	TWIN OAKS VALLEY RD	RL OC	M	ORA AVO DR	DEER SPRINGS RD	12-B6	1108-E1
SC 1170	TWIN OAKS VALLEY RD	RL OC	RC	S BDRY BONSALL C.P.	SA 1414	12-C3	1088-F2

Pictures of SR-76 currently being widened from 2 to 4 lanes. Pictures taken Dec 2008 and Jan 2009.

Intersection of SR-76 at Pankey Road. Pankey Road closed south of SR-76 due to SR-76 widening.

Looking west along SR-76 in the vicinity of Granite driveway

Looking west along SR-76 prior to Pankey Rd where new alignment deviates from existing alignment

Looking west along SR-76 just before I-15 interchange

Appendix BB

San Diego County TIF Email

Meadowood TIF Determination

From: **Campbell, Dennis** (Dennis.Campbell@sdcounty.ca.gov)
Sent: Wed 4/22/09 9:16 AM
To: Ayala, Jimmy (Jimmy.Ayala@pardeehomes.com)
Cc: Justin Rasas (justin@losengineering.com); Areigat, Nael (Nael.Areigat@sdcounty.ca.gov); Ortiz, Francisco "Nick" (Francisco.Ortiz@sdcounty.ca.gov); Real, Sami (Sami.Real@sdcounty.ca.gov)
Attachments:
image001.jpg (26.9 KB), image002.jpg (23.6 KB)

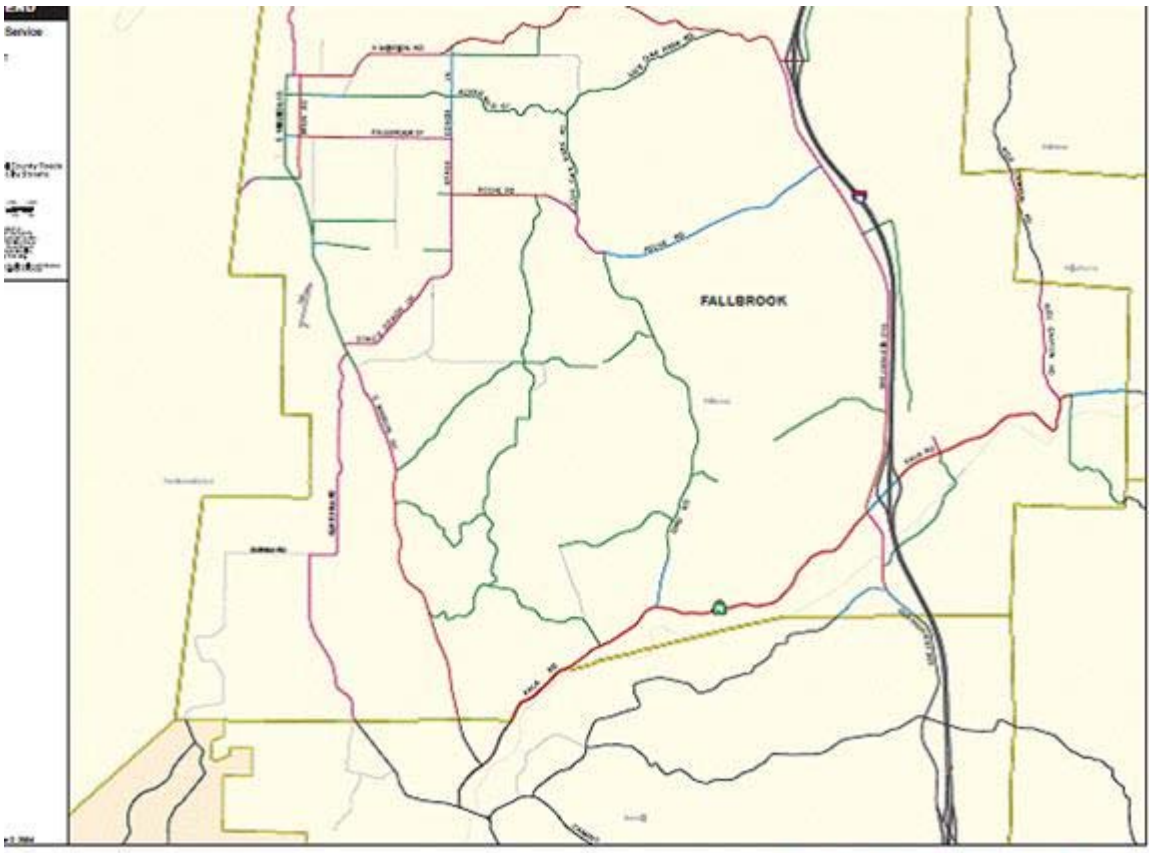
Hello Jimmy,

Please find below the County staff's determination on the TIF and handling of potential impacts to TIF facilities in Fallbrook. If you have any questions, please contact me. Thank you, Dennis

Based on information contained in the Fallbrook TIF report (attached), it is determined that cumulative impacts occurring to roadway segments and intersections located within the Fallbrook community can be fully mitigated by payment into the County's TIF program.

The traffic analysis contained in the TIF report adequately demonstrates that with the construction of all TIF roadway and intersection improvement projects that all County Circulation Element roads will operate at an acceptable LOS (LOS D or better) within the Fallbrook community. The Existing plus CIP network map (Fig.3-1) shows that without the TIF improvement projects, several roadway segments are projected to operate at LOS E/F, in the future Year 2030 conditions. However, the TIF Network map (Fig.3-2) shows that with the addition of all TIF projects all Fallbrook roadway segments are projected to operate at LOS D or better, in the future Year 2030 conditions. The conclusion is that the Fallbrook TIF program mitigates cumulative traffic impacts due to new development within the Fallbrook community.

WITHOUT TIF IMPROVEMENTS (FIG.3-1)



WITH TIF IMPROVEMENTS (FIG.3-2)

Appendix C

85th Percentile Speed Data

Speed Report

Date: 11/12/08 Site: [93215] SR-76 between North River Road & East Vista Way

EASTBOUND

		5	10	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**9**	**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	0	0	0	0	0	2	9	33	37	24	7	3	0	115
01:00		1	0	0	0	0	0	0	3	18	27	13	5	0	0	67
02:00		1	0	0	0	0	0	0	5	16	22	12	3	3	0	62
03:00		0	1	0	0	0	0	1	6	11	15	3	3	1	0	41
04:00		2	2	3	0	1	0	2	15	32	34	20	4	0	0	115
05:00		20	20	3	3	0	3	9	62	83	76	36	8	0	0	323
06:00		50	25	8	2	3	20	80	143	153	73	15	0	0	0	572
07:00		59	35	29	31	28	63	82	127	148	52	16	0	0	0	670
08:00		63	45	18	7	17	19	97	180	106	56	10	0	0	0	618
09:00		42	17	12	5	3	26	71	167	172	61	16	3	0	0	595
10:00		39	15	6	4	8	15	51	140	204	98	22	3	3	1	609
11:00		50	18	17	25	28	35	84	184	157	62	13	0	1	1	675
12:00	PM	34	6	11	9	21	67	145	212	211	55	9	1	0	0	781
13:00		26	13	16	13	22	68	158	203	189	60	13	1	0	0	782
14:00		52	47	69	81	52	69	139	218	168	39	9	0	2	0	945
15:00		95	107	170	124	123	99	142	128	95	30	2	2	0	0	1117
16:00		170	297	408	171	48	28	16	11	5	3	0	0	0	0	1157
17:00		205	248	317	136	70	48	40	14	3	0	0	0	0	0	1081
18:00		158	228	365	206	74	25	29	21	18	3	2	0	0	0	1129
19:00		13	9	8	7	12	42	111	187	207	87	21	1	0	0	705
20:00		7	10	1	0	0	13	48	130	171	91	22	2	1	1	497
21:00		4	4	1	1	1	3	28	114	218	115	21	5	1	0	516
22:00		2	0	1	0	0	1	9	49	114	91	30	9	0	0	306
23:00		0	2	0	0	0	2	0	15	52	55	24	2	0	0	152
Totals		**1093**	**1149**	**1463**	**825**	**511**	**646**	**1344**	**2343**	**2584**	**1242**	**353**	**59**	**15**	**3**	**13630**
% of Totals		8%	8%	11%	6%	4%	5%	10%	17%	19%	9%	3%	0%	0%	0%	100%
% AM		2%	1%	1%	1%	1%	1%	4%	8%	8%	4%	1%	0%	0%	0%	33%
AM Peak Hour			08:00	07:00	07:00	07:00	07:00	08:00	11:00	10:00	10:00	05:00	05:00		10:00	11:00
Volume			45	29	31	28	63	97	184	204	98	36	8	3	1	675
% PM		6%	7%	10%	5%	3%	3%	6%	10%	11%	5%	1%	0%	0%	0%	67%
PM Peak Hour			16:00	16:00	18:00	15:00	15:00	13:00	14:00	21:00	21:00	22:00	22:00	14:00	20:00	16:00
Volume			297	408	206	123	99	158	218	218	115	30	9	2	1	1157

Average Speed	50th Percentile	85th Percentile
33.7	39	49

Speed Report

Date: 11/12/08 Site: [93215] SR-76 between North River Road & East Vista Way

WESTBOUND

		5	10	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**9**	**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	1	0	0	0	0	2	3	9	33	29	15	5	2	1	100
01:00		0	0	0	0	0	0	0	4	20	22	20	4	3	0	73
02:00		0	0	0	0	0	0	1	1	7	18	12	7	5	0	51
03:00		0	0	0	0	0	1	2	15	31	41	24	11	2	1	128
04:00		2	1	0	0	0	0	13	46	77	83	68	29	2	1	322
05:00		6	8	12	3	9	34	82	207	253	146	24	6	1	0	791
06:00		21	11	28	24	43	93	158	275	314	66	6	3	0	0	1042
07:00		36	12	34	16	16	53	190	336	252	49	2	0	0	0	996
08:00		56	29	41	42	25	70	157	348	241	43	2	1	0	0	1055
09:00		32	15	5	4	9	15	58	224	363	128	24	4	1	0	882
10:00		25	13	3	2	8	39	109	234	258	107	22	7	0	0	827
11:00		46	9	4	6	8	43	71	206	227	96	15	1	0	0	732
12:00	PM	37	7	7	4	2	23	34	156	225	117	31	3	2	0	648
13:00		25	11	3	4	1	13	66	147	232	115	38	2	0	1	658
14:00		61	18	6	5	3	13	48	130	189	89	12	3	1	0	578
15:00		135	12	15	2	0	2	71	150	170	69	15	0	1	0	642
16:00		208	7	2	0	0	19	74	128	116	18	2	1	0	0	575
17:00		159	15	13	16	13	34	145	107	41	13	1	1	0	1	559
18:00		65	4	0	1	1	20	50	85	41	14	6	0	0	0	287
19:00		3	2	7	8	0	2	35	89	85	41	5	1	0	0	278
20:00		1	2	2	6	1	2	21	61	120	63	22	3	0	0	304
21:00		0	2	1	1	0	0	27	57	97	45	15	7	1	2	255
22:00		0	0	1	0	1	0	6	25	62	48	29	3	1	0	176
23:00		1	0	0	0	0	1	11	25	50	46	26	8	0	0	168
Totals		**920**	**178**	**184**	**144**	**140**	**479**	**1432**	**3065**	**3504**	**1506**	**436**	**110**	**22**	**7**	**12127**
% of Totals		8%	1%	2%	1%	1%	4%	12%	25%	29%	12%	4%	1%	0%	0%	100%
% AM		2%	1%	1%	1%	1%	3%	7%	16%	17%	7%	2%	1%	0%	0%	58%
AM Peak Hour			08:00	08:00	08:00	06:00	06:00	07:00	08:00	09:00	05:00	04:00	04:00	02:00		08:00
Volume			29	41	42	43	93	190	348	363	146	68	29	5	1	1055
% PM		6%	1%	0%	0%	0%	1%	5%	10%	12%	6%	2%	0%	0%	0%	42%
PM Peak Hour			14:00	15:00	17:00	17:00	17:00	17:00	12:00	13:00	12:00	13:00	23:00	12:00	21:00	13:00
Volume			18	15	16	13	34	145	156	232	117	38	8	2	2	658

Average Speed	50th Percentile	85th Percentile
40.9	44	51

Speed Report

Date: 11/12/08 Site: [93214] SR-76 between Olive Hill Road & North River Road

EASTBOUND

		5	10	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**9**	**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	1	0	0	0	0	2	6	29	36	24	7	5	1	111
01:00		0	0	0	0	0	0	1	4	19	27	14	6	1	0	72
02:00		1	0	1	0	0	0	0	2	12	26	15	7	2	1	67
03:00		0	0	0	0	0	0	1	7	6	11	13	4	1	0	43
04:00		3	1	0	1	0	0	4	7	26	36	22	7	2	0	109
05:00		8	5	3	2	0	2	10	47	122	69	53	12	0	0	333
06:00		114	11	3	0	0	0	22	79	115	109	19	2	1	0	475
07:00		157	14	1	0	0	5	31	128	162	84	15	1	0	0	598
08:00		101	17	7	1	0	8	46	151	146	52	20	1	0	0	550
09:00		38	10	4	4	1	0	16	162	270	107	26	0	1	0	639
10:00		29	12	8	7	1	6	34	119	183	144	37	4	1	1	586
11:00		30	13	6	1	0	5	24	175	257	117	32	3	1	0	664
12:00	PM	41	19	14	18	1	4	39	194	318	156	26	3	0	0	833
13:00		35	19	25	14	2	5	57	199	314	144	35	3	2	0	854
14:00		50	26	22	17	1	0	41	238	375	205	38	2	1	0	1016
15:00		54	21	32	41	37	34	116	361	333	90	12	3	0	0	1134
16:00		43	15	18	13	6	23	184	415	348	108	12	0	0	0	1185
17:00		55	14	18	20	23	72	378	398	156	34	12	0	0	0	1180
18:00		37	8	7	2	6	20	107	369	357	104	14	2	0	0	1033
19:00		7	4	1	2	0	6	37	160	281	193	26	5	0	0	722
20:00		8	6	1	2	1	0	19	72	216	160	39	3	2	2	531
21:00		1	3	0	1	2	6	34	77	162	146	51	15	1	0	499
22:00		2	2	0	0	0	0	0	23	90	116	40	9	3	0	285
23:00		0	0	0	0	0	0	1	17	59	63	31	4	1	1	177
Totals		**814**	**221**	**171**	**146**	**81**	**196**	**1204**	**3410**	**4356**	**2337**	**626**	**103**	**25**	**6**	**13696**
% of Totals		6%	2%	1%	1%	1%	1%	9%	25%	32%	17%	5%	1%	0%	0%	100%
% AM		4%	1%	0%	0%	0%	0%	1%	6%	10%	6%	2%	0%	0%	0%	31%
AM Peak Hour			08:00	10:00	10:00	09:00	08:00	08:00	11:00	09:00	10:00	05:00	05:00			11:00
Volume			17	8	7	1	8	46	175	270	144	53	12	5	1	664
% PM		2%	1%	1%	1%	1%	1%	7%	18%	22%	11%	2%	0%	0%	0%	69%
PM Peak Hour			14:00	15:00	15:00	15:00	17:00	17:00	16:00	14:00	14:00	21:00	21:00	22:00	20:00	16:00
Volume			26	32	41	37	72	378	415	375	205	51	15	3	2	1185

Average Speed	50th Percentile	85th Percentile
42.7	46	52

Speed Report

Date: 11/12/08 Site: [93214] SR-76 between Olive Hill Road & North River Road

EASTBOUND

		5	10	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**9**	**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	1	0	0	0	0	5	26	29	35	7	2	0	0	105
01:00		0	0	0	0	0	0	1	21	27	20	6	3	0	0	78
02:00		0	0	0	0	0	0	2	13	18	14	6	0	1	0	54
03:00		0	0	0	0	0	0	10	13	67	30	12	2	0	0	134
04:00		4	2	2	0	0	8	18	33	109	129	26	4	0	0	335
05:00		10	3	3	2	1	10	62	317	325	86	15	5	0	0	839
06:00		213	262	256	64	37	41	62	99	39	5	0	0	0	0	1078
07:00		228	341	256	139	78	19	0	0	0	1	0	0	0	0	1062
08:00		127	146	199	180	137	37	52	117	50	7	0	0	0	0	1052
09:00		30	12	7	1	1	17	138	362	264	57	3	0	0	0	892
10:00		31	12	10	6	0	14	115	314	282	59	8	0	0	0	851
11:00		27	7	3	5	0	9	91	382	253	35	5	0	0	0	817
12:00	PM	30	8	6	3	0	20	38	152	246	102	27	0	0	0	632
13:00		25	11	3	3	3	20	69	152	233	114	34	0	0	0	667
14:00		50	26	10	8	6	19	62	137	179	88	14	0	0	0	599
15:00		61	21	8	2	2	2	93	310	213	35	2	0	0	0	749
16:00		56	33	12	8	3	19	118	298	242	40	1	0	0	1	831
17:00		87	32	18	11	4	10	138	330	116	15	1	0	0	0	762
18:00		17	6	5	4	0	29	97	219	154	16	3	1	0	0	551
19:00		5	2	0	0	1	11	48	183	149	33	5	0	0	0	437
20:00		9	1	1	2	0	2	24	140	129	44	8	1	0	0	361
21:00		0	2	0	2	0	1	20	136	133	52	7	0	0	0	353
22:00		0	2	1	1	0	6	29	60	101	35	11	0	0	0	246
23:00		0	1	0	0	0	0	6	41	74	43	10	1	0	0	176
Totals		**1010**	**931**	**800**	**441**	**273**	**294**	**1298**	**3855**	**3432**	**1095**	**211**	**19**	**1**	**1**	**13661**
% of Totals		7%	7%	6%	3%	2%	2%	10%	28%	25%	8%	2%	0%	0%	0%	100%
% AM		5%	6%	5%	3%	2%	1%	4%	12%	11%	3%	1%	0%	0%		53%
AM Peak Hour			07:00	06:00	08:00	08:00	06:00	09:00	11:00	05:00	04:00	04:00	05:00	02:00		06:00
Volume			341	256	180	137	41	138	382	325	129	26	5	1		1078
% PM		2%	1%	0%	0%	0%	1%	5%	16%	14%	5%	1%	0%		0%	47%
PM Peak Hour			16:00	17:00	17:00	14:00	18:00	17:00	17:00	12:00	13:00	13:00	18:00		16:00	16:00
Volume			33	18	11	6	29	138	330	246	114	34	1		1	831

Average Speed	50th Percentile	85th Percentile
36.7	42	49

Speed Report

Date: 11/12/08 Site: [93213] SR-76 between South Mission Road & Olive Hill Road

EASTBOUND

		5	10	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**9**	**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	1	0	0	0	0	6	8	35	38	17	6	1	0	0	112
01:00		0	1	0	0	0	0	6	20	31	12	5	1	1	0	77
02:00		0	1	0	0	0	5	13	12	16	14	4	1	1	0	67
03:00		1	0	0	1	3	4	12	37	46	24	7	1	0	0	136
04:00		3	4	1	1	2	7	40	99	110	52	19	5	1	0	344
05:00		24	5	11	19	49	119	208	258	173	43	6	3	0	0	918
06:00		61	68	205	330	193	171	167	118	55	12	2	0	0	0	1382
07:00		126	140	316	263	149	122	114	80	27	3	1	0	0	0	1341
08:00		68	57	100	124	106	156	201	162	57	16	3	0	0	0	1050
09:00		55	25	22	46	79	128	274	219	87	27	2	0	0	0	964
10:00		60	16	17	34	71	117	225	224	87	11	5	0	0	0	867
11:00		72	43	43	32	85	140	214	196	68	10	1	0	0	0	904
12:00	PM	55	32	45	31	55	137	191	184	60	21	2	0	0	0	813
13:00		70	26	24	42	88	153	228	147	44	7	0	0	0	0	829
14:00		99	41	40	79	94	151	191	141	41	10	1	0	0	0	888
15:00		129	49	63	57	88	122	164	108	35	2	0	0	0	0	817
16:00		130	85	60	76	75	106	138	96	41	8	2	0	0	0	817
17:00		152	71	31	81	89	135	140	106	25	5	0	0	0	0	835
18:00		109	54	15	17	34	62	132	97	34	6	1	0	1	0	562
19:00		18	6	7	2	18	36	119	158	66	22	3	1	0	0	456
20:00		10	6	5	2	7	31	121	135	61	19	9	0	1	0	407
21:00		7	4	2	1	2	22	87	125	64	19	4	1	1	0	339
22:00		0	0	0	1	4	6	39	77	52	21	3	0	0	0	203
23:00		2	0	0	0	1	11	34	69	45	22	3	1	1	0	189
Totals		**1252**	**734**	**1007**	**1239**	**1292**	**1947**	**3066**	**2903**	**1363**	**403**	**89**	**15**	**7**	**0**	**15317**
% of Totals		8%	5%	7%	8%	8%	13%	20%	19%	9%	3%	1%	0%	0%		100%
% AM		3%	2%	5%	6%	5%	6%	10%	10%	5%	2%	0%	0%	0%		53%
AM Peak Hour			07:00	07:00	06:00	06:00	06:00	09:00	05:00	05:00	04:00	04:00	04:00	01:00		06:00
Volume			140	316	330	193	171	274	258	173	52	19	5	1		1382
% PM		5%	2%	2%	3%	4%	6%	10%	9%	4%	1%	0%	0%	0%		47%
PM Peak Hour			16:00	15:00	17:00	14:00	13:00	13:00	12:00	19:00	19:00	20:00	19:00	18:00		14:00
Volume			85	63	81	94	153	228	184	66	22	9	1	1		888

Average Speed	50th Percentile	85th Percentile
31.9	35	44

Speed Report

Date: 11/12/08 Site: [93213] SR-76 between South Mission Road & Olive Hill Road

WESTBOUND

		5	10	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**9**	**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	1	0	0	0	4	11	40	44	15	0	1	0	0	116
01:00		0	0	0	2	0	0	9	15	24	15	1	0	0	0	66
02:00		0	0	0	0	1	1	6	20	21	18	1	1	0	0	69
03:00		0	0	1	0	0	1	6	7	15	11	0	0	0	0	41
04:00		0	1	2	1	0	2	14	26	33	19	3	2	0	0	103
05:00		3	9	4	1	0	2	25	43	42	30	4	1	0	1	165
06:00		48	5	3	1	9	17	33	31	19	6	0	0	0	0	172
07:00		142	22	8	5	7	50	103	80	27	3	0	0	0	0	447
08:00		75	19	13	2	11	50	198	173	46	11	2	1	0	0	601
09:00		55	19	6	1	23	79	192	169	49	7	1	0	0	0	601
10:00		53	15	9	2	6	86	210	150	59	9	1	0	0	0	600
11:00		59	21	9	1	22	64	239	181	60	6	0	0	0	0	662
12:00	PM	76	23	15	7	17	116	243	179	64	12	0	0	0	0	752
13:00		56	30	10	1	23	112	267	202	75	10	1	0	0	0	787
14:00		101	29	12	4	44	165	334	220	62	11	0	0	0	0	982
15:00		120	41	17	24	97	291	347	188	39	4	0	0	0	0	1168
16:00		140	46	41	52	141	306	297	146	33	5	0	0	1	0	1208
17:00		138	40	31	101	333	353	183	53	11	2	0	0	0	0	1245
18:00		72	33	25	94	335	424	233	99	26	6	1	0	0	0	1348
19:00		21	2	4	5	35	109	218	261	88	17	1	0	0	0	761
20:00		9	12	4	0	8	37	123	205	91	9	0	1	0	0	499
21:00		9	9	3	0	0	16	178	198	84	13	2	1	0	0	513
22:00		1	1	2	0	1	5	47	141	88	30	7	0	0	0	323
23:00		0	0	0	0	0	5	21	59	49	21	1	0	0	0	156
Totals		**1178**	**378**	**219**	**304**	**1113**	**2295**	**3537**	**2886**	**1149**	**290**	**26**	**8**	**1**	**1**	**13385**
% of Totals		9%	3%	2%	2%	8%	17%	26%	22%	9%	2%	0%	0%	0%	0%	100%
% AM		3%	1%	0%	0%	1%	3%	8%	7%	3%	1%	0%	0%		0%	27%
AM Peak Hour			07:00	08:00	07:00	09:00	10:00	11:00	11:00	11:00	05:00	05:00	04:00		05:00	11:00
Volume			22	13	5	23	86	239	181	60	30	4	2		1	662
% PM		6%	2%	1%	2%	8%	14%	19%	15%	5%	1%	0%	0%	0%		73%
PM Peak Hour			16:00	16:00	17:00	18:00	18:00	15:00	19:00	20:00	22:00	22:00	20:00	16:00		18:00
Volume			46	41	101	335	424	347	261	91	30	7	1	1		1348

Average Speed	50th Percentile	85th Percentile
33.8	37	44

Speed Report

Date: 11/18/08 Site: [93212] SR-76 between Via Monserate & South Mission Road

EASTBOUND

		5	10	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**9**	**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	27	9	6	8	6	19	80	185	121	24	3	1	0	0	489
01:00		7	8	6	2	2	8	103	227	115	15	2	0	0	0	495
02:00		15	8	5	1	4	20	108	194	129	29	1	0	0	0	514
03:00		15	11	10	4	6	12	106	238	160	22	2	0	0	0	586
04:00		15	7	6	2	1	32	91	227	157	45	6	0	0	0	589
05:00		16	9	8	6	0	9	89	269	244	66	7	0	0	0	723
06:00		35	11	4	9	2	18	142	345	261	56	3	0	0	0	886
07:00		27	7	4	3	3	43	193	356	187	22	0	0	0	0	845
08:00		20	9	5	3	9	61	247	336	95	13	1	0	1	0	800
09:00		3	4	1	1	4	35	152	225	107	27	5	0	0	0	564
10:00		3	2	3	0	0	3	68	139	134	14	3	0	0	0	369
11:00		1	1	0	0	1	3	42	121	92	25	4	0	1	0	291
12:00	PM	0	0	0	1	0	2	33	96	74	20	4	1	0	0	231
13:00		1	0	0	0	2	8	22	43	48	20	7	1	0	0	152
14:00		0	1	0	0	0	2	1	17	25	7	3	0	0	0	56
15:00		0	0	0	0	0	2	6	18	19	11	4	1	0	0	61
16:00		0	0	0	0	0	0	5	21	13	7	4	0	0	0	50
17:00		0	0	0	0	0	0	0	8	19	8	1	0	0	0	36
18:00		0	0	0	0	0	1	6	13	18	9	1	0	1	0	49
19:00		5	1	1	0	0	0	21	45	40	27	8	0	0	0	148
20:00		7	12	4	7	0	2	37	98	114	53	4	1	0	0	339
21:00		9	10	8	4	4	6	39	135	210	60	6	2	1	0	494
22:00		34	17	5	3	1	4	55	212	179	42	5	0	0	0	557
23:00		28	9	4	3	3	13	80	148	126	33	4	0	0	0	451
Totals		**268**	**136**	**80**	**57**	**48**	**303**	**1726**	**3716**	**2687**	**655**	**88**	**7**	**4**	**0**	**9775**
% of Totals		3%	1%	1%	1%	0%	3%	18%	38%	27%	7%	1%	0%	0%		100%
% AM		2%	1%	1%	0%	0%	3%	15%	29%	18%	4%	0%	0%	0%		73%
AM Peak Hour			03:00	03:00	06:00	08:00	08:00	08:00	07:00	06:00	05:00	05:00		08:00		06:00
Volume			11	10	9	9	61	247	356	261	66	7	1	1		886
% PM		1%	1%	0%	0%	0%	0%	3%	9%	9%	3%	1%	0%	0%		27%
PM Peak Hour			22:00	21:00	20:00	21:00	23:00	23:00	22:00	21:00	21:00	19:00	21:00	18:00		22:00
Volume			17	8	7	4	13	80	212	210	60	8	2	1		557

Average Speed	50th Percentile	85th Percentile
41.6	43	49

Speed Report

Date: 11/18/08 Site: [93212] SR-76 between Via Monserate & South Mission Road

WESTBOUND

		5	10	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**9**	**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	11	4	1	10	18	32	91	184	106	19	2	0	0	0	478
01:00		14	5	2	8	15	49	123	145	79	10	3	0	0	0	453
02:00		10	1	3	5	11	62	115	156	81	11	0	0	0	0	455
03:00		14	7	8	3	6	30	121	152	84	12	1	0	0	0	438
04:00		27	7	5	2	0	7	71	236	166	27	1	0	0	0	549
05:00		26	8	2	2	11	17	65	179	142	48	8	0	0	0	508
06:00		26	11	5	4	0	4	66	209	144	33	2	0	0	0	504
07:00		25	7	4	2	2	16	100	294	137	33	5	1	0	0	626
08:00		19	5	4	1	0	32	144	172	87	16	1	0	0	0	481
09:00		9	2	1	0	1	21	55	127	79	19	8	1	0	0	323
10:00		1	2	1	2	0	6	49	77	69	36	5	1	0	0	249
11:00		1	0	0	0	1	1	30	61	74	20	8	0	0	0	196
12:00	PM	0	0	0	0	0	0	30	58	56	20	5	0	0	0	169
13:00		0	1	0	0	0	3	13	38	54	21	9	1	0	0	140
14:00		0	0	0	0	0	0	5	15	25	11	5	1	0	0	62
15:00		0	0	0	0	0	6	5	20	16	19	1	1	0	0	68
16:00		0	0	0	0	0	0	6	9	15	12	3	1	0	0	46
17:00		0	0	0	0	0	0	5	15	21	20	6	2	0	0	69
18:00		0	0	0	0	0	0	7	20	47	43	21	3	0	0	141
19:00		3	2	0	0	2	13	34	76	143	73	19	2	0	0	367
20:00		15	4	2	2	6	19	94	224	290	91	13	2	0	0	762
21:00		26	8	3	2	2	4	42	229	318	81	17	0	0	0	732
22:00		18	8	2	1	3	15	93	299	238	40	3	0	0	0	720
23:00		18	9	5	2	0	8	75	198	184	45	8	0	0	0	552
Totals		**263**	**91**	**48**	**46**	**78**	**345**	**1439**	**3193**	**2655**	**760**	**154**	**16**	**0**	**0**	**9088**
% of Totals		3%	1%	1%	1%	1%	4%	16%	35%	29%	8%	2%	0%			100%
% AM		2%	1%	0%	0%	1%	3%	11%	22%	14%	3%	0%	0%			58%
AM Peak Hour			06:00	03:00			02:00	08:00	07:00	04:00	05:00	05:00	07:00			07:00
Volume			11	8	10	18	62	144	294	166	48	8	1			626
% PM		1%	0%	0%	0%	0%	1%	5%	13%	15%	5%	1%	0%			42%
PM Peak Hour			23:00	23:00	20:00	20:00	20:00	20:00	22:00	21:00	20:00	18:00	18:00			20:00
Volume			9	5	2	6	19	94	299	318	91	21	3			762

Average Speed	50th Percentile	85th Percentile
42.1	43	49

Speed Report

Date: 11/23/07 Site: [808.22] SR-76 btwn Via Monserate & Gird Rd

EASTBOUND

		5	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	0	1	3	3	8	43	73	48	11	1	0	0	191
01:00		0	0	1	1	1	16	34	47	16	7	1	0	0	124
02:00		2	0	0	1	0	5	23	37	33	4	1	1	0	107
03:00		0	0	0	1	0	5	29	36	23	9	2	0	1	106
04:00		2	3	1	0	0	6	26	50	52	19	1	0	0	160
05:00		2	3	2	2	0	1	39	73	69	28	4	0	0	223
06:00		9	1	13	4	4	6	51	115	103	25	3	0	0	334
07:00		14	11	18	14	3	8	59	125	96	15	1	0	0	364
08:00		15	19	38	19	6	19	104	176	76	9	2	0	0	483
09:00		13	15	58	24	6	24	113	164	63	17	0	1	0	498
10:00		30	17	60	29	15	30	110	241	81	13	0	0	0	626
11:00		28	22	64	34	11	59	139	212	69	14	0	0	1	653
12:00	PM	26	26	70	41	13	82	220	211	59	4	1	0	0	753
13:00		25	22	57	30	9	69	191	223	47	6	0	0	0	679
14:00		32	22	79	35	15	82	260	218	39	4	0	0	0	786
15:00		25	20	66	27	19	67	268	183	49	5	0	0	0	729
16:00		12	16	80	14	33	139	306	169	38	7	1	0	0	815
17:00		12	24	93	27	19	87	199	175	70	10	0	0	0	716
18:00		5	11	54	13	5	54	162	202	76	12	0	0	0	594
19:00		5	7	46	15	11	26	137	159	54	10	3	1	0	474
20:00		2	7	21	13	4	31	112	143	45	7	2	0	0	387
21:00		5	3	22	8	1	25	84	125	57	15	1	0	0	346
22:00		0	5	16	6	8	27	64	129	65	8	2	0	0	330
23:00		1	0	6	2	9	17	61	97	48	16	1	0	1	259
Totals		**265**	**254**	**866**	**363**	**195**	**893**	**2834**	**3383**	**1376**	**275**	**27**	**3**	**3**	**10737**
% of Totals		2%	2%	8%	3%	2%	8%	26%	32%	13%	3%	0%	0%	0%	100%
% AM		1%	1%	2%	1%	0%	2%	7%	13%	7%	2%	0%	0%	0%	36%
AM Peak Hour		10:00	11:00	11:00	11:00	10:00	11:00	11:00	10:00	06:00	05:00	05:00	02:00	03:00	11:00
Volume		30	22	64	34	15	59	139	241	103	28	4	1	1	653
% PM		1%	2%	6%	2%	1%	7%	19%	19%	6%	1%	0%	0%	0%	64%
PM Peak Hour		14:00	12:00	17:00	12:00	16:00	16:00	16:00	13:00	18:00	23:00	19:00	19:00	23:00	16:00
Volume		32	26	93	41	33	139	306	223	76	16	3	1	1	815

Average Speed	50th Percentile	85th Percentile
41.7	44	50

Speed Report

Date: 11/6/07 Site: [808.22] SR-76 btwn Via Monserate & Gird Rd

WESTBOUND

		5	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	1	1	0	2	0	4	2	33	38	11	2	0	0	94
01:00		1	0	0	0	0	2	5	23	19	5	3	2	0	60
02:00		0	1	1	0	0	1	7	6	17	13	3	0	0	49
03:00		1	0	0	1	2	2	5	22	37	23	7	3	0	103
04:00		3	1	0	4	0	2	29	38	79	43	19	3	0	221
05:00		8	19	15	12	1	8	73	175	204	61	6	1	0	583
06:00		20	23	42	17	13	34	139	260	220	53	6	2	0	829
07:00		34	32	56	52	9	15	124	242	155	32	2	0	0	753
08:00		28	31	56	37	6	42	105	188	154	31	1	0	0	679
09:00		19	16	30	26	2	5	97	187	169	39	1	0	1	592
10:00		25	18	41	21	2	11	60	167	118	26	2	0	0	491
11:00		35	19	36	25	4	26	76	180	110	19	3	0	0	533
12:00	PM	33	17	43	28	6	13	77	141	97	23	2	1	0	481
13:00		37	20	45	28	2	28	105	147	122	20	4	0	0	558
14:00		28	20	61	36	5	45	99	193	116	15	1	0	0	619
15:00		36	47	71	49	0	25	119	239	127	18	0	0	0	731
16:00		54	28	52	55	1	29	151	273	95	15	0	0	0	753
17:00		38	38	106	46	7	50	175	211	82	14	1	1	0	769
18:00		11	33	65	36	5	10	96	152	96	23	2	0	0	529
19:00		9	11	24	24	0	8	52	129	96	22	3	0	0	378
20:00		2	3	14	13	1	12	32	102	84	24	5	1	0	293
21:00		1	2	15	9	1	0	64	136	85	14	2	0	0	329
22:00		2	0	6	6	3	27	62	85	49	21	5	0	0	266
23:00		2	2	2	3	0	1	41	58	53	21	2	0	0	185
Totals		**428**	**382**	**781**	**530**	**70**	**400**	**1795**	**3387**	**2422**	**586**	**82**	**14**	**1**	**10878**
% of Totals		4%	4%	7%	5%	1%	4%	17%	31%	22%	5%	1%	0%	0%	100%
% AM		2%	1%	3%	2%	0%	1%	7%	14%	12%	3%	1%	0%	0%	46%
AM Peak Hour		11:00	07:00	07:00	07:00	06:00	08:00	06:00	06:00	06:00	05:00	04:00	03:00	09:00	06:00
Volume		35	32	56	52	13	42	139	260	220	61	19	3	1	829
% PM		2%	2%	5%	3%	0%	2%	10%	17%	10%	2%	0%	0%		54%
PM Peak Hour		16:00	15:00	17:00	16:00	17:00	17:00	17:00	16:00	15:00	20:00	20:00	12:00		17:00
Volume		54	47	106	55	7	50	175	273	127	24	5	1		769

Average Speed	50th Percentile	85th Percentile
42.7	47	53

Speed Report

Date: 11/6/07 Site: [808.23] SR-76 btwn Gird Rd & Sage Rd

EASTBOUND

		5	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	3	2	0	0	0	1	1	9	12	17	9	3	1	58
01:00		0	0	0	0	0	0	2	2	8	15	16	1	0	44
02:00		0	0	0	0	0	0	1	3	10	16	9	5	1	45
03:00		0	1	0	0	0	0	0	5	13	18	10	1	0	48
04:00		5	2	0	0	0	2	5	16	29	29	23	6	1	118
05:00		31	20	1	1	0	0	3	24	84	84	36	6	0	290
06:00		45	32	6	2	3	13	26	68	99	86	27	7	2	416
07:00		76	34	6	1	14	80	112	175	175	92	11	1	0	777
08:00		49	29	2	1	3	38	52	114	181	145	26	0	0	640
09:00		37	20	6	0	5	9	21	82	144	132	31	3	0	490
10:00		29	24	6	1	4	13	63	107	152	102	36	3	1	541
11:00		32	14	4	3	4	24	56	116	178	103	16	0	0	550
12:00	PM	21	12	6	0	1	13	44	142	177	102	21	2	0	541
13:00		30	20	9	3	2	8	36	112	185	143	25	2	1	576
14:00		46	17	7	2	1	12	50	124	242	139	24	0	0	664
15:00		92	35	8	3	16	23	88	152	210	131	20	2	0	780
16:00		88	35	15	1	18	25	65	129	206	168	20	2	0	772
17:00		92	38	10	0	6	13	103	175	264	84	14	1	0	800
18:00		38	22	4	1	8	35	71	221	232	92	7	0	0	731
19:00		19	9	3	0	2	17	45	112	146	78	25	1	0	457
20:00		4	9	1	0	0	1	22	68	120	121	14	6	0	366
21:00		11	14	2	2	0	1	8	47	76	68	37	2	0	268
22:00		5	6	0	0	1	0	0	18	51	72	26	4	2	185
23:00		3	0	0	0	0	0	7	7	30	47	24	5	1	124
Totals		**756**	**395**	**96**	**21**	**88**	**328**	**881**	**2028**	**3024**	**2084**	**507**	**63**	**10**	**10281**
% of Totals		7%	4%	1%	0%	1%	3%	9%	20%	29%	20%	5%	1%	0%	100%
% AM		3%	2%	0%	0%	0%	2%	3%	7%	11%	8%	2%	0%	0%	39%
AM Peak Hour		07:00	07:00	06:00	11:00	07:00	07:00	07:00	07:00	08:00	08:00	05:00	06:00	06:00	07:00
Volume		76	34	6	3	14	80	112	175	181	145	36	7	2	777
% PM		4%	2%	1%	0%	1%	1%	5%	13%	19%	12%	2%	0%	0%	61%
PM Peak Hour		15:00	17:00	16:00	13:00	16:00	18:00	17:00	18:00	17:00	16:00	21:00	20:00	22:00	17:00
Volume		92	38	15	3	18	35	103	221	264	168	37	6	2	800

Average Speed	50th Percentile	85th Percentile
46.8	51	58

Speed Report

Date: 11/6/07 Site: [808.23] SR-76 btwn Gird Rd & Sage Rd

WESTBOUND

		5	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	0	0	0	0	5	5	16	39	20	7	1	0	93
01:00		0	0	0	0	0	1	5	13	20	8	7	2	1	57
02:00		0	0	0	0	0	0	8	4	13	9	10	5	0	49
03:00		0	0	0	0	0	3	3	14	20	34	18	5	4	101
04:00		1	3	0	1	0	10	25	27	45	70	32	8	1	223
05:00		13	3	6	6	10	18	89	137	168	90	14	7	2	563
06:00		16	17	20	34	27	60	141	202	177	83	23	4	2	806
07:00		31	25	19	29	43	44	113	130	86	43	10	1	0	574
08:00		22	5	17	12	39	54	82	111	116	45	6	2	0	511
09:00		13	6	5	11	14	35	68	173	140	45	14	0	0	524
10:00		12	4	9	6	6	16	85	96	116	38	8	0	0	396
11:00		10	5	7	6	27	50	93	120	100	44	5	3	0	470
12:00	PM	9	4	5	5	5	20	60	112	146	47	12	0	0	425
13:00		16	7	4	11	12	53	82	147	107	53	9	3	0	504
14:00		15	2	7	8	18	51	88	135	142	45	4	0	0	515
15:00		51	15	11	14	27	53	121	173	114	34	4	0	0	617
16:00		36	22	34	30	15	43	108	217	134	45	6	1	0	691
17:00		39	16	40	31	53	116	164	130	87	17	4	1	0	698
18:00		7	14	20	25	18	47	96	121	82	30	5	1	1	467
19:00		9	2	4	5	10	18	56	108	87	27	5	0	0	331
20:00		2	1	2	1	4	4	25	91	105	37	12	2	0	286
21:00		1	2	4	4	0	16	59	106	86	33	6	1	0	318
22:00		0	2	2	2	8	9	46	78	70	33	7	2	0	259
23:00		0	0	0	1	0	1	24	48	64	33	11	4	0	186
Totals		**303**	**155**	**216**	**242**	**336**	**727**	**1646**	**2509**	**2264**	**963**	**239**	**53**	**11**	**9664**
% of Totals		3%	2%	2%	3%	3%	8%	17%	26%	23%	10%	2%	1%	0%	100%
% AM		1%	1%	1%	1%	2%	3%	7%	11%	11%	5%	2%	0%	0%	45%
AM Peak Hour		07:00	07:00	06:00	06:00	07:00	06:00	06:00	06:00	06:00	05:00	04:00	04:00	03:00	06:00
Volume		31	25	20	34	43	60	141	202	177	90	32	8	4	806
% PM		2%	1%	1%	1%	2%	4%	10%	15%	13%	4%	1%	0%	0%	55%
PM Peak Hour		15:00	16:00	17:00	17:00	17:00	17:00	17:00	16:00	12:00	13:00	12:00	23:00	18:00	17:00
Volume		51	22	40	31	53	116	164	217	146	53	12	4	1	698

Average Speed	50th Percentile	85th Percentile
45.3	47	55

Speed Report

Date: 11/6/07 Site: [808.24] SR-76 btwn Sage Rd & Old Hwy 395

EASTBOUND

		5	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	3	0	0	0	0	2	5	13	18	10	4	0	0	55
01:00		0	0	0	0	0	0	3	4	18	14	4	2	0	45
02:00		0	0	0	0	0	0	3	10	20	7	4	2	0	46
03:00		0	0	0	0	0	0	5	5	25	9	1	1	0	46
04:00		2	1	0	0	0	5	14	21	42	25	5	0	0	115
05:00		11	5	6	0	1	7	30	88	86	51	4	1	0	290
06:00		33	10	4	3	3	3	14	106	142	59	10	0	0	387
07:00		52	17	11	19	25	58	107	258	174	49	3	0	0	773
08:00		30	7	8	2	3	41	165	208	159	21	1	0	0	645
09:00		27	6	5	1	1	10	92	159	154	36	5	0	0	496
10:00		21	10	2	3	4	26	123	188	119	17	1	0	0	514
11:00		23	11	10	9	41	42	92	193	96	13	1	0	0	531
12:00	PM	18	2	6	3	15	50	132	183	110	17	1	1	0	538
13:00		23	6	9	1	26	38	130	214	99	21	0	0	0	567
14:00		41	8	3	5	6	40	150	257	107	20	1	0	0	638
15:00		65	15	7	2	16	65	181	273	148	15	1	0	0	788
16:00		57	16	11	6	10	59	224	268	104	14	1	0	0	770
17:00		52	13	6	5	9	59	255	297	102	10	0	0	0	808
18:00		36	5	8	9	20	72	229	246	87	6	1	0	0	719
19:00		10	4	7	0	0	43	107	162	106	17	2	0	0	458
20:00		2	0	0	1	0	16	76	134	111	12	1	0	0	353
21:00		6	3	0	0	0	2	49	72	89	34	3	0	0	258
22:00		3	3	2	0	0	1	22	53	63	21	7	2	0	177
23:00		1	2	0	0	1	1	8	23	52	27	5	3	0	123
Totals		**516**	**144**	**105**	**69**	**181**	**640**	**2216**	**3435**	**2231**	**525**	**66**	**12**	**0**	**10140**
% of Totals		5%	1%	1%	1%	2%	6%	22%	34%	22%	5%	1%	0%		100%
% AM		2%	1%	0%	0%	1%	2%	6%	12%	10%	3%	0%	0%		39%
AM Peak Hour		07:00	07:00	07:00	07:00	11:00	07:00	08:00	07:00	07:00	06:00	06:00	01:00		07:00
Volume		52	17	11	19	41	58	165	258	174	59	10	2		773
% PM		3%	1%	1%	0%	1%	4%	15%	22%	12%	2%	0%	0%		61%
PM Peak Hour		15:00	16:00	16:00	18:00	13:00	18:00	17:00	17:00	15:00	21:00	22:00	23:00		17:00
Volume		65	16	11	9	26	72	255	297	148	34	7	3		808

Average Speed	50th Percentile	85th Percentile
44.5	47	53

Speed Report

Date: 11/6/07 Site: [808.24] SR-76 btwn Sage Rd & Old Hwy 395

WESTBOUND

		5	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	0	0	0	2	4	15	35	28	4	2	0	0	90
01:00		0	0	0	0	0	6	13	14	16	6	1	0	0	56
02:00		0	0	0	0	0	2	9	18	14	8	0	0	0	51
03:00		1	0	0	0	0	3	17	32	28	20	3	0	1	105
04:00		1	0	0	0	3	6	20	64	87	35	4	0	0	220
05:00		12	8	0	0	2	56	176	188	111	21	4	0	0	578
06:00		17	9	4	1	17	94	268	264	97	19	2	0	0	792
07:00		40	9	9	2	16	76	213	163	48	6	2	0	0	584
08:00		27	5	5	6	14	55	154	145	43	3	2	0	0	459
09:00		17	3	6	2	10	77	146	139	79	15	2	0	0	496
10:00		18	13	3	2	12	62	135	116	57	8	0	0	0	426
11:00		23	16	9	4	16	65	146	103	37	3	1	0	0	423
12:00	PM	17	6	2	0	9	48	117	163	50	2	1	0	0	415
13:00		20	7	1	2	8	45	157	176	59	10	4	0	0	489
14:00		33	3	10	3	12	60	191	141	58	9	0	0	0	520
15:00		37	14	20	6	11	87	221	151	42	7	2	0	0	598
16:00		38	15	13	3	14	128	266	154	39	9	0	0	0	679
17:00		39	13	8	4	55	169	203	128	35	5	1	0	0	660
18:00		16	9	15	2	11	74	151	133	34	4	2	0	1	452
19:00		6	4	2	1	4	19	105	132	48	4	1	0	0	326
20:00		2	0	1	0	0	6	65	118	72	11	3	0	0	278
21:00		6	0	0	0	2	18	103	108	66	19	0	0	0	322
22:00		3	0	1	0	3	23	72	98	38	8	4	0	0	250
23:00		1	0	1	0	1	7	55	53	40	15	5	0	0	178
Totals		**374**	**134**	**110**	**38**	**222**	**1190**	**3018**	**2836**	**1226**	**251**	**46**	**0**	**2**	**9447**
% of Totals		4%	1%	1%	0%	2%	13%	32%	30%	13%	3%	0%		0%	100%
% AM		2%	1%	0%	0%	1%	5%	14%	14%	7%	2%	0%		0%	45%
AM Peak Hour		07:00	11:00	07:00	08:00	06:00	06:00	06:00	06:00	05:00	04:00	04:00		03:00	06:00
Volume		40	16	9	6	17	94	268	264	111	35	4		1	792
% PM		2%	1%	1%	0%	1%	7%	18%	16%	6%	1%	0%		0%	55%
PM Peak Hour		17:00	16:00	15:00	15:00	17:00	17:00	16:00	13:00	20:00	21:00	23:00		18:00	16:00
Volume		39	15	20	6	55	169	266	176	72	19	5		1	679

Average Speed	50th Percentile	85th Percentile
43.0	44	50

Speed Report

Date: 11/6/07 Site: [808.25] SR-76 btwn Old Hwy 395 & I-15 SB Ramps

EASTBOUND

		5	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	0	0	2	11	14	9	6	11	6	0	1	1	61
01:00		1	0	2	5	7	9	5	12	18	9	0	0	0	68
02:00		0	0	4	2	4	5	12	12	9	5	1	0	0	54
03:00		0	1	5	5	9	7	11	14	7	8	0	0	0	67
04:00		0	2	5	8	29	32	30	18	19	8	1	0	1	153
05:00		1	15	21	41	95	118	72	21	15	11	0	0	0	410
06:00		9	19	22	58	180	162	88	27	17	1	0	0	0	583
07:00		25	31	52	118	237	260	136	29	9	1	1	0	0	899
08:00		32	33	93	169	202	171	91	25	6	2	0	0	0	824
09:00		23	22	55	104	195	137	69	21	4	2	0	0	0	632
10:00		21	47	41	126	178	131	78	35	2	3	0	0	0	662
11:00		10	28	62	143	202	136	63	11	6	1	0	0	0	662
12:00	PM	12	33	68	127	187	118	60	18	2	0	0	0	0	625
13:00		33	35	57	154	186	118	47	15	3	1	0	0	0	649
14:00		8	20	54	126	221	213	104	52	16	7	0	0	0	821
15:00		8	20	83	226	285	218	95	29	6	1	0	0	0	971
16:00		22	49	121	184	235	164	84	34	6	3	0	0	0	902
17:00		13	39	120	225	241	179	105	38	6	0	1	0	0	967
18:00		9	32	94	176	214	135	99	37	7	3	0	0	0	806
19:00		7	18	36	64	111	101	86	50	14	3	1	0	0	491
20:00		2	4	13	35	59	129	83	38	14	4	0	0	0	381
21:00		3	6	18	41	50	70	50	30	17	3	0	0	0	288
22:00		0	2	4	23	45	46	44	30	20	4	2	0	0	220
23:00		2	1	2	5	23	25	21	30	24	12	0	0	0	145
Totals		**241**	**457**	**1032**	**2167**	**3206**	**2698**	**1542**	**632**	**258**	**98**	**7**	**1**	**2**	**12341**
% of Totals		2%	4%	8%	18%	26%	22%	12%	5%	2%	1%	0%	0%	0%	100%
% AM		1%	2%	3%	6%	11%	10%	5%	2%	1%	0%	0%	0%	0%	41%
AM Peak Hour		08:00	10:00	08:00	08:00	07:00	07:00	07:00	10:00	04:00	05:00	02:00			07:00
Volume		32	47	93	169	237	260	136	35	19	11	1	1	1	899
% PM		1%	2%	5%	11%	15%	12%	7%	3%	1%	0%	0%			59%
PM Peak Hour		13:00	16:00	16:00	15:00	15:00	15:00	17:00	14:00	23:00	23:00	22:00			15:00
Volume		33	49	121	226	285	218	105	52	24	12	2			971

Average Speed	50th Percentile	85th Percentile
33.5	34	42

Speed Report

Date: 11/6/07 Site: [808.25] SR-76 btwn Old Hwy 395 & I-15 SB Ramps

WESTBOUND

		5	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	1	1	1	10	23	30	22	21	9	3	0	0	0	121
01:00		1	2	4	7	9	14	17	10	8	4	0	0	0	76
02:00		0	1	1	5	8	11	10	8	9	6	0	0	0	59
03:00		0	1	3	3	17	31	29	15	7	3	1	0	0	110
04:00		1	3	8	28	45	63	50	22	5	2	0	0	0	227
05:00		3	10	29	112	150	166	110	33	10	1	0	0	0	624
06:00		8	38	97	195	246	179	84	22	2	0	0	0	0	871
07:00		16	54	83	167	215	145	82	21	2	1	0	0	0	786
08:00		11	31	64	180	210	121	37	9	2	0	0	0	0	665
09:00		7	18	62	161	199	123	56	9	4	0	0	0	0	639
10:00		3	21	72	140	159	121	39	4	2	0	0	0	0	561
11:00		11	25	50	121	163	128	47	15	0	1	0	0	0	561
12:00	PM	0	15	49	88	203	138	60	17	4	2	0	0	0	576
13:00		1	15	46	122	209	145	59	13	8	0	0	0	0	618
14:00		10	30	64	135	215	157	79	33	10	0	0	0	0	733
15:00		12	39	121	226	226	148	88	23	5	0	0	0	0	888
16:00		20	71	123	250	228	161	97	27	12	0	0	0	0	989
17:00		16	46	106	254	266	137	83	29	7	1	0	0	0	945
18:00		6	14	34	153	218	136	65	23	13	1	0	0	0	663
19:00		0	6	10	54	124	160	78	35	8	2	0	0	0	477
20:00		0	4	11	56	114	120	72	20	4	1	0	0	0	402
21:00		2	4	6	47	99	129	76	36	13	2	0	0	0	414
22:00		1	7	6	26	88	88	75	28	9	3	0	0	0	331
23:00		0	3	6	15	30	63	62	37	6	5	1	0	0	228
Totals		**130**	**459**	**1056**	**2555**	**3464**	**2714**	**1477**	**510**	**159**	**38**	**2**	**0**	**0**	**12564**
% of Totals		1%	4%	8%	20%	28%	22%	12%	4%	1%	0%	0%			100%
% AM		0%	2%	4%	9%	11%	9%	5%	2%	0%	0%	0%			42%
AM Peak Hour		07:00	07:00	06:00	06:00	06:00	06:00	05:00	05:00	05:00	02:00	03:00			06:00
Volume		16	54	97	195	246	179	110	33	10	6	1			871
% PM		1%	2%	5%	11%	16%	13%	7%	3%	1%	0%	0%			58%
PM Peak Hour		16:00	16:00	16:00	17:00	17:00	16:00	16:00	23:00	18:00	23:00	23:00			16:00
Volume		20	71	123	254	266	161	97	37	13	5	1			989

Average Speed	50th Percentile	85th Percentile
33.1	33	41

Speed Report

Date: 8/5/08 Site: [89501-1] SR-76 (Pala Road) between I-15 Northbound & Southbound Ramps

EASTBOUND

		5	10	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**9**	**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	0	0	0	7	15	19	19	19	9	2	2	0	0	92
01:00		0	0	0	0	5	6	16	19	13	6	2	1	0	0	68
02:00		0	1	1	3	0	12	14	12	9	6	1	0	0	0	59
03:00		0	0	0	0	1	2	12	21	12	9	1	0	0	0	58
04:00		0	0	1	0	2	7	13	35	24	6	2	2	0	0	92
05:00		0	0	3	10	18	38	79	53	28	10	2	0	0	0	241
06:00		0	0	2	9	37	104	141	98	43	9	3	0	0	0	446
07:00		0	2	3	17	63	144	158	88	36	6	0	1	0	0	518
08:00		0	0	15	25	56	118	143	91	34	9	0	0	0	0	491
09:00		0	1	3	29	76	138	139	88	21	4	1	0	0	0	500
10:00		0	1	10	29	72	153	154	70	27	6	1	0	0	0	523
11:00		0	1	7	60	69	163	174	64	18	4	0	0	0	0	560
12:00	PM	0	1	9	46	146	211	121	37	9	4	0	0	0	0	584
13:00		0	0	10	26	112	240	167	62	11	4	2	0	0	0	634
14:00		0	0	7	37	107	204	186	91	21	3	0	0	0	0	656
15:00		6	13	20	73	179	294	179	66	13	2	1	0	0	0	846
16:00		2	22	47	84	157	337	202	74	19	5	1	0	0	0	950
17:00		10	34	44	101	213	276	165	69	21	5	0	0	0	0	938
18:00		0	1	8	60	183	285	237	94	36	8	0	0	0	0	912
19:00		0	1	4	10	71	180	232	112	35	3	0	0	0	0	648
20:00		0	0	2	10	58	160	156	60	25	2	1	0	0	0	474
21:00		0	0	1	7	48	125	110	62	16	3	0	0	0	0	372
22:00		0	0	0	10	54	109	88	39	13	1	0	0	0	0	314
23:00		0	1	0	0	6	31	63	68	29	3	0	1	0	0	202
Totals		**18**	**79**	**197**	**646**	**1740**	**3352**	**2968**	**1492**	**532**	**127**	**20**	**7**	**0**	**0**	**11178**
% of Totals		0%	1%	2%	6%	16%	30%	27%	13%	5%	1%	0%	0%			100%
% AM			0%	0%	2%	4%	8%	10%	6%	3%	1%	0%	0%			33%
AM Peak Hour			07:00	08:00	11:00	09:00	11:00	11:00	06:00	06:00	05:00	06:00				11:00
Volume			2	15	60	76	163	174	98	43	10	3	2			560
% PM		0%	1%	1%	4%	12%	22%	17%	7%	2%	0%	0%	0%			67%
PM Peak Hour			17:00	16:00	17:00	17:00	16:00	18:00	19:00	18:00	18:00	13:00	23:00			16:00
Volume			34	47	101	213	337	237	112	36	8	2	1			950

Average Speed	50th Percentile	85th Percentile
34.3	34	42

Speed Report

Date: 8/5/08 Site: [89501-1] SR-76 (Pala Road) between I-15 Northbound & Southbound Ramps

WESTBOUND

		5	10	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**9**	**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	0	1	3	24	32	27	31	9	3	1	0	0	0	131
01:00		0	0	0	1	9	13	35	23	9	4	2	0	0	0	96
02:00		0	0	1	0	11	13	19	18	13	7	0	0	0	0	82
03:00		0	0	3	3	7	17	16	23	12	7	0	0	0	0	88
04:00		0	0	1	8	17	16	11	11	13	2	0	0	0	0	79
05:00		0	1	3	6	21	49	27	11	3	6	2	0	0	0	129
06:00		0	1	12	17	101	87	40	18	4	2	0	0	0	0	282
07:00		1	0	19	27	95	95	40	17	6	0	0	0	0	0	300
08:00		0	0	14	42	86	110	41	9	2	0	1	0	0	0	305
09:00		0	0	13	45	101	133	16	16	1	2	0	0	0	0	327
10:00		0	10	11	30	106	105	31	21	6	0	1	0	0	0	321
11:00		0	0	9	31	106	150	43	6	0	0	0	0	0	0	345
12:00	PM	0	2	14	62	131	140	52	10	0	0	0	0	0	0	411
13:00		0	3	28	56	164	137	27	7	0	0	0	0	0	0	422
14:00		0	3	23	56	183	166	30	14	4	0	0	0	0	0	479
15:00		0	0	12	72	258	197	35	3	1	0	0	0	0	0	578
16:00		0	0	10	78	283	169	44	12	0	0	0	0	0	0	596
17:00		0	0	9	51	288	200	43	6	2	0	0	0	0	0	599
18:00		0	1	9	23	215	182	45	8	2	1	0	0	0	0	486
19:00		0	0	0	22	111	163	43	13	3	0	0	0	0	0	355
20:00		0	0	1	17	135	133	32	6	0	0	0	0	0	0	324
21:00		0	1	2	14	87	118	41	7	2	1	0	0	0	0	273
22:00		0	3	28	52	266	187	50	4	2	0	0	0	0	0	592
23:00		0	0	2	9	49	96	73	37	7	0	0	0	0	0	273
Totals		**1**	**25**	**225**	**725**	**2854**	**2708**	**861**	**331**	**101**	**35**	**7**	**0**	**0**	**0**	**7873**
% of Totals		0%	0%	3%	9%	36%	34%	11%	4%	1%	0%	0%				100%
% AM		0%	0%	1%	3%	9%	10%	4%	3%	1%	0%	0%				32%
AM Peak Hour			10:00	07:00	09:00	10:00	11:00	11:00		02:00	02:00	01:00				11:00
Volume			10	19	45	106	150	43	31	13	7	2				345
% PM			0%	2%	7%	28%	24%	7%	2%	0%	0%					68%
PM Peak Hour			13:00	13:00	16:00	17:00	17:00	23:00	23:00	23:00	18:00					17:00
Volume			3	28	78	288	200	73	37	7	1					599

Average Speed	50th Percentile	85th Percentile
30.5	30	36

Speed Report

Date: 11/6/07 Site: [808.26] SR-76 btwn I-15 NB Ramps & Pankey Rd

EASTBOUND

		5	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	0	0	0	0	0	1	1	9	9	7	8	3	38
01:00		0	0	0	0	0	1	1	2	2	6	5	11	5	33
02:00		0	0	0	1	0	0	1	1	2	8	15	5	11	44
03:00		0	0	0	0	0	0	0	1	6	3	2	4	5	21
04:00		0	0	0	0	0	1	1	0	7	5	5	6	11	36
05:00		0	0	1	0	3	1	1	9	18	18	15	14	15	95
06:00		1	2	2	4	3	4	2	9	45	66	43	30	13	224
07:00		4	9	1	8	6	2	5	16	39	71	71	45	24	301
08:00		7	1	1	8	3	2	5	38	80	76	59	31	9	320
09:00		6	3	3	4	5	10	17	25	77	104	72	38	15	379
10:00		5	4	2	5	1	2	17	42	89	112	74	43	19	415
11:00		7	7	4	9	1	6	15	32	88	74	70	27	8	348
12:00	PM	9	2	4	11	4	0	8	38	110	83	51	33	9	362
13:00		10	4	5	16	7	3	11	35	74	99	70	27	11	372
14:00		12	11	6	12	2	6	15	26	82	88	60	42	18	380
15:00		36	12	5	7	0	3	15	45	119	86	69	27	3	427
16:00		41	17	11	9	2	1	18	22	75	94	82	25	12	409
17:00		34	12	5	6	1	0	5	40	66	123	84	42	9	427
18:00		9	14	3	15	2	0	5	27	96	135	87	34	6	433
19:00		2	5	2	9	3	1	4	6	46	72	49	17	6	222
20:00		3	1	2	4	0	3	1	18	36	43	39	32	8	190
21:00		2	3	5	4	0	1	3	3	18	37	31	25	8	140
22:00		0	2	2	4	1	1	0	9	27	18	31	13	13	121
23:00		0	2	1	1	1	0	0	4	8	12	19	9	13	70
Totals		**188**	**111**	**65**	**137**	**45**	**48**	**151**	**449**	**1219**	**1442**	**1110**	**588**	**254**	**5807**
% of Totals		3%	2%	1%	2%	1%	1%	3%	8%	21%	25%	19%	10%	4%	100%
% AM		1%	0%	0%	1%	0%	0%	1%	3%	8%	10%	8%	5%	2%	39%
AM Peak Hour		08:00	07:00	11:00	11:00	07:00	09:00	09:00	10:00	10:00	10:00	10:00	07:00	07:00	10:00
Volume		7	9	4	9	6	10	17	42	89	112	74	45	24	415
% PM		3%	1%	1%	2%	0%	0%	1%	5%	13%	15%	12%	6%	2%	61%
PM Peak Hour		16:00	16:00	16:00	13:00	13:00	14:00	16:00	15:00	15:00	18:00	18:00	14:00	14:00	18:00
Volume		41	17	11	16	7	6	18	45	119	135	87	42	18	433

Average Speed	50th Percentile	85th Percentile
54.0	57	65

Speed Report

Date: 11/6/07 Site: [808.26] SR-76 btwn I-15 NB Ramps & Pankey Rd

WESTBOUND

		5	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	1	0	0	0	1	6	15	24	23	24	11	7	112
01:00		0	0	0	0	0	0	2	5	16	24	16	16	1	80
02:00		0	1	0	0	0	0	2	3	13	18	15	13	7	72
03:00		1	0	0	0	0	2	5	9	13	7	13	16	5	71
04:00		0	0	0	0	0	0	0	9	5	12	10	10	11	57
05:00		1	5	1	0	0	0	4	25	33	32	21	12	8	142
06:00		3	12	0	0	0	0	10	25	40	59	30	14	4	197
07:00		8	15	4	2	9	16	33	34	61	33	17	7	0	239
08:00		7	19	6	3	4	6	13	27	34	44	22	6	2	193
09:00		6	25	3	2	1	6	6	33	46	54	15	6	0	203
10:00		5	32	3	8	3	6	13	46	57	41	23	1	0	238
11:00		9	17	7	3	17	26	33	25	46	39	19	6	1	248
12:00	PM	4	26	6	8	7	12	19	52	53	35	24	5	2	253
13:00		15	16	6	8	12	31	41	45	85	42	21	4	1	327
14:00		21	19	16	14	24	43	75	74	68	27	8	2	0	391
15:00		57	56	53	29	61	57	61	28	22	10	4	1	1	440
16:00		78	94	70	43	29	29	29	17	25	16	2	0	0	432
17:00		22	40	42	31	33	43	63	52	31	18	3	1	1	380
18:00		12	38	11	13	7	36	55	55	51	26	1	2	0	307
19:00		3	6	7	6	11	24	49	47	54	35	20	5	1	268
20:00		3	4	3	0	1	6	23	38	53	49	19	2	0	201
21:00		3	4	3	6	12	26	41	74	70	47	9	5	0	300
22:00		0	1	1	2	11	19	30	81	67	42	14	6	2	276
23:00		0	0	0	0	1	10	23	43	51	57	31	6	4	226
Totals		**258**	**431**	**242**	**178**	**243**	**399**	**636**	**862**	**1018**	**790**	**381**	**157**	**58**	**5653**
% of Totals		5%	8%	4%	3%	4%	7%	11%	15%	18%	14%	7%	3%	1%	100%
% AM		1%	2%	0%	0%	1%	1%	2%	5%	7%	7%	4%	2%	1%	33%
AM Peak Hour		11:00	10:00	11:00	10:00	11:00	11:00	07:00	10:00	07:00	06:00	06:00	01:00	04:00	11:00
Volume		9	32	7	8	17	26	33	46	61	59	30	16	11	248
% PM		4%	5%	4%	3%	4%	6%	9%	11%	11%	7%	3%	1%	0%	67%
PM Peak Hour		16:00	16:00	16:00	16:00	15:00	15:00	14:00	22:00	13:00	23:00	23:00	22:00	23:00	15:00
Volume		78	94	70	43	61	57	75	81	85	57	31	6	4	440

Average Speed	50th Percentile	85th Percentile
44.0	48	58

Speed Report

Date: 11/6/07 Site: [808.27] SR-76 btwn Horse Ranch Creek Rd & Rice Cyn Rd

EASTBOUND

		5	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	7	1	0	0	0	3	8	18	7	0	0	0	0	44
01:00		2	1	0	0	0	4	6	11	5	1	1	0	0	31
02:00		0	0	0	0	1	6	13	8	13	1	0	0	0	42
03:00		1	0	0	0	0	2	12	8	1	0	0	0	0	24
04:00		0	1	0	0	2	3	12	7	8	0	0	0	0	33
05:00		8	1	0	0	4	10	25	33	18	2	0	0	0	101
06:00		7	4	2	1	6	14	72	83	23	2	0	0	0	214
07:00		16	8	0	0	9	28	100	115	22	3	0	0	0	301
08:00		14	3	1	1	5	36	133	99	18	1	0	0	0	311
09:00		11	2	2	2	13	72	129	90	26	3	1	0	0	351
10:00		24	5	1	0	23	48	193	107	14	0	0	0	0	415
11:00		10	5	4	3	23	100	129	59	11	2	1	0	0	347
12:00	PM	11	1	3	2	29	90	167	59	8	1	0	0	0	371
13:00		24	5	2	17	20	63	148	66	10	0	0	0	0	355
14:00		35	9	0	5	15	80	165	61	12	1	0	0	0	383
15:00		51	19	3	5	21	69	168	69	5	0	0	0	0	410
16:00		31	29	5	1	9	69	156	80	15	2	0	0	0	397
17:00		32	20	3	1	17	97	182	83	3	0	1	0	1	440
18:00		30	11	0	1	24	77	162	88	11	0	1	0	0	405
19:00		13	8	0	2	5	38	94	36	5	3	0	0	0	204
20:00		17	4	0	0	5	20	63	49	13	1	0	0	0	172
21:00		20	6	2	0	3	14	48	33	16	1	0	0	0	143
22:00		16	4	0	1	3	8	49	32	11	1	0	0	0	125
23:00		8	2	1	0	2	9	17	28	6	1	0	0	0	74
Totals		**388**	**149**	**29**	**42**	**239**	**960**	**2251**	**1322**	**281**	**26**	**5**	**0**	**1**	**5693**
% of Totals		7%	3%	1%	1%	4%	17%	40%	23%	5%	0%	0%		0%	100%
% AM		2%	1%	0%	0%	2%	6%	15%	11%	3%	0%	0%			39%
AM Peak Hour		10:00	07:00	11:00	11:00	10:00	11:00	10:00	07:00	09:00	07:00	01:00			10:00
Volume		24	8	4	3	23	100	193	115	26	3	1			415
% PM		5%	2%	0%	1%	3%	11%	25%	12%	2%	0%	0%		0%	61%
PM Peak Hour		15:00	16:00	16:00	13:00	12:00	17:00	17:00	18:00	21:00	19:00	17:00		17:00	17:00
Volume		51	29	5	17	29	97	182	88	16	3	1		1	440

Average Speed	50th Percentile	85th Percentile
39.9	42	48

Speed Report

Date: 11/6/07 Site: [808.27] SR-76 btwn Horse Ranch Creek Rd & Rice Cyn Rd

WESTBOUND

		5	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	0	0	4	35	64	9	4	0	0	0	0	0	116
01:00		0	0	0	0	23	42	14	2	0	0	0	0	0	81
02:00		0	0	0	1	21	37	16	0	0	0	0	0	0	75
03:00		0	0	1	2	13	45	6	0	0	0	0	0	0	67
04:00		0	0	0	4	9	30	11	1	0	0	0	0	0	55
05:00		2	0	0	0	29	68	20	0	0	0	0	0	0	119
06:00		3	0	1	8	40	72	25	3	0	0	0	0	0	152
07:00		1	1	7	13	59	93	21	0	0	0	0	0	0	195
08:00		2	3	3	6	31	76	28	0	0	0	0	0	0	149
09:00		3	2	2	8	36	69	18	0	0	0	0	0	0	138
10:00		6	0	4	14	45	92	14	0	0	0	0	0	0	175
11:00		2	1	6	11	59	101	14	2	0	0	0	0	0	196
12:00	PM	0	4	1	13	56	120	19	0	0	0	0	0	0	213
13:00		10	3	2	15	90	128	17	0	0	0	0	0	0	265
14:00		8	11	11	33	133	143	6	0	0	0	0	0	0	345
15:00		20	1	17	32	204	184	12	0	0	0	0	0	0	470
16:00		16	5	10	5	148	206	20	0	0	0	0	0	0	410
17:00		14	6	16	15	124	139	12	0	0	0	0	0	0	326
18:00		9	9	12	17	96	95	5	0	1	0	0	0	0	244
19:00		3	0	6	4	92	117	12	1	0	0	0	0	0	235
20:00		1	3	3	7	65	102	13	1	0	0	0	0	0	195
21:00		1	3	2	15	120	150	11	0	0	0	0	0	0	302
22:00		2	0	2	13	141	122	6	2	0	0	0	0	0	288
23:00		1	1	1	2	95	109	10	0	0	1	0	0	0	220
Totals		**104**	**53**	**107**	**242**	**1764**	**2404**	**339**	**16**	**1**	**1**	**0**	**0**	**0**	**5031**
% of Totals		2%	1%	2%	5%	35%	48%	7%	0%	0%	0%				100%
% AM		0%	0%	0%	1%	8%	16%	4%	0%						30%
AM Peak Hour		10:00	08:00	07:00	10:00	07:00	11:00	08:00							11:00
Volume		6	3	7	14	59	101	28	4						196
% PM		2%	1%	2%	3%	27%	32%	3%	0%	0%	0%				70%
PM Peak Hour		15:00	14:00	15:00	14:00	15:00	16:00	16:00	22:00	18:00	23:00				15:00
Volume		20	11	17	33	204	206	20	2	1	1				470

Average Speed	50th Percentile	85th Percentile
34.5	36	39

Speed Report

Date: 11/6/07 Site: [808.28] SR-76 (Pala Road) btwn Rice Cyn Rd & Couser Cyn Rd

EASTBOUND

		5	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	4	4	0	0	7	12	13	2	0	0	0	0	42
01:00		0	0	2	0	0	3	17	8	1	1	0	0	0	32
02:00		0	1	1	0	1	6	17	14	3	1	0	0	0	44
03:00		0	2	2	0	0	7	7	6	0	0	0	0	0	24
04:00		0	0	0	0	1	10	9	4	4	1	0	0	0	29
05:00		1	3	0	0	5	22	36	26	5	0	0	0	0	98
06:00		3	3	3	0	15	44	106	32	3	0	0	0	0	209
07:00		9	4	5	2	13	82	133	47	8	0	0	0	0	303
08:00		13	4	1	3	22	119	116	32	2	0	0	0	0	312
09:00		8	5	6	7	35	130	124	39	1	2	0	0	0	357
10:00		7	6	4	6	49	163	168	26	1	0	0	0	0	430
11:00		10	9	2	2	40	133	140	20	0	1	0	0	0	357
12:00	PM	10	5	6	3	27	157	131	26	5	0	0	0	0	370
13:00		13	9	12	16	33	118	144	28	2	0	0	0	0	375
14:00		19	23	10	2	25	139	142	35	3	0	0	0	0	398
15:00		26	25	10	7	33	113	161	27	2	1	0	0	0	405
16:00		22	22	16	2	32	122	132	40	3	1	0	0	0	392
17:00		21	24	7	4	27	173	166	12	2	0	0	0	0	436
18:00		10	11	6	4	34	137	165	26	2	1	0	0	0	396
19:00		5	11	3	4	12	69	82	15	2	1	0	0	0	204
20:00		5	6	6	0	10	47	67	26	6	0	0	0	0	173
21:00		5	15	8	0	6	33	48	27	1	1	0	0	0	144
22:00		7	14	5	2	5	30	46	26	0	0	0	0	0	135
23:00		3	13	4	0	2	17	34	7	0	0	0	0	0	80
Totals		**197**	**219**	**123**	**64**	**427**	**1881**	**2203**	**562**	**58**	**11**	**0**	**0**	**0**	**5745**
% of Totals		3%	4%	2%	1%	7%	33%	38%	10%	1%	0%				100%
% AM		1%	1%	1%	0%	3%	13%	15%	5%	1%	0%				39%
AM Peak Hour		08:00	11:00	09:00	09:00	10:00	10:00	10:00	07:00	07:00	09:00				10:00
Volume		13	9	6	7	49	163	168	47	8	2				430
% PM		3%	3%	2%	1%	4%	20%	23%	5%	0%	0%				61%
PM Peak Hour		15:00	15:00	16:00	13:00	18:00	17:00	17:00	16:00	20:00	15:00				17:00
Volume		26	25	16	16	34	173	166	40	6	1				436

Average Speed	50th Percentile	85th Percentile
38.1	40	44

Speed Report

Date: 11/6/07 Site: [808.28] SR-76 (Pala Road) btwn Rice Cyn Rd & Couser Cyn Rd

WESTBOUND

		5	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	0	1	2	5	32	45	19	9	0	2	0	0	115
01:00		0	0	1	0	2	18	34	19	7	0	0	0	0	81
02:00		0	1	0	0	3	13	19	30	6	1	0	0	0	73
03:00		0	0	1	0	4	13	24	18	7	1	0	0	0	68
04:00		0	0	0	1	3	8	12	25	9	0	0	0	0	58
05:00		2	0	2	1	5	12	44	36	8	0	0	0	0	110
06:00		7	7	6	2	15	17	50	46	3	0	0	0	0	153
07:00		6	16	5	1	21	40	74	48	7	0	0	0	0	218
08:00		5	19	10	0	5	22	74	27	11	0	0	0	0	173
09:00		14	21	9	1	11	22	61	32	0	0	0	0	0	171
10:00		16	19	11	2	24	37	92	28	4	0	0	0	0	233
11:00		15	19	13	3	16	47	92	33	2	2	0	0	0	242
12:00	PM	6	15	9	7	18	49	93	51	5	1	0	0	0	254
13:00		19	15	9	5	15	63	137	38	1	0	0	0	0	302
14:00		13	25	14	12	55	79	187	37	3	0	0	0	0	425
15:00		16	25	16	9	27	160	212	34	9	0	0	0	0	508
16:00		17	19	23	1	15	97	228	41	2	0	0	0	0	443
17:00		13	30	25	4	36	137	127	24	0	0	0	0	0	396
18:00		11	22	22	0	24	105	100	21	1	0	0	0	0	306
19:00		4	8	6	1	16	65	120	30	1	0	0	0	0	251
20:00		2	11	1	3	13	60	77	34	3	1	0	0	0	205
21:00		3	3	5	1	18	105	161	26	1	0	0	0	0	323
22:00		2	1	6	3	21	88	125	34	2	0	1	0	0	283
23:00		2	0	4	0	14	67	100	32	1	0	0	0	0	220
Totals		**173**	**276**	**199**	**59**	**386**	**1356**	**2288**	**763**	**102**	**6**	**3**	**0**	**0**	**5611**
% of Totals		3%	5%	4%	1%	7%	24%	41%	14%	2%	0%	0%			100%
% AM		1%	2%	1%	0%	2%	5%	11%	6%	1%	0%	0%			30%
AM Peak Hour		10:00	09:00	11:00	11:00	10:00	11:00	10:00	07:00	08:00	11:00				11:00
Volume		16	21	13	3	24	47	92	48	11	2	2			242
% PM		2%	3%	2%	1%	5%	19%	30%	7%	1%	0%	0%			70%
PM Peak Hour		13:00	17:00	17:00	14:00	14:00	15:00	16:00	12:00	15:00	12:00	22:00			15:00
Volume		19	30	25	12	55	160	228	51	9	1	1			508

Average Speed	50th Percentile	85th Percentile
38.4	41	45

Speed Report

Date: 11/12/08 Site: [93210] SR-76 between Couser Canyon Road & Pala Mission Road

EASTBOUND

		5	10	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**9**	**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	0	0	0	0	1	16	34	39	18	3	0	0	0	111
01:00		0	0	0	0	0	3	14	13	18	20	5	2	0	0	75
02:00		0	0	0	0	0	2	8	20	28	9	4	1	0	0	72
03:00		0	0	0	0	1	5	4	21	25	11	3	0	0	0	70
04:00		0	0	0	1	0	0	3	6	9	18	4	2	0	0	43
05:00		0	2	2	0	1	1	6	15	25	10	8	1	1	0	72
06:00		1	1	0	1	0	0	12	32	37	30	5	1	0	1	121
07:00		5	3	1	1	0	0	10	39	57	39	14	2	1	0	172
08:00		3	0	0	1	0	1	11	36	61	34	3	4	0	0	154
09:00		1	0	0	0	0	2	15	45	48	29	4	2	0	0	146
10:00		4	2	0	1	0	2	9	43	66	19	9	2	0	0	157
11:00		1	1	0	1	0	0	17	65	60	44	6	1	1	0	197
12:00	PM	0	1	1	0	0	1	17	63	84	27	5	1	0	0	200
13:00		3	0	1	0	0	15	42	83	63	33	6	0	0	0	246
14:00		2	0	1	3	3	10	39	110	120	35	4	0	0	1	328
15:00		0	1	1	0	0	14	54	161	112	27	9	1	0	0	380
16:00		1	1	0	0	0	8	37	109	124	44	4	2	0	0	330
17:00		2	3	0	0	1	9	39	87	97	32	7	1	0	0	278
18:00		1	4	0	2	1	9	31	70	41	22	8	2	0	0	191
19:00		1	1	2	1	1	11	23	51	38	19	4	3	0	1	156
20:00		0	2	0	0	0	7	20	39	48	33	3	3	0	1	156
21:00		1	0	0	0	0	2	16	48	66	26	4	2	0	0	165
22:00		0	1	0	0	1	4	22	46	66	20	5	1	0	0	166
23:00		0	1	0	0	0	5	21	48	58	22	7	0	1	0	163
Totals		**26**	**24**	**9**	**12**	**9**	**112**	**486**	**1284**	**1390**	**621**	**134**	**34**	**4**	**4**	**4149**
% of Totals		1%	1%	0%	0%	0%	3%	12%	31%	34%	15%	3%	1%	0%	0%	100%
% AM		0%	0%	0%	0%	0%	0%	3%	9%	11%	7%	2%	0%	0%	0%	34%
AM Peak Hour			07:00	05:00	04:00	03:00	03:00	11:00	11:00	10:00	11:00	07:00	08:00	05:00	06:00	11:00
Volume			3	2	1	1	5	17	65	66	44	14	4	1	1	197
% PM		0%	0%	0%	0%	0%	2%	9%	22%	22%	8%	2%	0%	0%	0%	66%
PM Peak Hour			18:00	19:00	14:00	14:00	13:00	15:00	15:00	16:00	16:00	15:00	19:00	23:00	14:00	15:00
Volume			4	2	3	3	15	54	161	124	44	9	3	1	1	380

Average Speed	50th Percentile	85th Percentile
44.9	45	51

Speed Report

Date: 11/12/08 Site: [93210] SR-76 between Couser Canyon Road & Pala Mission Road

WESTBOUND

		5	10	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**9**	**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	0	0	0	0	0	0	3	11	10	1	1	0	0	26
01:00		0	0	0	0	0	1	1	1	10	7	2	1	0	0	23
02:00		1	0	0	0	0	0	2	3	3	11	8	1	1	1	31
03:00		0	0	0	0	0	1	1	2	4	2	3	2	0	0	15
04:00		0	0	0	0	0	0	3	3	2	5	0	1	1	0	15
05:00		1	0	0	0	0	0	18	25	41	22	8	1	0	2	118
06:00		0	0	0	4	0	0	15	33	87	57	22	4	0	0	222
07:00		6	0	1	4	1	0	10	76	111	60	11	1	0	0	281
08:00		1	0	0	3	0	1	16	91	95	44	9	1	0	0	261
09:00		0	2	0	1	0	7	14	100	86	36	7	2	0	0	255
10:00		1	1	1	0	0	1	31	129	134	26	1	0	0	0	325
11:00		1	1	1	1	0	10	35	119	108	32	8	0	0	0	316
12:00	PM	2	0	0	0	0	3	32	103	121	31	4	0	0	0	296
13:00		3	0	2	1	0	1	21	91	103	57	9	0	0	0	288
14:00		1	2	1	0	0	3	21	86	97	44	3	2	0	1	261
15:00		4	2	3	1	1	3	29	71	129	50	7	3	0	0	303
16:00		3	0	2	3	1	1	34	94	118	39	2	0	0	1	298
17:00		1	1	1	0	0	1	14	91	111	27	3	0	1	0	251
18:00		1	0	3	1	0	1	22	69	71	32	5	1	0	0	206
19:00		0	0	0	3	1	0	10	54	67	39	5	0	1	0	180
20:00		0	0	1	0	0	2	12	51	38	22	2	0	1	0	129
21:00		0	0	0	1	0	0	9	30	54	27	7	0	0	1	129
22:00		0	1	0	0	0	1	7	35	40	24	6	1	0	0	115
23:00		0	0	0	0	0	0	1	11	26	20	2	1	4	0	65
Totals		**26**	**10**	**16**	**23**	**4**	**37**	**358**	**1371**	**1667**	**724**	**135**	**23**	**9**	**6**	**4409**
% of Totals		1%	0%	0%	1%	0%	1%	8%	31%	38%	16%	3%	1%	0%	0%	100%
% AM		0%	0%	0%	0%	0%	0%	3%	13%	16%	7%	2%	0%	0%	0%	43%
AM Peak Hour			09:00	07:00	06:00	07:00	11:00	11:00	10:00	10:00	07:00	06:00	06:00	02:00	05:00	10:00
Volume			2	1	4	1	10	35	129	134	60	22	4	1	2	325
% PM		0%	0%	0%	0%	0%	0%	5%	18%	22%	9%	1%	0%	0%	0%	57%
PM Peak Hour			14:00	15:00	16:00	15:00	12:00	16:00	12:00	15:00	13:00	13:00	15:00	23:00	14:00	15:00
Volume			2	3	3	1	3	34	103	129	57	9	3	4	1	303

Average Speed	50th Percentile	85th Percentile
45.7	46	52

Speed Report

Date: 11/6/07 Site: [808.35] Old Hwy 395 btwn Reche Rd & East Mission Rd

NORTHBOUND

		5	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	0	0	0	0	2	1	1	2	0	1	0	0	7
01:00		0	0	0	0	0	0	0	2	0	0	0	0	0	2
02:00		0	0	0	0	0	0	1	2	0	0	1	0	0	4
03:00		0	0	0	0	0	0	1	3	3	1	1	0	1	10
04:00		1	0	0	0	0	3	4	10	5	5	1	1	0	30
05:00		0	0	0	0	2	1	8	17	18	7	5	1	0	59
06:00		0	1	0	0	1	5	17	57	40	20	7	2	2	152
07:00		2	0	0	3	10	22	43	94	56	28	11	3	0	272
08:00		2	0	3	13	32	51	60	48	26	5	0	0	0	240
09:00		3	2	10	18	43	35	42	22	15	1	0	0	0	191
10:00		1	5	16	33	50	51	35	14	4	2	0	0	0	211
11:00		3	1	17	33	49	31	29	11	3	0	0	0	0	177
12:00	PM	4	3	3	5	1	12	23	62	47	12	2	1	0	175
13:00		3	1	1	2	6	10	36	41	36	21	5	1	0	163
14:00		0	0	1	0	2	18	51	74	57	24	3	1	1	232
15:00		1	0	1	0	5	15	42	68	62	24	6	0	0	224
16:00		1	1	0	0	1	8	40	81	76	23	4	0	1	236
17:00		1	0	0	1	0	7	38	80	45	14	4	0	1	191
18:00		1	1	0	1	1	3	20	52	32	18	1	1	0	131
19:00		0	0	0	0	4	5	18	12	19	12	4	1	0	75
20:00		0	0	0	0	0	1	10	29	20	10	1	0	0	71
21:00		0	0	0	0	0	0	22	25	15	14	1	0	0	77
22:00		0	0	0	0	0	1	5	1	10	6	3	0	1	27
23:00		0	0	0	0	0	2	2	3	2	2	2	0	0	13
Totals		**23**	**15**	**52**	**109**	**207**	**283**	**548**	**809**	**593**	**249**	**63**	**12**	**7**	**2970**
% of Totals		1%	1%	2%	4%	7%	10%	18%	27%	20%	8%	2%	0%	0%	100%
% AM		0%	0%	2%	3%	6%	7%	8%	9%	6%	2%	1%	0%	0%	46%
AM Peak Hour		09:00	10:00	11:00	10:00	10:00	08:00	08:00	07:00	07:00	07:00	07:00	07:00	06:00	07:00
Volume		3	5	17	33	50	51	60	94	56	28	11	3	2	272
% PM		0%	0%	0%	0%	1%	3%	10%	18%	14%	6%	1%	0%	0%	54%
PM Peak Hour		12:00	12:00	12:00	12:00	13:00	14:00	14:00	16:00	16:00	14:00	15:00	12:00	14:00	16:00
Volume		4	3	3	5	6	18	51	81	76	24	6	1	1	236

Average Speed	50th Percentile	85th Percentile
45.3	47	54

Speed Report

Date: 11/7/07 Site: [808.35] Old Hwy 395 btwn Reche Rd & East Mission Rd

SOUTHBOUND

		5	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	0	0	0	0	0	1	1	3	1	1	0	0	7
01:00		0	0	0	0	0	0	0	1	0	2	0	0	1	4
02:00		0	0	0	0	0	0	0	0	3	2	0	0	0	5
03:00		0	0	0	0	0	0	0	2	1	3	1	0	0	7
04:00		0	0	0	0	0	0	0	2	4	4	3	1	0	14
05:00		0	0	0	0	1	0	1	4	24	26	13	5	0	74
06:00		2	3	0	0	0	0	2	14	63	39	14	8	0	145
07:00		1	2	1	0	0	1	7	54	97	38	7	1	0	209
08:00		3	4	1	2	17	33	43	42	23	3	2	0	0	173
09:00		5	1	0	3	29	48	55	9	2	0	0	0	0	152
10:00		1	1	0	8	23	65	36	11	2	0	0	0	0	147
11:00		1	2	2	10	33	53	52	8	0	0	0	0	0	161
12:00	PM	1	1	4	2	5	12	18	47	57	17	7	0	0	171
13:00		1	1	0	0	2	2	22	59	82	27	7	1	0	204
14:00		4	0	0	1	0	3	14	63	91	31	7	1	1	216
15:00		5	1	0	0	0	3	20	72	97	49	7	0	0	254
16:00		1	0	1	0	0	0	11	52	88	43	6	0	0	202
17:00		1	1	2	0	0	4	8	28	79	36	6	1	0	166
18:00		1	1	0	0	2	1	7	40	65	44	12	0	0	173
19:00		0	0	0	0	1	2	8	24	46	26	10	0	0	117
20:00		0	0	0	0	0	0	6	13	34	28	9	0	0	90
21:00		1	1	0	0	0	0	1	12	27	21	8	3	2	76
22:00		0	0	0	0	0	0	0	4	15	8	5	1	0	33
23:00		0	0	0	0	0	0	1	5	9	8	1	2	0	26
Totals		**28**	**19**	**11**	**26**	**113**	**227**	**313**	**567**	**912**	**456**	**126**	**24**	**4**	**2826**
% of Totals		1%	1%	0%	1%	4%	8%	11%	20%	32%	16%	4%	1%	0%	100%
% AM		0%	0%	0%	1%	4%	7%	7%	5%	8%	4%	1%	1%	0%	39%
AM Peak Hour		09:00	08:00	11:00	11:00	11:00	10:00	09:00	07:00	07:00	06:00	06:00	06:00	01:00	07:00
Volume		5	4	2	10	33	65	55	54	97	39	14	8	1	209
% PM		1%	0%	0%	0%	0%	1%	4%	15%	24%	12%	3%	0%	0%	61%
PM Peak Hour		15:00	12:00	12:00	12:00	12:00	12:00	13:00	15:00	15:00	15:00	18:00	21:00	21:00	15:00
Volume		5	1	4	2	5	12	22	72	97	49	12	3	2	254

Average Speed	50th Percentile	85th Percentile
48.8	51	57

Speed Report

Date: 11/14/07 Site: [80834] Old Hwy 395 btwn Reche Rd & Canonita Dr/Steward Cyn Rd

NORTHBOUND

		5	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	0	0	0	0	0	2	7	5	3	2	0	0	19
01:00		0	0	0	0	0	1	1	3	3	1	0	1	2	12
02:00		0	0	0	0	0	0	5	4	1	0	0	0	0	10
03:00		0	0	0	0	0	1	1	1	0	1	2	1	0	7
04:00		0	0	0	0	0	0	2	3	4	0	2	0	1	12
05:00		1	1	0	0	0	1	3	4	13	9	6	2	1	41
06:00		1	1	6	8	2	5	5	19	48	20	6	4	0	125
07:00		1	1	0	1	2	5	30	34	81	44	15	5	3	222
08:00		3	1	0	0	3	8	10	40	64	44	20	7	2	202
09:00		1	0	0	0	0	4	12	34	60	32	11	2	1	157
10:00		5	2	1	1	1	4	15	39	54	40	9	1	1	173
11:00		1	1	1	0	0	7	29	52	49	21	9	1	2	173
12:00	PM	2	3	1	1	0	5	20	61	65	41	15	0	1	215
13:00		2	0	0	0	6	18	48	68	55	25	10	2	0	234
14:00		2	2	0	0	0	1	26	69	91	52	7	1	2	253
15:00		2	0	1	1	5	10	33	99	93	37	9	2	2	294
16:00		3	2	0	0	11	37	64	118	95	44	11	1	1	387
17:00		2	1	1	0	5	23	71	98	79	20	9	1	0	310
18:00		3	0	0	2	2	16	35	58	60	30	7	3	0	216
19:00		0	0	2	0	1	6	15	43	45	20	3	2	0	137
20:00		0	0	0	0	0	2	7	17	31	15	2	0	1	75
21:00		0	0	0	0	0	1	17	39	28	16	5	0	1	107
22:00		0	0	0	0	2	3	6	11	22	16	11	0	1	72
23:00		0	0	0	0	0	0	5	9	19	6	5	4	1	49
Totals		**29**	**15**	**13**	**14**	**40**	**158**	**462**	**930**	**1065**	**537**	**176**	**40**	**23**	**3502**
% of Totals		1%	0%	0%	0%	1%	5%	13%	27%	30%	15%	5%	1%	1%	100%
% AM		0%	0%	0%	0%	0%	1%	3%	7%	11%	6%	2%	1%	0%	33%
AM Peak Hour		10:00	10:00	06:00	06:00	08:00	08:00	07:00	11:00	07:00	07:00	08:00	08:00	07:00	07:00
Volume		5	2	6	8	3	8	30	52	81	44	20	7	3	222
% PM		0%	0%	0%	0%	1%	3%	10%	20%	20%	9%	3%	0%	0%	67%
PM Peak Hour		16:00	12:00	19:00	18:00	16:00	16:00	17:00	16:00	16:00	14:00	12:00	23:00	14:00	16:00
Volume		3	3	2	2	11	37	71	118	95	52	15	4	2	387

Average Speed	50th Percentile	85th Percentile
49.8	50	57

Speed Report

Date: 11/14/07 Site: [80834] Old Hwy 395 btwn Reche Rd & Canonita Dr/Steward Cyn Rd

SOUTHBOUND

		5	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	0	0	0	0	0	1	2	1	1	1	0	0	6
01:00		0	0	0	0	0	0	1	0	1	1	1	0	0	4
02:00		0	0	0	0	0	1	0	5	2	0	2	0	0	10
03:00		0	0	0	0	0	1	2	9	4	2	2	0	1	21
04:00		0	0	0	0	0	0	5	17	10	4	2	0	0	38
05:00		0	0	1	0	0	4	31	67	36	16	5	0	2	162
06:00		2	2	2	1	2	4	38	120	75	30	7	2	1	286
07:00		0	1	1	0	1	7	48	116	67	20	3	1	0	265
08:00		3	2	1	0	1	10	41	86	62	32	7	1	0	246
09:00		0	2	0	1	1	15	48	73	51	12	1	0	0	204
10:00		2	1	1	0	3	12	56	77	49	13	4	1	0	219
11:00		0	1	0	2	2	15	52	72	37	16	5	0	0	202
12:00	PM	1	2	1	1	0	21	59	57	38	16	2	2	0	200
13:00		5	1	3	0	2	20	50	58	35	17	6	1	0	198
14:00		1	0	0	1	6	18	56	61	42	14	3	1	0	203
15:00		3	2	0	0	1	18	51	63	37	14	5	0	0	194
16:00		2	2	3	0	0	19	69	82	38	11	3	0	1	230
17:00		0	3	2	0	1	9	52	75	34	15	2	0	0	193
18:00		1	0	1	0	0	4	34	56	30	11	3	1	0	141
19:00		0	0	0	0	0	3	15	36	26	13	3	1	0	97
20:00		0	0	0	0	0	4	17	20	23	10	3	0	0	77
21:00		0	1	0	0	0	0	11	24	15	9	4	1	0	65
22:00		0	0	0	0	0	2	11	7	11	4	1	2	1	39
23:00		0	0	0	0	0	0	3	2	2	1	0	0	0	8
Totals		**20**	**20**	**16**	**6**	**20**	**187**	**751**	**1185**	**726**	**282**	**75**	**14**	**6**	**3308**
% of Totals		1%	1%	0%	0%	1%	6%	23%	36%	22%	9%	2%	0%	0%	100%
% AM		0%	0%	0%	0%	0%	2%	10%	19%	12%	4%	1%	0%	0%	50%
AM Peak Hour		08:00	06:00	06:00	11:00	10:00	09:00	10:00	06:00	06:00	08:00	06:00	06:00	05:00	06:00
Volume		3	2	2	2	3	15	56	120	75	32	7	2	2	286
% PM		0%	0%	0%	0%	0%	4%	13%	16%	10%	4%	1%	0%	0%	50%
PM Peak Hour		13:00	17:00	13:00	12:00	14:00	12:00	16:00	16:00	14:00	13:00	13:00	12:00	16:00	16:00
Volume		5	3	3	1	6	21	69	82	42	17	6	2	1	230

Average Speed	50th Percentile	85th Percentile
47.6	48	54

Speed Report

Date: 11/7/07 Site: [808.33] Old Hwy 395 btwn Tecalote Ln & Stewart Cyn Rd

NORTHBOUND

		5	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	0	0	0	0	1	0	4	6	10	4	2	3	30
01:00		0	0	0	0	0	0	1	1	3	2	2	1	0	10
02:00		0	0	0	0	0	0	0	2	3	3	3	4	0	15
03:00		0	0	0	0	0	0	0	0	1	0	1	0	0	2
04:00		0	0	0	0	0	0	0	1	2	9	2	0	1	15
05:00		2	0	0	0	0	0	1	0	9	6	9	5	1	33
06:00		2	0	1	3	4	3	10	20	30	26	10	5	3	117
07:00		1	1	0	9	10	48	60	52	26	9	0	1	1	218
08:00		1	2	0	6	36	57	57	36	23	2	0	0	0	220
09:00		3	3	0	11	40	28	55	28	11	2	1	0	0	182
10:00		5	0	0	3	35	46	59	23	17	1	0	0	0	189
11:00		2	1	2	3	17	33	52	32	23	5	0	0	0	170
12:00	PM	5	1	0	2	3	8	36	74	42	18	1	0	1	191
13:00		2	0	1	0	4	5	58	74	64	15	3	0	0	226
14:00		2	0	1	3	5	31	75	87	62	33	3	0	0	302
15:00		3	2	4	4	7	12	34	68	88	53	13	2	0	290
16:00		5	2	33	50	53	33	54	47	38	6	2	0	0	323
17:00		5	2	3	26	52	78	66	40	30	20	2	1	0	325
18:00		0	1	1	0	0	0	12	38	82	50	17	1	0	202
19:00		0	1	0	0	0	7	7	10	27	43	31	11	5	142
20:00		0	0	0	0	0	0	3	8	16	36	32	11	3	109
21:00		0	0	0	0	0	1	0	7	20	38	11	9	6	92
22:00		0	0	0	0	1	1	0	6	6	33	9	9	2	67
23:00		0	0	0	0	0	0	1	8	14	12	9	7	2	53
Totals		**38**	**16**	**46**	**120**	**267**	**392**	**641**	**666**	**643**	**432**	**165**	**69**	**28**	**3523**
% of Totals		1%	0%	1%	3%	8%	11%	18%	19%	18%	12%	5%	2%	1%	100%
% AM		0%	0%	0%	1%	4%	6%	8%	6%	4%	2%	1%	1%	0%	34%
AM Peak Hour		10:00	09:00	11:00	09:00	09:00	08:00	07:00	07:00	06:00	06:00	06:00	05:00		08:00
Volume		5	3	2	11	40	57	60	52	30	26	10	5	3	220
% PM		1%	0%	1%	2%	4%	5%	10%	13%	14%	10%	4%	1%	1%	66%
PM Peak Hour		12:00	15:00	16:00	16:00	16:00	17:00	14:00	14:00	15:00	15:00	20:00	19:00	21:00	17:00
Volume		5	2	33	50	53	78	75	87	88	53	32	11	6	325

Average Speed	50th Percentile	85th Percentile
46.2	47	57

Speed Report

Date: 11/7/07 Site: [808.33] Old Hwy 395 btwn Tecalote Ln & Stewart Cyn Rd

SOUTHBOUND

		5	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	0	0	0	0	0	1	1	3	1	0	3	1	10
01:00		0	0	0	0	0	0	0	0	0	1	1	0	1	3
02:00		0	0	0	0	0	0	0	0	1	2	1	1	1	6
03:00		0	0	0	0	0	0	0	2	2	5	2	3	5	19
04:00		0	0	0	0	0	0	0	0	4	8	9	13	6	40
05:00		0	0	0	0	0	0	1	2	10	49	44	26	22	154
06:00		12	5	1	1	2	6	18	22	56	55	65	24	6	273
07:00		6	0	0	1	23	38	65	99	49	13	4	1	1	300
08:00		5	0	0	0	14	38	86	81	28	7	4	0	1	264
09:00		1	1	1	3	16	35	61	43	23	4	0	1	0	189
10:00		3	0	0	2	16	47	65	42	23	3	1	0	0	202
11:00		2	1	3	0	11	38	58	49	27	7	1	0	0	197
12:00	PM	2	1	1	1	0	6	31	49	79	35	13	1	1	220
13:00		2	1	1	0	0	3	26	56	70	37	9	4	0	209
14:00		7	3	3	2	0	6	22	59	89	40	6	1	0	238
15:00		1	1	0	0	0	5	12	48	73	40	19	2	2	203
16:00		17	11	7	11	19	23	41	40	29	17	4	1	0	220
17:00		5	2	0	6	24	31	43	35	23	21	8	2	0	200
18:00		2	1	0	0	0	1	2	13	32	54	30	4	5	144
19:00		1	0	1	1	0	0	3	12	28	28	25	13	6	118
20:00		0	0	0	0	0	0	1	4	1	14	15	8	3	46
21:00		0	0	0	0	0	0	1	2	9	22	13	4	4	55
22:00		0	0	0	0	1	1	0	2	2	7	6	2	2	23
23:00		0	0	0	0	0	0	1	2	2	2	1	0	2	10
Totals		**66**	**27**	**18**	**28**	**126**	**278**	**538**	**663**	**663**	**472**	**281**	**114**	**69**	**3343**
% of Totals		2%	1%	1%	1%	4%	8%	16%	20%	20%	14%	8%	3%	2%	100%
% AM		1%	0%	0%	0%	2%	6%	11%	10%	7%	5%	4%	2%	1%	50%
AM Peak Hour		06:00	06:00	11:00	09:00	07:00	10:00	08:00	07:00	06:00	06:00	06:00	05:00	05:00	07:00
Volume		12	5	3	3	23	47	86	99	56	55	65	26	22	300
% PM		1%	1%	0%	1%	1%	2%	5%	10%	13%	9%	4%	1%	1%	50%
PM Peak Hour		16:00	16:00	16:00	16:00	17:00	17:00	17:00	14:00	14:00	18:00	18:00	19:00	19:00	14:00
Volume		17	11	7	11	24	31	43	59	89	54	30	13	6	238

Average Speed	50th Percentile	85th Percentile
48.8	49	60

Speed Report

Date: 11/8/07 Site: [808.32] Old Hwy 395 btwn Pala Mesa Dr & Tecalote Ln

NORTHBOUND

		5	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	0	0	0	0	0	1	3	10	6	6	1	1	28
01:00		0	0	0	0	0	0	2	0	3	1	2	2	0	10
02:00		0	0	0	0	0	0	0	4	5	3	5	0	1	18
03:00		0	0	0	0	0	0	0	0	1	1	0	0	0	2
04:00		0	0	0	0	0	0	1	1	4	8	2	0	1	17
05:00		0	0	0	0	1	0	2	4	10	13	6	1	1	38
06:00		0	1	0	0	1	4	9	23	36	29	13	6	4	126
07:00		4	0	0	1	0	10	40	68	82	52	16	0	2	275
08:00		1	1	0	0	0	1	29	81	66	40	13	2	0	234
09:00		0	3	0	2	2	8	23	44	61	40	10	1	1	195
10:00		2	1	0	0	3	15	21	63	60	29	9	5	0	208
11:00		1	3	0	0	5	4	8	35	69	44	18	5	1	193
12:00	PM	1	5	0	0	0	3	15	44	76	42	13	6	1	206
13:00		2	1	0	0	1	5	17	54	88	53	9	1	0	231
14:00		5	2	2	0	0	6	10	48	99	77	26	4	1	280
15:00		2	4	0	0	1	2	16	37	112	83	27	4	4	292
16:00		1	2	0	2	0	0	20	43	135	83	32	13	4	335
17:00		2	1	1	1	0	3	16	59	140	74	19	3	1	320
18:00		1	0	1	0	0	5	9	26	72	53	25	6	2	200
19:00		0	1	1	0	0	0	10	20	48	40	18	2	4	144
20:00		0	0	2	0	0	0	5	7	28	33	22	6	3	106
21:00		0	0	0	0	0	0	3	14	24	40	12	6	3	102
22:00		0	0	0	0	0	0	2	5	12	27	11	5	2	64
23:00		0	0	0	0	0	0	4	7	17	14	9	4	1	56
Totals		**22**	**25**	**7**	**6**	**14**	**66**	**263**	**690**	**1258**	**885**	**323**	**83**	**38**	**3680**
% of Totals		1%	1%	0%	0%	0%	2%	7%	19%	34%	24%	9%	2%	1%	100%
% AM		0%	0%		0%	0%	1%	4%	9%	11%	7%	3%	1%	0%	37%
AM Peak Hour		07:00	09:00		09:00	11:00	10:00	07:00	08:00	07:00	07:00	11:00	06:00	06:00	07:00
Volume		4	3		2	5	15	40	81	82	52	18	6	4	275
% PM		0%	0%	0%	0%	0%	1%	3%	10%	23%	17%	6%	2%	1%	63%
PM Peak Hour		14:00	12:00	14:00	16:00	13:00	14:00	16:00	17:00	17:00	15:00	16:00	16:00	15:00	16:00
Volume		5	5	2	2	1	6	20	59	140	83	32	13	4	335

Average Speed	50th Percentile	85th Percentile
52.5	53	59

Speed Report

Date: 11/8/07 Site: [808.32] Old Hwy 395 btwn Pala Mesa Dr & Tecalote Ln

SOUTHBOUND

		5	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	0	0	0	0	0	1	3	3	1	0	1	0	9
01:00		0	0	0	0	0	1	1	0	0	2	0	0	1	5
02:00		0	0	0	0	0	0	0	1	3	1	1	0	0	6
03:00		0	0	0	0	0	1	0	0	3	7	1	0	5	17
04:00		0	0	0	0	0	0	0	1	3	10	9	12	6	41
05:00		0	0	0	0	0	0	2	5	15	38	45	22	24	151
06:00		1	1	1	0	1	1	3	19	59	94	80	20	6	286
07:00		5	2	1	0	0	2	9	51	93	87	39	9	5	303
08:00		6	1	0	0	1	0	20	66	87	58	13	5	1	258
09:00		2	2	0	1	3	7	21	37	58	42	14	2	3	192
10:00		2	2	1	1	0	2	22	59	79	51	14	0	1	234
11:00		0	0	0	0	2	0	15	42	75	39	9	7	0	189
12:00	PM	2	3	0	0	1	5	21	53	80	41	16	4	0	226
13:00		3	2	0	0	2	8	16	63	72	36	16	3	0	221
14:00		2	0	0	0	0	4	26	65	90	47	18	3	1	256
15:00		0	1	0	1	0	3	15	37	62	76	19	5	4	223
16:00		3	0	2	1	1	2	16	43	77	55	28	8	1	237
17:00		2	0	0	1	1	10	19	51	47	55	23	5	2	216
18:00		0	1	0	0	0	2	10	20	52	46	19	6	1	157
19:00		1	0	0	0	0	1	7	19	24	39	17	11	4	123
20:00		0	0	0	1	1	3	0	2	13	13	13	4	2	52
21:00		0	0	0	0	0	1	2	5	13	20	11	1	4	57
22:00		0	0	0	0	0	0	2	2	1	7	10	2	0	24
23:00		0	0	0	0	0	0	2	1	2	3	1	1	2	12
Totals		**29**	**15**	**5**	**6**	**13**	**53**	**230**	**645**	**1011**	**868**	**416**	**131**	**73**	**3495**
% of Totals		1%	0%	0%	0%	0%	2%	7%	18%	29%	25%	12%	4%	2%	100%
% AM		0%	0%	0%	0%	0%	0%	3%	8%	14%	12%	6%	2%	1%	48%
AM Peak Hour		08:00	07:00	06:00	09:00	09:00	09:00	10:00	08:00	07:00	06:00	06:00	05:00	05:00	07:00
Volume		6	2	1	1	3	7	22	66	93	94	80	22	24	303
% PM		0%	0%	0%	0%	0%	1%	4%	10%	15%	13%	5%	2%	1%	52%
PM Peak Hour		13:00	12:00	16:00	15:00	13:00	17:00	14:00	14:00	14:00	15:00	16:00	19:00	15:00	14:00
Volume		3	3	2	1	2	10	26	65	90	76	28	11	4	256

Average Speed	50th Percentile	85th Percentile
53.4	54	61

Speed Report

Date: 11/8/07 Site: [808.31] Old Hwy 395 btwn Pala Rd & Pala Mesa Dr

NORTHBOUND

		5	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	0	0	0	0	0	4	5	10	5	0	1	0	25
01:00		0	0	0	0	0	0	1	2	6	1	0	1	0	11
02:00		0	0	0	0	0	0	2	8	3	6	0	0	0	19
03:00		0	0	0	0	0	1	1	0	1	0	0	0	0	3
04:00		0	0	0	0	0	0	1	2	7	3	0	1	0	14
05:00		0	0	0	0	0	0	4	12	14	7	1	0	0	38
06:00		2	0	2	1	0	12	32	52	28	11	3	2	0	145
07:00		1	1	1	0	7	25	82	73	56	17	4	0	0	267
08:00		1	0	0	2	9	24	56	77	49	15	1	0	0	234
09:00		2	1	0	0	1	12	39	74	52	9	2	0	0	192
10:00		1	0	0	0	1	12	56	86	45	8	1	1	0	211
11:00		3	1	0	0	2	10	48	83	49	22	2	0	0	220
12:00	PM	2	3	0	0	0	10	39	68	78	20	3	1	0	224
13:00		3	1	0	1	0	9	43	77	83	21	2	0	0	240
14:00		4	1	0	1	0	8	39	120	98	32	2	1	0	306
15:00		4	5	0	1	0	7	59	122	95	23	0	1	0	317
16:00		2	3	0	0	4	26	44	134	112	27	5	2	0	359
17:00		2	2	0	2	8	18	58	132	107	14	4	0	0	347
18:00		0	1	0	0	1	19	43	90	63	20	4	0	0	241
19:00		1	0	0	0	3	8	41	48	53	9	2	1	1	167
20:00		0	0	0	0	2	5	21	30	47	13	6	0	0	124
21:00		0	1	0	0	0	3	11	36	35	18	3	0	0	107
22:00		0	0	0	0	1	0	8	17	31	10	1	1	0	69
23:00		0	0	0	0	0	1	6	12	25	11	2	1	0	58
Totals		**28**	**20**	**3**	**8**	**39**	**210**	**738**	**1360**	**1147**	**322**	**48**	**14**	**1**	**3938**
% of Totals		1%	1%	0%	0%	1%	5%	19%	35%	29%	8%	1%	0%	0%	100%
% AM		0%	0%	0%	0%	1%	2%	8%	12%	8%	3%	0%	0%		35%
AM Peak Hour		11:00	07:00	06:00	08:00	08:00	07:00	07:00	10:00	07:00	11:00	07:00	06:00		07:00
Volume		3	1	2	2	9	25	82	86	56	22	4	2		267
% PM		0%	0%		0%	0%	3%	10%	22%	21%	6%	1%	0%	0%	65%
PM Peak Hour		14:00	15:00		17:00	17:00	16:00	15:00	16:00	16:00	14:00	20:00	16:00	19:00	16:00
Volume		4	5		2	8	26	59	134	112	32	6	2	1	359

Average Speed	50th Percentile	85th Percentile
47.9	48	54

Speed Report

Date: 11/8/07 Site: [808.31] Old Hwy 395 btwn Pala Rd & Pala Mesa Dr

SOUTHBOUND

		5	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	0	0	0	0	0	3	1	2	1	2	0	0	9
01:00		0	0	0	0	0	1	0	0	0	2	0	0	0	3
02:00		0	0	0	0	0	1	0	0	3	2	2	0	0	8
03:00		0	0	0	0	0	0	0	2	4	3	2	1	4	16
04:00		0	0	0	0	1	1	3	2	6	11	14	3	5	46
05:00		0	0	1	0	0	3	7	12	33	46	37	13	9	161
06:00		7	0	1	1	2	5	10	37	95	93	39	9	4	303
07:00		3	3	1	0	2	11	31	46	106	99	32	2	1	337
08:00		3	0	2	3	1	14	25	59	119	52	7	2	2	289
09:00		2	0	0	0	2	14	29	53	73	37	9	3	2	224
10:00		3	2	0	0	1	9	30	63	82	30	9	1	1	231
11:00		1	0	0	0	10	12	28	62	69	33	10	1	2	228
12:00	PM	1	2	0	0	1	12	40	65	69	34	6	1	0	231
13:00		1	3	1	0	5	10	29	62	77	33	11	2	0	234
14:00		0	1	1	1	8	13	28	81	90	37	6	2	2	270
15:00		3	0	0	0	4	19	37	44	95	38	8	1	1	250
16:00		1	0	0	1	2	10	26	48	106	36	19	4	0	253
17:00		1	0	0	1	4	14	39	59	68	32	13	3	1	235
18:00		0	0	0	0	2	10	22	25	52	31	6	2	0	150
19:00		0	0	0	0	0	1	10	31	35	32	12	2	2	125
20:00		0	1	0	0	4	1	1	7	13	13	6	4	0	50
21:00		0	0	0	0	1	3	3	6	24	15	5	2	1	60
22:00		0	0	0	0	0	0	2	3	6	8	6	0	0	25
23:00		0	0	0	0	0	0	1	2	1	2	0	2	1	9
Totals		**26**	**12**	**7**	**7**	**50**	**164**	**404**	**770**	**1228**	**720**	**261**	**60**	**38**	**3747**
% of Totals		1%	0%	0%	0%	1%	4%	11%	21%	33%	19%	7%	2%	1%	100%
% AM		1%	0%	0%	0%	1%	2%	4%	9%	16%	11%	4%	1%	1%	50%
AM Peak Hour		06:00	07:00	08:00	08:00	11:00	08:00	07:00	10:00	08:00	07:00	06:00	05:00	05:00	07:00
Volume		7	3	2	3	10	14	31	63	119	99	39	13	9	337
% PM		0%	0%	0%	0%	1%	2%	6%	12%	17%	8%	3%	1%	0%	50%
PM Peak Hour		15:00	13:00	13:00	14:00	14:00	15:00	12:00	14:00	16:00	15:00	16:00	16:00	14:00	14:00
Volume		3	3	1	1	8	19	40	81	106	38	19	4	2	270

Average Speed	50th Percentile	85th Percentile
51.0	52	59

Speed Report

Date: 11/15/07 Site: [808.40] Steward Cyn Rd west of Old Hwy 395

EASTBOUND

		5	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	0	0	0	0	1	0	0	0	0	0	0	0	1
01:00		0	0	0	0	0	1	0	0	0	0	0	0	0	1
02:00		0	0	0	0	0	1	0	0	0	0	0	0	0	1
03:00		0	0	0	0	0	1	0	0	0	0	0	0	0	1
04:00		0	0	0	0	1	1	1	0	0	0	0	0	0	3
05:00		0	0	0	1	3	6	3	0	0	0	0	0	0	13
06:00		0	0	0	1	4	9	6	0	0	0	0	0	0	20
07:00		1	0	0	1	6	7	0	1	1	0	0	0	0	17
08:00		0	1	0	1	2	8	3	1	1	0	0	0	0	17
09:00		0	0	2	1	4	9	3	2	0	0	1	0	0	22
10:00		1	3	2	3	7	4	3	0	0	0	0	0	0	23
11:00		0	0	4	4	8	7	2	0	0	0	0	0	0	25
12:00	PM	1	0	0	4	1	6	2	3	0	0	0	0	0	17
13:00		0	1	2	5	7	8	4	0	1	0	0	0	0	28
14:00		0	1	2	4	3	7	4	1	0	1	0	0	0	23
15:00		0	0	0	0	6	9	6	0	0	0	0	0	0	21
16:00		0	2	0	1	5	9	9	1	0	0	0	0	0	27
17:00		1	0	0	0	3	2	11	4	0	0	0	0	0	21
18:00		0	0	1	2	4	9	5	1	1	0	0	0	0	23
19:00		0	0	0	0	2	4	2	0	0	0	0	0	0	8
20:00		0	0	0	1	3	6	3	0	0	0	0	0	0	13
21:00		0	0	0	1	2	4	2	0	0	0	0	0	0	9
22:00		0	0	0	1	4	3	3	0	0	0	0	0	0	11
23:00		0	0	0	0	1	2	1	0	0	0	0	0	0	4
Totals		**4**	**8**	**13**	**31**	**76**	**124**	**73**	**14**	**4**	**1**	**1**	**0**	**0**	**349**
% of Totals		1%	2%	4%	9%	22%	36%	21%	4%	1%	0%	0%			100%
% AM		1%	1%	2%	3%	10%	16%	6%	1%	1%		0%			41%
AM Peak Hour		07:00	10:00	11:00	11:00	11:00	06:00	06:00	09:00	07:00		09:00			11:00
Volume		1	3	4	4	8	9	6	2	1		1			25
% PM		1%	1%	1%	5%	12%	20%	15%	3%	1%	0%				59%
PM Peak Hour		12:00	16:00	13:00	13:00	13:00	15:00	17:00	17:00	13:00	14:00				13:00
Volume		1	2	2	5	7	9	11	4	1	1				28

Average Speed	50th Percentile	85th Percentile
35.9	37	43

Speed Report

Date: 11/15/07 Site: [808.40] Steward Cyn Rd west of Old Hwy 395

WESTBOUND

		5	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	0	0	0	1	2	0	0	0	0	0	0	0	3
01:00		0	0	0	0	1	0	0	0	0	0	0	0	0	1
02:00		0	0	0	0	1	1	0	0	0	0	0	0	0	2
03:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00		0	0	0	0	2	3	0	0	0	0	0	0	0	5
05:00		0	0	0	1	2	1	1	0	0	0	0	0	0	5
06:00		0	1	1	3	2	4	1	0	0	0	0	0	0	12
07:00		0	0	0	1	7	5	5	2	1	0	0	0	0	21
08:00		0	0	2	3	5	2	4	2	0	0	0	0	0	18
09:00		1	0	0	1	7	8	4	1	0	0	0	0	0	22
10:00		1	0	1	4	7	5	1	0	1	0	0	0	0	20
11:00		1	0	3	1	8	5	2	0	0	0	0	0	0	20
12:00	PM	0	1	2	3	4	5	2	0	0	0	0	0	0	17
13:00		1	0	1	1	7	7	2	1	0	0	0	0	0	20
14:00		2	0	1	3	2	14	4	1	0	0	0	0	0	27
15:00		0	0	1	4	7	10	4	0	0	0	0	0	0	26
16:00		0	1	1	5	14	8	6	0	0	0	0	0	0	35
17:00		0	1	2	7	7	8	3	2	0	0	0	0	0	30
18:00		0	0	2	3	9	7	4	0	0	0	0	0	0	25
19:00		0	0	1	4	6	5	4	0	0	0	0	0	0	20
20:00		0	0	1	3	5	5	2	0	0	0	0	0	0	16
21:00		0	0	0	0	2	2	0	0	0	0	0	0	0	4
22:00		0	0	0	0	1	0	0	0	0	0	0	0	0	1
23:00		0	0	0	0	1	3	0	0	0	0	0	0	0	4
Totals		**6**	**4**	**19**	**47**	**108**	**110**	**49**	**9**	**2**	**0**	**0**	**0**	**0**	**354**
% of Totals		2%	1%	5%	13%	31%	31%	14%	3%	1%					100%
% AM		1%	0%	2%	4%	12%	10%	5%	1%	1%					36%
AM Peak Hour		09:00	06:00	11:00	10:00	11:00	09:00	07:00	07:00	07:00					09:00
Volume		1	1	3	4	8	8	5	2	1					22
% PM		1%	1%	3%	9%	18%	21%	9%	1%						64%
PM Peak Hour		14:00	12:00	12:00	17:00	16:00	14:00	16:00	17:00						16:00
Volume		2	1	2	7	14	14	6	2						35

Average Speed	50th Percentile	85th Percentile
34.2	35	41

Speed Report

Date: 12/11/08 Site: [94023] Pankey Road south of Stewart Canyon Road

NORTHBOUND

		5	10	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**9**	**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00		0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
06:00		0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
07:00		0	0	0	0	0	1	0	0	0	1	0	0	0	0	2
08:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00		0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
11:00		0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
12:00	PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
13:00		0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
14:00		0	0	1	0	0	1	0	0	1	0	0	0	0	0	3
15:00		1	1	0	0	1	0	0	0	0	0	0	0	0	0	3
16:00		0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
17:00		1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
18:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00		0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
22:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals		**2**	**1**	**2**	**3**	**5**	**2**	**2**	**1**	**1**	**1**	**0**	**0**	**0**	**0**	**20**
% of Totals		10%	5%	10%	15%	25%	10%	10%	5%	5%	5%					100%

% AM					10%	5%	5%	5%	5%		5%					35%
AM Peak Hour					06:00	11:00	07:00	10:00	05:00		07:00					07:00
Volume					1	1	1	1	1		1					2
% PM	10%	5%	10%	5%	20%	5%	5%		5%							65%
PM Peak Hour		15:00	12:00	16:00	13:00	14:00	13:00		14:00							14:00
Volume		1	1	1	1	1	1		1							3

Average Speed	50th Percentile	85th Percentile
27.1	27	40

Speed Report

Date: 12/11/08 Site: [94023] Pankey Road south of Stewart Canyon Road

SOUTHBOUND

		5	10	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**9**	**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00		0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
06:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00		0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
08:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00		0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
11:00		0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
12:00	PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00		0	0	0	0	0	1	1	0	1	0	0	0	0	0	3
14:00		0	0	1	0	0	1	0	0	0	0	0	0	0	0	2
15:00		0	0	2	0	1	0	0	0	0	0	0	0	0	0	3
16:00		0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
17:00		1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
18:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00		0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
21:00		0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
22:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals		**1**	**0**	**3**	**2**	**5**	**3**	**5**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**20**
% of Totals		5%		15%	10%	25%	15%	25%		5%						100%
% AM					10%	10%		10%								30%
AM Peak Hour					11:00	05:00		07:00								10:00
Volume					2	1		1								2
% PM		5%		15%		15%	15%	15%		5%						70%
PM Peak Hour				15:00		15:00	13:00	13:00		13:00						13:00
Volume				2		1	1	1		1						3

Average Speed	50th Percentile	85th Percentile
28.6	29	38

Speed Report

Date: 11/6/07 Site: [808.39] Pankey Rd btwn Pala Rd & Dulin Rd

NORTHBOUND

		5	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	0	0	2	0	0	0	0	0	0	0	0	0	2
01:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00		0	0	0	0	1	0	0	0	0	0	0	0	0	1
03:00		0	0	0	1	0	0	0	0	0	0	0	0	0	1
04:00		0	0	2	2	1	0	0	0	0	0	0	0	0	5
05:00		0	1	3	15	0	0	0	0	0	0	0	0	0	19
06:00		0	1	10	17	5	0	0	0	0	0	0	0	0	33
07:00		1	2	12	18	5	0	0	0	0	0	0	0	0	38
08:00		0	4	13	13	4	0	0	0	0	0	0	0	0	34
09:00		0	0	10	10	5	0	0	0	0	0	0	0	0	25
10:00		0	0	8	13	2	0	0	0	0	0	0	0	0	23
11:00		0	0	4	16	3	0	0	0	0	0	0	0	0	23
12:00	PM	0	1	6	15	3	0	0	0	0	0	0	0	0	25
13:00		0	0	9	14	1	0	0	0	0	0	0	0	0	24
14:00		0	2	6	20	2	0	0	0	0	0	0	0	0	30
15:00		1	1	8	13	4	1	0	0	0	0	0	0	0	28
16:00		0	2	4	13	3	0	0	0	0	0	0	0	0	22
17:00		0	0	5	14	4	1	0	0	0	0	0	0	0	24
18:00		0	0	1	8	3	1	0	0	0	0	0	0	0	13
19:00		0	0	4	10	4	0	1	0	0	0	0	0	0	19
20:00		0	0	1	6	4	0	0	0	0	0	0	0	0	11
21:00		0	0	1	3	3	0	0	0	0	0	0	0	0	7
22:00		0	1	0	4	1	0	0	0	0	0	0	0	0	6
23:00		0	0	1	3	0	0	0	0	0	0	0	0	0	4
Totals		**2**	**15**	**108**	**230**	**58**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**417**
% of Totals		0%	4%	26%	55%	14%	1%	0%							100%
% AM		0%	2%	15%	26%	6%									49%
AM Peak Hour		07:00	08:00	08:00	07:00	06:00									07:00
Volume		1	4	13	18	5									38
% PM		0%	2%	11%	29%	8%	1%	0%							51%
PM Peak Hour		15:00	14:00	13:00	14:00	15:00	15:00	19:00							14:00
Volume		1	2	9	20	4	1	1							30

Average Speed	50th Percentile	85th Percentile
26.6	27	30

Speed Report

Date: 11/6/07 Site: [808.39] Pankey Rd btwn Pala Rd & Dulin Rd

SOUTHBOUND

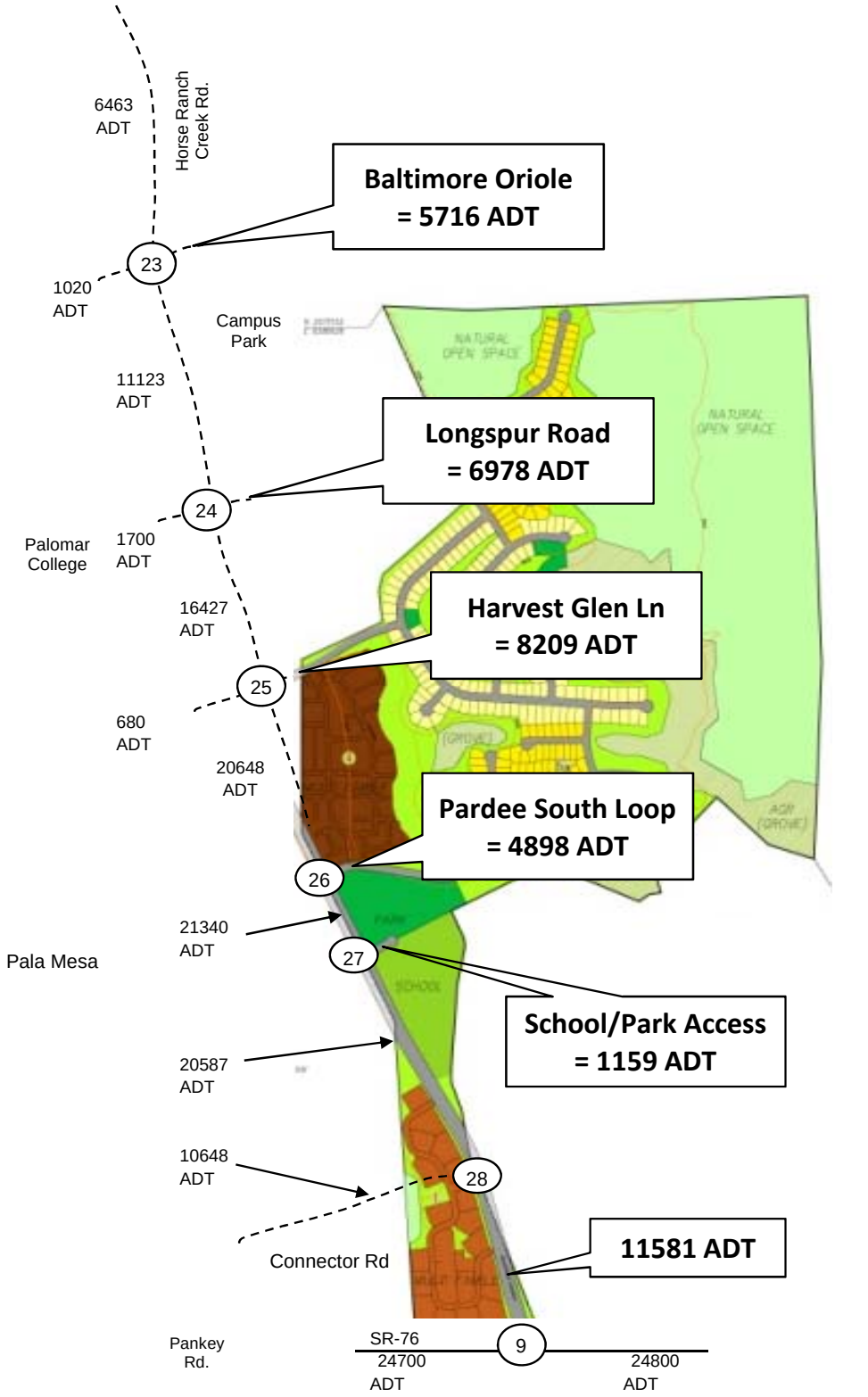
		5	15	20	25	30	35	40	45	50	55	60	65	70	
Time		**14**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**	**69**	**74+**	**Total**
00:00	AM	0	1	0	5	1	0	0	0	0	0	0	0	0	7
01:00		0	0	1	1	0	1	0	0	0	0	0	0	0	3
02:00		0	0	0	2	2	0	0	0	0	0	0	0	0	4
03:00		0	0	0	1	0	0	0	0	0	0	0	0	0	1
04:00		0	0	1	0	0	0	0	0	0	0	0	0	0	1
05:00		0	0	0	3	0	0	0	0	0	0	0	0	0	3
06:00		0	3	3	9	2	0	0	0	0	0	0	0	0	17
07:00		0	3	6	14	3	1	0	0	0	0	0	0	0	27
08:00		1	0	2	11	3	0	0	0	0	0	0	0	0	17
09:00		0	0	2	5	1	0	0	0	0	0	0	0	0	8
10:00		0	0	5	12	1	0	0	0	0	0	0	0	0	18
11:00		0	0	4	10	1	0	0	0	0	0	0	0	0	15
12:00	PM	0	0	4	14	6	0	0	0	0	0	0	0	0	24
13:00		0	1	3	13	0	0	0	0	0	0	0	0	0	17
14:00		0	0	9	11	3	1	0	0	0	0	0	0	0	24
15:00		0	0	13	19	5	2	0	0	0	0	0	0	0	39
16:00		0	4	14	25	13	0	0	0	0	0	0	0	0	56
17:00		0	0	8	25	7	0	0	0	0	0	0	0	0	40
18:00		0	0	17	30	3	0	0	0	0	0	0	0	0	50
19:00		0	0	11	25	5	0	0	0	0	0	0	0	0	41
20:00		0	0	6	21	5	0	0	0	0	0	0	0	0	32
21:00		0	2	4	19	4	0	0	0	0	0	0	0	0	29
22:00		0	1	5	7	2	0	0	0	0	0	0	0	0	15
23:00		0	0	1	2	3	1	0	0	0	0	0	0	0	7
Totals		**1**	**15**	**119**	**284**	**70**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**495**
% of Totals		0%	3%	24%	57%	14%	1%								100%
% AM		0%	1%	5%	15%	3%	0%								24%
AM Peak Hour		08:00	06:00	07:00	07:00	07:00	01:00								07:00
Volume		1	3	6	14	3	1								27
% PM			2%	19%	43%	11%	1%								76%
PM Peak Hour			16:00	18:00	18:00	16:00	15:00								16:00
Volume			4	17	30	13	2								56

Average Speed	50th Percentile	85th Percentile
26.8	27	30

Appendix CC

On-Site MUTCD Signal Warrant Calculations

Build-Out Volumes for MUTCD Warrant Calculations
LOS Engineering (2/19/08)



LEGEND

XX	AM peak hour volumes at intersections	———	Existing Roadways
(YY)	PM peak hour volumes at intersections	- - - -	Future Roadways
Z,ZZZ	ADT volumes shown along segments		
(#)	Intersection Reference Number to LOS Tables		

N

No Scale

INT. (9)

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM
		76	

COUNT DATE BUILD-OUT
CALC JR DATE 2/19/08
CHK _____ DATE _____

Major St: SR-76 (PALA RD)
Minor St: HOUSE RANCH CREEK RD

Critical Approach Speed EB 65MPH WB 55 mph (85th %ile)
Critical Approach Speed _____ mph

Speed limit or critical speed on major street traffic > 64 km/h (40 mph)..... ☑
In built up area of isolated community of < 10,000 population..... ☐ } or → **RURAL (R)**

☐ **URBAN (U)**

(Based on Estimated Average Daily Traffic - See Note)

URBAN..... RURAL..... ✓

CONDITION A - Minimum Vehicular Volume

Satisfied ✓ Not Satisfied _____

Number of lanes for moving traffic on each approach

Major Street 24750	Minor Street 5791
1	1
2 or More	1
(2) or More	(2) or More
1	2 or More

Minimum Requirements EADT			
Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Urban	Rural	Urban	Rural
8,000	5,600	2,400	1,680
9,600	6,720	2,400	1,680
9,600	6,720 ✓	3,200	2,240 ✓
8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied ✓ Not Satisfied _____

Number of lanes for moving traffic on each approach

Major Street 24750	Minor Street 5791
1	1
2 or More	1
(2) or More	(2) or More
1	2 or More

Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Urban	Rural	Urban	Rural
12,000	8,400	1,200	850
14,400	10,080	1,200	850
14,400	10,080 ✓	1,600	1,120 ✓
12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied ✓ Not Satisfied _____

No one condition satisfied, but following conditions fulfilled 80% or more..... A _____ B _____

2 CONDITIONS 80%	2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

COUNT DATE BUILD-OUT

____ ____ ____ ____
DIST CO RTE PM

CALC JR DATE 2/19/08

CHK ____ DATE ____

Major St: HORSE RANCH CREEK ROAD
Minor St: BALTIMORE ORIOLE

Critical Approach Speed — mph
Critical Approach Speed — mph

Speed limit or critical speed on major street traffic > 64 km/h (40 mph)..... ☐
or
In built up area of isolated community of < 10,000 population..... ☑ **RURAL (R)**

☐ **URBAN (U)**

(Based on Estimated Average Daily Traffic - See Note)

URBAN..... RURAL..... ✓

CONDITION A - Minimum Vehicular Volume

Satisfied ✓ Not Satisfied ____

Number of lanes for moving traffic on each approach

Major Street 6793 Minor Street 2858

1 / 1
2 or More / 1
(2) or More / (2) or More
1 / 2 or More

Minimum Requirements EADT			
Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Urban	Rural	Urban	Rural
8,000	5,600	2,400	1,680
9,600	6,720	2,400	1,680
9,600	6,720 ✓	3,200	2,240 ✓
8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied ____ Not Satisfied ✓

Number of lanes for moving traffic on each approach

Major Street 6793 Minor Street 2858

1 / 1
2 or More / 1
(2) or More / (2) or More
1 / 2 or More

Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Urban	Rural 80%	Urban	Rural
12,000	8,400	1,200	850
14,400	10,080	1,200	850
14,400	×10,080 BOTH ✓	1,600	1,120 ✓
12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B AT 80%

Satisfied ✓ Not Satisfied ____

No one condition satisfied, but following conditions fulfilled 80% or more..... ____ (A) ____ (B)

2 CONDITIONS 80%	2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

COUNT DATE BUILD-OUT

____ ____ ____ ____
DIST CO RTE PM

CALC JR DATE 2/19/08

CHK ____ DATE ____

Major St: HORSE RANCH CREEK RD — Critical Approach Speed — mph

Minor St: LONGSPUR RD — Critical Approach Speed — mph

Speed limit or critical speed on major street traffic > 64 km/h (40 mph)..... ☐
In built up area of isolated community of < 10,000 population..... ☑ } **RURAL (R)**
☐ **URBAN (U)**

(Based on Estimated Average Daily Traffic - See Note)

URBAN..... RURAL..... ✓

CONDITION A - Minimum Vehicular Volume

Satisfied ✓ Not Satisfied ____

Number of lanes for moving traffic on each approach

Major Street 13775	Minor Street 3489
1	1
2 or More	1
(2) or More	(2) or More
1	2 or More

Minimum Requirements EADT

Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Urban	Rural	Urban	Rural
8,000	5,600	2,400	1,680
9,600	6,720	2,400	1,680
9,600	6,720 ✓	3,200	2,240 ✓
8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied ✓ Not Satisfied ____

Number of lanes for moving traffic on each approach

Major Street 13775	Minor Street 3489
1	1
2 or More	1
(2) or More	(2) or More
1	2 or More

Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Urban	Rural	Urban	Rural
12,000	8,400	1,200	850
14,400	10,080	1,200	850
14,400	10,080 ✓	1,600	1,120 ✓
12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied ✓ Not Satisfied ____

No one condition satisfied, but following conditions fulfilled 80% or more..... ____ (A) ____ (B)

2 CONDITIONS 80%	2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

COUNT DATE BUILD-OUT

____ ____ ____ ____
DIST CO RTE PM

CALC JR DATE 2/19/08

CHK _____ DATE _____

Major St: HORSE RANCH CREEK RD

Minor St: HARVEST GLEN LN

Critical Approach Speed — mph

Critical Approach Speed — mph

Speed limit or critical speed on major street traffic > 64 km/h (40 mph)..... ☐
or
In built up area of isolated community of < 10,000 population..... ☑ **RURAL (R)**

☐ **URBAN (U)**

(Based on Estimated Average Daily Traffic - See Note)

URBAN..... RURAL..... ✓

CONDITION A - Minimum Vehicular Volume

Satisfied ✓ Not Satisfied _____

Number of lanes for moving traffic on each approach

Major Street 18538	Minor Street 4105
1	1
2 or More	1
(2) or More	(2) or More
1	2 or More

Minimum Requirements EADT

Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Urban	Rural	Urban	Rural
8,000	5,600	2,400	1,680
9,600	6,720	2,400	1,680
9,600	6,720 ✓	3,200	2,240 ✓
8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied ✓ Not Satisfied _____

Number of lanes for moving traffic on each approach

Major Street 18538	Minor Street 4105
1	1
2 or More	1
(2) or More	(2) or More
1	2 or More

Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Urban	Rural	Urban	Rural
12,000	8,400	1,200	850
14,400	10,080	1,200	850
14,400	10,080 ✓	1,600	1,120 ✓
12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied ✓ Not Satisfied _____

No one condition satisfied, but following conditions fulfilled 80% or more..... ____ (A) ____ (B)

2 CONDITIONS 80%	2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

COUNT DATE BUILD-OUT

CALC JR DATE 2/19/08

CHK _____ DATE _____

DIST _____ CO _____ RTE _____ PM _____

Major St: HORSE RANCH CREEK RD

Minor St: PARDEE SOUTH LOOP

Critical Approach Speed — mph

Critical Approach Speed — mph

Speed limit or critical speed on major street traffic > 64 km/h (40 mph)..... ☐ or ☑ **RURAL (R)**

In built up area of isolated community of < 10,000 population..... ☐ **URBAN (U)**

(Based on Estimated Average Daily Traffic - See Note)

URBAN..... RURAL..... ✓

CONDITION A - Minimum Vehicular Volume

Satisfied ✓ Not Satisfied _____

Number of lanes for moving traffic on each approach

Major Street 20994 Minor Street 2449

1 / 1
2 or More / 1
(2) or More / (2) or More
1 / 2 or More

Minimum Requirements EADT			
Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Urban	Rural	Urban	Rural
8,000	5,600	2,400	1,680
9,600	6,720	2,400	1,680
9,600	6,720 ✓	3,200	2,240 ✓
8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied ✓ Not Satisfied _____

Number of lanes for moving traffic on each approach

Major Street 20994 Minor Street 2449

1 / 1
2 or More / 1
(2) or More / (2) or More
1 / 2 or More

Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Urban	Rural	Urban	Rural
12,000	8,400	1,200	850
14,400	10,080	1,200	850
14,400	10,080 ✓	1,600	1,120 ✓
12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied ✓ Not Satisfied _____

No one condition satisfied, but following conditions fulfilled 80% or more..... A _____ B _____

2 CONDITIONS 80%

2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

COUNT DATE BUILD-OUT

CALC JR DATE 2/19/08

CHK _____ DATE _____

DIST CO RTE PM

Major St: HORSE RANCH CREEK RD

Minor St: SCHOOL & PARK ACCESS

Critical Approach Speed _____ mph

Critical Approach Speed _____ mph

Speed limit or critical speed on major street traffic > 64 km/h (40 mph)..... ☐

or

In built up area of isolated community of < 10,000 population..... ☑ **RURAL (R)**

☐ **URBAN (U)**

(Based on Estimated Average Daily Traffic - See Note)

URBAN..... RURAL.....

CONDITION A - Minimum Vehicular Volume

Satisfied _____ Not Satisfied ✓

Number of lanes for moving traffic on each approach

Major Street 20,994 Minor Street 580

		Minimum Requirements EADT			
		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
		Urban	Rural	Urban	Rural 80%
1	1	8,000	5,600	2,400	1,680
(2) or More	1	9,600	6,720	2,400	1,680 (134)
2 or More	2 or More	9,600	6,720	3,200	2,240
1	2 or More	8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied _____ Not Satisfied ✓

Number of lanes for moving traffic on each approach

Major Street 20,994 Minor Street 580

		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
		Urban	Rural	Urban	Rural 70%
1	1	12,000	8,400	1,200	850
(2) or More	(1)	14,400	(10,080)	1,200	(850) (120)
2 or More	2 or More	14,400	10,080	1,600	1,120
1	2 or More	12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied _____ Not Satisfied ✓

No one condition satisfied, but following conditions fulfilled 80% or more..... A _____ B _____

2 CONDITIONS 80%	2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

COUNT DATE BUILD-OUT

___ ___ ___ ___
DIST CO RTE PM

CALC JR DATE 2/19/08

CHK _____ DATE _____

Major St: HORSE RANCH CREEK RD

Minor St: CONNECTOR RD

Critical Approach Speed — mph

Critical Approach Speed — mph

Speed limit or critical speed on major street traffic > 64 km/h (40 mph)..... ☐
or
In built up area of isolated community of < 10,000 population..... ☑ **RURAL (R)**

☐ **URBAN (U)**

(Based on Estimated Average Daily Traffic - See Note)

URBAN..... RURAL..... ✓

CONDITION A - Minimum Vehicular Volume

Satisfied ✓ Not Satisfied _____

Number of lanes for moving traffic on each approach

Major Street	Minor Street
1	1
2 or More	1
(2) or More	(2) or More
1	2 or More

Minimum Requirements EADT

Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Urban	Rural	Urban	Rural
8,000	5,600	2,400	1,680
9,600	6,720	2,400	1,680
9,600	6,720 ✓	3,200	2,240 ✓
8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied ✓ Not Satisfied _____

Number of lanes for moving traffic on each approach

Major Street	Minor Street
1	1
2 or More	1
(2) or More	2 or More
1	2 or More

Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Urban	Rural	Urban	Rural
12,000	8,400	1,200	850
14,400	10,080	1,200	850
14,400	10,080 ✓	1,600	1,120 ✓
12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied ✓ Not Satisfied _____

No one condition satisfied, but following conditions fulfilled 80% or more..... ___ (A) ___ (B)

2 CONDITIONS 80%	2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Appendix D

Count Data and Caltrans' Factors

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #04
Location: Via Monserate & Pala Road (SR-76)

Start Date: 12/18/2008
File Name: 941-01-1

	Northbound				Via Monserate Southbound				Pala Road (SR-76) Eastbound				Pala Road (SR-76) Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
7:00	0	0	0	0	22	0	5	0	0	94	0	0	0	248	6	0	375
7:15	0	0	0	0	17	0	10	0	1	134	0	0	0	210	5	0	377
7:30	0	0	0	0	16	0	3	0	2	136	0	0	0	269	9	0	435
7:45	0	0	0	0	15	0	7	0	1	177	0	0	0	252	2	0	454
Total	0	0	0	0	70	0	25	0	4	541	0	0	0	979	22	0	1641
8:00	0	0	0	0	6	0	1	0	5	173	0	0	0	177	7	0	369
8:15	0	0	0	0	14	0	10	0	3	142	0	0	0	171	4	0	344
8:30	0	0	0	0	8	0	1	0	1	129	0	0	0	173	6	0	318
8:45	0	0	0	0	4	0	4	0	3	52	0	0	0	88	2	0	153
Total	0	0	0	0	32	0	16	0	12	496	0	0	0	609	19	0	1184
Grand Total	0	0	0	0	102	0	41	0	16	1037	0	0	0	1588	41	0	2825
Approach%	-	-	-	-	71.3	-	28.7	-	1.5	98.5	-	-	-	97.5	2.5	-	
Total%	-	-	-	-	3.6	-	1.5	-	0.6	36.7	-	-	-	56.2	1.5	-	

Peak hour analysis for the period 07:00 to 07:45

Volume	-	-	-	-	70	-	25	-	4	541	-	-	-	979	22	-	1,641
Approach%	-	-	-	-	73.7	-	26.3	-	0.7	99.3	-	-	-	97.8	2.2	-	
Total%	-	-	-	-	4.3	-	1.5	-	0.2	33.0	-	-	-	59.7	1.3	-	
PHF				######				0.88				0.77				0.90	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #04
Location: Via Monserate & Pala Road (SR-76)

Start Date: 12/18/2008
File Name: 941-01-2

	Northbound				Via Monserate Southbound				Pala Road (SR-76) Eastbound				Pala Road (SR-76) Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
16:00	0	0	0	0	13	0	7	0	6	212	0	0	0	213	18	0	469
16:15	0	0	0	0	14	0	3	0	7	213	0	0	0	192	10	0	439
16:30	0	0	0	0	6	0	2	0	4	242	0	0	0	186	15	0	455
16:45	0	0	0	0	8	0	3	0	5	260	0	0	0	206	10	0	492
Total	0	0	0	0	41	0	15	0	22	927	0	0	0	797	53	0	1855
17:00	0	0	0	0	19	0	2	0	2	220	0	0	0	202	15	0	460
17:15	0	0	0	0	13	0	0	0	2	246	0	0	0	173	13	0	447
17:30	0	0	0	0	12	0	2	0	4	234	0	0	0	188	7	0	447
17:45	0	0	0	0	4	0	3	0	4	188	0	0	0	151	10	0	360
Total	0	0	0	0	48	0	7	0	12	888	0	0	0	714	45	0	1714
Grand Total	0	0	0	0	89	0	22	0	34	1815	0	0	0	1511	98	0	3569
Approach%	-	-	-	-	80.2	-	19.8	-	1.8	98.2	-	-	-	93.9	6.1	-	
Total%	-	-	-	-	2.5	-	0.6	-	1.0	50.9	-	-	-	42.3	2.7	-	

Peak hour analysis for the period 16:00 to 16:45

Volume	-	-	-	-	41	-	15	-	22	927	-	-	-	797	53	-	1,855
Approach%	-	-	-	-	73.2	-	26.8	-	2.3	97.7	-	-	-	93.8	6.2	-	
Total%	-	-	-	-	2.2	-	0.8	-	1.2	50.0	-	-	-	43.0	2.9	-	
PHF				######				0.70				0.90				0.92	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #12
Location: Gird Road & Pala Road (SR-76)

Start Date: 12/18/2008
File Name: 941-02-1

	Northbound				Gird Road Southbound				Pala Road (SR-76) Eastbound				Pala Road (SR-76) Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
7:00	0	0	0	0	13	0	18	0	25	94	0	0	0	194	6	0	350
7:15	0	0	0	0	14	0	28	0	22	141	0	0	0	185	10	0	400
7:30	0	0	0	0	14	0	34	0	22	134	0	0	0	243	4	0	451
7:45	0	0	0	0	14	0	25	0	18	165	0	0	0	184	10	0	416
Total	0	0	0	0	55	0	105	0	87	534	0	0	0	806	30	0	1617
8:00	0	0	0	0	17	0	16	0	13	149	0	0	0	169	5	0	369
8:15	0	0	0	0	11	0	20	0	21	136	0	0	0	157	9	0	354
8:30	0	0	0	0	12	0	17	0	15	148	0	0	0	167	5	0	364
8:45	0	0	0	0	13	0	15	0	9	115	0	0	0	136	13	0	301
Total	0	0	0	0	53	0	68	0	58	548	0	0	0	629	32	0	1388
Grand Total	0	0	0	0	108	0	173	0	145	1082	0	0	0	1435	62	0	3005
Approach%	-	-	-	-	38.4	-	61.6	-	11.8	88.2	-	-	-	95.9	4.1	-	
Total%	-	-	-	-	3.6	-	5.8	-	4.8	36.0	-	-	-	47.8	2.1	-	

Peak hour analysis for the period 07:15 to 08:00

Volume	-	-	-	-	59	-	103	-	75	589	-	-	-	781	29	-	1,636
Approach%	-	-	-	-	36.4	-	63.6	-	11.3	88.7	-	-	-	96.4	3.6	-	
Total%	-	-	-	-	3.6	-	6.3	-	4.6	36.0	-	-	-	47.7	1.8	-	
PHF				######				0.84				0.91				0.82	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #05
Location: Gird Road & Pala Road (SR-76)

Start Date: 12/18/2008
File Name: 941-02-2

	Northbound				Gird Road Southbound				Pala Road (SR-76) Eastbound				Pala Road (SR-76) Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
16:00	0	0	0	0	7	0	17	0	14	195	0	0	0	202	20	0	455
16:15	0	0	0	0	12	0	15	0	24	202	0	0	0	216	24	0	493
16:30	0	0	0	0	15	0	12	0	17	216	0	0	0	200	13	0	473
16:45	0	0	0	0	6	0	13	0	31	223	0	0	0	201	16	0	490
Total	0	0	0	0	40	0	57	0	86	836	0	0	0	819	73	0	1911
17:00	0	0	0	0	9	0	16	0	24	219	0	0	0	197	15	0	480
17:15	0	0	0	0	15	0	10	0	28	221	0	0	0	179	20	0	473
17:30	0	0	0	0	14	0	17	1	28	211	0	0	0	207	17	0	494
17:45	0	0	0	0	13	0	17	0	21	171	0	0	0	184	16	0	422
Total	0	0	0	0	51	0	60	1	101	822	0	0	0	767	68	0	1869
Grand Total	0	0	0	0	91	0	117	1	187	1658	0	0	0	1586	141	0	3780
Approach%	-	-	-	-	43.5	-	56.0	0.5	10.1	89.9	-	-	-	91.8	8.2	-	
Total%	-	-	-	-	2.4	-	3.1	0.0	4.9	43.9	-	-	-	42.0	3.7	-	

Peak hour analysis for the period 16:45 to 17:30

Volume	-	-	-	-	44	-	56	1	111	874	-	-	-	784	68	-	1,937
Approach%	-	-	-	-	43.6	-	55.4	1.0	11.3	88.7	-	-	-	92.0	8.0	-	
Total%	-	-	-	-	2.3	-	2.9	0.1	5.7	45.1	-	-	-	40.5	3.5	-	
PHF				######				0.79				0.97				0.95	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #14
Location: Sage Road & Pala Road (SR-76)

Start Date: 12/18/2008
File Name: 941-03-1

	Northbound				Sage Road Southbound				Pala Road (SR-76) Eastbound				Pala Road (SR-76) Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
7:00	0	0	0	0	1	0	3	0	0	120	0	0	0	214	0	0	338
7:15	0	0	0	0	1	0	1	0	0	151	0	0	0	203	0	0	356
7:30	0	0	0	0	1	0	5	0	0	164	0	0	0	235	0	0	405
7:45	0	0	0	0	2	0	1	0	1	168	0	0	0	193	1	0	366
Total	0	0	0	0	5	0	10	0	1	603	0	0	0	845	1	0	1465
8:00	0	0	0	0	0	0	1	0	1	166	0	0	0	160	1	0	329
8:15	0	0	0	0	0	0	2	0	2	149	0	0	0	171	3	0	327
8:30	0	0	0	0	4	0	1	0	1	160	0	0	0	172	2	0	340
8:45	0	0	0	0	3	0	2	0	3	116	0	0	0	142	1	0	267
Total	0	0	0	0	7	0	6	0	7	591	0	0	0	645	7	0	1263
Grand Total	0	0	0	0	12	0	16	0	8	1194	0	0	0	1490	8	0	2728
Approach%	-	-	-	-	42.9	-	57.1	-	0.7	99.3	-	-	-	99.5	0.5	-	
Total%	-	-	-	-	0.4	-	0.6	-	0.3	43.8	-	-	-	54.6	0.3	-	

Peak hour analysis for the period 07:00 to 07:45

Volume	-	-	-	-	5	-	10	-	1	603	-	-	-	845	1	-	1,465
Approach%	-	-	-	-	33.3	-	66.7	-	0.2	99.8	-	-	-	99.9	0.1	-	
Total%	-	-	-	-	0.3	-	0.7	-	0.1	41.2	-	-	-	57.7	0.1	-	
PHF				######				0.63				0.89				0.90	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #14
Location: Sage Road & Pala Road (SR-76)

Start Date: 12/18/2008
File Name: 941-03-2

	Northbound				Sage Road Southbound				Pala Road (SR-76) Eastbound				Pala Road (SR-76) Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
16:00	0	0	0	0	2	0	1	0	1	207	0	0	0	217	0	0	428
16:15	0	0	0	0	3	0	2	0	1	216	0	0	0	229	0	0	451
16:30	0	0	0	0	2	0	0	0	2	233	0	0	0	210	1	0	448
16:45	0	0	0	0	0	0	0	0	4	229	0	0	0	215	1	0	449
Total	0	0	0	0	7	0	3	0	8	885	0	0	0	871	2	0	1776
17:00	0	0	0	0	1	0	7	0	1	234	0	0	0	200	2	0	445
17:15	0	0	0	0	2	0	1	0	3	224	0	0	0	195	3	0	428
17:30	0	0	0	0	1	0	1	0	0	234	0	0	0	216	1	0	453
17:45	0	0	0	0	1	0	0	0	0	191	0	0	0	197	2	0	391
Total	0	0	0	0	5	0	9	0	4	883	0	0	0	808	8	0	1717
Grand Total	0	0	0	0	12	0	12	0	12	1768	0	0	0	1679	10	0	3493
Approach%	-	-	-	-	50.0	-	50.0	-	0.7	99.3	-	-	-	99.4	0.6	-	
Total%	-	-	-	-	0.3	-	0.3	-	0.3	50.6	-	-	-	48.1	0.3	-	

Peak hour analysis for the period 16:15 to 17:00

Volume	-	-	-	-	6	-	9	-	8	912	-	-	-	854	4	-	1,793
Approach%	-	-	-	-	40.0	-	60.0	-	0.9	99.1	-	-	-	99.5	0.5	-	
Total%	-	-	-	-	0.3	-	0.5	-	0.4	50.9	-	-	-	47.6	0.2	-	
PHF				######				0.47				0.98				0.94	

LOS Engineering, Inc.

5114 Sea Mist Court, San Diego, CA 92121

Counted By: Emp. #01
Location: Old Highway 395 & Pala Road (SR-76)

Start Date: 01/06/2009
File Name: 941-04-1

	Old Highway 395 Northbound				Old Highway 395 Southbound				Pala Road (SR-76) Eastbound				Pala Road (SR-76) Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
7:00	29	20	10	0	49	15	12	0	11	95	6	0	14	171	25	0	457
7:15	32	15	13	1	62	14	11	0	14	140	12	0	10	131	26	1	480
7:30	22	19	10	0	61	18	13	0	10	142	16	0	14	145	18	0	488
7:45	25	16	24	0	76	27	7	0	12	126	28	0	15	131	20	0	507
Total	108	70	57	1	248	74	43	0	47	503	62	0	53	578	89	1	1932
8:00	17	20	18	0	56	17	11	0	14	125	21	0	12	137	12	0	460
8:15	11	24	15	0	49	11	13	0	7	124	14	0	7	126	10	0	411
8:30	13	13	16	0	56	12	7	0	6	105	9	0	15	112	21	1	385
8:45	12	16	16	0	39	16	7	0	14	96	7	0	12	103	19	0	357
Total	53	73	65	0	200	56	38	0	41	450	51	0	46	478	62	1	1613
Grand Total	161	143	122	1	448	130	81	0	88	953	113	0	99	1056	151	2	3545
Approach%	37.7	33.5	28.6	0.2	68.0	19.7	12.3	-	7.6	82.6	9.8	-	7.6	80.7	11.5	0.2	
Total%	4.5	4.0	3.4	0.0	12.6	3.7	2.3	-	2.5	26.9	3.2	-	2.8	29.8	4.3	0.1	

Peak hour analysis for the period 07:15 to 08:00

Volume	96	70	65	1	255	76	42	-	50	533	77	-	51	544	76	1	1,935
Approach%	41.4	30.2	28.0	0.4	68.4	20.4	11.3	-	7.6	80.8	11.7	-	7.6	81.0	11.3	0.1	
Total%	5.0	3.6	3.4	0.1	13.2	3.9	2.2	-	2.6	27.5	4.0	-	2.6	28.1	3.9	0.1	
PHF				0.89				0.85				0.98				0.95	

LOS Engineering, Inc.

5114 Sea Mist Court, San Diego, CA 92121

Counted By: Emp. #01
Location: Old Highway 395 & Pala Road (SR-76)

Start Date: 01/06/2009
File Name: 941-04-2

	Old Highway 395 Northbound				Old Highway 395 Southbound				Pala Road (SR-76) Eastbound				Pala Road (SR-76) Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
16:00	21	27	18	0	45	19	16	0	16	197	16	0	19	159	56	3	609
16:15	25	22	19	0	47	21	17	0	15	201	16	0	18	147	42	4	590
16:30	14	23	12	0	49	12	10	0	15	209	21	0	9	167	62	3	603
16:45	13	27	11	1	40	17	12	0	25	173	22	0	14	126	76	1	556
Total	73	99	60	1	181	69	55	0	71	780	75	0	60	599	236	11	2358
17:00	12	32	21	0	41	14	13	0	16	181	20	0	16	180	55	0	601
17:15	16	17	9	0	59	19	14	0	41	158	13	0	26	141	52	2	565
17:30	14	20	9	0	49	23	11	0	15	180	17	0	14	168	52	0	572
17:45	9	19	16	0	41	25	7	0	9	167	19	0	18	141	46	0	517
Total	51	88	55	0	190	81	45	0	81	686	69	0	74	630	205	2	2255
Grand Total	124	187	115	1	371	150	100	0	152	1466	144	0	134	1229	441	13	4613
Approach%	29.0	43.8	26.9	0.2	59.7	24.2	16.1	-	8.6	83.2	8.2	-	7.4	67.6	24.3	0.7	
Total%	2.7	4.1	2.5	0.0	8.0	3.3	2.2	-	3.3	31.8	3.1	-	2.9	26.6	9.6	0.3	

Peak hour analysis for the period 16:00 to 16:45

Volume	73	99	60	1	181	69	55	-	71	780	75	-	60	599	236	11	2,358
Approach%	31.3	42.5	25.8	0.4	59.3	22.6	18.0	-	7.7	84.2	8.1	-	6.6	66.1	26.0	1.2	
Total%	3.1	4.2	2.5	0.0	7.7	2.9	2.3	-	3.0	33.1	3.2	-	2.5	25.4	10.0	0.5	
PHF				0.88				0.90				0.94				0.94	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #06 Start Date: 12/18/2008

Location: I-15 Southbound Ramps & Pala Road (SR-76) File Name: 941-06-1

	I-15 Southbound On Ramp Northbound				I-15 Southbound Off Ramp Southbound				Pala Road (SR-76) Eastbound				Pala Road (SR-76) Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
7:00	0	0	0	0	11	0	153	0	0	103	75	0	11	63	0	0	416
7:15	0	0	0	1	14	1	131	0	0	113	91	0	9	60	0	0	419
7:30	0	0	0	0	18	0	161	0	0	127	73	0	19	64	0	0	462
7:45	0	0	0	0	5	0	106	0	0	135	58	0	15	55	0	0	374
Total	0	0	0	1	48	1	551	0	0	478	297	0	54	242	0	0	1671
8:00	0	0	0	0	13	0	96	1	0	128	48	0	13	48	0	0	346
8:15	0	0	0	0	16	0	110	0	0	115	64	1	16	48	0	0	369
8:30	0	0	0	0	18	2	105	0	0	136	62	0	12	65	0	0	400
8:45	0	0	0	0	22	1	99	0	0	100	62	0	17	49	0	0	350
Total	0	0	0	0	69	3	410	1	0	479	236	1	58	210	0	0	1465
Grand Total	0	0	0	1	117	4	961	1	0	957	533	1	112	452	0	0	3136
Approach%	-	-	-	100.0	10.8	0.4	88.7	0.1	-	64.2	35.7	0.1	19.9	80.1	-	-	
Total%	-	-	-	0.0	3.7	0.1	30.6	0.0	-	30.5	17.0	0.0	3.6	14.4	-	-	

Peak hour analysis for the period 07:00 to 07:45

Volume	-	-	-	1	48	1	551	-	-	478	297	-	54	242	-	-	1,671
Approach%	-	-	-	100.0	8.0	0.2	91.8	-	-	61.7	38.3	-	18.2	81.8	-	-	
Total%	-	-	-	0.1	2.9	0.1	33.0	-	-	28.6	17.8	-	3.2	14.5	-	-	
PHF				0.25				0.84				0.95				0.89	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #06 Start Date: 12/18/2008

Location: I-15 Southbound Ramps & Pala Road (SR-76) File Name: 941-06-2

	I-15 Southbound On Ramp Northbound				I-15 Southbound Off Ramp Southbound				Pala Road (SR-76) Eastbound				Pala Road (SR-76) Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
16:00	0	0	0	0	12	1	99	0	0	157	50	0	33	118	0	0	470
16:15	0	0	0	0	11	0	126	0	0	161	37	0	33	98	0	0	466
16:30	0	0	0	0	14	2	113	0	0	169	75	0	39	118	0	0	530
16:45	0	0	0	0	14	0	109	0	3	183	57	0	30	157	0	0	553
Total	0	0	0	0	51	3	447	0	3	670	219	0	135	491	0	0	2019
17:00	0	0	0	0	24	1	94	0	5	178	69	0	24	137	0	0	532
17:15	0	0	0	0	19	2	117	0	0	187	72	0	32	144	0	0	573
17:30	0	0	0	0	22	0	107	0	0	163	79	0	27	119	0	0	517
17:45	0	0	0	0	10	0	86	0	0	164	47	0	13	110	0	0	430
Total	0	0	0	0	75	3	404	0	5	692	267	0	96	510	0	0	2052
Grand Total	0	0	0	0	126	6	851	0	8	1362	486	0	231	1001	0	0	4071
Approach%	-	-	-	-	12.8	0.6	86.6	-	0.4	73.4	26.2	-	18.8	81.3	-	-	
Total%	-	-	-	-	3.1	0.1	20.9	-	0.2	33.5	11.9	-	5.7	24.6	-	-	

Peak hour analysis for the period 16:30 to 17:15

Volume	-	-	-	-	71	5	433	-	8	717	273	-	125	556	-	-	2,188
Approach%	-	-	-	-	13.9	1.0	85.1	-	0.8	71.8	27.4	-	18.4	81.6	-	-	
Total%	-	-	-	-	3.2	0.2	19.8	-	0.4	32.8	12.5	-	5.7	25.4	-	-	
PHF				######				0.92				0.96				0.91	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #03 Start Date: 12/18/2008

Location: I-15 Northbound Ramps & Pala Road (SR-76) File Name: 941-07-1

	I-15 Northbound Off Ramp Northbound				I-15 Northbound On Ramp Southbound				Pala Road (SR-76) Eastbound				Pala Road (SR-76) Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
7:00	41	0	21	0	0	0	0	0	92	25	0	0	0	32	2	0	213
7:15	31	0	27	0	0	0	0	0	96	40	0	0	0	39	13	0	246
7:30	29	0	32	0	0	0	0	0	100	55	0	0	0	63	13	1	292
7:45	38	0	29	0	0	0	0	0	102	47	0	0	0	36	16	0	268
Total	139	0	109	0	0	0	0	0	390	167	0	0	0	170	44	1	1019
8:00	37	0	26	0	0	0	0	0	108	43	0	0	0	30	4	0	248
8:15	30	0	29	0	0	0	0	0	95	49	0	0	0	38	8	1	249
8:30	45	2	25	0	0	0	0	0	90	46	0	0	0	39	10	0	257
8:45	34	0	42	0	0	0	0	0	83	47	0	0	0	34	11	0	251
Total	146	2	122	0	0	0	0	0	376	185	0	0	0	141	33	1	1005
Grand Total	285	2	231	0	0	0	0	0	766	352	0	0	0	311	77	2	2024
Approach%	55.0	0.4	44.6	-	-	-	-	-	68.5	31.5	-	-	-	79.7	19.7	0.5	
Total%	14.1	0.1	11.4	-	-	-	-	-	37.8	17.4	-	-	-	15.4	3.8	0.1	

Peak hour analysis for the period 07:30 to 08:15

Volume	134	-	116	-	-	-	-	-	405	194	-	-	-	167	41	2	1,057
Approach%	53.6	-	46.4	-	-	-	-	-	67.6	32.4	-	-	-	79.5	19.5	1.0	
Total%	12.7	-	11.0	-	-	-	-	-	38.3	18.4	-	-	-	15.8	3.9	0.2	
PHF				0.93				######				0.97				0.68	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #03 Start Date: 12/18/2008

Location: I-15 Northbound Ramps & Pala Road (SR-76) File Name: 941-07-2

	I-15 Northbound Off Ramp Northbound				I-15 Northbound On Ramp Southbound				Pala Road (SR-76) Eastbound				Pala Road (SR-76) Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
16:00	59	0	17	0	0	0	0	0	135	43	0	0	0	64	17	0	335
16:15	71	1	26	0	0	0	0	0	130	48	0	0	0	63	13	0	352
16:30	92	0	31	0	0	0	0	0	134	56	0	0	0	77	16	0	406
16:45	106	2	30	0	0	0	0	0	140	52	0	0	0	95	15	0	440
Total	328	3	104	0	0	0	0	0	539	199	0	0	0	299	61	0	1533
17:00	84	1	29	0	0	0	0	0	158	51	0	0	0	85	13	0	421
17:15	98	0	29	0	0	0	0	0	157	57	0	0	0	84	11	0	436
17:30	92	1	33	0	0	0	0	0	139	53	0	0	0	87	11	0	416
17:45	94	0	42	0	0	0	0	0	142	44	0	0	0	49	13	0	384
Total	368	2	133	0	0	0	0	0	596	205	0	0	0	305	48	0	1657
Grand Total	696	5	237	0	0	0	0	0	1135	404	0	0	0	604	109	0	3190
Approach%	74.2	0.5	25.3	-	-	-	-	-	73.7	26.3	-	-	-	84.7	15.3	-	
Total%	21.8	0.2	7.4	-	-	-	-	-	35.6	12.7	-	-	-	18.9	3.4	-	

Peak hour analysis for the period 16:45 to 17:30

Volume	380	4	121	-	-	-	-	-	594	213	-	-	-	351	50	-	1,713
Approach%	75.2	0.8	24.0	-	-	-	-	-	73.6	26.4	-	-	-	87.5	12.5	-	
Total%	22.2	0.2	7.1	-	-	-	-	-	34.7	12.4	-	-	-	20.5	2.9	-	
PHF				0.91				######				0.94				0.91	

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

City: FALLBROOK
N-S Direction: PANKEY ROAD
E-W Direction: PALA ROAD

File Name : H0711122
Site Code : 00000000
Start Date : 12/4/2007
Page No : 1

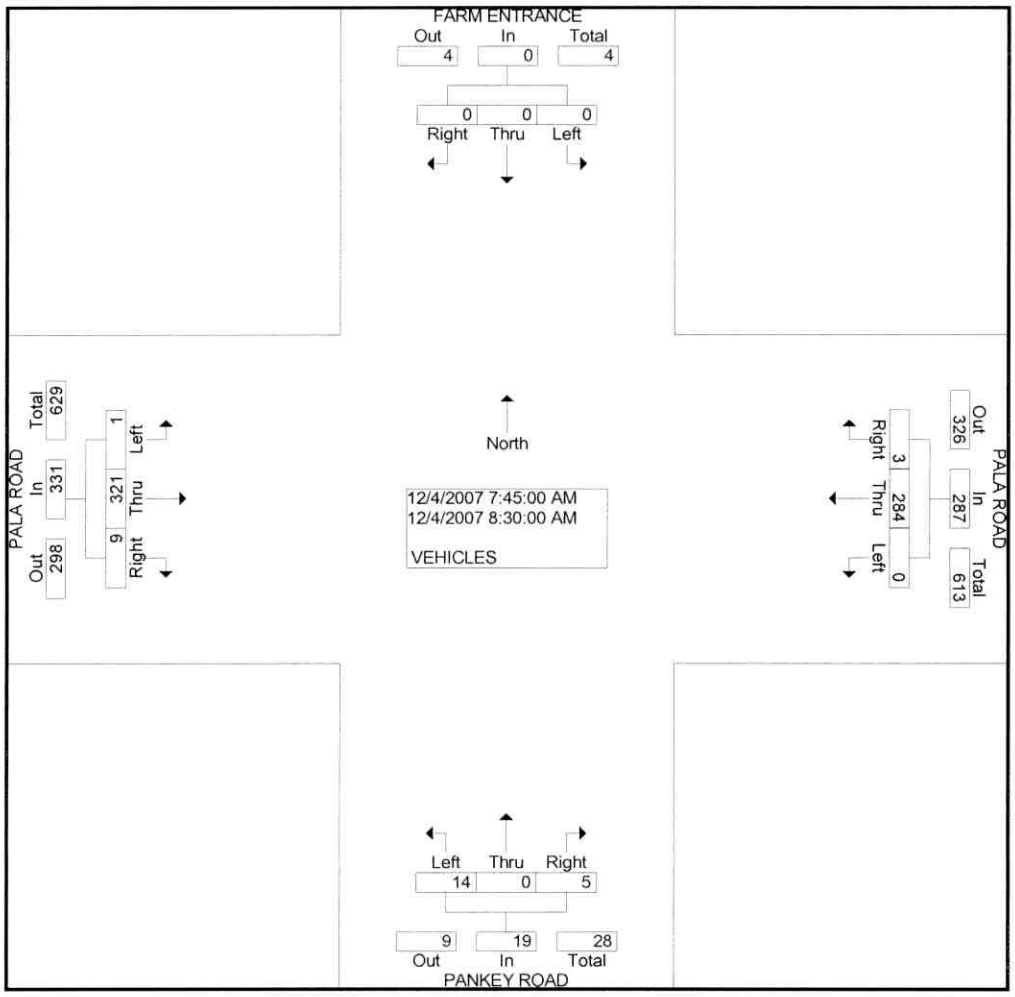
Groups Printed- VEHICLES

	FARM ENTRANCE Southbound			PALA ROAD Westbound			PANKEY ROAD Northbound			PALA ROAD Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
07:00 AM	0	0	0	0	38	1	2	0	2	2	66	0	111
07:15 AM	0	0	0	0	42	0	0	0	0	2	57	0	101
07:30 AM	0	0	0	0	61	0	2	0	2	0	51	1	117
07:45 AM	0	0	0	2	87	0	0	0	2	2	79	1	173
Total	0	0	0	2	228	1	4	0	6	6	253	2	502
08:00 AM	0	0	0	0	97	0	1	0	6	2	64	0	170
08:15 AM	0	0	0	0	53	0	1	0	3	2	96	0	155
08:30 AM	0	0	0	1	47	0	3	0	3	3	82	0	139
08:45 AM	0	0	0	0	58	1	1	0	3	7	89	0	159
Total	0	0	0	1	255	1	6	0	15	14	331	0	623
*** BREAK ***													
04:00 PM	0	0	0	0	92	1	3	0	5	6	64	0	171
04:15 PM	0	0	0	0	80	1	1	0	5	8	84	0	179
04:30 PM	0	0	0	0	80	0	3	0	6	2	63	0	154
04:45 PM	0	0	0	0	120	2	1	0	1	4	63	0	191
Total	0	0	0	0	372	4	8	0	17	20	274	0	695
05:00 PM	0	0	0	0	115	1	1	0	5	9	83	0	214
05:15 PM	0	0	0	0	118	0	0	0	3	9	83	0	213
05:30 PM	0	0	0	0	104	0	0	0	4	3	93	0	204
05:45 PM	0	0	0	7	97	0	0	0	2	6	90	0	202
Total	0	0	0	7	434	1	1	0	14	27	349	0	833
Grand Total	0	0	0	10	1289	7	19	0	52	67	1207	2	2653
Apprch %	0.0	0.0	0.0	0.8	98.7	0.5	26.8	0.0	73.2	5.3	94.6	0.2	
Total %	0.0	0.0	0.0	0.4	48.6	0.3	0.7	0.0	2.0	2.5	45.5	0.1	

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

File Name : H0711122
Site Code : 00000000
Start Date : 12/4/2007
Page No : 2

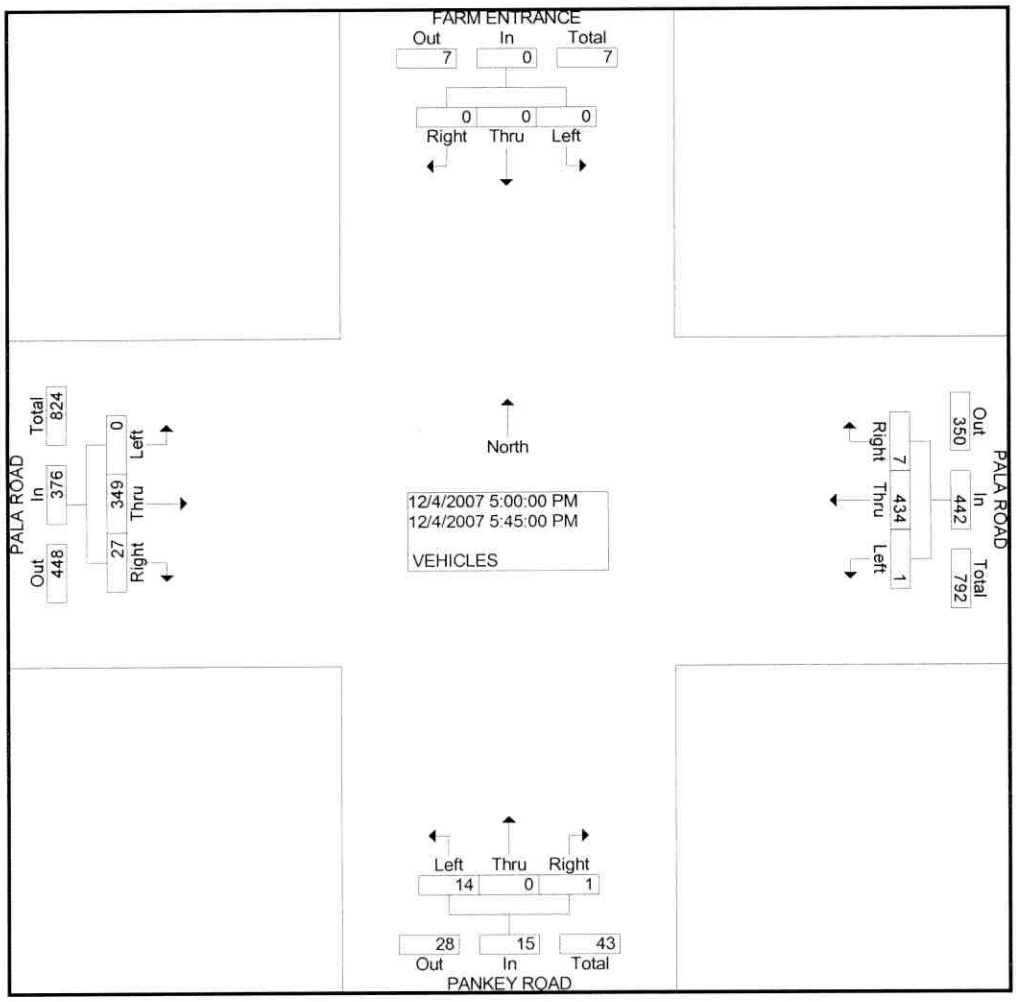
	FARM ENTRANCE Southbound				PALA ROAD Westbound				PANKEY ROAD Northbound				PALA ROAD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Intersection	07:45 AM																
Volume	0	0	0	0	3	284	0	287	5	0	14	19	9	321	1	331	637
Percent	0.0	0.0	0.0		1.0	99.0	0.0		26.3	0.0	73.7		2.7	97.0	0.3		
07:45 Volume	0	0	0	0	2	87	0	89	0	0	2	2	2	79	1	82	173
Peak Factor																	0.921
High Int.	6:45:00 AM				08:00 AM				08:00 AM				08:15 AM				
Volume	0	0	0	0	0	97	0	97	1	0	6	7	2	96	0	98	
Peak Factor								0.740				0.679				0.844	



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

File Name : H0711122
Site Code : 00000000
Start Date : 12/4/2007
Page No : 3

	FARM ENTRANCE Southbound				PALA ROAD Westbound				PANKEY ROAD Northbound				PALA ROAD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Intersection	05:00 PM																
Volume	0	0	0	0	7	434	1	442	1	0	14	15	27	349	0	376	833
Percent	0.0	0.0	0.0		1.6	98.2	0.2		6.7	0.0	93.3		7.2	92.8	0.0		
05:00 Volume	0	0	0	0	0	115	1	116	1	0	5	6	9	83	0	92	214
Peak Factor																	0.973
High Int.					05:15 PM				05:00 PM				05:30 PM				
Volume	0	0	0	0	0	118	0	118	1	0	5	6	3	93	0	96	
Peak Factor								0.936				0.625				0.979	



LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #06
Location: Rice Canyon Road & Pala Road (SR-76)

Start Date: 01/06/2009
File Name: 941-09-1

	Northbound				Rice Canyon Road Southbound				Pala Road (SR-76) Eastbound				Pala Road (SR-76) Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
7:00	0	0	0	0	0	0	7	0	1	40	0	0	0	45	0	0	93
7:15	0	0	0	0	3	0	5	0	1	58	0	0	0	48	2	0	117
7:30	0	0	0	0	4	0	10	0	4	88	0	0	0	52	3	0	161
7:45	0	0	0	0	2	0	4	0	1	65	0	0	0	44	6	0	122
Total	0	0	0	0	9	0	26	0	7	251	0	0	0	189	11	0	493
8:00	0	0	0	0	4	0	2	0	4	68	0	0	0	25	1	0	104
8:15	0	0	0	0	2	0	5	0	0	79	0	0	0	44	0	0	130
8:30	0	0	0	0	1	0	2	0	1	56	0	0	0	53	1	0	114
8:45	0	0	0	0	1	0	2	0	1	56	0	0	0	38	1	0	99
Total	0	0	0	0	8	0	11	0	6	259	0	0	0	160	3	0	447
Grand Total	0	0	0	0	17	0	37	0	13	510	0	0	0	349	14	0	940
Approach%	-	-	-	-	31.5	-	68.5	-	2.5	97.5	-	-	-	96.1	3.9	-	
Total%	-	-	-	-	1.8	-	3.9	-	1.4	54.3	-	-	-	37.1	1.5	-	

Peak hour analysis for the period 07:30 to 08:15

Volume	-	-	-	-	12	-	21	-	9	300	-	-	-	165	10	-	517
Approach%	-	-	-	-	36.4	-	63.6	-	2.9	97.1	-	-	-	94.3	5.7	-	
Total%	-	-	-	-	2.3	-	4.1	-	1.7	58.0	-	-	-	31.9	1.9	-	
PHF				######				0.59				0.84				0.80	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #06
Location: Rice Canyon Road & Pala Road (SR-76)

Start Date: 01/06/2009
File Name: 941-09-2

	Northbound				Rice Canyon Road Southbound				Pala Road (SR-76) Eastbound				Pala Road (SR-76) Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
16:00	0	0	0	0	4	0	1	0	3	71	0	0	0	80	2	0	161
16:15	0	0	0	0	1	0	5	0	3	74	0	0	0	98	1	0	182
16:30	0	0	0	0	3	0	2	0	4	75	0	0	0	85	5	0	174
16:45	0	0	0	0	0	0	2	0	3	60	0	0	0	102	0	0	167
Total	0	0	0	0	8	0	10	0	13	280	0	0	0	365	8	0	684
17:00	0	0	0	0	1	0	1	0	9	54	0	0	0	85	3	0	153
17:15	0	0	0	0	0	0	7	0	5	67	0	0	0	83	0	0	162
17:30	0	0	0	0	1	0	6	0	2	84	0	0	0	87	1	0	181
17:45	0	0	0	0	1	0	3	0	6	58	0	0	0	63	1	0	132
Total	0	0	0	0	3	0	17	0	22	263	0	0	0	318	5	0	628
Grand Total	0	0	0	0	11	0	27	0	35	543	0	0	0	683	13	0	1312
Approach%	-	-	-	-	28.9	-	71.1	-	6.1	93.9	-	-	-	98.1	1.9	-	
Total%	-	-	-	-	0.8	-	2.1	-	2.7	41.4	-	-	-	52.1	1.0	-	

Peak hour analysis for the period 16:00 to 16:45

Volume	-	-	-	-	8	-	10	-	13	280	-	-	-	365	8	-	684
Approach%	-	-	-	-	44.4	-	55.6	-	4.4	95.6	-	-	-	97.9	2.1	-	
Total%	-	-	-	-	1.2	-	1.5	-	1.9	40.9	-	-	-	53.4	1.2	-	
PHF				######				0.75				0.93				0.91	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #03 Start Date: 01/06/2009

Location: Couser Canyon Road & Pala Road (SR-76) File Name: 941.10-1

	Couser Canyon Road Northbound				Driveway Southbound				Pala Road (SR-76) Eastbound				Pala Road (SR-76) Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
7:00	2	0	6	0	0	0	0	0	0	39	1	0	1	41	0	0	90
7:15	4	0	0	0	0	0	0	0	0	59	1	0	1	48	0	0	113
7:30	8	0	5	0	0	0	0	0	0	86	4	0	0	50	0	0	153
7:45	1	0	0	0	0	0	0	0	0	68	1	0	1	49	0	0	120
Total	15	0	11	0	0	0	0	0	0	252	7	0	3	188	0	0	476
8:00	1	0	0	0	0	0	0	0	0	73	0	0	0	24	0	0	98
8:15	1	0	0	0	0	0	0	0	0	75	6	0	1	43	0	0	126
8:30	2	0	2	0	0	0	0	0	0	52	4	0	1	53	0	0	114
8:45	6	0	0	0	0	0	0	0	0	56	3	0	0	33	1	0	99
Total	10	0	2	0	0	0	0	0	0	256	13	0	2	153	1	0	437
Grand Total	25	0	13	0	0	0	0	0	0	508	20	0	5	341	1	0	913
Approach%	65.8	-	34.2	-	-	-	-	-	-	96.2	3.8	-	1.4	98.3	0.3	-	
Total%	2.7	-	1.4	-	-	-	-	-	-	55.6	2.2	-	0.5	37.3	0.1	-	

Peak hour analysis for the period 07:30 to 08:15

Volume	11	-	5	-	-	-	-	-	-	302	11	-	2	166	-	-	497
Approach%	68.8	-	31.3	-	-	-	-	-	-	96.5	3.5	-	1.2	98.8	-	-	
Total%	2.2	-	1.0	-	-	-	-	-	-	60.8	2.2	-	0.4	33.4	-	-	
PHF				0.31				######				0.87				0.84	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #03 Start Date: 01/06/2009

Location: Couser Canyon Road & Pala Road (SR-76) File Name: 941.10-2

	Couser Canyon Road Northbound				Driveway Southbound				Pala Road (SR-76) Eastbound				Pala Road (SR-76) Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
16:00	5	0	2	0	0	0	1	0	0	72	2	0	3	79	0	0	164
16:15	4	0	0	0	0	0	0	0	0	70	6	0	2	95	0	0	177
16:30	1	0	0	0	0	0	0	0	0	70	6	0	2	92	0	0	171
16:45	1	0	0	0	0	0	0	0	0	53	6	0	1	102	0	0	163
Total	11	0	2	0	0	0	1	0	0	265	20	0	8	368	0	0	675
17:00	3	0	0	0	0	0	0	0	0	50	3	0	1	87	0	0	144
17:15	0	0	1	0	0	0	0	0	0	64	2	0	0	79	0	0	146
17:30	2	0	0	0	0	0	0	0	0	83	2	0	2	89	0	0	178
17:45	1	0	0	0	0	0	0	0	0	53	4	0	1	62	0	0	121
Total	6	0	1	0	0	0	0	0	0	250	11	0	4	317	0	0	589
Grand Total	17	0	3	0	0	0	1	0	0	515	31	0	12	685	0	0	1264
Approach%	85.0	-	15.0	-	-	-	100.0	-	-	94.3	5.7	-	1.7	98.3	-	-	
Total%	1.3	-	0.2	-	-	-	0.1	-	-	40.7	2.5	-	0.9	54.2	-	-	

Peak hour analysis for the period 16:00 to 16:45

Volume	11	-	2	-	-	-	1	-	-	265	20	-	8	368	-	-	675
Approach%	84.6	-	15.4	-	-	-	100.0	-	-	93.0	7.0	-	2.1	97.9	-	-	
Total%	1.6	-	0.3	-	-	-	0.1	-	-	39.3	3.0	-	1.2	54.5	-	-	
PHF				0.46				0.25				0.94				0.91	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #14
Location: Old Highway 395 & Pala Mesa Drive

Start Date: 01/06/2009
File Name: 941-11-1

	Old Highway 395 Northbound				Old Highway 395 Southbound				Pala Mesa Drive Eastbound				Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
7:00	8	44	0	0	0	55	4	0	6	0	10	1	0	0	0	0	127
7:15	3	33	0	0	0	59	3	0	6	0	14	0	0	0	0	0	118
7:30	3	36	0	0	0	75	0	0	9	0	4	0	0	0	0	0	127
7:45	7	36	0	0	0	55	1	0	4	0	9	0	0	0	0	0	112
Total	21	149	0	0	0	244	8	0	25	0	37	1	0	0	0	0	484
8:00	5	32	0	0	0	63	2	0	5	0	9	0	0	0	0	0	116
8:15	3	32	0	0	0	53	6	0	3	0	7	0	0	0	0	0	104
8:30	4	36	0	0	0	43	1	0	3	0	8	1	0	0	0	0	95
8:45	3	40	0	0	0	44	4	0	4	0	4	0	0	0	0	0	99
Total	15	140	0	0	0	203	13	0	15	0	28	1	0	0	0	0	414
Grand Total	36	289	0	0	0	447	21	0	40	0	65	2	0	0	0	0	898
Approach%	11.1	88.9	-	-	-	95.5	4.5	-	37.4	-	60.7	1.9	-	-	-	-	
Total%	4.0	32.2	-	-	-	49.8	2.3	-	4.5	-	7.2	0.2	-	-	-	-	

Peak hour analysis for the period 07:00 to 07:45

Volume	21	149	-	-	-	244	8	-	25	-	37	1	-	-	-	-	484
Approach%	12.4	87.6	-	-	-	96.8	3.2	-	39.7	-	58.7	1.6	-	-	-	-	
Total%	4.3	30.8	-	-	-	50.4	1.7	-	5.2	-	7.6	0.2	-	-	-	-	
PHF				0.82				0.84				0.79				######	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. # 14
Location: Old Highway 395 & Pala Mesa Drive

Start Date: 01/06/2009
File Name: 941-11-2

	Old Highway 395 Northbound				Old Highway 395 Southbound				Pala Mesa Drive Eastbound				Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
16:00	9	82	0	0	0	52	13	0	6	0	6	0	0	0	0	0	168
16:15	7	64	0	0	0	47	5	0	4	0	6	0	0	0	0	0	133
16:30	11	80	0	0	0	40	10	0	1	0	4	0	0	0	0	0	146
16:45	9	87	0	0	0	32	6	0	2	0	5	0	0	0	0	0	141
Total	36	313	0	0	0	171	34	0	13	0	21	0	0	0	0	0	588
17:00	19	98	0	0	0	46	6	0	6	0	9	0	0	0	0	0	184
17:15	3	56	0	0	0	52	4	0	2	0	4	0	0	0	0	0	121
17:30	4	60	0	0	0	53	5	0	2	0	6	0	0	0	0	0	130
17:45	14	52	0	0	0	43	2	0	2	0	3	0	0	0	0	0	116
Total	40	266	0	0	0	194	17	0	12	0	22	0	0	0	0	0	551
Grand Total	76	579	0	0	0	365	51	0	25	0	43	0	0	0	0	0	1139
Approach%	11.6	88.4	-	-	-	87.7	12.3	-	36.8	-	63.2	-	-	-	-	-	
Total%	6.7	50.8	-	-	-	32.0	4.5	-	2.2	-	3.8	-	-	-	-	-	

Peak hour analysis for the period 16:15 to 17:00

Volume	46	329	-	-	-	165	27	-	13	-	24	-	-	-	-	-	604
Approach%	12.3	87.7	-	-	-	85.9	14.1	-	35.1	-	64.9	-	-	-	-	-	
Total%	7.6	54.5	-	-	-	27.3	4.5	-	2.2	-	4.0	-	-	-	-	-	
PHF				0.80				0.92				0.62				######	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #12 Start Date: 12/11/2008

Location: Old Highway 395 & Canonita Drive/ Stewart Canyon Road File Name: 941-13-1

	Old Highway 395 Northbound				Old Highway 395 Southbound				Canonita Drive Eastbound				Stewart Canyon Road Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
7:00	1	33	6	0	4	56	1	0	2	1	7	0	3	0	3	0	117
7:15	0	39	1	0	3	71	1	0	1	0	2	0	3	0	1	0	122
7:30	1	38	1	0	2	54	2	0	9	0	10	0	1	0	1	0	119
7:45	1	37	3	0	3	62	3	0	2	0	4	0	3	0	8	0	126
Total	3	147	11	0	12	243	7	0	14	1	23	0	10	0	13	0	484
8:00	1	32	2	0	3	55	0	0	3	0	6	0	2	0	2	0	106
8:15	2	34	7	0	1	55	1	0	2	0	1	0	2	0	4	0	109
8:30	3	26	5	0	3	46	2	0	3	0	2	0	3	0	1	0	94
8:45	1	33	2	0	1	60	0	0	0	0	6	0	2	1	0	0	106
Total	7	125	16	0	8	216	3	0	8	0	15	0	9	1	7	0	415
Grand Total	10	272	27	0	20	459	10	0	22	1	38	0	19	1	20	0	899
Approach%	3.2	88.0	8.7	-	4.1	93.9	2.0	-	36.1	1.6	62.3	-	47.5	2.5	50.0	-	
Total%	1.1	30.3	3.0	-	2.2	51.1	1.1	-	2.4	0.1	4.2	-	2.1	0.1	2.2	-	

Peak hour analysis for the period 07:00 to 07:45

Volume	3	147	11	-	12	243	7	-	14	1	23	-	10	-	13	-	484
Approach%	1.9	91.3	6.8	-	4.6	92.7	2.7	-	36.8	2.6	60.5	-	43.5	-	56.5	-	
Total%	0.6	30.4	2.3	-	2.5	50.2	1.4	-	2.9	0.2	4.8	-	2.1	-	2.7	-	
PHF				0.98				0.87				0.50				0.52	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #06 Start Date: 12/11/2008

Location: Old Highway 395 & Canonita Drive/ Stewart Canyon Road File Name: 941-13-2

	Old Highway 395 Northbound				Old Highway 395 Southbound				Canonita Drive Eastbound				Stewart Canyon Road Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
16:00	3	86	5	0	2	45	5	0	3	0	5	0	3	0	11	0	168
16:15	4	59	2	0	2	28	2	0	1	1	5	0	4	0	2	0	110
16:30	7	57	3	0	4	47	5	0	3	1	2	0	3	1	4	0	137
16:45	7	57	2	0	4	48	7	0	1	1	6	0	9	0	11	0	153
Total	21	259	12	0	12	168	19	0	8	3	18	0	19	1	28	0	568
17:00	6	61	1	0	6	41	3	0	0	1	1	0	7	0	4	0	131
17:15	5	64	1	0	1	51	3	0	0	1	4	0	2	1	3	0	136
17:30	5	70	3	0	3	58	1	0	2	0	2	0	0	0	1	0	145
17:45	6	62	3	0	2	41	1	0	2	0	1	0	0	0	4	0	122
Total	22	257	8	0	12	191	8	0	4	2	8	0	9	1	12	0	534
Grand Total	43	516	20	0	24	359	27	0	12	5	26	0	28	2	40	0	1102
Approach%	7.4	89.1	3.5	-	5.9	87.6	6.6	-	27.9	11.6	60.5	-	40.0	2.9	57.1	-	
Total%	3.9	46.8	1.8	-	2.2	32.6	2.5	-	1.1	0.5	2.4	-	2.5	0.2	3.6	-	

Peak hour analysis for the period 16:00 to 16:45

Volume	21	259	12	-	12	168	19	-	8	3	18	-	19	1	28	-	568
Approach%	7.2	88.7	4.1	-	6.0	84.4	9.5	-	27.6	10.3	62.1	-	39.6	2.1	58.3	-	
Total%	3.7	45.6	2.1	-	2.1	29.6	3.3	-	1.4	0.5	3.2	-	3.3	0.2	4.9	-	
PHF				0.78				0.84				0.91				0.60	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #01
Location: Old Highway 395 & Reche Road

Start Date: 12/11/2008
File Name: 941-14-1

	Old Highway 395 Northbound				Old Highway 395 Southbound				Reche Road Eastbound				Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
7:00	25	11	0	0	0	17	56	0	29	0	41	0	0	0	0	0	179
7:15	33	12	0	0	0	14	28	0	33	0	55	0	0	0	0	0	175
7:30	29	19	0	0	0	16	34	0	57	0	51	0	0	0	0	0	206
7:45	33	18	0	0	0	19	29	0	42	0	47	0	0	0	0	0	188
Total	120	60	0	0	0	66	147	0	161	0	194	0	0	0	0	0	748
8:00	20	19	0	0	0	17	28	0	57	0	43	0	0	0	0	0	184
8:15	21	26	0	0	0	21	19	0	31	0	38	0	0	0	0	0	156
8:30	20	16	0	0	0	13	22	0	25	0	38	0	0	0	0	0	134
8:45	23	9	0	0	0	17	17	0	30	0	39	0	0	0	0	0	135
Total	84	70	0	0	0	68	86	0	143	0	158	0	0	0	0	0	609
Grand Total	204	130	0	0	0	134	233	0	304	0	352	0	0	0	0	0	1357
Approach%	61.1	38.9	-	-	-	36.5	63.5	-	46.3	-	53.7	-	-	-	-	-	
Total%	15.0	9.6	-	-	-	9.9	17.2	-	22.4	-	25.9	-	-	-	-	-	

Peak hour analysis for the period 07:15 to 08:00

Volume	115	68	-	-	-	66	119	-	189	-	196	-	-	-	-	-	753
Approach%	62.8	37.2	-	-	-	35.7	64.3	-	49.1	-	50.9	-	-	-	-	-	
Total%	15.3	9.0	-	-	-	8.8	15.8	-	25.1	-	26.0	-	-	-	-	-	
PHF				0.90				0.93				0.89				######	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #01
Location: Old Highway 395 & Reche Road

Start Date: 12/11/2008
File Name: 941-14-2

	Old Highway 395 Northbound				Old Highway 395 Southbound				Reche Road Eastbound				Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
16:00	76	25	0	0	0	22	33	0	33	0	33	0	0	0	0	0	222
16:15	57	23	0	0	0	17	31	0	37	0	33	0	0	0	0	0	198
16:30	52	26	0	0	0	19	23	0	40	0	47	0	0	0	0	0	207
16:45	54	19	0	0	0	15	33	0	53	0	45	0	0	0	0	0	219
Total	239	93	0	0	0	73	120	0	163	0	158	0	0	0	0	0	846
17:00	47	23	0	0	0	14	40	0	51	0	40	0	0	0	0	0	215
17:15	49	18	0	0	0	12	39	0	36	0	43	0	0	0	0	0	197
17:30	60	19	0	0	0	12	40	5	65	0	48	0	0	0	0	0	244
17:45	41	23	0	0	0	10	38	0	31	0	47	0	0	0	0	0	190
Total	197	83	0	0	0	48	157	5	183	0	178	0	0	0	0	0	846
Grand Total	436	176	0	0	0	121	277	5	346	0	336	0	0	0	0	0	1692
Approach%	71.2	28.8	-	-	-	30.0	68.7	1.2	50.7	-	49.3	-	-	-	-	-	
Total%	25.8	10.4	-	-	-	7.2	16.4	0.3	20.4	-	19.9	-	-	-	-	-	

Peak hour analysis for the period 16:45 to 17:30

Volume	210	79	-	-	-	53	152	5	205	-	176	-	-	-	-	-	875
Approach%	72.7	27.3	-	-	-	25.2	72.4	2.4	53.8	-	46.2	-	-	-	-	-	
Total%	24.0	9.0	-	-	-	6.1	17.4	0.6	23.4	-	20.1	-	-	-	-	-	
PHF				0.91				0.92				0.84				######	

LOS Engineering, Inc.

5114 Sea Mist Court, San Diego, CA 92121

Counted By: Emp. #08
Location: Old Highway 395 & East Mission Road

Start Date: 12/18/2008
File Name: 941-18-1

	Old Highway 395 Northbound				East Mission Road Southbound				Eastbound				East Mission Road Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
7:00	0	3	37	0	152	9	0	0	0	0	0	0	30	0	209	0	440
7:15	0	3	33	0	136	6	0	0	0	0	0	0	26	0	206	0	410
7:30	0	5	43	0	129	10	0	0	0	0	0	0	29	0	241	0	457
7:45	0	10	40	0	132	14	0	0	0	0	0	0	22	0	222	1	440
Total	0	21	153	0	549	39	0	0	0	0	0	0	107	0	878	1	1747
8:00	0	3	37	0	139	18	0	0	0	0	0	0	22	0	154	0	373
8:15	0	5	30	0	126	5	0	0	0	0	0	0	24	0	150	0	340
8:30	0	9	42	1	120	12	0	0	0	0	0	0	23	0	124	0	330
8:45	0	9	37	0	112	10	0	0	0	0	0	0	21	0	140	0	329
Total	0	26	146	1	497	45	0	0	0	0	0	0	90	0	568	0	1372
Grand Total	0	47	299	1	1046	84	0	0	0	0	0	0	197	0	1446	1	3119
Approach%	-	13.5	86.2	0.3	92.6	7.4	-	-	-	-	-	-	12.0	-	88.0	0.1	
Total%	-	1.5	9.6	0.0	33.5	2.7	-	-	-	-	-	-	6.3	-	46.4	0.0	

Peak hour analysis for the period 07:00 to 07:45

Volume	-	21	153	-	549	39	-	-	-	-	-	-	107	-	878	1	1,747
Approach%	-	12.1	87.9	-	93.4	6.6	-	-	-	-	-	-	10.9	-	89.0	0.1	
Total%	-	1.2	8.8	-	31.4	2.2	-	-	-	-	-	-	6.1	-	50.3	0.1	
PHF				0.87				0.91				######				0.91	

LOS Engineering, Inc.

5114 Sea Mist Court, San Diego, CA 92121

Counted By: Emp. #08
Location: Old Highway 395 & East Mission Road

Start Date: 12/18/2008
File Name: 941-18-2

	Old Highway 395 Northbound				East Mission Road Southbound				Eastbound				East Mission Road Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
16:00	0	6	55	0	233	7	0	0	0	0	0	0	48	0	175	1	524
16:15	0	6	49	0	251	5	0	0	0	0	0	0	30	0	183	0	524
16:30	0	11	53	0	244	6	0	0	0	0	0	0	66	0	151	1	531
16:45	0	9	60	0	242	2	0	0	0	0	0	0	37	0	179	1	529
Total	0	32	217	0	970	20	0	0	0	0	0	0	181	0	688	3	2108
17:00	0	12	59	0	243	5	0	0	0	0	0	0	43	0	159	0	521
17:15	0	7	58	0	239	5	0	0	0	0	0	0	55	0	150	0	514
17:30	0	4	71	0	227	8	0	0	0	0	0	0	43	0	163	0	516
17:45	0	8	76	0	223	4	0	0	0	0	0	0	63	0	153	0	527
Total	0	31	264	0	932	22	0	0	0	0	0	0	204	0	625	0	2078
Grand Total	0	63	481	0	1902	42	0	0	0	0	0	0	385	0	1313	3	4186
Approach%	-	11.6	88.4	-	97.8	2.2	-	-	-	-	-	-	22.6	-	77.2	0.2	
Total%	-	1.5	11.5	-	45.4	1.0	-	-	-	-	-	-	9.2	-	31.4	0.1	

Peak hour analysis for the period 16:00 to 16:45

Volume	-	32	217	-	970	20	-	-	-	-	-	-	181	-	688	3	2,108
Approach%	-	12.9	87.1	-	98.0	2.0	-	-	-	-	-	-	20.8	-	78.9	0.3	
Total%	-	1.5	10.3	-	46.0	0.9	-	-	-	-	-	-	8.6	-	32.6	0.1	
PHF				0.90				0.97				######				0.97	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #01 Start Date: 12/18/2008

Location: I-15 Southbound Ramps & East Mission Road File Name: 941-19-1

	I-15 Southbound On Ramp Northbound				I-15 Southbound Off Ramp Southbound				East Mission Road Eastbound				East Mission Road Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
7:00	0	0	0	0	2	0	190	0	0	129	52	0	17	59	0	0	449
7:15	0	0	0	0	4	6	190	0	0	126	48	0	15	50	0	0	439
7:30	0	0	0	0	1	1	216	0	0	134	47	0	15	61	0	0	475
7:45	0	0	0	0	1	0	179	0	0	140	46	0	14	72	0	0	452
Total	0	0	0	0	8	7	775	0	0	529	193	0	61	242	0	0	1815
8:00	0	0	0	0	2	0	128	0	0	135	47	0	11	43	0	0	366
8:15	0	0	0	0	1	1	125	0	0	118	42	0	11	57	0	0	355
8:30	0	0	0	0	1	2	102	0	0	122	48	0	10	42	0	0	327
8:45	0	0	0	0	1	0	124	0	0	114	44	0	7	43	0	0	333
Total	0	0	0	0	5	3	479	0	0	489	181	0	39	185	0	0	1381
Grand Total	0	0	0	0	13	10	1254	0	0	1018	374	0	100	427	0	0	3196
Approach%	-	-	-	-	1.0	0.8	98.2	-	-	73.1	26.9	-	19.0	81.0	-	-	
Total%	-	-	-	-	0.4	0.3	39.2	-	-	31.9	11.7	-	3.1	13.4	-	-	

Peak hour analysis for the period 07:00 to 07:45

Volume	-	-	-	-	8	7	775	-	-	529	193	-	61	242	-	-	1,815
Approach%	-	-	-	-	1.0	0.9	98.1	-	-	73.3	26.7	-	20.1	79.9	-	-	
Total%	-	-	-	-	0.4	0.4	42.7	-	-	29.1	10.6	-	3.4	13.3	-	-	
PHF				######				0.91				0.97				0.88	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #01 Start Date: 12/18/2008

Location: I-15 Southbound Ramps & East Mission Road File Name: 941-19-2

	I-15 Southbound On Ramp Northbound				I-15 Southbound Off Ramp Southbound				East Mission Road Eastbound				East Mission Road Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
16:00	0	0	0	0	4	1	134	0	0	241	32	0	12	97	0	0	521
16:15	0	0	0	0	3	0	131	0	0	264	26	0	14	91	0	0	529
16:30	0	0	0	0	2	1	146	0	0	271	23	0	8	74	0	0	525
16:45	0	0	0	0	1	1	143	0	0	270	18	0	14	81	0	0	528
Total	0	0	0	0	10	3	554	0	0	1046	99	0	48	343	0	0	2103
17:00	0	0	0	0	2	0	137	0	0	291	18	0	8	68	0	0	524
17:15	0	0	0	0	2	0	149	0	0	265	20	0	10	61	0	0	507
17:30	0	0	0	0	2	0	137	0	0	270	13	0	15	78	0	0	515
17:45	0	0	0	0	1	1	163	0	0	270	19	0	3	58	0	0	515
Total	0	0	0	0	7	1	586	0	0	1096	70	0	36	265	0	0	2061
Grand Total	0	0	0	0	17	4	1140	0	0	2142	169	0	84	608	0	0	4164
Approach%	-	-	-	-	1.5	0.3	98.2	-	-	92.7	7.3	-	12.1	87.9	-	-	
Total%	-	-	-	-	0.4	0.1	27.4	-	-	51.4	4.1	-	2.0	14.6	-	-	

Peak hour analysis for the period 16:15 to 17:00

Volume	-	-	-	-	8	2	557	-	-	1,096	85	-	44	314	-	-	2,106
Approach%	-	-	-	-	1.4	0.4	98.2	-	-	92.8	7.2	-	12.3	87.7	-	-	
Total%	-	-	-	-	0.4	0.1	26.4	-	-	52.0	4.0	-	2.1	14.9	-	-	
PHF				######				0.95				0.96				0.85	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #02 Start Date: 12/18/2008

Location: I-15 Northbound Ramps & East Mission Road/ Old Highway 395 File Name: 941-20-1

	I-15 Northbound Off Ramp Northbound				I-15 Northbound On Ramp Southbound				East Mission Road Eastbound				Old Highway 395 Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
7:00	21	0	7	0	0	0	0	0	109	19	0	0	0	55	1	0	212
7:15	13	0	8	0	0	0	0	0	109	23	0	0	0	52	2	0	207
7:30	34	0	8	1	0	0	0	0	109	17	0	0	0	39	0	0	207
7:45	39	1	11	0	0	0	0	0	99	31	0	0	0	40	1	0	222
Total	107	1	34	1	0	0	0	0	426	90	0	0	0	186	4	0	848
8:00	29	1	10	0	0	0	0	0	125	22	0	0	0	30	1	0	218
8:15	31	0	6	0	0	0	0	0	101	16	0	0	0	31	1	0	186
8:30	19	0	4	0	0	0	0	0	107	19	0	0	0	28	1	0	178
8:45	24	1	6	0	0	0	0	0	74	19	0	0	0	18	1	0	143
Total	103	2	26	0	0	0	0	0	407	76	0	0	0	107	4	0	725
Grand Total	210	3	60	1	0	0	0	0	833	166	0	0	0	293	8	0	1573
Approach%	76.6	1.1	21.9	0.4	-	-	-	-	83.4	16.6	-	-	-	97.3	2.7	-	
Total%	13.4	0.2	3.8	0.1	-	-	-	-	53.0	10.6	-	-	-	18.6	0.5	-	

Peak hour analysis for the period 07:15 to 08:00

Volume	115	2	37	1	-	-	-	-	442	93	-	-	-	161	4	-	854
Approach%	74.2	1.3	23.9	0.6	-	-	-	-	82.6	17.4	-	-	-	97.6	2.4	-	
Total%	13.5	0.2	4.3	0.1	-	-	-	-	51.8	10.9	-	-	-	18.9	0.5	-	
PHF				0.76				######				0.91				0.76	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #02 Start Date: 12/18/2008

Location: I-15 Northbound Ramps & East Mission Road/ Old Highway 395 File Name: 941-20-2

	I-15 Northbound Off Ramp Northbound				I-15 Northbound On Ramp Southbound				East Mission Road Eastbound				Old Highway 395 Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
16:00	53	1	12	0	0	0	0	0	203	33	0	0	0	51	0	0	353
16:15	46	1	15	0	0	0	0	0	217	46	0	0	0	55	2	0	382
16:30	37	1	28	0	0	0	0	0	216	48	0	0	0	47	0	0	377
16:45	43	0	24	0	0	0	0	0	229	45	0	0	0	39	1	0	381
Total	179	3	79	0	0	0	0	0	865	172	0	0	0	192	3	0	1493
17:00	40	0	10	0	0	0	0	0	239	48	0	0	0	23	0	0	360
17:15	52	1	13	0	0	0	0	0	207	47	0	0	0	27	1	0	348
17:30	56	1	27	0	0	0	0	0	215	52	0	0	0	28	1	0	380
17:45	39	1	17	0	0	0	0	0	219	43	0	0	0	13	1	0	333
Total	187	3	67	0	0	0	0	0	880	190	0	0	0	91	3	0	1421
Grand Total	366	6	146	0	0	0	0	0	1745	362	0	0	0	283	6	0	2914
Approach%	70.7	1.2	28.2	-	-	-	-	-	82.8	17.2	-	-	-	97.9	2.1	-	
Total%	12.6	0.2	5.0	-	-	-	-	-	59.9	12.4	-	-	-	9.7	0.2	-	

Peak hour analysis for the period 16:15 to 17:00

Volume	166	2	77	-	-	-	-	-	901	187	-	-	-	164	3	-	1,500
Approach%	67.8	0.8	31.4	-	-	-	-	-	82.8	17.2	-	-	-	98.2	1.8	-	
Total%	11.1	0.1	5.1	-	-	-	-	-	60.1	12.5	-	-	-	10.9	0.2	-	
PHF				0.91				######				0.95				0.73	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #06
Location: Pankey Road & Stewart Canyon Road

Start Date: 12/11/2008
File Name: 941-21-1

	Pankey Road Northbound				Pankey Road Southbound				Stewart Canyon Road Eastbound				Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
7:00	2	0	0	0	0	0	4	0	11	0	0	0	0	0	0	0	17
7:15	1	0	0	0	0	0	3	0	1	0	1	0	0	0	0	0	6
7:30	0	0	0	0	0	0	2	0	0	0	3	0	0	0	0	0	5
7:45	1	0	0	0	0	0	11	0	6	0	0	0	0	0	0	0	18
Total	4	0	0	0	0	0	20	0	18	0	4	0	0	0	0	0	46
8:00	0	0	0	0	0	0	4	0	5	0	1	0	0	0	0	0	10
8:15	0	0	0	0	0	0	5	0	8	0	0	2	0	0	0	0	13
8:30	1	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	5
8:45	0	0	0	0	0	0	3	0	4	0	0	0	0	0	0	0	7
Total	1	0	0	0	0	0	14	0	19	0	1	2	0	0	0	0	35
Grand Total	5	0	0	0	0	0	34	0	37	0	5	2	0	0	0	0	81
Approach%	100.0	-	-	-	-	-	100.0	-	84.1	-	11.4	4.5	-	-	-	-	
Total%	6.2	-	-	-	-	-	42.0	-	45.7	-	6.2	2.5	-	-	-	-	

Peak hour analysis for the period 07:00 to 07:45

Volume	4	-	-	-	-	-	20	-	18	-	4	-	-	-	-	-	46
Approach%	100.0	-	-	-	-	-	100.0	-	81.8	-	18.2	-	-	-	-	-	
Total%	8.7	-	-	-	-	-	43.5	-	39.1	-	8.7	-	-	-	-	-	
PHF				0.50				0.45				0.50				######	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #07
Location: Pankey Road & Stewart Canyon Road

Start Date: 12/11/2008
File Name: 941-21-2

	Pankey Road Northbound				Pankey Road Southbound				Stewart Canyon Road Eastbound				Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
16:00	1	0	0	0	0	0	7	0	4	0	0	0	0	0	0	0	12
16:15	1	0	0	0	0	0	4	0	2	0	1	0	0	0	0	0	8
16:30	1	0	0	0	0	0	7	0	5	0	0	0	0	0	0	0	13
16:45	1	0	0	0	0	0	16	0	4	0	1	0	0	0	0	0	22
Total	4	0	0	0	0	0	34	0	15	0	2	0	0	0	0	0	55
17:00	1	0	0	0	0	0	8	0	5	0	2	0	0	0	0	0	16
17:15	1	0	0	0	0	0	5	0	3	0	0	0	0	0	0	0	9
17:30	0	1	0	0	0	0	1	0	6	0	0	0	0	0	0	0	8
17:45	0	0	0	0	0	0	3	0	5	0	0	0	0	0	0	0	8
Total	2	1	0	0	0	0	17	0	19	0	2	0	0	0	0	0	41
Grand Total	6	1	0	0	0	0	51	0	34	0	4	0	0	0	0	0	96
Approach%	85.7	14.3	-	-	-	-	100.0	-	89.5	-	10.5	-	-	-	-	-	
Total%	6.3	1.0	-	-	-	-	53.1	-	35.4	-	4.2	-	-	-	-	-	

Peak hour analysis for the period 16:30 to 17:15

Volume	4	-	-	-	-	-	36	-	17	-	3	-	-	-	-	-	60
Approach%	100.0	-	-	-	-	-	100.0	-	85.0	-	15.0	-	-	-	-	-	
Total%	6.7	-	-	-	-	-	60.0	-	28.3	-	5.0	-	-	-	-	-	
PHF				1.00				0.56				0.71				######	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #03 Start Date: 11/13/2008

Location: Old River Road/ East Vista Way & SR-76 (Mission Road) File Name: 932-06-2

	East Vista Way Northbound				Old River Road Southbound				SR-76 (Mission Road) Eastbound				SR-76 (Mission Road) Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
16:00	50	6	95	0	1	14	14	0	11	244	52	0	91	169	3	0	750
16:15	54	13	85	0	2	22	13	0	18	253	59	0	100	174	2	0	795
16:30	37	20	94	0	0	15	17	0	21	251	49	0	89	175	6	0	774
16:45	41	23	74	0	0	17	14	0	20	233	39	0	95	175	4	0	735
Total	182	62	348	0	3	68	58	0	70	981	199	0	375	693	15	0	3054
17:00	45	25	79	0	0	12	16	0	15	206	52	0	95	182	4	0	731
17:15	49	15	88	0	0	28	19	0	25	213	40	0	102	164	5	0	748
17:30	40	20	93	0	2	16	9	0	27	218	52	0	97	174	2	0	750
17:45	50	16	95	0	2	11	7	0	13	215	45	0	92	150	3	0	699
Total	184	76	355	0	4	67	51	0	80	852	189	0	386	670	14	0	2928
Grand Total	366	138	703	0	7	135	109	0	150	1833	388	0	761	1363	29	0	5982
Approach%	30.3	11.4	58.2	-	2.8	53.8	43.4	-	6.3	77.3	16.4	-	35.3	63.3	1.3	-	
Total%	6.1	2.3	11.8	-	0.1	2.3	1.8	-	2.5	30.6	6.5	-	12.7	22.8	0.5	-	

Peak hour analysis for the period 16:00 to 16:45

Volume	182	62	348	-	3	68	58	-	70	981	199	-	375	693	15	-	3,054
Approach%	30.7	10.5	58.8	-	2.3	52.7	45.0	-	5.6	78.5	15.9	-	34.6	64.0	1.4	-	
Total%	6.0	2.0	11.4	-	0.1	2.2	1.9	-	2.3	32.1	6.5	-	12.3	22.7	0.5	-	
PHF				0.97				0.87				0.95				0.98	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #03 Start Date: 11/13/2008

Location: Old River Road/ East Vista Way & SR-76 (Mission Road) File Name: 932-06-1

	East Vista Way Northbound				Old River Road Southbound				SR-76 (Mission Road) Eastbound				SR-76 (Mission Road) Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
7:00	66	7	73	0	0	45	68	0	7	124	59	0	63	187	0	0	699
7:15	49	11	67	0	2	44	53	0	7	111	70	0	64	183	1	0	662
7:30	60	10	66	0	0	40	25	0	8	143	53	3	80	206	4	0	695
7:45	74	18	72	0	3	38	55	1	8	142	56	0	61	223	1	0	751
Total	249	46	278	0	5	167	201	1	30	520	238	3	268	799	6	0	2807
8:00	44	7	57	0	1	41	48	0	6	121	46	0	68	225	0	0	664
8:15	35	5	50	0	0	27	29	0	9	153	31	1	74	234	1	0	648
8:30	42	3	49	0	1	16	19	0	6	104	32	0	84	190	4	0	550
8:45	40	15	53	0	1	14	18	0	1	118	39	0	62	185	0	0	546
Total	161	30	209	0	3	98	114	0	22	496	148	1	288	834	5	0	2408
Grand Total	410	76	487	0	8	265	315	1	52	1016	386	4	556	1633	11	0	5215
Approach%	42.1	7.8	50.1	-	1.4	45.0	53.5	0.2	3.6	69.7	26.5	0.3	25.3	74.2	0.5	-	
Total%	7.9	1.5	9.3	-	0.2	5.1	6.0	0.0	1.0	19.5	7.4	0.1	10.7	31.3	0.2	-	

Peak hour analysis for the period 07:00 to 07:45

Volume	249	46	278	-	5	167	201	1	30	520	238	3	268	799	6	-	2,807
Approach%	43.5	8.0	48.5	-	1.3	44.7	53.7	0.3	3.8	65.7	30.1	0.4	25.0	74.5	0.6	-	
Total%	8.9	1.6	9.9	-	0.2	5.9	7.2	0.0	1.1	18.5	8.5	0.1	9.5	28.5	0.2	-	
PHF				0.87				0.83				0.96				0.93	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #01
Location: North River Road & SR-76 (Mission Road)

Start Date: 11/13/2008
File Name: 932-05-2

	Northbound				North River Road Southbound				SR-76 (Mission Road) Eastbound				SR-76 (Mission Road) Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
16:00	0	0	0	0	48	0	46	0	12	311	0	0	0	224	24	1	665
16:15	0	0	0	0	45	0	36	0	7	330	0	0	0	237	21	0	676
16:30	0	0	0	0	44	0	31	0	9	315	0	0	0	229	22	0	650
16:45	0	0	0	0	50	0	49	0	9	312	0	0	0	241	41	0	702
Total	0	0	0	0	187	0	162	0	37	1268	0	0	0	931	108	1	2693
17:00	0	0	0	0	54	0	30	2	8	303	0	0	0	244	23	2	662
17:15	0	0	0	0	56	0	18	0	14	307	0	0	0	245	24	0	664
17:30	0	0	0	0	60	0	28	0	15	301	0	0	0	234	22	0	660
17:45	0	0	0	0	57	0	24	0	5	301	0	0	0	223	28	0	638
Total	0	0	0	0	227	0	100	2	42	1212	0	0	0	946	97	2	2624
Grand Total	0	0	0	0	414	0	262	2	79	2480	0	0	0	1877	205	3	5317
Approach%	-	-	-	-	61.1	-	38.6	0.3	3.1	96.9	-	-	-	90.0	9.8	0.1	
Total%	-	-	-	-	7.8	-	4.9	0.0	1.5	46.6	-	-	-	35.3	3.9	0.1	

Peak hour analysis for the period 16:00 to 16:45

Volume	-	-	-	-	187	-	162	-	37	1,268	-	-	-	931	108	1	2,693
Approach%	-	-	-	-	53.6	-	46.4	-	2.8	97.2	-	-	-	89.5	10.4	0.1	
Total%	-	-	-	-	6.9	-	6.0	-	1.4	47.1	-	-	-	34.6	4.0	0.0	
PHF				######				0.88				0.97				0.92	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #12
Location: North River Road & SR-76 (Mission Road)

Start Date: 11/13/2008
File Name: 932-05-1

	Northbound				North River Road Southbound				SR-76 (Mission Road) Eastbound				SR-76 (Mission Road) Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
7:00	0	0	0	0	18	0	15	0	34	163	0	0	0	250	53	0	533
7:15	0	0	0	0	32	0	21	0	26	174	0	0	0	265	36	0	554
7:30	0	0	0	0	27	0	13	0	20	180	0	0	0	274	36	0	550
7:45	0	0	0	0	14	0	17	0	13	215	0	0	0	287	35	0	581
Total	0	0	0	0	91	0	66	0	93	732	0	0	0	1076	160	0	2218
8:00	0	0	0	0	23	0	11	0	16	162	0	0	0	267	29	0	508
8:15	0	0	0	0	20	0	13	0	15	158	0	0	0	288	18	0	512
8:30	0	0	0	0	10	0	17	0	3	172	0	0	0	265	24	0	491
8:45	0	0	0	0	12	0	12	0	14	156	0	0	0	260	17	0	471
Total	0	0	0	0	65	0	53	0	48	648	0	0	0	1080	88	0	1982
Grand Total	0	0	0	0	156	0	119	0	141	1380	0	0	0	2156	248	0	4200
Approach%	-	-	-	-	56.7	-	43.3	-	9.3	90.7	-	-	-	89.7	10.3	-	
Total%	-	-	-	-	3.7	-	2.8	-	3.4	32.9	-	-	-	51.3	5.9	-	

Peak hour analysis for the period 07:00 to 07:45

Volume	-	-	-	-	91	-	66	-	93	732	-	-	-	1,076	160	-	2,218
Approach%	-	-	-	-	58.0	-	42.0	-	11.3	88.7	-	-	-	87.1	12.9	-	
Total%	-	-	-	-	4.1	-	3.0	-	4.2	33.0	-	-	-	48.5	7.2	-	
PHF				######				0.74				0.90				0.96	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #14 Start Date: 11/13/2008

Location: Olive Hill Road/ Camino Del Rey & SR-76 (Mission Road) File Name: 932-04-2

	Camino Del Rey Northbound				Olive Hill Road Southbound				SR-76 (Mission Road) Eastbound				SR-76 (Mission Road) Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
16:00	13	18	49	0	26	13	16	0	15	319	18	0	48	186	23	0	744
16:15	18	19	86	0	33	25	9	0	25	331	12	0	43	229	17	0	847
16:30	20	25	74	0	21	16	21	0	19	342	10	0	59	219	12	0	838
16:45	18	11	82	0	27	11	19	0	26	311	13	0	55	253	22	2	848
Total	69	73	291	0	107	65	65	0	85	1303	53	0	205	887	74	2	3277
17:00	15	26	76	0	39	8	18	0	20	313	10	0	58	204	23	0	810
17:15	11	16	68	0	27	17	17	0	20	320	15	0	51	242	11	0	815
17:30	10	27	72	0	30	8	15	0	22	312	11	0	54	219	12	0	792
17:45	3	15	47	0	32	19	15	0	29	314	10	0	41	220	16	0	761
Total	39	84	263	0	128	52	65	0	91	1259	46	0	204	885	62	0	3178
Grand Total	108	157	554	0	235	117	130	0	176	2562	99	0	409	1772	136	2	6455
Approach%	13.2	19.2	67.6	-	48.8	24.3	27.0	-	6.2	90.3	3.5	-	17.6	76.4	5.9	0.1	
Total%	1.7	2.4	8.6	-	3.6	1.8	2.0	-	2.7	39.7	1.5	-	6.3	27.5	2.1	0.0	

Peak hour analysis for the period 16:15 to 17:00

Volume	71	81	318	-	120	60	67	-	90	1,297	45	-	215	905	74	2	3,343
Approach%	15.1	17.2	67.7	-	48.6	24.3	27.1	-	6.3	90.6	3.1	-	18.0	75.7	6.2	0.2	
Total%	2.1	2.4	9.5	-	3.6	1.8	2.0	-	2.7	38.8	1.3	-	6.4	27.1	2.2	0.1	
PHF				0.96				0.92				0.96				0.90	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #14 | Start Date: 11/13/2008

Location: Olive Hill Road/ Camino Del Rey & SR-76 (Mission Road) | File Name: 932-04-1

	Camino Del Rey Northbound				Olive Hill Road Southbound				SR-76 (Mission Road) Eastbound				SR-76 (Mission Road) Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
7:00	9	9	56	0	23	60	8	0	13	171	6	0	86	283	13	1	737
7:15	12	9	58	0	18	35	18	0	21	162	15	0	139	275	11	1	773
7:30	12	18	56	1	14	59	18	0	14	195	26	0	113	256	18	2	799
7:45	11	25	62	0	26	60	15	0	12	164	35	0	121	274	14	0	819
Total	44	61	232	1	81	214	59	0	60	692	82	0	459	1088	56	4	3128
8:00	15	29	68	0	30	37	12	0	9	155	10	0	51	250	8	0	674
8:15	17	13	48	0	18	23	18	0	18	171	8	0	53	246	13	0	646
8:30	9	8	35	0	20	16	32	0	11	172	14	0	43	232	6	0	598
8:45	10	9	29	0	19	11	22	0	6	176	13	0	34	238	3	0	570
Total	51	59	180	0	87	87	84	0	44	674	45	0	181	966	30	0	2488
Grand Total	95	120	412	1	168	301	143	0	104	1366	127	0	640	2054	86	4	5616
Approach%	15.1	19.1	65.6	0.2	27.5	49.2	23.4	-	6.5	85.5	8.0	-	23.0	73.8	3.1	0.1	
Total%	1.7	2.1	7.3	0.0	3.0	5.4	2.5	-	1.9	24.3	2.3	-	11.4	36.6	1.5	0.1	

Peak hour analysis for the period 07:00 to 07:45

Volume	44	61	232	1	81	214	59	-	60	692	82	-	459	1,088	56	4	3,128
Approach%	13.0	18.0	68.6	0.3	22.9	60.5	16.7	-	7.2	83.0	9.8	-	28.6	67.7	3.5	0.2	
Total%	1.4	2.0	7.4	0.0	2.6	6.8	1.9	-	1.9	22.1	2.6	-	14.7	34.8	1.8	0.1	
PHF				0.86				0.88				0.89				0.94	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #04 Start Date: 11/13/2008

Location: South Mission Road & SR-76 (Pala Road)/ SR-76 (Mission Road) File Name: 932-03-2

	Northbound				South Mission Road Southbound				SR-76 (Mission Road) Eastbound				SR-76 (Pala Road) Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
16:00	0	0	0	0	27	0	103	0	199	190	0	0	0	170	22	0	711
16:15	0	0	0	0	25	0	121	0	247	202	0	0	0	188	15	0	798
16:30	0	0	0	0	24	0	110	0	182	185	0	0	0	155	30	0	686
16:45	0	0	0	0	23	0	77	0	218	165	0	0	0	212	28	0	723
Total	0	0	0	0	99	0	411	0	846	742	0	0	0	725	95	0	2918
17:00	0	0	0	0	41	0	124	0	220	247	0	0	0	219	33	1	884
17:15	0	0	0	0	38	0	112	0	190	184	0	0	0	165	23	0	712
17:30	0	0	0	0	24	0	81	0	224	217	0	0	0	182	29	0	757
17:45	0	0	0	0	16	0	106	1	176	213	0	0	0	181	17	0	709
Total	0	0	0	0	119	0	423	1	810	861	0	0	0	747	102	1	3062
Grand Total	0	0	0	0	218	0	834	1	1656	1603	0	0	0	1472	197	1	5980
Approach%	-	-	-	-	20.7	-	79.2	0.1	50.8	49.2	-	-	-	88.1	11.8	0.1	
Total%	-	-	-	-	3.6	-	13.9	0.0	27.7	26.8	-	-	-	24.6	3.3	0.0	

Peak hour analysis for the period 16:15 to 17:00

Volume	-	-	-	-	113	-	432	-	867	799	-	-	-	774	106	1	3,091
Approach%	-	-	-	-	20.7	-	79.3	-	52.0	48.0	-	-	-	87.9	12.0	0.1	
Total%	-	-	-	-	3.7	-	14.0	-	28.0	25.8	-	-	-	25.0	3.4	0.0	
PHF				######				0.83				0.89				0.87	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #04 Start Date: 11/13/2008

Location: South Mission Road & SR-76 (Pala Road)/ SR-76 (Mission Road) File Name: 932-03-1

	Northbound				South Mission Road Southbound				SR-76 (Mission Road) Eastbound				SR-76 (Pala Road) Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
7:00	0	0	0	0	23	0	236	0	170	70	0	0	0	197	20	0	716
7:15	0	0	0	0	28	1	184	0	143	124	1	0	0	218	26	0	725
7:30	0	0	0	0	30	0	181	0	104	109	1	0	0	194	20	0	639
7:45	0	0	0	0	22	1	180	0	108	139	0	0	0	219	23	0	692
Total	0	0	0	0	103	2	781	0	525	442	2	0	0	828	89	0	2772
8:00	0	0	0	0	28	2	170	0	151	152	1	0	0	139	12	0	655
8:15	0	0	0	0	16	4	137	0	101	121	0	0	0	155	17	1	551
8:30	0	0	0	0	21	1	139	0	89	100	2	0	0	159	14	0	525
8:45	0	0	0	0	20	4	100	0	112	99	2	0	0	148	12	0	497
Total	0	0	0	0	85	11	546	0	453	472	5	0	0	601	55	1	2228
Grand Total	0	0	0	0	188	13	1327	0	978	914	7	0	0	1429	144	1	5000
Approach%	-	-	-	-	12.3	0.9	86.8	-	51.5	48.1	0.4	-	-	90.8	9.1	0.1	
Total%	-	-	-	-	3.8	0.3	26.5	-	19.6	18.3	0.1	-	-	28.6	2.9	0.0	

Peak hour analysis for the period 07:00 to 07:45

Volume	-	-	-	-	103	2	781	-	525	442	2	-	-	828	89	-	2,772
Approach%	-	-	-	-	11.6	0.2	88.1	-	54.2	45.6	0.2	-	-	90.3	9.7	-	
Total%	-	-	-	-	3.7	0.1	28.2	-	18.9	15.9	0.1	-	-	29.9	3.2	-	
PHF				######				0.86				0.90				0.94	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #06 Start Date: 11/19/2008

Location: Pala Mission Road/ Pala Casino Driveway & SR-76 (Pala Road) File Name: 932-01-2

	Pala Casino Driveway Northbound				Pala Mission Road Southbound				SR-76 (Pala Road) Eastbound				SR-76 (Pala Road) Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
16:00	6	5	3	0	2	4	28	0	43	40	2	0	2	61	2	0	198
16:15	0	0	2	0	1	2	28	0	37	53	5	0	6	47	3	0	184
16:30	1	8	2	0	9	9	51	1	53	45	3	0	2	51	2	0	236
16:45	4	6	2	0	5	4	29	0	32	41	7	0	5	54	2	1	191
Total	11	19	9	0	17	19	136	1	165	179	17	0	15	213	9	1	809
17:00	7	4	0	0	1	7	21	0	43	49	7	0	0	39	2	0	180
17:15	9	2	0	0	0	8	18	0	47	34	5	0	3	54	4	0	184
17:30	3	2	0	0	2	3	33	0	34	46	4	3	3	31	0	0	161
17:45	3	4	0	0	2	5	13	1	20	20	6	1	2	35	3	0	113
Total	22	12	0	0	5	23	85	1	144	149	22	4	8	159	9	0	638
Grand Total	33	31	9	0	22	42	221	2	309	328	39	4	23	372	18	1	1447
Approach%	45.2	42.5	12.3	-	7.7	14.6	77.0	0.7	45.4	48.2	5.7	0.6	5.6	89.9	4.3	0.2	
Total%	2.3	2.1	0.6	-	1.5	2.9	15.3	0.1	21.4	22.7	2.7	0.3	1.6	25.7	1.2	0.1	

Peak hour analysis for the period 16:00 to 16:45

Volume	11	19	9	-	17	19	136	1	165	179	17	-	15	213	9	1	809
Approach%	28.2	48.7	23.1	-	9.8	11.0	78.6	0.6	45.7	49.6	4.7	-	6.3	89.5	3.8	0.4	
Total%	1.4	2.3	1.1	-	2.1	2.3	16.8	0.1	20.4	22.1	2.1	-	1.9	26.3	1.1	0.1	
PHF				0.70				0.62				0.89				0.92	

LOS Engineering, Inc.

5629 Willowmere Lane, San Diego, CA 92130

Counted By: Emp. #06 Start Date: 11/19/2008

Location: Pala Mission Road/ Pala Casino Driveway & SR-76 (Pala Road) File Name: 932-01-1

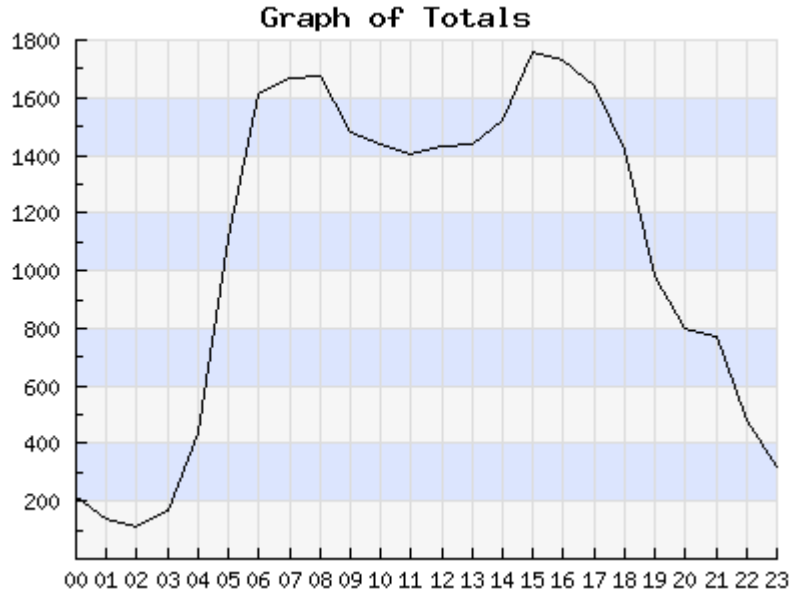
	Pala Casino Driveway Northbound				Pala Mission Road Southbound				SR-76 (Pala Road) Eastbound				SR-76 (Pala Road) Westbound				Vehicle
Start Time	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Interval Total
7:00	2	1	0	0	2	1	22	0	27	29	0	0	0	25	0	0	109
7:15	1	3	1	0	1	2	29	0	11	31	2	0	0	16	1	0	98
7:30	5	0	0	0	3	1	33	0	30	50	2	1	1	15	0	0	140
7:45	3	0	0	0	4	1	34	0	23	38	6	0	1	24	2	0	136
Total	11	4	1	0	10	5	118	0	91	148	10	1	2	80	3	0	483
8:00	1	0	0	0	10	3	28	0	15	26	3	0	1	24	3	0	114
8:15	0	0	0	0	4	3	24	0	13	34	2	0	2	20	4	1	106
8:30	3	2	0	0	4	2	30	1	14	39	0	2	1	21	4	0	120
8:45	4	4	0	1	3	1	21	0	23	22	0	1	0	19	5	0	102
Total	8	6	0	1	21	9	103	1	65	121	5	3	4	84	16	1	442
Grand Total	19	10	1	1	31	14	221	1	156	269	15	4	6	164	19	1	925
Approach%	61.3	32.3	3.2	3.2	11.6	5.2	82.8	0.4	35.1	60.6	3.4	0.9	3.2	86.3	10.0	0.5	
Total%	2.1	1.1	0.1	0.1	3.4	1.5	23.9	0.1	16.9	29.1	1.6	0.4	0.6	17.7	2.1	0.1	

Peak hour analysis for the period 07:30 to 08:15

Volume	9	-	-	-	21	8	119	-	81	148	13	1	5	83	9	1	496
Approach%	100.0	-	-	-	14.2	5.4	80.4	-	33.3	60.9	5.3	0.4	5.1	84.7	9.2	1.0	
Total%	1.8	-	-	-	4.2	1.6	24.0	-	16.3	29.8	2.6	0.2	1.0	16.7	1.8	0.2	
PHF				0.45				0.90				0.73				0.88	

Daily Vehicle Volume Report

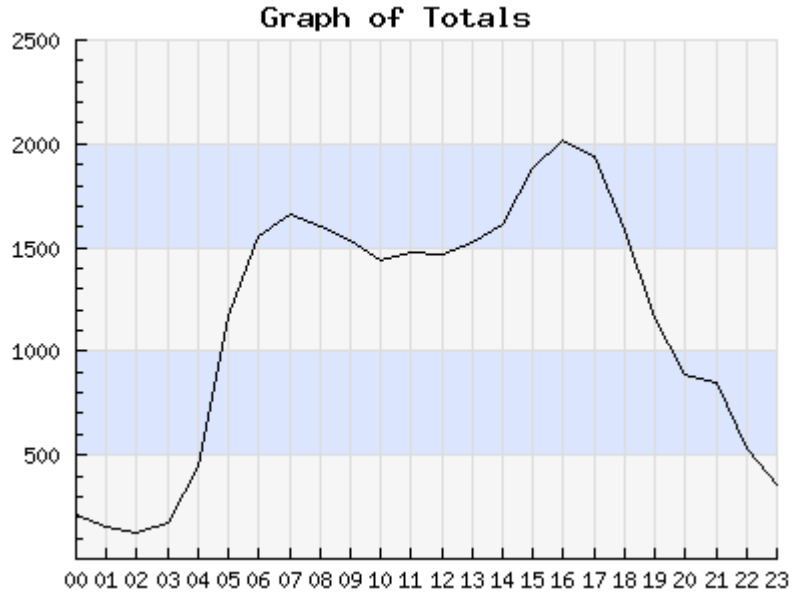
Location:
SR-76 btwn North River Rd & East Vista Way
File Number: 93315
Counter ID: 113
Report Duration:
Wednesday Nov 12, 2008 - 00:00 to
Wednesday Nov 12, 2008 - 23:59
Other Notes:
None at this time



Time	East Bound Volume	West Bound Volume	Total Volume
00:00 - 00:59	115	100	215
01:00 - 01:59	67	73	140
02:00 - 02:59	62	51	113
03:00 - 03:59	41	128	169
04:00 - 04:59	115	322	437
05:00 - 05:59	323	791	1114
06:00 - 06:59	572	1042	1614
07:00 - 07:59	670	996	1666
08:00 - 08:59	618	1055	1673
09:00 - 09:59	595	882	1477
10:00 - 10:59	609	827	1436
11:00 - 11:59	675	732	1407
12:00 - 12:59	781	648	1429
13:00 - 13:59	782	658	1440
14:00 - 14:59	945	578	1523
15:00 - 15:59	1117	642	1759
16:00 - 16:59	1157	575	1732
17:00 - 17:59	1081	559	1640
18:00 - 18:59	1129	287	1416
19:00 - 19:59	705	278	983
20:00 - 20:59	497	304	801
21:00 - 21:59	516	255	771
22:00 - 22:59	306	176	482
23:00 - 23:59	152	168	320
Total	**13630**	**12127**	**25757**
AM Peak	6:30	8:00	6:30
Hour	7:29	8:59	7:29
Volume	707	1055	1696
PM Peak	16:15	12:15	15:15
Hour	17:14	13:14	16:14
Volume	1164	660	1775

Daily Vehicle Volume Report

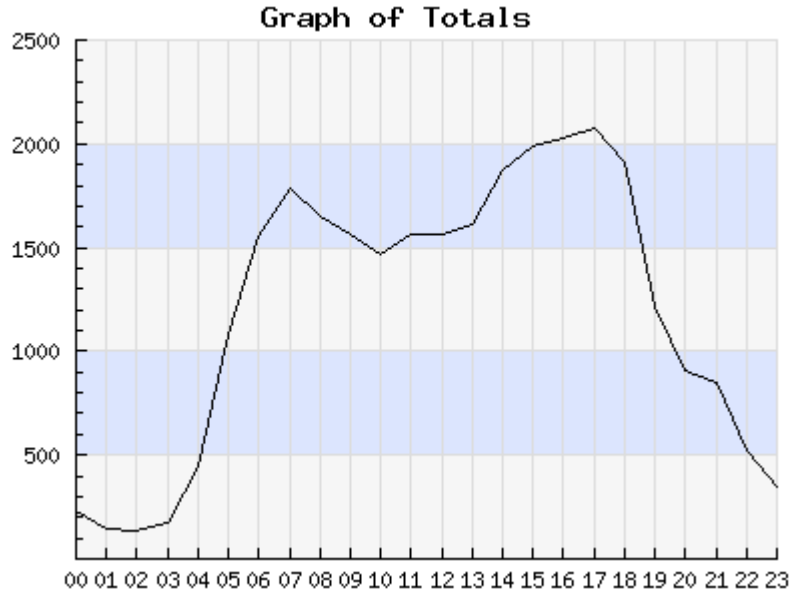
Location:
SR-76 btwn Olive Hill Rd & North River Rd
File Number: 93314
Counter ID: 106
Report Duration:
Tuesday Nov 11, 2008 - 15:00 to
Wednesday Nov 12, 2008 - 14:59
Other Notes:
None at this time



Time	East Bound Volume	West Bound Volume	Total Volume
00:00 - 00:59	111	105	216
01:00 - 01:59	72	78	150
02:00 - 02:59	67	54	121
03:00 - 03:59	43	134	177
04:00 - 04:59	109	335	444
05:00 - 05:59	333	839	1172
06:00 - 06:59	475	1078	1553
07:00 - 07:59	598	1062	1660
08:00 - 08:59	550	1052	1602
09:00 - 09:59	639	892	1531
10:00 - 10:59	586	851	1437
11:00 - 11:59	664	817	1481
12:00 - 12:59	833	632	1465
13:00 - 13:59	854	667	1521
14:00 - 14:59	1016	599	1615
15:00 - 15:59	1134	749	1883
16:00 - 16:59	1185	831	2016
17:00 - 17:59	1180	762	1942
18:00 - 18:59	1033	551	1584
19:00 - 19:59	722	437	1159
20:00 - 20:59	531	361	892
21:00 - 21:59	499	353	852
22:00 - 22:59	285	246	531
23:00 - 23:59	177	176	353
Total	**13696**	**13661**	**27357**
AM Peak	11:00	5:45	7:00
Hour	11:59	6:44	7:59
Volume	664	1092	1660
PM Peak	17:15	16:15	16:00
Hour	18:14	17:14	16:59
Volume	1202	844	2016

Daily Vehicle Volume Report

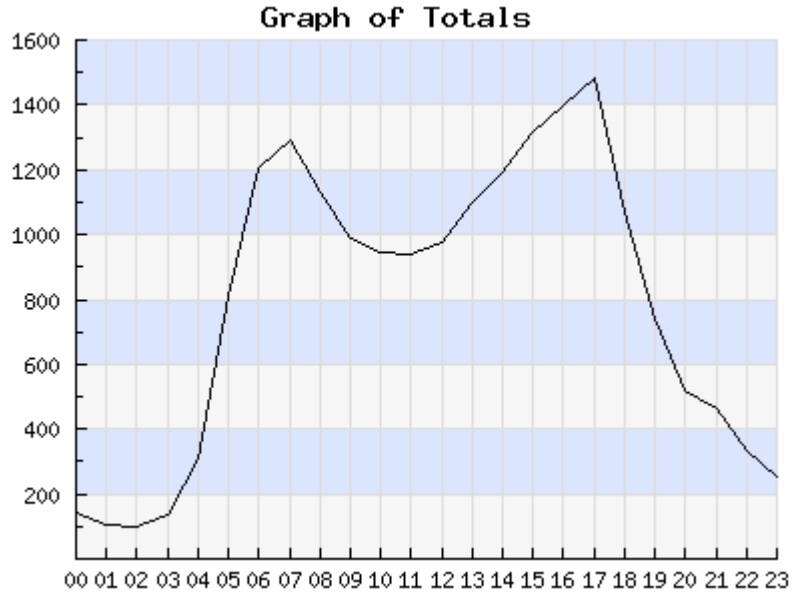
Location:
SR-76 btwn South Mission Rd & Olive Hill Rd
File Number: 93313
Counter ID: 104
Report Duration:
Wednesday Nov 12, 2008 - 00:00 to
Wednesday Nov 12, 2008 - 23:59
Other Notes:
None at this time



Time	East Bound Volume	West Bound Volume	Total Volume
00:00 - 00:59	112	116	228
01:00 - 01:59	77	66	143
02:00 - 02:59	67	69	136
03:00 - 03:59	136	41	177
04:00 - 04:59	344	103	447
05:00 - 05:59	918	165	1083
06:00 - 06:59	1382	172	1554
07:00 - 07:59	1341	447	1788
08:00 - 08:59	1050	601	1651
09:00 - 09:59	964	601	1565
10:00 - 10:59	867	600	1467
11:00 - 11:59	904	662	1566
12:00 - 12:59	813	752	1565
13:00 - 13:59	829	787	1616
14:00 - 14:59	888	982	1870
15:00 - 15:59	817	1168	1985
16:00 - 16:59	817	1209	2026
17:00 - 17:59	835	1245	2080
18:00 - 18:59	562	1348	1910
19:00 - 19:59	456	761	1217
20:00 - 20:59	407	499	906
21:00 - 21:59	339	513	852
22:00 - 22:59	203	323	526
23:00 - 23:59	189	156	345
Total	**15317**	**13386**	**28703**
AM Peak	6:00	11:00	7:00
Hour	6:59	11:59	7:59
Volume	1382	662	1788
PM Peak	13:45	18:00	16:45
Hour	14:44	18:59	17:44
Volume	924	1348	2094

Daily Vehicle Volume Report

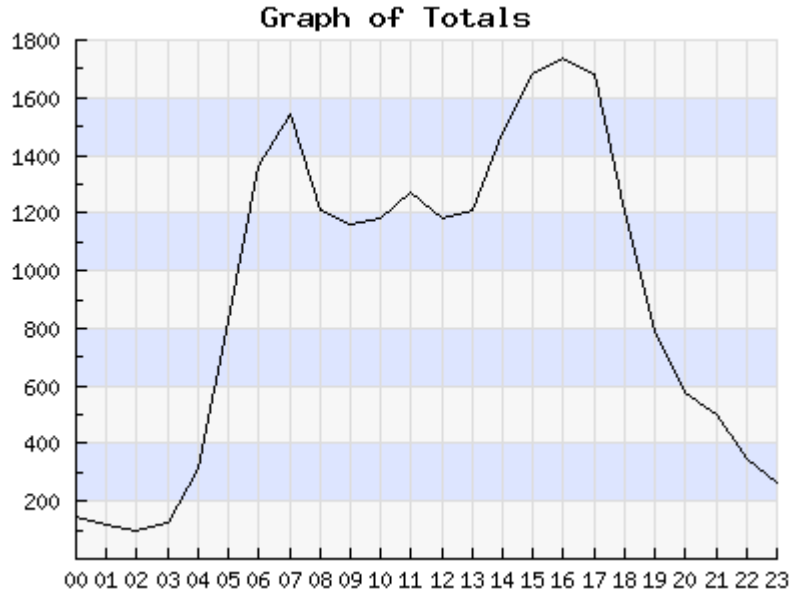
Location:
SR-76 btwn Via Monserate & South Mission Road
File Number: 93212
Counter ID: 111
Report Duration:
Tuesday Nov 18, 2008 - 09:30 to
Wednesday Nov 19, 2008 - 09:29
Other Notes:
None at this time



Time	East Bound Volume	West Bound Volume	Total Volume
00:00 - 00:59	68	75	143
01:00 - 01:59	53	54	107
02:00 - 02:59	46	55	101
03:00 - 03:59	37	98	135
04:00 - 04:59	87	219	306
05:00 - 05:59	233	576	809
06:00 - 06:59	428	775	1203
07:00 - 07:59	534	756	1290
08:00 - 08:59	506	622	1128
09:00 - 09:59	480	507	987
10:00 - 10:59	491	455	946
11:00 - 11:59	465	472	937
12:00 - 12:59	560	419	979
13:00 - 13:59	623	477	1100
14:00 - 14:59	614	576	1190
15:00 - 15:59	827	487	1314
16:00 - 16:59	869	530	1399
17:00 - 17:59	849	632	1481
18:00 - 18:59	697	369	1066
19:00 - 19:59	455	288	743
20:00 - 20:59	308	214	522
21:00 - 21:59	277	185	462
22:00 - 22:59	179	153	332
23:00 - 23:59	124	127	251
Total	**9810**	**9121**	**18931**
AM Peak	7:15	5:45	7:15
Hour	8:14	6:44	8:14
Volume	582	775	1314
PM Peak	15:30	17:00	17:00
Hour	16:29	17:59	17:59
Volume	886	632	1481

Daily Vehicle Volume Report

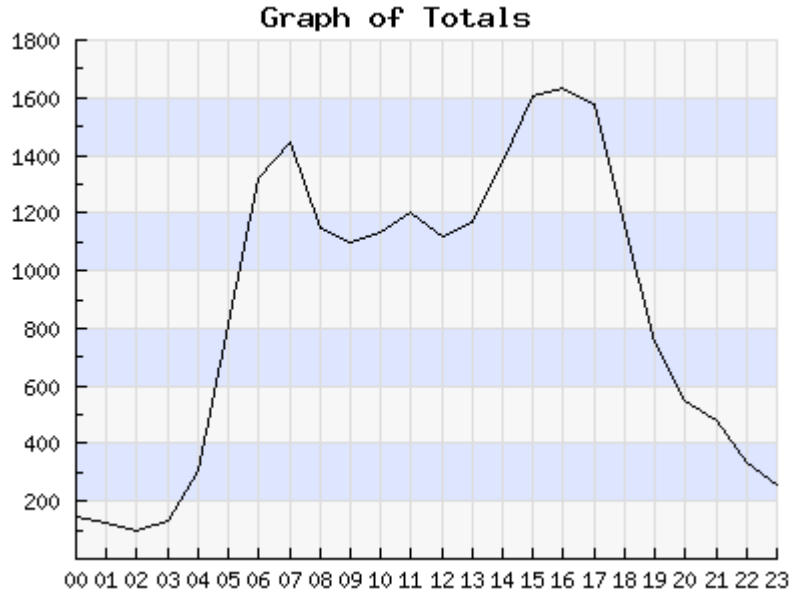
Location:
SR-76 (Pala Rd) btwn Via Monserate & Gird Road
File Number: 94001
Counter ID: 202/204
Report Duration:
Tuesday Jan 06, 2009 - 00:00 to
Tuesday Jan 06, 2009 - 23:59
Other Notes:
None at this time



Time	East Bound Volume	West Bound Volume	Total Volume
00:00 - 00:59	60	89	149
01:00 - 01:59	55	63	118
02:00 - 02:59	37	57	94
03:00 - 03:59	28	100	128
04:00 - 04:59	102	214	316
05:00 - 05:59	259	570	829
06:00 - 06:59	461	904	1365
07:00 - 07:59	651	889	1540
08:00 - 08:59	563	648	1211
09:00 - 09:59	579	583	1162
10:00 - 10:59	578	600	1178
11:00 - 11:59	599	673	1272
12:00 - 12:59	616	568	1184
13:00 - 13:59	645	567	1212
14:00 - 14:59	825	655	1480
15:00 - 15:59	913	769	1682
16:00 - 16:59	986	752	1738
17:00 - 17:59	936	747	1683
18:00 - 18:59	786	416	1202
19:00 - 19:59	469	326	795
20:00 - 20:59	332	248	580
21:00 - 21:59	257	240	497
22:00 - 22:59	186	160	346
23:00 - 23:59	130	134	264
Total	**11053**	**10972**	**22025**
AM Peak	7:15	6:45	7:00
Hour	8:14	7:44	7:59
Volume	676	931	1540
PM Peak	16:00	15:30	15:30
Hour	16:59	16:29	16:29
Volume	986	799	1762

Daily Vehicle Volume Report

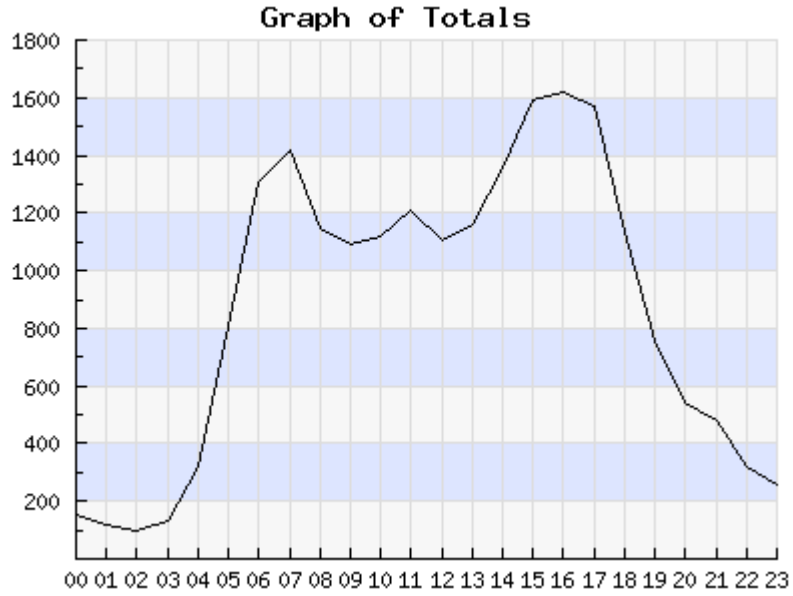
Location:
SR-76 (Pala Rd) between Gird Rd & Sage Rd
File Number: 94002
Counter ID: 104
Report Duration:
Tuesday Jan 06, 2009 - 00:00 to
Tuesday Jan 06, 2009 - 23:59
Other Notes:
None at this time



Time	East Bound Volume	West Bound Volume	Total Volume
00:00 - 00:59	59	90	149
01:00 - 01:59	57	65	122
02:00 - 02:59	34	62	96
03:00 - 03:59	32	99	131
04:00 - 04:59	101	208	309
05:00 - 05:59	262	548	810
06:00 - 06:59	464	854	1318
07:00 - 07:59	618	831	1449
08:00 - 08:59	549	595	1144
09:00 - 09:59	561	538	1099
10:00 - 10:59	561	569	1130
11:00 - 11:59	568	635	1203
12:00 - 12:59	573	546	1119
13:00 - 13:59	598	569	1167
14:00 - 14:59	764	612	1376
15:00 - 15:59	834	769	1603
16:00 - 16:59	893	741	1634
17:00 - 17:59	829	747	1576
18:00 - 18:59	709	442	1151
19:00 - 19:59	431	321	752
20:00 - 20:59	302	246	548
21:00 - 21:59	233	244	477
22:00 - 22:59	170	165	335
23:00 - 23:59	118	141	259
Total	**10320**	**10637**	**20957**
AM Peak	7:15	6:15	7:00
Hour	8:14	7:14	7:59
Volume	656	862	1449
PM Peak	16:00	15:15	15:30
Hour	16:59	16:14	16:29
Volume	893	815	1690

Daily Vehicle Volume Report

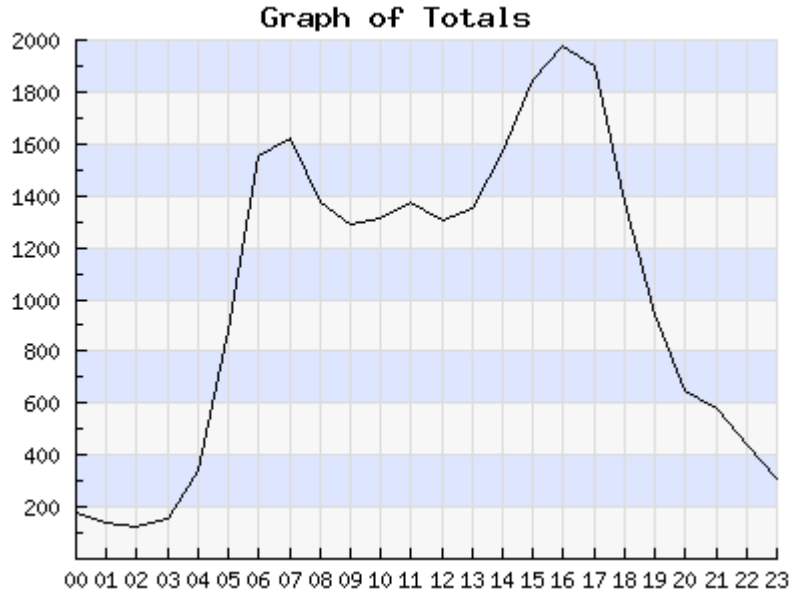
Location:
SR-76 (Pala Rd) between Sage Rd & Old Highway 395
File Number: 94003
Counter ID: 107
Report Duration:
Tuesday Jan 06, 2009 - 00:00 to
Tuesday Jan 06, 2009 - 23:59
Other Notes:
None at this time



Time	East Bound Volume	West Bound Volume	Total Volume
00:00 - 00:59	63	93	156
01:00 - 01:59	56	64	120
02:00 - 02:59	35	59	94
03:00 - 03:59	31	102	133
04:00 - 04:59	103	214	317
05:00 - 05:59	256	553	809
06:00 - 06:59	451	857	1308
07:00 - 07:59	615	802	1417
08:00 - 08:59	548	602	1150
09:00 - 09:59	556	536	1092
10:00 - 10:59	552	567	1119
11:00 - 11:59	577	630	1207
12:00 - 12:59	560	545	1105
13:00 - 13:59	586	573	1159
14:00 - 14:59	767	588	1355
15:00 - 15:59	818	776	1594
16:00 - 16:59	890	726	1616
17:00 - 17:59	828	743	1571
18:00 - 18:59	686	448	1134
19:00 - 19:59	439	318	757
20:00 - 20:59	299	245	544
21:00 - 21:59	232	247	479
22:00 - 22:59	163	160	323
23:00 - 23:59	120	138	258
Total	**10231**	**10586**	**20817**
AM Peak	7:15	6:00	7:00
Hour	8:14	6:59	7:59
Volume	660	857	1417
PM Peak	16:00	15:30	15:30
Hour	16:59	16:29	16:29
Volume	890	797	1658

Daily Vehicle Volume Report

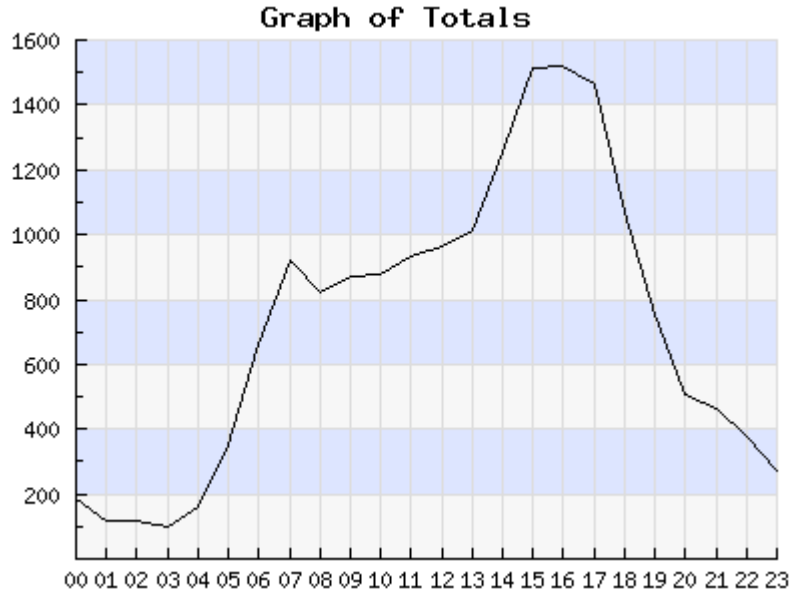
Location:
SR-76 (Pala Rd) btwn Old Hwy 395 & I-15 SB Ramps
File Number: 94004
Counter ID: 105/114
Report Duration:
Tuesday Jan 06, 2009 - 00:00 to
Tuesday Jan 06, 2009 - 23:59
Other Notes:
None at this time



Time	East Bound Volume	West Bound Volume	Total Volume
00:00 - 00:59	65	114	179
01:00 - 01:59	59	77	136
02:00 - 02:59	43	84	127
03:00 - 03:59	42	116	158
04:00 - 04:59	134	208	342
05:00 - 05:59	331	549	880
06:00 - 06:59	662	887	1549
07:00 - 07:59	829	796	1625
08:00 - 08:59	725	652	1377
09:00 - 09:59	699	591	1290
10:00 - 10:59	701	613	1314
11:00 - 11:59	710	662	1372
12:00 - 12:59	685	623	1308
13:00 - 13:59	691	664	1355
14:00 - 14:59	840	724	1564
15:00 - 15:59	973	875	1848
16:00 - 16:59	1034	940	1974
17:00 - 17:59	949	952	1901
18:00 - 18:59	763	610	1373
19:00 - 19:59	497	442	939
20:00 - 20:59	331	314	645
21:00 - 21:59	253	324	577
22:00 - 22:59	211	229	440
23:00 - 23:59	127	179	306
Total	**12354**	**12225**	**24579**
AM Peak	7:15	6:15	7:00
Hour	8:14	7:14	7:59
Volume	866	897	1625
PM Peak	16:00	16:30	16:15
Hour	16:59	17:29	17:14
Volume	1034	967	1981

Daily Vehicle Volume Report

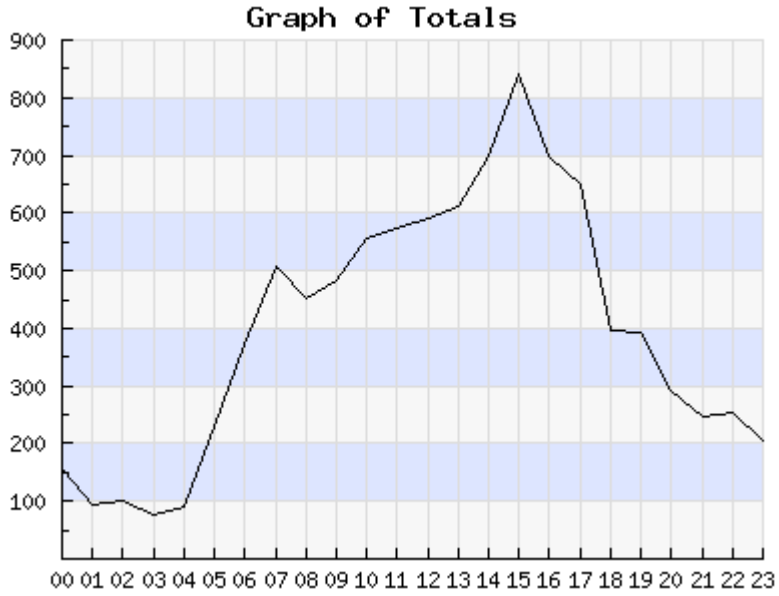
Location:
SR-76 (Pala Rd) between I-15 SB & I-15 NB Ramps
File Number: 94005
Counter ID: 113
Report Duration:
Tuesday Jan 06, 2009 - 00:00 to
Tuesday Jan 06, 2009 - 23:59
Other Notes:
None at this time



Time	East Bound Volume	West Bound Volume	Total Volume
00:00 - 00:59	73	111	184
01:00 - 01:59	56	60	116
02:00 - 02:59	50	68	118
03:00 - 03:59	35	61	96
04:00 - 04:59	99	62	161
05:00 - 05:59	245	108	353
06:00 - 06:59	448	214	662
07:00 - 07:59	586	335	921
08:00 - 08:59	529	293	822
09:00 - 09:59	561	308	869
10:00 - 10:59	574	306	880
11:00 - 11:59	588	345	933
12:00 - 12:59	588	376	964
13:00 - 13:59	602	409	1011
14:00 - 14:59	761	491	1252
15:00 - 15:59	857	656	1513
16:00 - 16:59	894	624	1518
17:00 - 17:59	847	615	1462
18:00 - 18:59	693	378	1071
19:00 - 19:59	469	285	754
20:00 - 20:59	305	199	504
21:00 - 21:59	255	211	466
22:00 - 22:59	199	175	374
23:00 - 23:59	131	139	270
Total	**10445**	**6829**	**17274**
AM Peak	10:45	10:45	10:45
Hour	11:44	11:44	11:44
Volume	604	346	950
PM Peak	15:45	16:30	16:30
Hour	16:44	17:29	17:29
Volume	903	670	1521

Daily Vehicle Volume Report

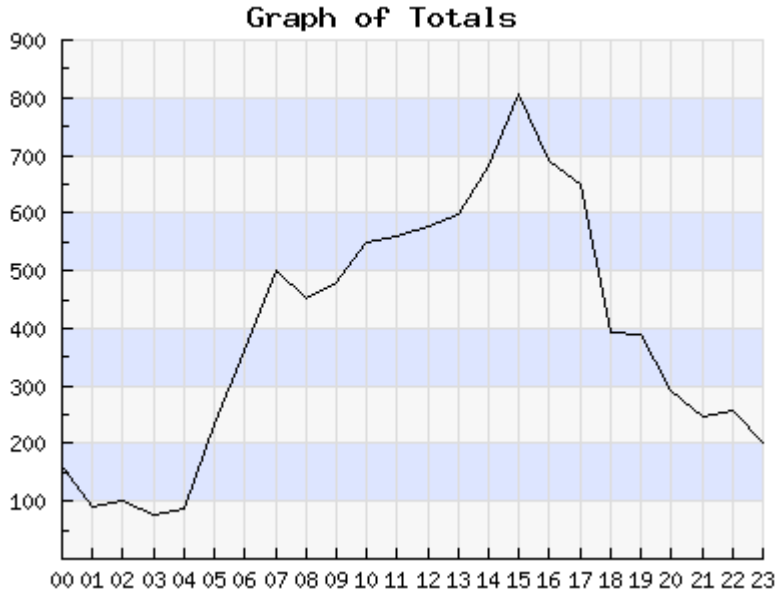
Location:
SR-76 (Pala Rd) between I-15 NB Ramps & Pankey Rd
File Number: 94006
Counter ID: 109
Report Duration:
Tuesday Jan 06, 2009 - 00:00 to
Tuesday Jan 06, 2009 - 23:59
Other Notes:
None at this time



Time	East Bound Volume	West Bound Volume	Total Volume
00:00 - 00:59	33	125	158
01:00 - 01:59	26	67	93
02:00 - 02:59	31	69	100
03:00 - 03:59	18	60	78
04:00 - 04:59	33	57	90
05:00 - 05:59	151	80	231
06:00 - 06:59	232	141	373
07:00 - 07:59	283	224	507
08:00 - 08:59	282	171	453
09:00 - 09:59	302	181	483
10:00 - 10:59	342	215	557
11:00 - 11:59	351	222	573
12:00 - 12:59	339	251	590
13:00 - 13:59	308	303	611
14:00 - 14:59	332	367	699
15:00 - 15:59	324	516	840
16:00 - 16:59	296	402	698
17:00 - 17:59	283	368	651
18:00 - 18:59	211	184	395
19:00 - 19:59	185	207	392
20:00 - 20:59	137	156	293
21:00 - 21:59	106	141	247
22:00 - 22:59	117	135	252
23:00 - 23:59	63	142	205
Total	**4785**	**4784**	**9569**
AM Peak	10:15	7:00	10:15
Hour	11:14	7:59	11:14
Volume	364	224	580
PM Peak	13:45	14:45	14:45
Hour	14:44	15:44	15:44
Volume	341	529	846

Daily Vehicle Volume Report

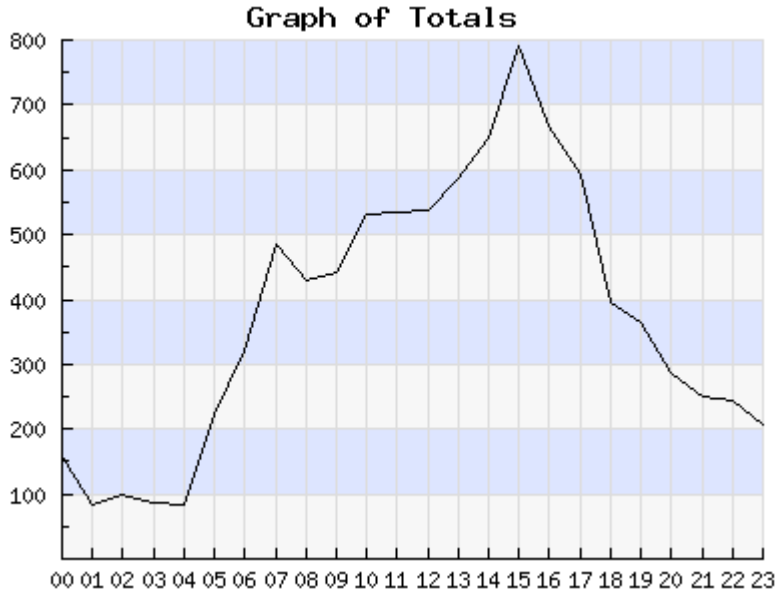
Location:
SR-76 (Pala Rd) between Pankey Rd & Rice Cyn Rd
File Number: 94007
Counter ID: 108
Report Duration:
Tuesday Jan 06, 2009 - 00:00 to
Tuesday Jan 06, 2009 - 23:59
Other Notes:
None at this time



Time	East Bound Volume	West Bound Volume	Total Volume
00:00 - 00:59	34	126	160
01:00 - 01:59	26	66	92
02:00 - 02:59	33	68	101
03:00 - 03:59	19	59	78
04:00 - 04:59	33	55	88
05:00 - 05:59	155	77	232
06:00 - 06:59	220	140	360
07:00 - 07:59	278	221	499
08:00 - 08:59	290	163	453
09:00 - 09:59	299	180	479
10:00 - 10:59	342	208	550
11:00 - 11:59	349	210	559
12:00 - 12:59	338	240	578
13:00 - 13:59	307	289	596
14:00 - 14:59	328	353	681
15:00 - 15:59	324	483	807
16:00 - 16:59	302	390	692
17:00 - 17:59	295	355	650
18:00 - 18:59	212	182	394
19:00 - 19:59	189	201	390
20:00 - 20:59	144	149	293
21:00 - 21:59	107	139	246
22:00 - 22:59	122	136	258
23:00 - 23:59	65	138	203
Total	**4811**	**4628**	**9439**
AM Peak	10:15	7:00	10:15
Hour	11:14	7:59	11:14
Volume	363	221	576
PM Peak	14:15	14:45	14:45
Hour	15:14	15:44	15:44
Volume	339	515	836

Daily Vehicle Volume Report

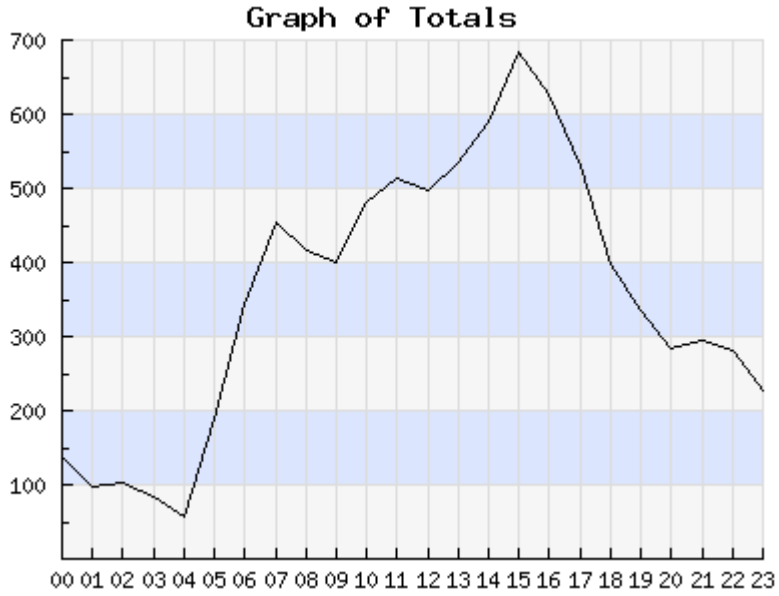
Location:
SR-76 (Pala Rd) between Rice Cyn Rd & Couser Cyn Rd
File Number: 94008
Counter ID: 110
Report Duration:
Tuesday Jan 06, 2009 - 00:00 to
Tuesday Jan 06, 2009 - 23:59
Other Notes:
None at this time



Time	East Bound Volume	West Bound Volume	Total Volume
00:00 - 00:59	32	125	157
01:00 - 01:59	19	63	82
02:00 - 02:59	33	65	98
03:00 - 03:59	21	64	85
04:00 - 04:59	30	53	83
05:00 - 05:59	146	76	222
06:00 - 06:59	197	124	321
07:00 - 07:59	269	216	485
08:00 - 08:59	272	158	430
09:00 - 09:59	286	156	442
10:00 - 10:59	328	203	531
11:00 - 11:59	336	197	533
12:00 - 12:59	317	220	537
13:00 - 13:59	298	290	588
14:00 - 14:59	311	339	650
15:00 - 15:59	293	499	792
16:00 - 16:59	284	383	667
17:00 - 17:59	265	327	592
18:00 - 18:59	210	184	394
19:00 - 19:59	168	197	365
20:00 - 20:59	135	153	288
21:00 - 21:59	103	147	250
22:00 - 22:59	117	126	243
23:00 - 23:59	67	139	206
Total	**4537**	**4504**	**9041**
AM Peak	10:30	7:00	10:15
Hour	11:29	7:59	11:14
Volume	348	216	558
PM Peak	13:45	14:45	15:00
Hour	14:44	15:44	15:59
Volume	323	500	792

Daily Vehicle Volume Report

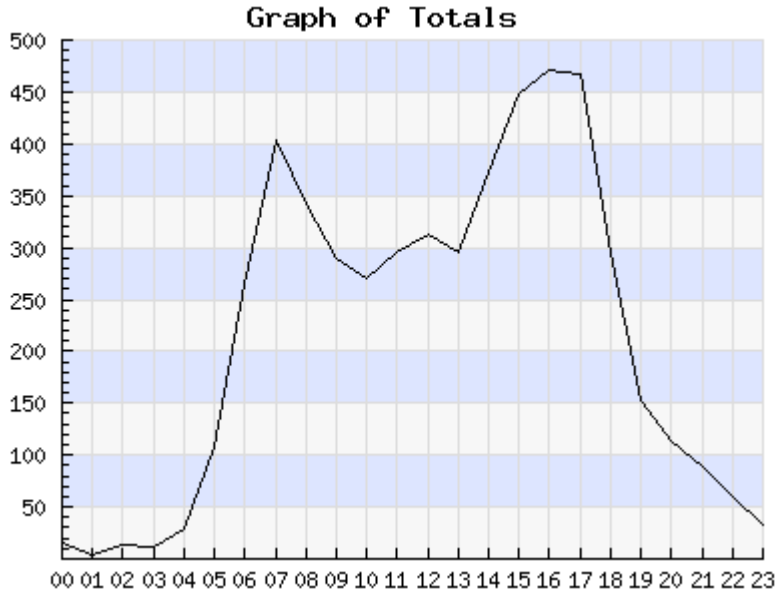
Location:
SR-76 btwn Couser Cyn Rd & Pala Mission Rd
File Number: 93310
Counter ID: 108
Report Duration:
Wednesday Nov 12, 2008 - 00:00 to
Wednesday Nov 12, 2008 - 23:59
Other Notes:
None at this time



Time	East Bound Volume	West Bound Volume	Total Volume
00:00 - 00:59	111	26	137
01:00 - 01:59	75	23	98
02:00 - 02:59	72	31	103
03:00 - 03:59	70	15	85
04:00 - 04:59	43	15	58
05:00 - 05:59	72	118	190
06:00 - 06:59	121	222	343
07:00 - 07:59	172	281	453
08:00 - 08:59	154	261	415
09:00 - 09:59	146	255	401
10:00 - 10:59	157	325	482
11:00 - 11:59	197	316	513
12:00 - 12:59	200	296	496
13:00 - 13:59	246	288	534
14:00 - 14:59	328	261	589
15:00 - 15:59	380	303	683
16:00 - 16:59	330	298	628
17:00 - 17:59	278	251	529
18:00 - 18:59	191	206	397
19:00 - 19:59	156	180	336
20:00 - 20:59	156	129	285
21:00 - 21:59	165	129	294
22:00 - 22:59	166	115	281
23:00 - 23:59	163	65	228
Total	**4149**	**4409**	**8558**
AM Peak	11:00	10:00	11:00
Hour	11:59	10:59	11:59
Volume	197	325	513
PM Peak	14:30	15:30	15:00
Hour	15:29	16:29	15:59
Volume	392	340	683

Daily Vehicle Volume Report

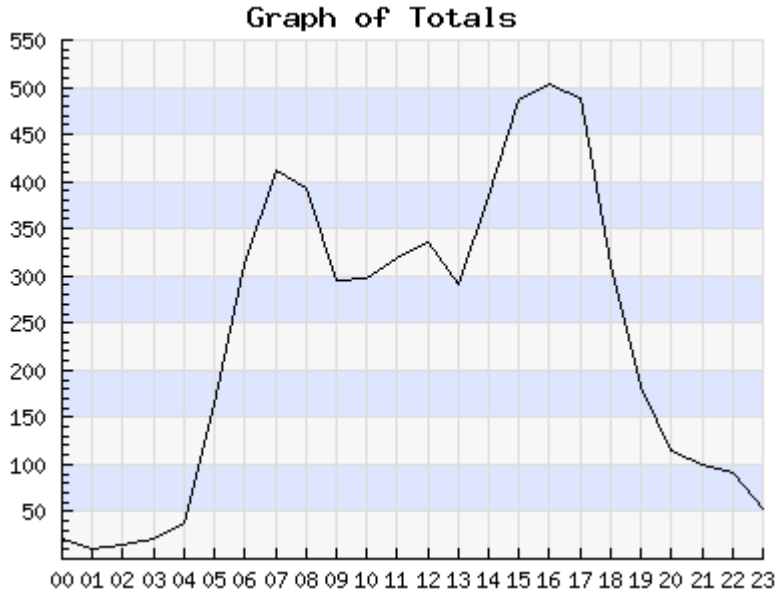
Location:
Old Highway 395 btwn East Misssion Rd & Reche Rd
File Number: 94010
Counter ID: 205
Report Duration:
Tuesday Jan 06, 2009 - 00:00 to
Tuesday Jan 06, 2009 - 23:59
Other Notes:
None at this time



Time	North Bound Volume	South Bound Volume	Total Volume
00:00 - 00:59	9	6	15
01:00 - 01:59	2	2	4
02:00 - 02:59	8	5	13
03:00 - 03:59	4	7	11
04:00 - 04:59	18	11	29
05:00 - 05:59	56	52	108
06:00 - 06:59	109	156	265
07:00 - 07:59	211	192	403
08:00 - 08:59	203	138	341
09:00 - 09:59	156	134	290
10:00 - 10:59	144	127	271
11:00 - 11:59	155	140	295
12:00 - 12:59	146	166	312
13:00 - 13:59	142	154	296
14:00 - 14:59	169	204	373
15:00 - 15:59	220	228	448
16:00 - 16:59	255	217	472
17:00 - 17:59	267	201	468
18:00 - 18:59	127	169	296
19:00 - 19:59	61	91	152
20:00 - 20:59	36	78	114
21:00 - 21:59	31	57	88
22:00 - 22:59	22	37	59
23:00 - 23:59	6	26	32
Total	**2557**	**2598**	**5155**
AM Peak	7:30	6:45	7:00
Hour	8:29	7:44	7:59
Volume	225	196	403
PM Peak	16:30	15:00	16:30
Hour	17:29	15:59	17:29
Volume	281	228	505

Daily Vehicle Volume Report

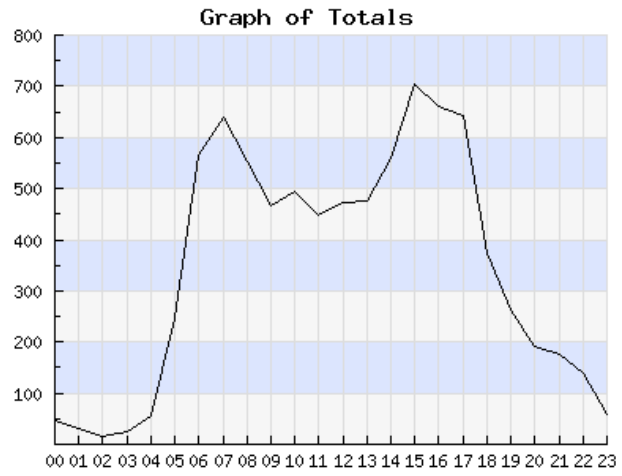
Location:
Old Highway 395 btwn Reche Rd & Stewart Cyn Rd
File Number: 94011
Counter ID: 208
Report Duration:
Tuesday Jan 06, 2009 - 00:00 to
Tuesday Jan 06, 2009 - 23:59
Other Notes:
None at this time



Time	North Bound Volume	South Bound Volume	Total Volume
00:00 - 00:59	19	3	22
01:00 - 01:59	5	5	10
02:00 - 02:59	9	6	15
03:00 - 03:59	10	12	22
04:00 - 04:59	9	29	38
05:00 - 05:59	45	119	164
06:00 - 06:59	94	219	313
07:00 - 07:59	196	217	413
08:00 - 08:59	174	218	392
09:00 - 09:59	149	146	295
10:00 - 10:59	140	158	298
11:00 - 11:59	148	171	319
12:00 - 12:59	158	177	335
13:00 - 13:59	158	133	291
14:00 - 14:59	207	178	385
15:00 - 15:59	286	201	487
16:00 - 16:59	329	174	503
17:00 - 17:59	302	187	489
18:00 - 18:59	190	123	313
19:00 - 19:59	115	67	182
20:00 - 20:59	70	44	114
21:00 - 21:59	71	29	100
22:00 - 22:59	57	35	92
23:00 - 23:59	31	23	54
Total	**2972**	**2674**	**5646**
AM Peak	7:00	7:15	7:15
Hour	7:59	8:14	8:14
Volume	196	244	426
PM Peak	16:15	15:15	16:15
Hour	17:14	16:14	17:14
Volume	367	211	537

Daily Vehicle Volume Report

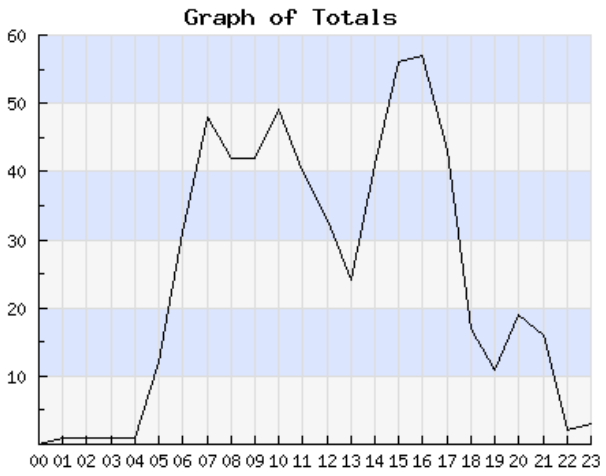
Location:
Old Hwy 395 btwn Pala Mesa Dr & SR-76 (Pala Rd)
File Number: 94014
Counter ID: 210
Report Duration:
Thursday Dec 11, 2008 - 00:00 to
Thursday Dec 11, 2008 - 23:59
Other Notes:
None at this time



Time	North Bound Volume	South Bound Volume	Total Volume
00:00 - 00:59	30	17	47
01:00 - 01:59	21	9	30
02:00 - 02:59	4	11	15
03:00 - 03:59	5	20	25
04:00 - 04:59	11	46	57
05:00 - 05:59	38	208	246
06:00 - 06:59	148	416	564
07:00 - 07:59	246	394	640
08:00 - 08:59	230	323	553
09:00 - 09:59	200	267	467
10:00 - 10:59	207	286	493
11:00 - 11:59	192	257	449
12:00 - 12:59	251	223	474
13:00 - 13:59	273	202	475
14:00 - 14:59	325	235	560
15:00 - 15:59	375	328	703
16:00 - 16:59	433	229	662
17:00 - 17:59	375	266	641
18:00 - 18:59	310	65	375
19:00 - 19:59	193	69	262
20:00 - 20:59	130	62	192
21:00 - 21:59	119	57	176
22:00 - 22:59	85	53	138
23:00 - 23:59	51	7	58
Total	**4252**	**4050**	**8302**
AM Peak	7:00	6:00	7:00
Hour	7:59	6:59	7:59
Volume	246	416	640
PM Peak	15:45	15:00	15:30
Hour	16:44	15:59	16:29
Volume	472	328	720

Daily Vehicle Volume Report

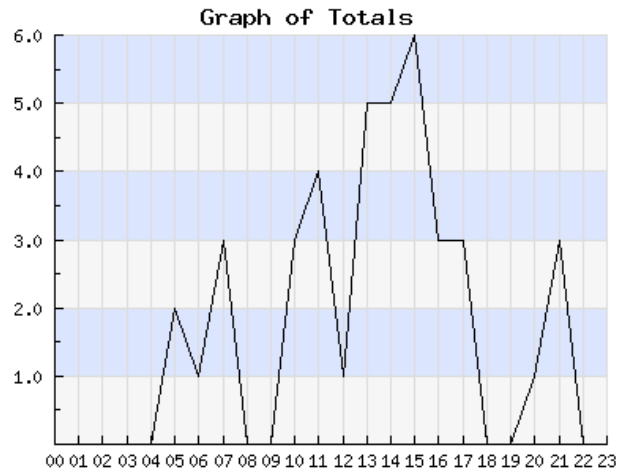
Location:
Stewart Cyn Rd btwn Old Hwy 395 & Pankey Rd
File Number: 94021
Counter ID: 106
Report Duration:
Thursday Dec 11, 2008 - 00:00 to
Thursday Dec 11, 2008 - 23:59
Other Notes:
None at this time



Time	East Bound Volume	West Bound Volume	Total Volume
00:00 - 00:59	0	0	0
01:00 - 01:59	1	0	1
02:00 - 02:59	1	0	1
03:00 - 03:59	0	1	1
04:00 - 04:59	1	0	1
05:00 - 05:59	5	7	12
06:00 - 06:59	15	16	31
07:00 - 07:59	23	25	48
08:00 - 08:59	23	19	42
09:00 - 09:59	18	24	42
10:00 - 10:59	24	25	49
11:00 - 11:59	21	19	40
12:00 - 12:59	18	15	33
13:00 - 13:59	12	12	24
14:00 - 14:59	19	22	41
15:00 - 15:59	31	25	56
16:00 - 16:59	17	40	57
17:00 - 17:59	21	22	43
18:00 - 18:59	11	6	17
19:00 - 19:59	7	4	11
20:00 - 20:59	14	5	19
21:00 - 21:59	12	4	16
22:00 - 22:59	0	2	2
23:00 - 23:59	2	1	3
Total	**296**	**294**	**590**
AM Peak	7:45	10:15	10:15
Hour	8:44	11:14	11:14
Volume	27	27	54
PM Peak	15:15	16:15	16:15
Hour	16:14	17:14	17:14
Volume	32	41	62

Daily Vehicle Volume Report

Location:
Pankey Road south of Stewart Canyon Road
File Number: 94023
Counter ID: 110
Report Duration:
Thursday Dec 11, 2008 - 00:00 to
Thursday Dec 11, 2008 - 23:59
Other Notes:
None at this time



Time	North Bound Volume	South Bound Volume	Total Volume
00:00 - 00:59	0	0	0
01:00 - 01:59	0	0	0
02:00 - 02:59	0	0	0
03:00 - 03:59	0	0	0
04:00 - 04:59	0	0	0
05:00 - 05:59	1	1	2
06:00 - 06:59	1	0	1
07:00 - 07:59	2	1	3
08:00 - 08:59	0	0	0
09:00 - 09:59	0	0	0
10:00 - 10:59	1	2	3
11:00 - 11:59	2	2	4
12:00 - 12:59	1	0	1
13:00 - 13:59	2	3	5
14:00 - 14:59	3	2	5
15:00 - 15:59	3	3	6
16:00 - 16:59	1	2	3
17:00 - 17:59	2	1	3
18:00 - 18:59	0	0	0
19:00 - 19:59	0	0	0
20:00 - 20:59	0	1	1
21:00 - 21:59	1	2	3
22:00 - 22:59	0	0	0
23:00 - 23:59	0	0	0
Total	**20**	**20**	**40**
AM Peak	10:30	10:15	10:15
Hour	11:29	11:14	11:14
Volume	3	3	5
PM Peak	14:00	12:45	14:30
Hour	14:59	13:44	15:29
Volume	3	3	6

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

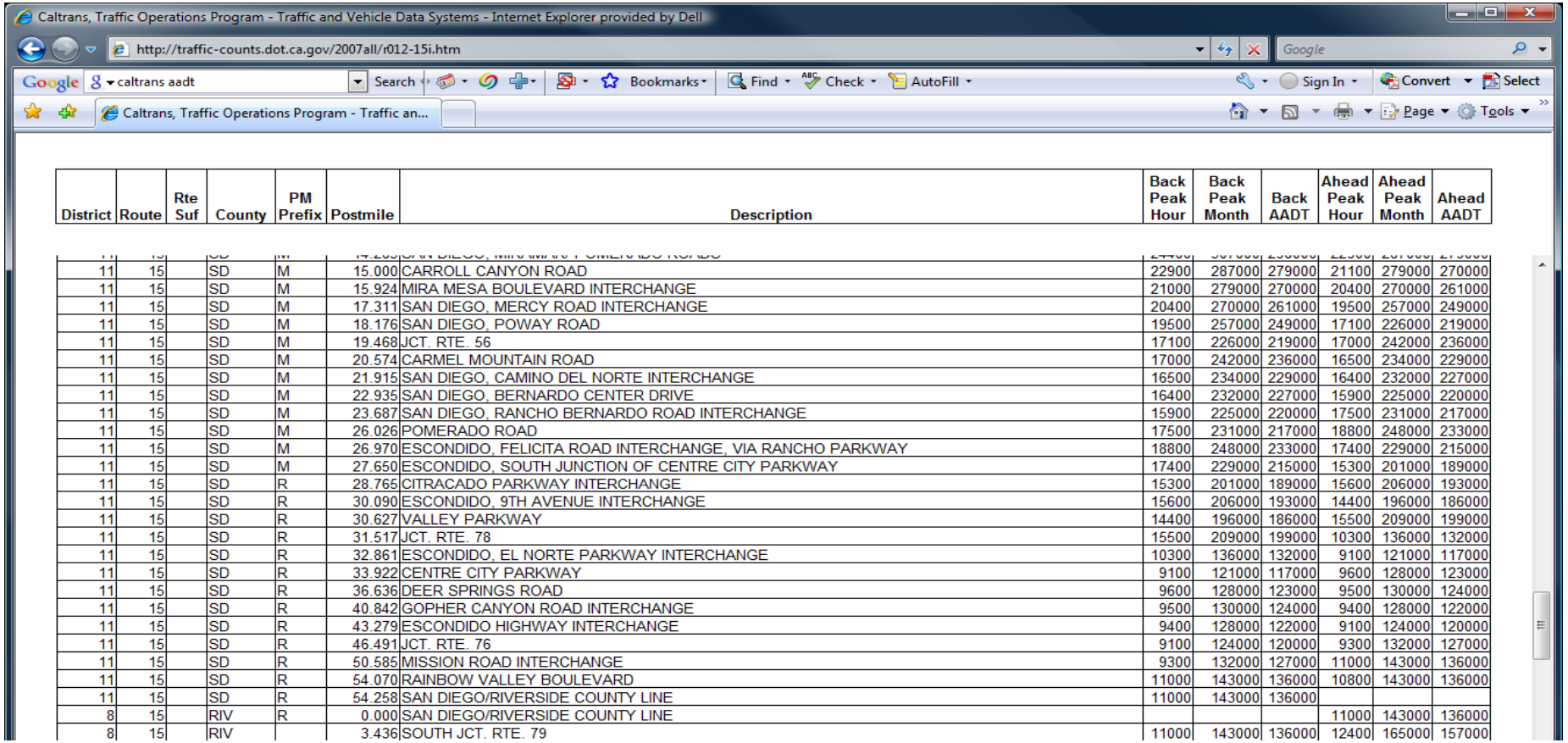
Location : PANKEY ROAD
Segment : PALA RD TO DULIN ROAD
Client : URBAN SYSTEMS

Site: FALLBROOK
Date: 12/13/07

Interval	NB				SB				Combined				Day: Thursday
Begin	AM		PM		AM		PM		AM		PM		
12:00	0	4	6	23	4	11	9	31	4	15	15	54	
12:15	1		3		3		7		4		10		
12:30	2		5		2		5		4		10		
12:45	1		9		2		10		3		19		
01:00	0	1	4	30	1	4	9	27	1	5	13	57	
01:15	0		9		2		5		2		14		
01:30	1		13		1		7		2		20		
01:45	0		4		0		6		0		10		
02:00	0	3	5	24	0	5	7	25	0	8	12	49	
02:15	1		2		1		4		2		6		
02:30	1		10		2		6		3		16		
02:45	1		7		2		8		3		15		
03:00	1	6	8	32	2	6	5	38	3	12	13	70	
03:15	1		7		3		8		4		15		
03:30	1		11		0		13		1		24		
03:45	3		6		1		12		4		18		
04:00	0	4	10	34	0	3	14	54	0	7	24	88	
04:15	2		7		1		10		3		17		
04:30	1		8		0		14		1		22		
04:45	1		9		2		16		3		25		
05:00	1	17	10	35	0	1	9	48	1	18	19	83	
05:15	3		9		1		8		4		17		
05:30	7		6		0		17		7		23		
05:45	6		10		0		14		6		24		
06:00	6	26	8	19	1	12	8	36	7	38	16	55	
06:15	8		4		4		13		12		17		
06:30	10		5		3		10		13		15		
06:45	2		2		4		5		6		7		
07:00	2	28	5	15	8	14	12	43	10	42	17	58	
07:15	8		4		1		10		9		14		
07:30	7		4		1		10		8		14		
07:45	11		2		4		11		15		13		
08:00	4	35	1	14	3	11	5	29	7	46	6	43	
08:15	11		6		4		8		15		14		
08:30	14		4		4		10		18		14		
08:45	6		3		0		6		6		9		
09:00	6	29	4	11	1	8	7	25	7	37	11	36	
09:15	7		4		6		5		13		9		
09:30	9		1		0		4		9		5		
09:45	7		2		1		9		8		11		
10:00	7	30	3	6	6	15	3	14	13	45	6	20	
10:15	5		3		3		2		8		5		
10:30	12		0		4		7		16		7		
10:45	6		0		2		2		8		2		
11:00	5	17	0	1	5	19	3	13	10	36	3	14	
11:15	4		1		7		4		11		5		
11:30	4		0		3		3		7		3		
11:45	4		0		4		3		8		3		
Totals	200		244		109		383		309		627		
Split%	64.7		38.9		35.3		61.1						
Day Totals		444				492				936			
Day Splits		47.4				52.6							
Peak Hour	07:45		04:30		06:15		04:00		07:45		04:00		
Volume	40		36		19		54		55		88		
Factor	0.71		0.90		0.59		0.84		0.76		0.88		

Data File : D0711788

2007 Caltrans AADTs from Caltrans Website.



District	Route	Rte Suf	County	PM Prefix	Postmile	Description	Back Peak Hour	Back Peak Month	Back AADT	Ahead Peak Hour	Ahead Peak Month	Ahead AADT
11	15		SD	M	15.000	CARROLL CANYON ROAD	22900	287000	279000	21100	279000	270000
11	15		SD	M	15.924	MIRA MESA BOULEVARD INTERCHANGE	21000	279000	270000	20400	270000	261000
11	15		SD	M	17.311	SAN DIEGO, MERCY ROAD INTERCHANGE	20400	270000	261000	19500	257000	249000
11	15		SD	M	18.176	SAN DIEGO, POWAY ROAD	19500	257000	249000	17100	226000	219000
11	15		SD	M	19.468	JCT. RTE. 56	17100	226000	219000	17000	242000	236000
11	15		SD	M	20.574	CARMEL MOUNTAIN ROAD	17000	242000	236000	16500	234000	229000
11	15		SD	M	21.915	SAN DIEGO, CAMINO DEL NORTE INTERCHANGE	16500	234000	229000	16400	232000	227000
11	15		SD	M	22.935	SAN DIEGO, BERNARDO CENTER DRIVE	16400	232000	227000	15900	225000	220000
11	15		SD	M	23.687	SAN DIEGO, RANCHO BERNARDO ROAD INTERCHANGE	15900	225000	220000	17500	231000	217000
11	15		SD	M	26.026	POMERADO ROAD	17500	231000	217000	18800	248000	233000
11	15		SD	M	26.970	ESCONDIDO, FELICITA ROAD INTERCHANGE, VIA RANCHO PARKWAY	18800	248000	233000	17400	229000	215000
11	15		SD	M	27.650	ESCONDIDO, SOUTH JUNCTION OF CENTRE CITY PARKWAY	17400	229000	215000	15300	201000	189000
11	15		SD	R	28.765	CITRACADO PARKWAY INTERCHANGE	15300	201000	189000	15600	206000	193000
11	15		SD	R	30.090	ESCONDIDO, 9TH AVENUE INTERCHANGE	15600	206000	193000	14400	196000	186000
11	15		SD	R	30.627	VALLEY PARKWAY	14400	196000	186000	15500	209000	199000
11	15		SD	R	31.517	JCT. RTE. 78	15500	209000	199000	10300	136000	132000
11	15		SD	R	32.861	ESCONDIDO, EL NORTE PARKWAY INTERCHANGE	10300	136000	132000	9100	121000	117000
11	15		SD	R	33.922	CENTRE CITY PARKWAY	9100	121000	117000	9600	128000	123000
11	15		SD	R	36.636	DEER SPRINGS ROAD	9600	128000	123000	9500	130000	124000
11	15		SD	R	40.842	GOPHER CANYON ROAD INTERCHANGE	9500	130000	124000	9400	128000	122000
11	15		SD	R	43.279	ESCONDIDO HIGHWAY INTERCHANGE	9400	128000	122000	9100	124000	120000
11	15		SD	R	46.491	JCT. RTE. 76	9100	124000	120000	9300	132000	127000
11	15		SD	R	50.585	MISSION ROAD INTERCHANGE	9300	132000	127000	11000	143000	136000
11	15		SD	R	54.070	RAINBOW VALLEY BOULEVARD	11000	143000	136000	10800	143000	136000
11	15		SD	R	54.258	SAN DIEGO/RIVERSIDE COUNTY LINE	11000	143000	136000			
8	15		RIV	R	0.000	SAN DIEGO/RIVERSIDE COUNTY LINE				11000	143000	136000
8	15		RIV		3.436	SOUTH JCT. RTE. 79	11000	143000	136000	12400	165000	157000

2005

Annual Average Daily Truck Traffic on the California State Highway System

Compiled by
Traffic and Vehicle Data Systems

State of California
Business, Transportation and Housing Agency
Department of Transportation

Prepared in cooperation with the
U.S. Department of Transportation
Federal Highway Administration

NOVEMBER 2006

PREFACE

The annual average daily truck traffic is shown for selected locations on the State Highway System. Truck traffic is classified by number of axles. The two-axle class includes 11/2-ton trucks with dual rear tires and excludes pickups and vans with only four tires. Total vehicle AADT for the same year is taken from the Traffic Volumes on California State Highways booklet also published by the California Department of Transportation.

Annual average daily truck traffic is the total truck traffic volume divided by 365 days. Truck counting is done throughout the state in a program of continuous truck count sampling. The sampling includes a partial day, 24-hour, 7-day and continuous vehicle classification counts. The partial day and 24-hour counts are usually made on high volume, urban highways. The 7-day counts are made on low volume, rural highways. The counts are usually taken only once in the year. About one-sixth of the locations are counted annually. The resulting counts are adjusted to an estimate of annual average daily truck traffic by compensating for seasonal influence, weekly variation, and other variables that may be present. Annual average daily truck traffic is necessary for presenting a statewide picture of truck flow, evaluating truck trends, planning and designing highways and for other purposes.

The column entitled "Year Ver/Est" means Verified/Estimated and the codes are V and E. It represents the year the truck percentages were verified (counted continuously or quarterly) or estimated. Selected points on a route will be counted and the ones in between will be estimated. Our basic policy is to count a route every six years. At some locations, truck volumes are static and no new counts are made until there is a change in traffic on the route.

California State Highways are listed in legislative route number order. The legislative route number is the same as the signed route number in most cases.

Each count location is identified by the post mile value corresponding to that point on the highway. The post mile values increase from the beginning of a route within a county to the next county line. The post mile values start over again at each county line. Post mile values increase usually from south to north or west to east depending on the general direction the route follows within the state.

The post mile at a given location will remain the same year after year except in a few cases when the route was relocated/redesignated. When a section of road is relocated, new post miles (usually noted by an alphabetical prefix such as "R" or "M") are established for it. If relocation results in a change in length, "post mile equations" are introduced so that post miles on the remainder of the route within the county will remain unchanged. Post mile equations are not shown on this listing.

A leg is given for each count location and is denoted by an A, B or O. For traffic volumes purposes, a highway intersection or interchange has two legs. According to ascending post miles (route direction) and a post mile reference at the center of the intersection or interchange, B = back leg, A = ahead leg, and O = traffic volume is equal for the back and ahead legs.

Truck AADT's are shown as two-way traffic, but the equivalent axle loading (EAL) are calculated to represent one-way travel.

Data compiled by:

Traffic Operations Program, Office of Traffic Data
(916) 654-3072

RTE	DIST	CNTY	POST MILE	L E G	DESCRIPTION	VEHICLE AADT TOTAL	TRUCK AADT TOTAL	TRUCK % TOT VEH	TRUCK AADT TOTAL ------- By Axle ------ 2	3	4	5+	% TRUCK AADT ------ By Axle ------ 2	3	4	5+	EAL 1-WAY (1000)	YEAR VER/ EST
015	11	SD	2.226	B	JCT. RTE. 94	119000	6069	5.1	3107	1032	303	1626	51.2	17	5	26.8	809	85V
015	11	SD	R3.367	B	JCT. RTE. 805	103000	5253	5.1	2690	893	263	1408	51.2	17	5	26.8	701	85E
015	11	SD	R3.367	A	JCT. RTE. 805	160000	3520	2.2	2541	359	109	510	72.2	10.2	3.1	14.5	314	85V
015	11	SD	R6.132	B	JCT. RTE. 8	165000	3630	2.2	2621	374	113	523	72.2	10.3	3.1	14.4	323	85E
015	11	SD	R6.132	A	JCT. RTE. 8	222000	11056	4.98	6903	791	260	3101	62.44	7.15	2.35	28.05	1422	05V
015	11	SD	M12.124	A	JCT. RTE. 163	295000	11004	3.73	6761	792	304	3147	61.44	7.2	2.76	28.6	1440	05E
015	11	SD	M14.285	B	SAN DIEGO, MIRAMAR/ POMERADO ROADS	291000	10942	3.76	6723	788	302	3129	61.44	7.2	2.76	28.6	1432	05E
015	11	SD	M14.285	A	SAN DIEGO, MIRAMAR/ POMERADO ROADS	278000	10842	3.9	6353	1138	423	2927	58.6	10.5	3.9	27	1399	85V
015	11	SD	M18.176	B	SAN DIEGO, POWAY ROAD	250000	17750	7.1	8662	2006	994	6088	48.8	11.3	5.6	34.3	2734	96E
015	11	SD	M18.176	A	SAN DIEGO, POWAY ROAD	223000	15833	7.1	7727	1789	887	5431	48.8	11.3	5.6	34.3	2439	96E
015	11	SD	M27.65	A	ESCONDIDO, SOUTH JUNCTION OF CENTRE CITY PARKWAY	184000	13064	7.1	6375	1476	732	4481	48.8	11.3	5.6	34.3	2012	96E
015	11	SD	R30.627	B	VALLEY PARKWAY	185000	13135	7.1	6410	1484	736	4505	48.8	11.3	5.6	34.3	2023	96E
015	11	SD	R31.517	B	JCT. RTE. 78	198000	14058	7.1	6860	1589	787	4822	48.8	11.3	5.6	34.3	2166	96E
015	11	SD	R31.517	A	JCT. RTE. 78	128000	12928	10.1	5714	1112	672	5430	44.2	8.6	5.2	42	2274	80V
015	11	SD	R36.636	A	DEER SPRINGS ROAD	136000	17952	13.2	6337	1454	754	9407	35.3	8.1	4.2	52.4	3712	86V
015	11	SD	R46.491	B	JCT. RTE. 76	128000	13094	10.23	4167	1041	447	7440	31.82	7.95	3.41	56.82	2874	00E
015	11	SD	R46.491	A	JCT. RTE. 76	121000	9849	8.14	3200	751	334	5565	32.49	7.63	3.39	56.5	2150	00E
015	08	RIV	R0	A	SAN DIEGO/RIVERSIDE COUNTY LINE	136000	9180	6.75	3428	654	278	4820	37.34	7.12	3.03	52.51	1884	04V
015	08	RIV	3.436	B	SOUTH JCT. RTE. 79	136000	9180	6.75	3428	654	278	4820	37.34	7.12	3.03	52.51	1884	04E
015	08	RIV	3.436	A	SOUTH JCT. RTE. 79	157000	11069	7.05	4133	788	335	5812	37.34	7.12	3.03	52.51	2272	04E
015	08	RIV	6.623	B	NORTH JCT RTE. 79	170000	11169	6.57	4171	795	338	5865	37.34	7.12	3.03	52.51	2292	04E
015	08	RIV	8.737	B	JCT. RTE. 215 NORTH	196000	10878	5.55	4062	775	330	5712	37.34	7.12	3.03	52.51	2233	04E
015	08	RIV	8.737	A	JCT. RTE. 215 NORTH	117000	9828	8.4	4846	691	317	3972	49.31	7.03	3.23	40.42	1650	04E

PEAK HOUR VOLUME DATA

Peak hour volume data consists of hourly volume relationships and data location. The hourly volumes are expressed as a percentage of the Annual Average Daily Traffic (AADT). The percentages are shown for both the AM and the PM peak periods.

The principle data described here are the K factor, the D factor and their product (KD). The K factor is the percentage of AADT during the peak hour for both directions of travel. The D factor is the percentage of the peak hour travel in the peak direction. KD multiplied with the AADT gives the one way peak period directional flow rate or the design hourly volume (DHV). The design hourly volume is used for either Operational Analysis or Design Analysis. Refer to the 2000 Highway Capacity Manual for more details.

Following is a glossary of terms used in this listing of peak hour volume data:

Dir	Indicates direction of travel for peak volume
AADT	Annual Average Daily Traffic in vehicles per day (vpd).
AM Peak	Represents the morning peak period for traffic analysis
CS	Control Station Number, Caltrans identification number for monitoring site.
CO	County abbreviation used by Caltrans
D	D factor. The percentage of traffic in the peak direction during the peak hour. Values in this book are derived by dividing the measured PHV by the sum of both directions of travel during the peak hour.
DAY	Day of week for the peak volume.
DDHV	The directional design hour volume, in vehicles per hour (vph) DDHV=AADTxKxD. See equation (8-1) on page 8-11 of the 2000 Highway Capacity Manual.
DI	Caltrans has twelve transportation districts statewide. This abbreviation identifies the district in which the count station is located.
HR	The ending time for the peak hour volume listed. The volume observed fro 1 to 2 would be recorded as 2.

K	The percentage of the AADT in both directions during the peak hour. Values in this table are derived by dividing the measured 2-way PHV by the AADT.
KD	The product of K and D. The percentage of AADT in the peak direction during the peak hour. Values in this table are derived by dividing the measured 1-way PHV by the AADT.
LEG	For traffic counting purposes, a highway intersection or interchange is assigned two legs according to increasing postmiles (route direction) and with a postmile reference at the center of the intersection or interchange. The volume of traffic on each leg is denoted by an A, B or O. A = ahead leg, B = back leg, and O – traffic volume being same for both back and ahead legs.
MNTH	The month that the peak volume occurred.
PHV	Peak Hour Volume in the peak direction. A one way volume in vehicles per hour (vph) as used here. The PHV is analogous to the DDHV as used for design purposes.
PM	The Post Mile is the mileage measured from the county line, or from the beginning of a route. Each postmile along a route in a county is a unique location on the state highway system.
PM Peak	Represents the afternoon peak period for traffic analysis.
PRE	The postmile may have a prefix like R, T, L, M, etc. When a length of highway is changed due to construction or realigment, new postmile values are assigned. To distinguish the new values from the old, an alpha code is prefixed to the new postmile.
RTE	The state highway route number
YR	The year when the count was made. Traffic counting is on a 3-year cycle.

SANDAG Hwycov Year 2007 (peak hour volumes and capacities along SR-76)

Hwycov_id	Nm	Fxnm	Txnm	Lanes Iftlno	AM Vol Iftvla	dir	AM Cap Iftcpa	v/c ratio	AM LOS	AM Vol Itfvla	dir	AM Cap Itfcpa	v/c ratio	AM LOS	PM Vol Iftvlp	dir	PM Cap Iftcpp	v/c ratio	PM LOS	PM Vol Itfvlp	dir	PM Cap Itfcpp	v/c ratio	PM LOS
12033	MISSION	JEFFRIES RANCH	MELROSE	1	1536	WB	2406	0.64	C	980	EB	1300	0.75	D	1012	WB	2406	0.42	B	1456	EB	1300	1.12	F
2670	MISSION	CRANBERRY	JEFFRIES RANCH	1	1469	WB	1300	1.13	F	999	EB	1300	0.77	D	1001	WB	1300	0.77	D	1413	EB	1300	1.09	F
12731	MISSION	EAST VISTA	CRANBERRY	1	1469	WB	1300	1.13	F	999	EB	1654	0.60	C	1001	WB	1300	0.77	D	1413	EB	1654	0.85	D
12735	MISSION	HOLLY	EAST VISTA	1	1052	WB	1202	0.88	E	718	EB	950	0.76	D	653	WB	1202	0.54	C	1107	EB	950	1.17	F
12736	MISSION	NORTH RIVER	HOLLY	1	1040	WB	950	1.09	F	718	EB	1420	0.51	B	652	WB	950	0.69	C	1091	EB	1420	0.77	D
31079	MISSION	UNKNOWN	NORTH RIVER	1	1200	WB	1420	0.85	D	852	EB	950	0.90	E	781	WB	1420	0.55	C	1176	EB	950	1.24	F
7210	MISSION	VIA GRENADA	UNKNOWN	1	1200	WB	950	1.26	F	852	EB	950	0.90	E	781	WB	950	0.82	D	1176	EB	950	1.24	F
7209	MISSION	VALLEY RANCH	VIA GRENADA	1	1200	WB	950	1.26	F	852	EB	950	0.90	E	781	WB	950	0.82	D	1176	EB	950	1.24	F
11625	MISSION	OLIVEHILL/CM DEL REY	VALLEY RANCH	1	1198	WB	950	1.26	F	854	EB	1202	0.71	D	783	WB	950	0.82	D	1175	EB	1202	0.98	E
11626	MISSION	THOROUGHBRED	OLIVEHILL/CM DEL REY	1	1074	WB	1202	0.89	E	1031	EB	950	1.09	F	965	WB	1202	0.80	D	1457	EB	950	1.53	F
15943	PALA	THOROUGHBRED	MISSION	1	998	EB	2122	0.47	B	1245	WB	950	1.31	F	1467	EB	2122	0.69	C	1069	WB	950	1.13	F
19215	PALA	MISSION	ZONE CONNECTOR	1	745	EB	950	0.78	D	942	WB	2122	0.44	B	1064	EB	950	1.12	F	1101	WB	2122	0.52	C
19216	PALA	ZONE CONNECTOR	RAMONA	1	636	EB	950	0.67	C	900	WB	950	0.95	E	1062	EB	950	1.12	F	614	WB	950	0.65	C
30386	PALA	RAMONA	CALLE DE LA VUELTA	1	644	EB	950	0.68	C	901	WB	950	0.95	E	1064	EB	950	1.12	F	618	WB	950	0.65	C
17167	PALA	CALLE DE LA VUELTA	VIA MONSERATE	1	649	EB	950	0.68	C	881	WB	950	0.93	E	1037	EB	950	1.09	F	620	WB	950	0.65	C
3279	PALA	VIA MONSERATE	UNKNOWN	1	808	EB	950	0.85	D	895	WB	950	0.94	E	1077	EB	950	1.13	F	786	WB	950	0.83	D
1799	PALA	UNKNOWN	LIMBER PINE	1	808	EB	950	0.85	D	895	WB	950	0.94	E	1077	EB	950	1.13	F	786	WB	950	0.83	D
1800	PALA	LIMBER PINE	GIRD	1	808	EB	950	0.85	D	895	WB	950	0.94	E	1077	EB	950	1.13	F	786	WB	950	0.83	D
3278	PALA	GIRD	UNKNOWN	1	718	EB	950	0.76	D	540	WB	950	0.57	C	640	EB	950	0.67	C	715	WB	950	0.75	D
17822	PALA	UNKNOWN	ZONE CONNECTOR	1	740	EB	950	0.78	D	542	WB	950	0.57	C	645	EB	950	0.68	C	742	WB	950	0.78	D
17823	PALA	ZONE CONNECTOR	OLD 395	1	760	EB	950	0.80	D	534	WB	950	0.56	C	638	EB	950	0.67	C	768	WB	950	0.81	D
8586	PALA	OLD 395	RAMP I-15 SB	1	1507	EB	2050	0.74	D	665	WB	2028	0.33	B	816	EB	2050	0.40	B	1258	WB	2028	0.62	C
1801	PALA	RAMP I-15 SB	RAMP I-15 NB	1	844	EB	950	0.89	E	539	WB	950	0.57	C	718	EB	950	0.76	D	1153	WB	950	1.21	F
11460	PALA	RAMP I-15 NB	PANKEY	1	559	EB	950	0.59	C	606	WB	950	0.64	C	696	EB	950	0.73	D	820	WB	950	0.86	E
1804	PALA	PANKEY	PANKEY NEW	1	589	EB	950	0.62	C	540	WB	950	0.57	C	631	EB	950	0.66	C	897	WB	950	0.94	E
11457	PALA-NEW	PANKEY NEW	PALA	1	588	EB	950	0.62	C	539	WB	950	0.57	C	630	EB	950	0.66	C	896	WB	950	0.94	E
11456	PALA	PALA-NEW	RICE CANYON	1	589	EB	950	0.62	C	540	WB	950	0.57	C	631	EB	950	0.66	C	897	WB	950	0.94	E
11453	PALA	RICE CANYON	COUSER CANYON	1	617	EB	950	0.65	C	450	WB	950	0.47	B	526	EB	950	0.55	C	930	WB	950	0.98	E
7771	PALA	COUSER CANYON	ZONE CONNECTOR	1	630	EB	950	0.66	C	357	WB	950	0.38	B	434	EB	950	0.46	B	945	WB	950	0.99	E
11454	PALA	ZONE CONNECTOR	UNKNOWN	1	632	EB	950	0.67	C	356	WB	950	0.37	B	432	EB	950	0.45	B	947	WB	950	1.00	E
11451	PALA	UNKNOWN	PALA MISSION	1	634	EB	950	0.67	C	351	WB	950	0.37	B	427	EB	950	0.45	B	950	WB	950	1.00	F

Notes: Shaded cells represent the worst v/c ratio for the study area segments by peak hour and direction

SAN DIEGO COUNTY SERIES 10 TRAFFIC MODEL (Year 2030) Showing SR-76 Capacity at 4 lanes (Shaded Cells)

Hwycov_id	Nm	Fxnm	Txnm	Lanes lftlno	dir	AM Cap lftcpa	dir	AM Cap ltfcpa		dir	PM Cap lftcpp	dir	PM Cap ltfcpp
11460	PALA	RAMP I-15 NB	PANKEY	2	EB	3100	WB	3030		EB	3100	WB	3030
1804	PALA	PANKEY	PANKEY NEW	2	EB	1806	WB	2028		EB	1806	WB	2028

Notes: Shaded cells represent capacity used in year 2007 analysis because SR-76 is currently being widened to 2 lanes each direction

Appendix E

Existing Level of Service Calculations

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	4	541	979	22	70	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	4	569	1031	23	74	26
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1054				1620	1042
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1054				1620	1042
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				35	91
cM capacity (veh/h)	661				113	279

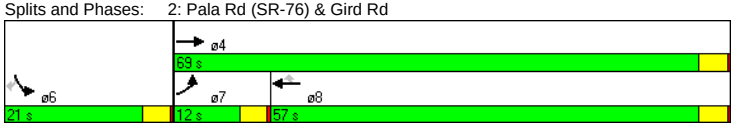
Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	4	569	1054	100
Volume Left	4	0	0	74
Volume Right	0	0	23	26
cSH	661	1700	1700	134
Volume to Capacity	0.01	0.33	0.62	0.75
Queue Length 95th (ft)	0	0	0	109
Control Delay (s)	10.5	0.0	0.0	86.1
Lane LOS	B			F
Approach Delay (s)	0.1		0.0	86.1
Approach LOS				F

Intersection Summary			
Average Delay	5.0		
Intersection Capacity Utilization	65.6%	ICU Level of Service	C
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	75	589	781	29	59	103
Turn Type	Prot			Perm		Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Detector Phases	7	4	8	8	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	12.0	69.0	57.0	57.0	21.0	21.0
Total Split (%)	13.3%	76.7%	63.3%	63.3%	23.3%	23.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	None	None	None	Min	Min
Act Effct Green (s)	7.6	34.5	29.0	29.0	8.8	8.8
Actuated g/C Ratio	0.13	0.65	0.54	0.54	0.16	0.16
v/c Ratio	0.37	0.52	0.81	0.04	0.24	0.33
Control Delay	35.5	5.5	17.7	5.6	30.1	10.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.5	5.5	17.7	5.6	30.1	10.5
LOS	D	A	B	A	C	B
Approach Delay		8.9	17.3		17.7	
Approach LOS		A	B		B	

Intersection Summary			
Cycle Length: 90			
Actuated Cycle Length: 53.4			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 13.9		Intersection LOS: B	
Intersection Capacity Utilization 59.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Pala Rd (SR-76) & Gird Rd



AM Existing
2: Pala Rd (SR-76) & Gird Rd

Queues

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	79	620	822	31	62	108
v/c Ratio	0.37	0.52	0.81	0.04	0.24	0.33
Control Delay	35.5	5.5	17.7	5.6	30.1	10.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.5	5.5	17.7	5.6	30.1	10.5
Queue Length 50th (ft)	26	63	222	4	20	0
Queue Length 95th (ft)	#93	137	406	14	66	44
Internal Link Dist (ft)		3111	8229		1191	
Turn Bay Length (ft)	450			20		180
Base Capacity (vph)	240	1495	1309	998	490	513
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.41	0.63	0.03	0.13	0.21

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

AM Existing
2: Pala Rd (SR-76) & Gird Rd

HCM Signalized Intersection Capacity Analysis

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1900	1900	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1583	1863	1863	1417	1583	1417
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1583	1863	1863	1417	1583	1417
Volume (vph)	75	589	781	29	59	103
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	79	620	822	31	62	108
RTOR Reduction (vph)	0	0	0	3	0	90
Lane Group Flow (vph)	79	620	822	28	62	18
Turn Type	Prot			Perm		Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Actuated Green, G (s)	3.7	36.7	29.0	29.0	8.9	8.9
Effective Green, g (s)	3.7	36.7	29.0	29.0	8.9	8.9
Actuated g/C Ratio	0.07	0.68	0.54	0.54	0.17	0.17
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	109	1276	1008	767	263	235
v/s Ratio Prot	c0.05	0.33	c0.44		c0.04	
v/s Ratio Perm				0.02		0.01
v/c Ratio	0.72	0.49	0.82	0.04	0.24	0.08
Uniform Delay, d1	24.5	4.0	10.1	5.8	19.4	18.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	21.1	0.3	5.2	0.0	0.5	0.1
Delay (s)	45.6	4.3	15.3	5.8	19.9	19.0
Level of Service	D	A	B	A	B	B
Approach Delay (s)		8.9	14.9		19.3	
Approach LOS		A	B		B	

Intersection Summary

HCM Average Control Delay	12.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	53.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	59.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

AM Existing
3: Pala Rd (SR-76) & Sage Rd — HCM Unsignalized Intersection Capacity Analysis

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	1	603	845	1	5	10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	1	635	889	1	5	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	891				1527	890
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	891				1527	890
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				96	97
cM capacity (veh/h)	761				129	342

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	636	891	16
Volume Left	1	0	5
Volume Right	0	1	11
cSH	761	1700	221
Volume to Capacity	0.00	0.52	0.07
Queue Length 95th (ft)	0	0	6
Control Delay (s)	0.0	0.0	22.6
Lane LOS	A		C
Approach Delay (s)	0.0	0.0	22.6
Approach LOS			C

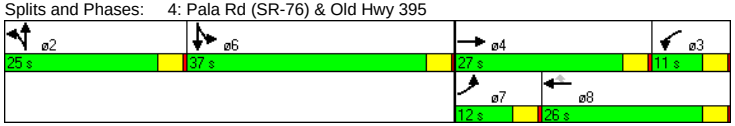
Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	54.5%	ICU Level of Service	A
Analysis Period (min)	15		

AM Existing
4: Pala Rd (SR-76) & Old Hwy 395 — Timings

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBT
Lane Configurations							
Volume (vph)	50	533	51	544	76	70	76
Turn Type	Prot		Prot		Perm		
Protected Phases	7	4	3	8		2	6
Permitted Phases					8		
Detector Phases	7	4	3	8	8	2	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	8.0	20.0	20.0	20.0	20.0
Total Split (s)	12.0	27.0	11.0	26.0	26.0	25.0	37.0
Total Split (%)	12.0%	27.0%	11.0%	26.0%	26.0%	25.0%	37.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead	Lead	Lag	Lag	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	None	None	None	None	Min	Min
Act Effct Green (s)	7.4	17.7	6.9	17.3	17.3	14.2	20.4
Actuated g/C Ratio	0.10	0.25	0.09	0.24	0.24	0.20	0.28
v/c Ratio	0.34	0.74	0.37	0.67	0.20	0.67	0.77
Control Delay	46.2	33.4	48.4	32.7	9.2	38.8	36.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.2	33.4	48.4	32.7	9.2	38.8	36.6
LOS	D	C	D	C	A	D	D
Approach Delay		34.4		31.2		38.8	36.6
Approach LOS		C		C		D	D

Intersection Summary			
Cycle Length: 100			
Actuated Cycle Length: 71.8			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 34.2		Intersection LOS: C	
Intersection Capacity Utilization 64.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 4: Pala Rd (SR-76) & Old Hwy 395



AM Existing
4: Pala Rd (SR-76) & Old Hwy 395 — Queues

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	53	642	54	573	80	243	392
v/c Ratio	0.34	0.74	0.37	0.67	0.20	0.67	0.77
Control Delay	46.2	33.4	48.4	32.7	9.2	38.8	36.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.2	33.4	48.4	32.7	9.2	38.8	36.6
Queue Length 50th (ft)	26	156	27	142	0	110	185
Queue Length 95th (ft)	73	265	#78	241	37	215	314
Internal Link Dist (ft)		572		382		819	4384
Turn Bay Length (ft)	330		150		150		
Base Capacity (vph)	180	1130	159	1103	497	523	738
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.57	0.34	0.52	0.16	0.46	0.53

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

AM Existing
4: Pala Rd (SR-76) & Old Hwy 395 — HCM Signalized Intersection Capacity Analysis

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1900	1700	1700	1900	1700	1700	1900	1700	1700	1900	1700
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00			1.00	
Frt	1.00	0.98		1.00	1.00	0.85		0.96			0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98			0.97	
Satd. Flow (prot)	1583	3472		1583	3539	1417		1756			1774	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.98			0.97	
Satd. Flow (perm)	1583	3472		1583	3539	1417		1756			1774	
Volume (vph)	50	533	77	51	544	76	96	70	65	255	76	42
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	53	561	81	54	573	80	101	74	68	268	80	44
RTOR Reduction (vph)	0	11	0	0	0	61	0	14	0	0	5	0
Lane Group Flow (vph)	53	631	0	54	573	19	0	229	0	0	387	0
Turn Type	Prot			Prot		Perm	Split			Split		
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8						
Actuated Green, G (s)	3.7	17.7		3.3	17.3	17.3		14.2			20.4	
Effective Green, g (s)	3.7	17.7		3.3	17.3	17.3		14.2			20.4	
Actuated g/C Ratio	0.05	0.25		0.05	0.24	0.24		0.20			0.28	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0			3.0	
Lane Grp Cap (vph)	82	858		73	855	342		348			505	
v/s Ratio Prot	0.03	c0.18		0.03	c0.16			c0.13			c0.22	
v/s Ratio Perm						0.01						
v/c Ratio	0.65	0.74		0.74	0.67	0.06		0.66			0.77	
Uniform Delay, d1	33.3	24.8		33.7	24.6	20.9		26.5			23.4	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	
Incremental Delay, d2	16.2	3.3		32.0	2.1	0.1		4.4			6.8	
Delay (s)	49.5	28.1		65.8	26.6	20.9		30.9			30.3	
Level of Service	D	C		E	C	C		C			C	
Approach Delay (s)		29.7			29.0			30.9			30.3	
Approach LOS		C			C			C			C	

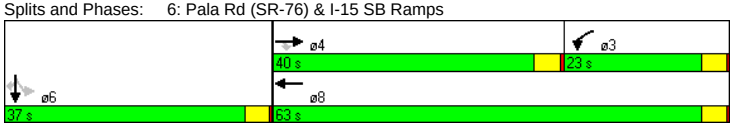
Intersection Summary

HCM Average Control Delay	29.7	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.70			
Actuated Cycle Length (s)	71.6	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	64.2%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Configurations						
Volume (vph)	478	297	54	242	1	551
Turn Type		Perm	Prot			Perm
Protected Phases	4		3	8	6	
Permitted Phases		4				6
Detector Phases	4	4	3	8	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	20.0	20.0	8.0	20.0	20.0	20.0
Total Split (s)	40.0	40.0	23.0	63.0	37.0	37.0
Total Split (%)	40.0%	40.0%	23.0%	63.0%	37.0%	37.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	None	None	None	None	C-Min	C-Min
Act Effct Green (s)	32.0	32.0	8.3	42.4	49.6	49.6
Actuated g/C Ratio	0.32	0.32	0.08	0.42	0.50	0.50
v/c Ratio	0.84	0.47	0.44	0.32	0.06	0.58
Control Delay	44.5	4.8	48.9	20.8	18.3	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.5	4.8	48.9	20.8	18.3	4.7
LOS	D	A	D	C	B	A
Approach Delay	29.3			25.9	5.8	
Approach LOS	C			C	A	

Intersection Summary			
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 40 (40%), Referenced to phase 2: and 6:SBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 20.3		Intersection LOS: C	
Intersection Capacity Utilization 57.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 6: Pala Rd (SR-76) & I-15 SB Ramps



Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	503	313	57	255	52	580
v/c Ratio	0.84	0.47	0.44	0.32	0.06	0.58
Control Delay	44.5	4.8	48.9	20.8	18.3	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.5	4.8	48.9	20.8	18.3	4.7
Queue Length 50th (ft)	296	0	38	99	17	0
Queue Length 95th (ft)	369	51	m54	0	49	85
Internal Link Dist (ft)	574			1191	1129	
Turn Bay Length (ft)			500			900
Base Capacity (vph)	694	724	301	1099	881	995
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.72	0.43	0.19	0.23	0.06	0.58

Intersection Summary
m Volume for 95th percentile queue is metered by upstream signal.

AM Existing
6: Pala Rd (SR-76) & I-15 SB Ramps

HCM Signalized Intersection Capacity Analysis

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1900	1700	1700	1900	1700	1700	1900	1700	1700	1900	1700
Total Lost time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Lane Util. Factor		1.00	1.00	1.00	1.00						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (prot)		1863	1417	1583	1863						1776	1417
Flt Permitted		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (perm)		1863	1417	1583	1863						1776	1417
Volume (vph)	0	478	297	54	242	0	0	0	0	48	1	551
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	503	313	57	255	0	0	0	0	51	1	580
RTOR Reduction (vph)	0	0	213	0	0	0	0	0	0	0	0	297
Lane Group Flow (vph)	0	503	100	57	255	0	0	0	0	0	52	283
Turn Type			Perm	Prot						Perm		Perm
Protected Phases		4		3	8						6	
Permitted Phases			4							6		6
Actuated Green, G (s)		32.0	32.0	7.2	43.2						48.8	48.8
Effective Green, g (s)		32.0	32.0	7.2	43.2						48.8	48.8
Actuated g/C Ratio		0.32	0.32	0.07	0.43						0.49	0.49
Clearance Time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0						3.0	3.0
Lane Grp Cap (vph)		596	453	114	805						867	691
v/s Ratio Prot		c0.27		c0.04	0.14							
v/s Ratio Perm			0.07								0.03	c0.20
v/c Ratio		0.84	0.22	0.50	0.32						0.06	0.41
Uniform Delay, d1		31.7	24.9	44.7	18.7						13.5	16.4
Progression Factor		1.00	1.00	0.92	1.14						1.00	1.00
Incremental Delay, d2		10.6	0.2	3.1	0.2						0.1	1.8
Delay (s)		42.2	25.1	44.3	21.5						13.6	18.2
Level of Service		D	C	D	C						B	B
Approach Delay (s)		35.7			25.7			0.0			17.8	
Approach LOS		D			C			A			B	

Intersection Summary				
HCM Average Control Delay	27.5	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.57			
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	57.5%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

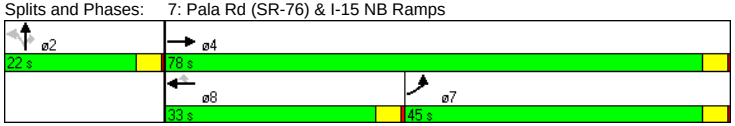
AM Existing
7: Pala Rd (SR-76) & I-15 NB Ramps

Timings

Lane Group	EBL	EBT	WBT	WBR	NBT	NBR
Lane Configurations						
Volume (vph)	405	194	167	41	0	116
Turn Type	Prot			Perm		Perm
Protected Phases	7	4	8		2	
Permitted Phases				8		2
Detector Phases	7	4	8	8	2	2
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	45.0	78.0	33.0	33.0	22.0	22.0
Total Split (%)	45.0%	78.0%	33.0%	33.0%	22.0%	22.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lag		Lead	Lead		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	None	None	None	C-Min	C-Min
Act Effct Green (s)	31.8	49.8	14.0	14.0	42.2	42.2
Actuated g/C Ratio	0.32	0.50	0.14	0.14	0.42	0.42
v/c Ratio	0.85	0.22	0.67	0.19	0.19	0.18
Control Delay	24.4	3.7	53.2	15.7	22.8	5.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.4	3.7	53.2	15.7	22.8	5.8
LOS	C	A	D	B	C	A
Approach Delay		17.7	45.8		14.9	
Approach LOS		B	D		B	

Intersection Summary		
Cycle Length: 100		
Actuated Cycle Length: 100		
Offset: 56 (56%), Referenced to phase 2:NBTL and 6:, Start of Green		
Natural Cycle: 65		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.85		
Intersection Signal Delay: 22.6	Intersection LOS: C	
Intersection Capacity Utilization 57.5%	ICU Level of Service B	
Analysis Period (min) 15		

Splits and Phases: 7: Pala Rd (SR-76) & I-15 NB Ramps



Queues

Lane Group	EBL	EBT	WBT	WBR	NBT	NBR
Lane Group Flow (vph)	426	204	176	43	141	122
v/c Ratio	0.85	0.22	0.67	0.19	0.19	0.18
Control Delay	24.4	3.7	53.2	15.7	22.8	5.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.4	3.7	53.2	15.7	22.8	5.8
Queue Length 50th (ft)	284	18	108	3	55	0
Queue Length 95th (ft)	m54	m18	168	33	124	43
Internal Link Dist (ft)		1191	2152		911	
Turn Bay Length (ft)	450			50		800
Base Capacity (vph)	651	1379	540	437	747	668
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.15	0.33	0.10	0.19	0.18

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1900	1700	1700	1900	1700	1700	1900	1700	1700	1900	1700
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0	4.0			
Lane Util. Factor	1.00	1.00			1.00	1.00		1.00	1.00			
Frt	1.00	1.00			1.00	0.85		1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00		0.95	1.00			
Satd. Flow (prot)	1583	1863			1863	1417		1770	1417			
Flt Permitted	0.95	1.00			1.00	1.00		0.95	1.00			
Satd. Flow (perm)	1583	1863			1863	1417		1770	1417			
Volume (vph)	405	194	0	0	167	41	134	0	116	0	0	0
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	426	204	0	0	176	43	141	0	122	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	32	0	0	71	0	0	0
Lane Group Flow (vph)	426	204	0	0	176	11	0	141	51	0	0	0
Turn Type	Prot					Perm	Perm		Perm			
Protected Phases	7	4			8			2				
Permitted Phases						8	2		2			
Actuated Green, G (s)	31.8	49.8			14.0	14.0		42.2	42.2			
Effective Green, g (s)	31.8	49.8			14.0	14.0		42.2	42.2			
Actuated g/C Ratio	0.32	0.50			0.14	0.14		0.42	0.42			
Clearance Time (s)	4.0	4.0			4.0	4.0		4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0	3.0			
Lane Grp Cap (vph)	503	928			261	198		747	598			
v/s Ratio Prot	c0.27	0.11			c0.09							
v/s Ratio Perm						0.01		0.08	0.04			
v/c Ratio	0.85	0.22			0.67	0.06		0.19	0.09			
Uniform Delay, d1	31.8	14.1			40.8	37.3		18.1	17.3			
Progression Factor	0.40	0.26			1.00	1.00		1.00	1.00			
Incremental Delay, d2	9.4	0.1			6.7	0.1		0.6	0.3			
Delay (s)	22.0	3.8			47.6	37.4		18.7	17.6			
Level of Service	C	A			D	D		B	B			
Approach Delay (s)		16.1			45.6			18.2			0.0	
Approach LOS		B			D			B			A	

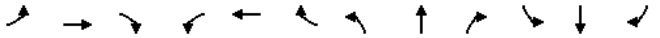
Intersection Summary

HCM Average Control Delay	22.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	57.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

AM Existing
8: Pala Rd (SR-76) & Pankey Rd

HCM Unsignalized Intersection Capacity Analysis



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	1	321	9	0	284	3	14	0	5	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	1	338	9	0	299	3	15	0	5	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	302			347			494	647	174	477	650	151
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	302			347			494	647	174	477	650	151
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			97	100	99	100	100	100
cM capacity (veh/h)	1256			1208			458	388	840	468	386	868

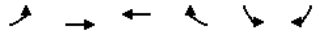
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	1	225	122	0	199	103	20	0
Volume Left	1	0	0	0	0	0	15	0
Volume Right	0	0	9	0	0	3	5	0
cSH	1256	1700	1700	1700	1700	1700	520	1700
Volume to Capacity	0.00	0.13	0.07	0.00	0.12	0.06	0.04	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	3	0
Control Delay (s)	7.9	0.0	0.0	0.0	0.0	0.0	12.2	0.0
Lane LOS	A						B	A
Approach Delay (s)	0.0			0.0			12.2	0.0
Approach LOS							B	A

Intersection Summary				
Average Delay	0.4			
Intersection Capacity Utilization	19.2%	ICU Level of Service		A
Analysis Period (min)	15			

LOS Engineering

AM Existing
10: Pala Rd (SR-76) & Rice Canyon Rd

HCM Unsignalized Intersection Capacity Analysis



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	9	334	176	10	12	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	9	352	185	11	13	22
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	196				561	191
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	196				561	191
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				97	97
cM capacity (veh/h)	1377				485	851

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	361	196	35
Volume Left	9	0	13
Volume Right	0	11	22
cSH	1377	1700	668
Volume to Capacity	0.01	0.12	0.05
Queue Length 95th (ft)	1	0	4
Control Delay (s)	0.3	0.0	10.7
Lane LOS	A		B
Approach Delay (s)	0.3	0.0	10.7
Approach LOS			B

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	34.8%	ICU Level of Service	A
Analysis Period (min)	15		

LOS Engineering

AM Existing
11: Pala Rd (SR-76) & Couser Canyon Rd

HCM Unsignalized Intersection Capacity Analysis

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	336	11	2	177	11	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	354	12	2	186	12	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			365		550	359
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			365		550	359
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		98	99
cM capacity (veh/h)			1193		495	685

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	365	188	17
Volume Left	0	2	12
Volume Right	12	0	5
cSH	1700	1193	542
Volume to Capacity	0.21	0.00	0.03
Queue Length 95th (ft)	0	0	2
Control Delay (s)	0.0	0.1	11.9
Lane LOS		A	B
Approach Delay (s)	0.0	0.1	11.9
Approach LOS			B

Intersection Summary			
Average Delay		0.4	
Intersection Capacity Utilization		28.4%	ICU Level of Service A
Analysis Period (min)		15	

LOS Engineering

AM Existing
12: Pala Mesa Dr & Old Hwy 395

HCM Unsignalized Intersection Capacity Analysis

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	25	37	21	149	244	8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	26	39	22	157	257	8
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	462	261	265			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	462	261	265			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	95	95	98			
cM capacity (veh/h)	548	778	1299			

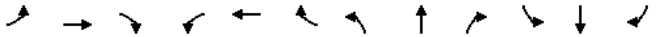
Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	65	22	157	265
Volume Left	26	22	0	0
Volume Right	39	0	0	8
cSH	665	1299	1700	1700
Volume to Capacity	0.10	0.02	0.09	0.16
Queue Length 95th (ft)	8	1	0	0
Control Delay (s)	11.0	7.8	0.0	0.0
Lane LOS	B	A		
Approach Delay (s)	11.0	1.0		0.0
Approach LOS	B			

Intersection Summary			
Average Delay		1.7	
Intersection Capacity Utilization		30.3%	ICU Level of Service A
Analysis Period (min)		15	

LOS Engineering

AM Existing

14: Stewart Canyon Rd & Old Hwy 395 — HCM Unsignalized Intersection Capacity Analysis



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	14	1	23	10	0	13	3	147	11	12	243	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	15	1	24	11	0	14	3	155	12	13	256	7
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	459	457	259	473	455	161	263			166		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	459	457	259	473	455	161	263			166		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	97	100	97	98	100	98	100			99		
cM capacity (veh/h)	500	494	779	481	495	885	1301			1412		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	40	24	3	166	13	263
Volume Left	15	11	3	0	13	0
Volume Right	24	14	0	12	0	7
cSH	638	648	1301	1700	1412	1700
Volume to Capacity	0.06	0.04	0.00	0.10	0.01	0.15
Queue Length 95th (ft)	5	3	0	0	1	0
Control Delay (s)	11.0	10.8	7.8	0.0	7.6	0.0
Lane LOS	B	B	A		A	
Approach Delay (s)	11.0	10.8	0.1		0.3	
Approach LOS	B	B				

Intersection Summary				
Average Delay	1.6			
Intersection Capacity Utilization	23.2%	ICU Level of Service	A	
Analysis Period (min)	15			

LOS Engineering

AM Existing

15: Reche Rd & Old Hwy 395 — HCM Unsignalized Intersection Capacity Analysis

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	189	196	115	68	66	119
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	199	206	121	72	69	125
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	446	132	195			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	446	132	195			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	62	78	91			
cM capacity (veh/h)	520	917	1378			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	405	121	72	195
Volume Left	199	121	0	0
Volume Right	206	0	0	125
cSH	667	1378	1700	1700
Volume to Capacity	0.61	0.09	0.04	0.11
Queue Length 95th (ft)	103	7	0	0
Control Delay (s)	18.4	7.9	0.0	0.0
Lane LOS	C	A		
Approach Delay (s)	18.4	4.9		0.0
Approach LOS	C			

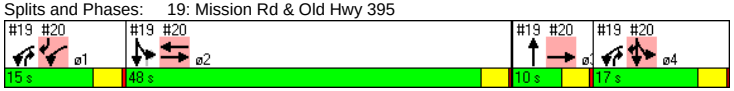
Intersection Summary				
Average Delay	10.6			
Intersection Capacity Utilization	53.0%	ICU Level of Service	A	
Analysis Period (min)	15			

LOS Engineering

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø1	ø4
Lane Configurations								
Volume (vph)	107	878	21	153	549	39		
Turn Type		Free		custom	Split			
Protected Phases	1 4		3	1 4	2	2	1	4
Permitted Phases		Free		2				
Detector Phases	1 4		3	1 4	2	2		
Minimum Initial (s)			4.0		4.0	4.0	4.0	4.0
Minimum Split (s)			8.0		20.0	20.0	8.0	20.0
Total Split (s)	32.0	0.0	10.0	32.0	48.0	48.0	15.0	17.0
Total Split (%)	35.6%	0.0%	11.1%	35.6%	53.3%	53.3%	17%	19%
Yellow Time (s)			3.5		3.5	3.5	3.5	3.5
All-Red Time (s)			0.5		0.5	0.5	0.5	0.5
Lead/Lag			Lead		Lag	Lag	Lead	Lag
Lead-Lag Optimize?			Yes					Yes
Recall Mode			None		None	None	None	None
Act Effct Green (s)	28.3	82.4	6.1	68.2	35.9	35.9		
Actuated g/C Ratio	0.34	1.00	0.07	0.83	0.44	0.44		
v/c Ratio	0.21	0.65	0.16	0.14	0.84	0.05		
Control Delay	25.0	2.1	42.0	1.6	32.4	12.6		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	25.0	2.1	42.0	1.6	32.4	12.6		
LOS	C	A	D	A	C	B		
Approach Delay	4.6		6.4			31.1		
Approach LOS	A		A			C		

Intersection Summary			
Cycle Length: 90			
Actuated Cycle Length: 82.4			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay: 13.7		Intersection LOS: B	
Intersection Capacity Utilization 54.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 19: Mission Rd & Old Hwy 395



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	113	924	22	161	578	41
v/c Ratio	0.21	0.65	0.16	0.14	0.84	0.05
Control Delay	25.0	2.1	42.0	1.6	32.4	12.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.0	2.1	42.0	1.6	32.4	12.6
Queue Length 50th (ft)	44	14	11	10	253	12
Queue Length 95th (ft)	m62	m20	36	18	391	28
Internal Link Dist (ft)	354		4880			955
Turn Bay Length (ft)		130		210	100	
Base Capacity (vph)	544	1417	137	1174	855	1007
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.65	0.16	0.14	0.68	0.04

Intersection Summary
m Volume for 95th percentile queue is metered by upstream signal.

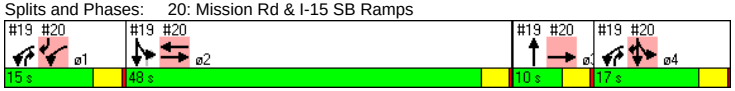
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1900	1700	1700	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1583	1417	1863	1417	1583	1863
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1583	1417	1863	1417	1583	1863
Volume (vph)	107	878	21	153	549	39
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	113	924	22	161	578	41
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	113	924	22	161	578	41
Turn Type		Free		custom	Split	
Protected Phases	1 4		3	1 4	2	2
Permitted Phases		Free		2		
Actuated Green, G (s)	28.3	82.3	6.1	64.2	35.9	35.9
Effective Green, g (s)	28.3	82.3	6.1	64.2	35.9	35.9
Actuated g/C Ratio	0.34	1.00	0.07	0.78	0.44	0.44
Clearance Time (s)			4.0		4.0	4.0
Vehicle Extension (s)			3.0		3.0	3.0
Lane Grp Cap (vph)	544	1417	138	1174	691	813
v/s Ratio Prot	0.07		0.01	0.05	c0.37	0.02
v/s Ratio Perm		c0.65		0.07		
v/c Ratio	0.21	0.65	0.16	0.14	0.84	0.05
Uniform Delay, d1	19.1	0.0	35.7	2.2	20.6	13.4
Progression Factor	1.10	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	1.5	0.5	0.1	8.7	0.0
Delay (s)	21.1	1.5	36.2	2.3	29.3	13.4
Level of Service	C	A	D	A	C	B
Approach Delay (s)	3.6		6.4			28.2
Approach LOS	A		A			C

Intersection Summary			
HCM Average Control Delay	12.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	82.3	Sum of lost time (s)	4.0
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	WBL	WBT	SBT	SBR	ø3
Lane Configurations						
Volume (vph)	529	61	242	7	775	
Turn Type		Prot			custom	
Protected Phases	2 3	1	2	4	1 4	3
Permitted Phases					4	
Detector Phases	2 3	1	2	4	1 4	
Minimum Initial (s)		4.0	4.0	4.0		4.0
Minimum Split (s)		8.0	20.0	20.0		8.0
Total Split (s)	58.0	15.0	48.0	17.0	32.0	10.0
Total Split (%)	64.4%	16.7%	53.3%	18.9%	35.6%	11%
Yellow Time (s)		3.5	3.5	3.5		3.5
All-Red Time (s)		0.5	0.5	0.5		0.5
Lead/Lag		Lead	Lag	Lag		Lead
Lead-Lag Optimize?				Yes		Yes
Recall Mode		None	None	None		None
Act Effct Green (s)	46.0	11.1	35.9	13.2	28.3	
Actuated g/C Ratio	0.56	0.13	0.44	0.16	0.34	
v/c Ratio	0.75	0.30	0.31	0.05	0.91	
Control Delay	5.2	39.4	15.7	33.6	23.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	5.2	39.4	15.7	33.6	23.6	
LOS	A	D	B	C	C	
Approach Delay	5.2		20.5	23.8		
Approach LOS	A		C	C		

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 82.4
Natural Cycle: 80
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.91
Intersection Signal Delay: 15.8 Intersection LOS: B
Intersection Capacity Utilization 73.0% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 20: Mission Rd & I-15 SB Ramps



Queues

Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	760	64	255	15	816
v/c Ratio	0.75	0.30	0.31	0.05	0.91
Control Delay	5.2	39.4	15.7	33.6	23.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	5.2	39.4	15.7	33.6	23.6
Queue Length 50th (ft)	34	32	82	7	105
Queue Length 95th (ft)	m44	73	132	25	#413
Internal Link Dist (ft)	354		664	817	
Turn Bay Length (ft)		285			200
Base Capacity (vph)	1090	214	1007	290	896
Starvation Cap Reductn	3	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.70	0.30	0.25	0.05	0.91

Intersection Summary

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1900	1700	1700	1900	1700	1700	1900	1700	1700	1900	1700
Total Lost time (s)		4.0		4.0	4.0						4.0	4.0
Lane Util. Factor		1.00		1.00	1.00						1.00	1.00
Frt		0.96		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.97	1.00
Satd. Flow (prot)		1796		1583	1863						1814	1417
Flt Permitted		1.00		0.95	1.00						0.97	1.00
Satd. Flow (perm)		1796		1583	1863						1814	1417
Volume (vph)	0	529	193	61	242	0	0	0	0	8	7	775
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	557	203	64	255	0	0	0	0	8	7	816
RTOR Reduction (vph)	0	16	0	0	0	0	0	0	0	0	0	409
Lane Group Flow (vph)	0	744	0	64	255	0	0	0	0	0	15	407
Turn Type				Prot						Split		custom
Protected Phases		2 3		1	2					4	4	1 4
Permitted Phases												4
Actuated Green, G (s)		46.0		11.1	35.9						13.2	28.3
Effective Green, g (s)		46.0		11.1	35.9						13.2	28.3
Actuated g/C Ratio		0.56		0.13	0.44						0.16	0.34
Clearance Time (s)				4.0	4.0						4.0	
Vehicle Extension (s)				3.0	3.0						3.0	
Lane Grp Cap (vph)		1004		214	813						291	487
v/s Ratio Prot		c0.41		0.04	0.14						0.01	c0.29
v/s Ratio Perm												
v/c Ratio		0.74		0.30	0.31						0.05	0.84
Uniform Delay, d1		13.7		32.1	15.2						29.3	24.9
Progression Factor		0.11		1.00	1.00						1.00	1.00
Incremental Delay, d2		2.2		0.8	0.2						0.1	11.8
Delay (s)		3.7		32.9	15.4						29.3	36.7
Level of Service		A		C	B						C	D
Approach Delay (s)		3.7			18.9			0.0			36.6	
Approach LOS		A			B			A			D	

Intersection Summary

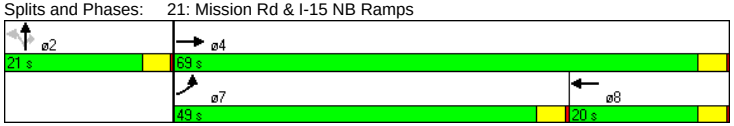
HCM Average Control Delay	20.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	82.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Configurations					
Volume (vph)	442	93	161	2	37
Turn Type	Prot				Perm
Protected Phases	7	4	8	2	
Permitted Phases					2
Detector Phases	7	4	8	2	2
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0
Total Split (s)	49.0	69.0	20.0	21.0	21.0
Total Split (%)	54.4%	76.7%	22.2%	23.3%	23.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	None	None	Min	Min
Act Effct Green (s)	20.3	31.5	10.2	10.8	10.8
Actuated g/C Ratio	0.39	0.61	0.19	0.21	0.21
v/c Ratio	0.75	0.09	0.49	0.33	0.12
Control Delay	22.6	3.4	27.7	26.3	10.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	22.6	3.4	27.7	26.3	10.7
LOS	C	A	C	C	B
Approach Delay		19.2	27.7	22.6	
Approach LOS		B	C	C	

Intersection Summary		
Cycle Length: 90		
Actuated Cycle Length: 51.7		
Natural Cycle: 65		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 0.75		
Intersection Signal Delay: 21.5	Intersection LOS: C	
Intersection Capacity Utilization 73.0%	ICU Level of Service D	
Analysis Period (min) 15		

Splits and Phases: 21: Mission Rd & I-15 NB Ramps

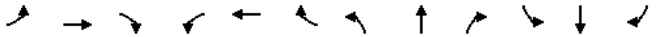


Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Group Flow (vph)	465	98	173	123	39
v/c Ratio	0.75	0.09	0.49	0.33	0.12
Control Delay	22.6	3.4	27.7	26.3	10.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	22.6	3.4	27.7	26.3	10.7
Queue Length 50th (ft)	113	8	45	32	0
Queue Length 95th (ft)	271	24	139	106	25
Internal Link Dist (ft)		664	1191	1002	
Turn Bay Length (ft)	300				200
Base Capacity (vph)	959	1461	526	566	478
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.48	0.07	0.33	0.22	0.08

Intersection Summary

AM Existing

21: Mission Rd & I-15 NB Ramps — HCM Signalized Intersection Capacity Analysis



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1900	1700	1700	1900	1700	1700	1900	1700	1700	1900	1700
Total Lost time (s)	4.0	4.0			4.0			4.0	4.0			
Lane Util. Factor	1.00	1.00			1.00			1.00	1.00			
Frt	1.00	1.00			1.00			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (prot)	1583	1863			1857			1775	1417			
Flt Permitted	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (perm)	1583	1863			1857			1775	1417			
Volume (vph)	442	93	0	0	161	4	115	2	37	0	0	0
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	465	98	0	0	169	4	121	2	39	0	0	0
RTOR Reduction (vph)	0	0	0	0	1	0	0	0	31	0	0	0
Lane Group Flow (vph)	465	98	0	0	172	0	0	123	8	0	0	0
Turn Type	Prot						Perm		Perm			
Protected Phases	7	4			8			2				
Permitted Phases							2		2			
Actuated Green, G (s)	20.3	32.4			8.1			10.8	10.8			
Effective Green, g (s)	20.3	32.4			8.1			10.8	10.8			
Actuated g/C Ratio	0.40	0.63			0.16			0.21	0.21			
Clearance Time (s)	4.0	4.0			4.0			4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0			3.0	3.0			
Lane Grp Cap (vph)	628	1179			294			374	299			
v/s Ratio Prot	c0.29	0.05			c0.09							
v/s Ratio Perm								0.07	0.01			
v/c Ratio	0.74	0.08			0.59			0.33	0.03			
Uniform Delay, d1	13.2	3.6			20.0			17.1	16.0			
Progression Factor	1.00	1.00			1.00			1.00	1.00			
Incremental Delay, d2	4.7	0.0			3.0			0.5	0.0			
Delay (s)	17.9	3.7			23.0			17.6	16.1			
Level of Service	B	A			C			B	B			
Approach Delay (s)		15.4			23.0			17.3			0.0	
Approach LOS		B			C			B			A	

Intersection Summary			
HCM Average Control Delay	17.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	51.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	73.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

LOS Engineering

AM Existing

22: Stewart Canyon Rd & Horse Ranch Creek Rd — HCM Unsignalized Intersection Capacity Analysis

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Yield			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	18	4	4	0	0	20
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	19	4	4	0	0	21
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	19	11	21			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	19	11	21			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	100	100			
cM capacity (veh/h)	996	1071	1595			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	23	4	21
Volume Left	19	4	0
Volume Right	4	0	21
cSH	1009	1595	1700
Volume to Capacity	0.02	0.00	0.01
Queue Length 95th (ft)	2	0	0
Control Delay (s)	8.7	7.3	0.0
Lane LOS	A	A	
Approach Delay (s)	8.7	7.3	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	4.8		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

LOS Engineering

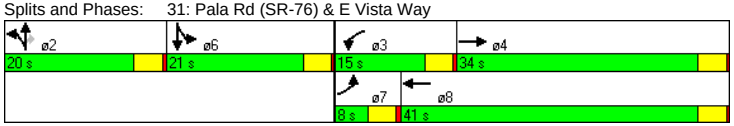
AM Existing
31: Pala Rd (SR-76) & E Vista Way

Timings

Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBT
Lane Configurations							
Volume (vph)	30	520	268	799	46	278	167
Turn Type	Prot		Prot			Perm	
Protected Phases	7	4	3	8	2		6
Permitted Phases						2	
Detector Phases	7	4	3	8	2	2	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	8.0	20.0	20.0	20.0	20.0
Total Split (s)	8.0	34.0	15.0	41.0	20.0	20.0	21.0
Total Split (%)	8.9%	37.8%	16.7%	45.6%	22.2%	22.2%	23.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead	Lag	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			
Recall Mode	None	None	None	None	Max	Max	Max
Act Effct Green (s)	4.0	27.0	10.7	37.1	16.0	16.0	17.0
Actuated g/C Ratio	0.04	0.31	0.12	0.43	0.18	0.18	0.20
v/c Ratio	0.46	0.72	0.75	1.07	0.94	0.58	1.02
Control Delay	63.3	27.5	50.9	77.9	74.2	9.5	83.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.3	27.5	50.9	77.9	74.2	9.5	83.4
LOS	E	C	D	E	E	A	F
Approach Delay		28.9		71.1	42.8		83.4
Approach LOS		C		E	D		F

Intersection Summary		
Cycle Length: 90		
Actuated Cycle Length: 86.8		
Natural Cycle: 120		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 1.07		
Intersection Signal Delay: 55.1	Intersection LOS: E	
Intersection Capacity Utilization 96.7%	ICU Level of Service F	
Analysis Period (min) 15		

Splits and Phases: 31: Pala Rd (SR-76) & E Vista Way



LOS Engineering

AM Existing
31: Pala Rd (SR-76) & E Vista Way

Queues

Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	32	798	282	847	310	293	393
v/c Ratio	0.46	0.72	0.75	1.07	0.94	0.58	1.02
Control Delay	63.3	27.5	50.9	77.9	74.2	9.5	83.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.3	27.5	50.9	77.9	74.2	9.5	83.4
Queue Length 50th (ft)	18	181	80	~555	177	0	~218
Queue Length 95th (ft)	#56	246	#137	#780	#341	71	#397
Internal Link Dist (ft)		630		446	717		472
Turn Bay Length (ft)	300		450			200	
Base Capacity (vph)	70	1188	388	795	330	501	385
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.67	0.73	1.07	0.94	0.58	1.02

Intersection Summary
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

LOS Engineering

AM Existing

31: Pala Rd (SR-76) & E Vista Way — HCM Signalized Intersection Capacity Analysis

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1900	1700	1700	1900	1700	1700	1900	1700	1700	1900	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95		0.97	1.00			1.00	1.00		1.00	
Frt	1.00	0.95		1.00	1.00			1.00	0.85		0.93	
Flt Protected	0.95	1.00		0.95	1.00			0.96	1.00		1.00	
Satd. Flow (prot)	1583	3372		3072	1861			1787	1417		1726	
Flt Permitted	0.95	1.00		0.95	1.00			0.96	1.00		1.00	
Satd. Flow (perm)	1583	3372		3072	1861			1787	1417		1726	
Volume (vph)	30	520	238	268	799	6	249	46	278	5	167	201
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	32	547	251	282	841	6	262	48	293	5	176	212
RTOR Reduction (vph)	0	60	0	0	0	0	0	0	240	0	47	0
Lane Group Flow (vph)	32	738	0	282	847	0	0	310	53	0	346	0
Turn Type	Prot			Prot			Split		Perm	Split		
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases									2			
Actuated Green, G (s)	2.3	28.7		10.7	37.1			16.0	16.0		17.0	
Effective Green, g (s)	2.3	28.7		10.7	37.1			16.0	16.0		17.0	
Actuated g/C Ratio	0.03	0.32		0.12	0.42			0.18	0.18		0.19	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	41	1095		372	781			323	256		332	
v/s Ratio Prot	0.02	0.22		c0.09	c0.46			c0.17			c0.20	
v/s Ratio Perm									0.04			
v/c Ratio	0.78	0.67		0.76	1.08			0.96	0.21		1.04	
Uniform Delay, d1	42.8	25.8		37.6	25.7			35.9	30.8		35.7	
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	62.4	1.7		8.6	57.6			40.8	1.8		60.9	
Delay (s)	105.2	27.5		46.2	83.2			76.7	32.6		96.6	
Level of Service	F	C		D	F			E	C		F	
Approach Delay (s)		30.5			74.0			55.3			96.6	
Approach LOS		C			E			E			F	

Intersection Summary			
HCM Average Control Delay	60.9	HCM Level of Service	E
HCM Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	88.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	96.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

LOS Engineering

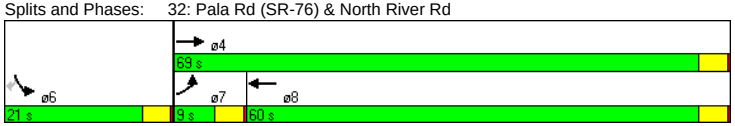
AM Existing

32: Pala Rd (SR-76) & North River Rd — Timings

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Volume (vph)	93	732	1076	91	66
Turn Type	Prot				Perm
Protected Phases	7	4	8	6	
Permitted Phases					6
Detector Phases	7	4	8	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0
Total Split (s)	9.0	69.0	60.0	21.0	21.0
Total Split (%)	10.0%	76.7%	66.7%	23.3%	23.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	None	None	Max	Max
Act Effct Green (s)	5.0	65.0	56.0	17.0	17.0
Actuated g/C Ratio	0.06	0.72	0.62	0.19	0.19
v/c Ratio	1.11	0.57	1.14	0.32	0.21
Control Delay	172.6	8.0	92.1	35.0	10.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	172.6	8.0	92.1	35.0	10.0
LOS	F	A	F	D	A
Approach Delay		26.6	92.1	24.6	
Approach LOS		C	F	C	

Intersection Summary		
Cycle Length: 90		
Actuated Cycle Length: 90		
Natural Cycle: 120		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 1.14		
Intersection Signal Delay: 62.9	Intersection LOS: E	
Intersection Capacity Utilization 87.7%	ICU Level of Service E	
Analysis Period (min) 15		

Splits and Phases: 32: Pala Rd (SR-76) & North River Rd



LOS Engineering

AM Existing
32: Pala Rd (SR-76) & North River Rd — Queues

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	98	771	1301	96	69
v/c Ratio	1.11	0.57	1.14	0.32	0.21
Control Delay	172.6	8.0	92.1	35.0	10.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	172.6	8.0	92.1	35.0	10.0
Queue Length 50th (ft)	~65	174	~871	48	0
Queue Length 95th (ft)	#164	259	#1124	93	35
Internal Link Dist (ft)		1276	1320	1206	
Turn Bay Length (ft)	150			50	
Base Capacity (vph)	88	1346	1145	299	324
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.11	0.57	1.14	0.32	0.21

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

AM Existing
32: Pala Rd (SR-76) & North River Rd — HCM Signalized Intersection Capacity Analysis

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1900	1900	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.98		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1583	1863	1830		1583	1417
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1583	1863	1830		1583	1417
Volume (vph)	93	732	1076	160	91	66
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	98	771	1133	168	96	69
RTOR Reduction (vph)	0	0	6	0	0	56
Lane Group Flow (vph)	98	771	1295	0	96	13
Turn Type	Prot					Perm
Protected Phases	7	4	8		6	
Permitted Phases						6
Actuated Green, G (s)	5.0	65.0	56.0		17.0	17.0
Effective Green, g (s)	5.0	65.0	56.0		17.0	17.0
Actuated g/C Ratio	0.06	0.72	0.62		0.19	0.19
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	88	1346	1139		299	268
v/s Ratio Prot	c0.06	0.41	c0.71		c0.06	
v/s Ratio Perm						0.01
v/c Ratio	1.11	0.57	1.14		0.32	0.05
Uniform Delay, d1	42.5	5.9	17.0		31.5	29.9
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	130.0	0.6	72.7		2.8	0.3
Delay (s)	172.5	6.5	89.7		34.3	30.2
Level of Service	F	A	F		C	C
Approach Delay (s)		25.2	89.7		32.6	
Approach LOS		C	F		C	

Intersection Summary

HCM Average Control Delay	61.7	HCM Level of Service	E
HCM Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	87.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

AM Existing
33: Pala Rd (SR-76) & Olive Hill Rd

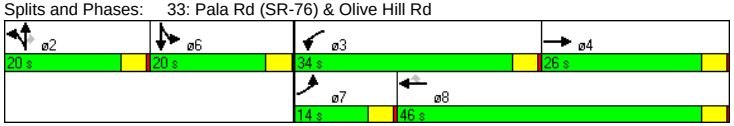
Timings

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT
Lane Configurations									
Volume (vph)	60	692	459	1088	56	61	232	81	214
Turn Type	Prot		Prot		Perm		Perm	Split	
Protected Phases	7	4	3	8		2		6	6
Permitted Phases					8		2		
Detector Phases	7	4	3	8	8	2	2	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	8.0	20.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	14.0	26.0	34.0	46.0	46.0	20.0	20.0	20.0	20.0
Total Split (%)	14.0%	26.0%	34.0%	46.0%	46.0%	20.0%	20.0%	20.0%	20.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	None	None	None	None	Max	Max	Max	Max
Act Effct Green (s)	8.6	22.0	30.0	45.4	45.4	16.0	16.0	16.0	16.0
Actuated g/C Ratio	0.08	0.22	0.30	0.45	0.45	0.16	0.16	0.16	0.16
v/c Ratio	0.47	1.05	1.02	0.71	0.09	0.38	0.56	0.34	0.96
Control Delay	55.0	84.2	81.8	26.1	5.9	41.9	10.6	41.5	84.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.0	84.2	81.8	26.1	5.9	41.9	10.6	41.5	84.3
LOS	E	F	F	C	A	D	B	D	F
Approach Delay		82.1		41.3		20.3			74.5
Approach LOS		F		D		C			E

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Natural Cycle: 100
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.05
Intersection Signal Delay: 53.7 Intersection LOS: D
Intersection Capacity Utilization 84.0% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 33: Pala Rd (SR-76) & Olive Hill Rd



LOS Engineering

AM Existing
33: Pala Rd (SR-76) & Olive Hill Rd

Queues

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	63	814	483	1145	59	110	244	85	287
v/c Ratio	0.47	1.05	1.02	0.71	0.09	0.38	0.56	0.34	0.96
Control Delay	55.0	84.2	81.8	26.1	5.9	41.9	10.6	41.5	84.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.0	84.2	81.8	26.1	5.9	41.9	10.6	41.5	84.3
Queue Length 50th (ft)	39	~296	~317	317	1	63	0	49	177
Queue Length 95th (ft)	81	#419	#524	405	25	117	69	95	#343
Internal Link Dist (ft)		505		583		881			1106
Turn Bay Length (ft)	250		250		200		150	150	
Base Capacity (vph)	153	776	475	1607	673	292	432	253	299
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	1.05	1.02	0.71	0.09	0.38	0.56	0.34	0.96

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

LOS Engineering

AM Existing
33: Pala Rd (SR-76) & Olive Hill Rd

HCM Signalized Intersection Capacity Analysis

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1900	1700	1700	1900	1700	1700	1900	1700	1700	1900	1700
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	1.00	
Satd. Flow (prot)	1583	3483		1583	3539	1417		1825	1417	1583	1802	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	1.00	
Satd. Flow (perm)	1583	3483		1583	3539	1417		1825	1417	1583	1802	
Volume (vph)	60	692	82	459	1088	56	44	61	232	81	214	59
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	63	728	86	483	1145	59	46	64	244	85	225	62
RTOR Reduction (vph)	0	9	0	0	0	30	0	0	205	0	10	0
Lane Group Flow (vph)	63	805	0	483	1145	29	0	110	39	85	277	0
Turn Type	Prot			Prot		Perm	Split		Perm	Split		
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8			2			
Actuated Green, G (s)	7.4	22.8		30.0	45.4	45.4		16.0	16.0	16.0	16.0	
Effective Green, g (s)	7.4	22.8		30.0	45.4	45.4		16.0	16.0	16.0	16.0	
Actuated g/C Ratio	0.07	0.23		0.30	0.45	0.45		0.16	0.16	0.16	0.16	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	116	788		471	1594	638		290	225	251	286	
v/s Ratio Prot	0.04	c0.23		c0.31	0.32			c0.06		0.05	c0.15	
v/s Ratio Perm						0.02			0.03			
v/c Ratio	0.54	1.02		1.03	0.72	0.05		0.38	0.17	0.34	0.97	
Uniform Delay, d1	45.1	39.0		35.4	22.5	15.5		38.0	36.7	37.7	42.1	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	5.1	37.5		48.1	1.6	0.0		3.7	1.7	3.6	45.7	
Delay (s)	50.2	76.5		83.5	24.1	15.6		41.7	38.3	41.3	87.8	
Level of Service	D	E		F	C	B		D	D	D	F	
Approach Delay (s)		74.6			40.8			39.4			77.2	
Approach LOS		E			D			D			E	

Intersection Summary			
HCM Average Control Delay	53.8	HCM Level of Service	D
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	100.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	84.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

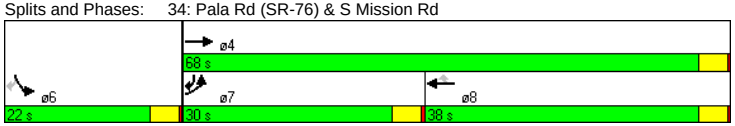
AM Existing
34: Pala Rd (SR-76) & S Mission Rd

Timings

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	525	442	828	89	103	781
Turn Type	Prot			Perm		pm+ov
Protected Phases	7	4	8		6	7
Permitted Phases				8		6
Detector Phases	7	4	8	8	6	7
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0	8.0
Total Split (s)	30.0	68.0	38.0	38.0	22.0	30.0
Total Split (%)	33.3%	75.6%	42.2%	42.2%	24.4%	33.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead		Lag	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes		Yes
Recall Mode	None	None	None	None	Max	None
Act Effct Green (s)	20.9	49.5	24.4	24.4	18.5	43.5
Actuated g/C Ratio	0.27	0.65	0.32	0.32	0.24	0.57
v/c Ratio	0.66	0.38	0.77	0.18	0.14	0.58
Control Delay	29.3	6.8	28.5	5.4	27.5	13.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.3	6.8	28.5	5.4	27.5	13.6
LOS	C	A	C	A	C	B
Approach Delay		19.0	26.2		15.2	
Approach LOS		B	C		B	

Intersection Summary		
Cycle Length: 90		
Actuated Cycle Length: 76.2		
Natural Cycle: 60		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 0.77		
Intersection Signal Delay: 20.2	Intersection LOS: C	
Intersection Capacity Utilization 60.1%	ICU Level of Service B	
Analysis Period (min) 15		

Splits and Phases: 34: Pala Rd (SR-76) & S Mission Rd



AM Existing
34: Pala Rd (SR-76) & S Mission Rd

Queues

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	553	465	872	94	108	822
v/c Ratio	0.66	0.38	0.77	0.18	0.14	0.58
Control Delay	29.3	6.8	28.5	5.4	27.5	13.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.3	6.8	28.5	5.4	27.5	13.6
Queue Length 50th (ft)	120	86	200	0	22	134
Queue Length 95th (ft)	194	129	276	30	48	240
Internal Link Dist (ft)		485	371		1253	
Turn Bay Length (ft)	500			300	500	
Base Capacity (vph)	994	1325	1417	624	747	1490
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.56	0.35	0.62	0.15	0.14	0.55

Intersection Summary

AM Existing
34: Pala Rd (SR-76) & S Mission Rd

HCM Signalized Intersection Capacity Analysis

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1900	1900	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	1.00	0.95	1.00	0.97	0.88
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3072	1863	3539	1417	3072	2493
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3072	1863	3539	1417	3072	2493
Volume (vph)	525	442	828	89	103	781
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	553	465	872	94	108	822
RTOR Reduction (vph)	0	0	0	64	0	0
Lane Group Flow (vph)	553	465	872	30	108	822
Turn Type	Prot			Perm		pm+ov
Protected Phases	7	4	8		6	7
Permitted Phases				8		6
Actuated Green, G (s)	20.9	49.4	24.5	24.5	18.5	39.4
Effective Green, g (s)	20.9	49.4	24.5	24.5	18.5	39.4
Actuated g/C Ratio	0.28	0.65	0.32	0.32	0.24	0.52
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	846	1213	1142	457	749	1426
v/s Ratio Prot	c0.18	0.25	c0.25		0.04	c0.16
v/s Ratio Perm				0.02		0.17
v/c Ratio	0.65	0.38	0.76	0.07	0.14	0.58
Uniform Delay, d1	24.3	6.2	23.1	17.8	22.5	12.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.8	0.2	3.1	0.1	0.4	0.6
Delay (s)	26.1	6.4	26.2	17.8	22.9	13.1
Level of Service	C	A	C	B	C	B
Approach Delay (s)		17.1	25.4		14.2	
Approach LOS		B	C		B	

Intersection Summary				
HCM Average Control Delay	18.9	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.69			
Actuated Cycle Length (s)	75.9	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	60.1%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

AM Existing
37: Pala Rd (SR-76) & Pala Mission Rd

Timings

Lane Group	EBL	EBT	WBL	WBT	NBL	SBT	SBR
Lane Configurations							
Volume (vph)	81	148	5	83	9	8	119
Turn Type	Prot		Prot		Split		Perm
Protected Phases	7	4	3	8	2	6	
Permitted Phases							6
Detector Phases	7	4	3	8	2	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	8.0	20.0	20.0	20.0	20.0
Total Split (s)	18.0	30.0	12.0	24.0	24.0	24.0	24.0
Total Split (%)	20.0%	33.3%	13.3%	26.7%	26.7%	26.7%	26.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead	Lag	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			
Recall Mode	None	None	None	None	Max	None	None
Act Effct Green (s)	9.7	17.3	6.3	9.6	34.2	8.0	8.0
Actuated g/C Ratio	0.13	0.24	0.08	0.13	0.48	0.11	0.11
v/c Ratio	0.42	0.20	0.04	0.39	0.01	0.15	0.47
Control Delay	30.4	15.9	31.0	27.3	17.0	27.4	12.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.4	15.9	31.0	27.3	17.0	27.4	12.1
LOS	C	B	C	C	B	C	B
Approach Delay		20.7		27.5		15.0	
Approach LOS		C		C		B	

Intersection Summary			
Cycle Length: 90			
Actuated Cycle Length: 71.7			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.47			
Intersection Signal Delay: 20.3		Intersection LOS: C	
Intersection Capacity Utilization 26.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 37: Pala Rd (SR-76) & Pala Mission Rd

AM Existing
37: Pala Rd (SR-76) & Pala Mission Rd

Queues

Lane Group	EBL	EBT	WBL	WBT	NBL	SBT	SBR
Lane Group Flow (vph)	85	170	5	96	9	30	125
v/c Ratio	0.42	0.20	0.04	0.39	0.01	0.15	0.47
Control Delay	30.4	15.9	31.0	27.3	17.0	27.4	12.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.4	15.9	31.0	27.3	17.0	27.4	12.1
Queue Length 50th (ft)	28	20	2	30	2	10	0
Queue Length 95th (ft)	72	52	12	76	13	34	43
Internal Link Dist (ft)		861		996		1485	
Turn Bay Length (ft)	250		250		200		50
Base Capacity (vph)	299	1203	168	478	756	455	452
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.14	0.03	0.20	0.01	0.07	0.28

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1900	1700	1700	1900	1700	1700	1900	1700	1700	1900	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0				4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	1.00		1.00				1.00	1.00
Frt	1.00	0.99		1.00	0.99		1.00				1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95				0.96	1.00
Satd. Flow (prot)	1583	3495		1583	1837		1583				1797	1417
Flt Permitted	0.95	1.00		0.95	1.00		0.95				0.96	1.00
Satd. Flow (perm)	1583	3495		1583	1837		1583				1797	1417
Volume (vph)	81	148	13	5	83	9	9	0	0	21	8	119
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	85	156	14	5	87	9	9	0	0	22	8	125
RTOR Reduction (vph)	0	8	0	0	4	0	0	0	0	0	0	113
Lane Group Flow (vph)	85	162	0	5	92	0	9	0	0	0	30	12
Turn Type	Prot			Prot			Split			Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases												6
Actuated Green, G (s)	6.9	16.2		1.3	10.6		33.7				7.2	7.2
Effective Green, g (s)	6.9	16.2		1.3	10.6		33.7				7.2	7.2
Actuated g/C Ratio	0.09	0.22		0.02	0.14		0.45				0.10	0.10
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0				4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0				3.0	3.0
Lane Grp Cap (vph)	147	761		28	262		717				174	137
v/s Ratio Prot	c0.05	0.05		0.00	c0.05		c0.01				c0.02	
v/s Ratio Perm												0.01
v/c Ratio	0.58	0.21		0.18	0.35		0.01				0.17	0.09
Uniform Delay, d1	32.4	23.9		36.0	28.8		11.2				30.9	30.6
Progression Factor	1.00	1.00		1.00	1.00		1.00				1.00	1.00
Incremental Delay, d2	5.4	0.1		3.0	0.8		0.0				0.5	0.3
Delay (s)	37.8	24.0		39.1	29.6		11.2				31.3	30.9
Level of Service	D	C		D	C		B				C	C
Approach Delay (s)		28.6			30.1			11.2			31.0	
Approach LOS		C			C			B			C	

Intersection Summary			
HCM Average Control Delay	29.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.16		
Actuated Cycle Length (s)	74.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	26.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

PM Existing
1: Pala Rd (SR-76) & Via Monserate

HCM Unsignalized Intersection Capacity Analysis

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	22	927	797	53	41	15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	23	976	839	56	43	16
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	895				1889	867
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	895				1889	867
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				42	96
cM capacity (veh/h)	758				75	352

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	23	976	895	59
Volume Left	23	0	0	43
Volume Right	0	0	56	16
cSH	758	1700	1700	95
Volume to Capacity	0.03	0.57	0.53	0.62
Queue Length 95th (ft)	2	0	0	74
Control Delay (s)	9.9	0.0	0.0	91.4
Lane LOS	A			F
Approach Delay (s)	0.2		0.0	91.4
Approach LOS				F

Intersection Summary			
Average Delay	2.9		
Intersection Capacity Utilization	59.0%	ICU Level of Service	B
Analysis Period (min)	15		

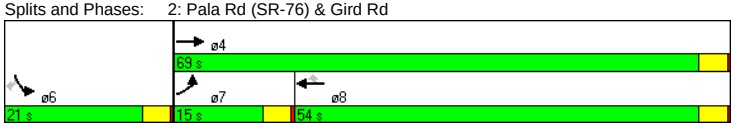
PM Existing
2: Pala Rd (SR-76) & Gird Rd

Timings

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	111	874	784	68	44	56
Turn Type	Prot			Perm		Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Detector Phases	7	4	8	8	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	15.0	69.0	54.0	54.0	21.0	21.0
Total Split (%)	16.7%	76.7%	60.0%	60.0%	23.3%	23.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	None	None	None	Min	Min
Act Effct Green (s)	9.2	41.6	31.6	31.6	8.2	8.2
Actuated g/C Ratio	0.15	0.70	0.53	0.53	0.14	0.14
v/c Ratio	0.49	0.70	0.83	0.09	0.21	0.24
Control Delay	36.7	7.6	20.4	6.4	32.5	12.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.7	7.6	20.4	6.4	32.5	12.5
LOS	D	A	C	A	C	B
Approach Delay		10.9	19.3		21.2	
Approach LOS		B	B		C	

Intersection Summary			
Cycle Length: 90			
Actuated Cycle Length: 59.3			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 15.1		Intersection LOS: B	
Intersection Capacity Utilization 61.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Pala Rd (SR-76) & Gird Rd



Queues

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1900	1900	1700	1700	1700
Storage Length (ft)	450			20	0	180
Storage Lanes	1			1	1	1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Turning Speed (mph)	15			9	15	9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1583	1863	1863	1417	1583	1417
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1583	1863	1863	1417	1583	1417
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				14		59
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30	30		30	
Link Distance (ft)		3191	8309		1271	
Travel Time (s)		72.5	188.8		28.9	
Volume (vph)	111	874	784	68	44	56
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	117	920	825	72	46	59
Lane Group Flow (vph)	117	920	825	72	46	59
v/c Ratio	0.49	0.70	0.83	0.09	0.21	0.24
Control Delay	36.7	7.6	20.4	6.4	32.5	12.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.7	7.6	20.4	6.4	32.5	12.5
Queue Length 50th (ft)	41	117	240	10	16	0
Queue Length 95th (ft)	#115	250	436	29	53	34
Internal Link Dist (ft)		3111	8229		1191	
Turn Bay Length (ft)	450			20		180
Base Capacity (vph)	295	1503	1225	937	432	430
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.61	0.67	0.08	0.11	0.14

Intersection Summary

Area Type: Other

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

LOS Engineering

HCM Signalized Intersection Capacity Analysis

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1900	1900	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1583	1863	1863	1417	1583	1417
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1583	1863	1863	1417	1583	1417
Volume (vph)	111	874	784	68	44	56
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	117	920	825	72	46	59
RTOR Reduction (vph)	0	0	0	6	0	51
Lane Group Flow (vph)	117	920	825	66	46	8
Turn Type	Prot			Perm		Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Actuated Green, G (s)	7.1	42.7	31.6	31.6	8.2	8.2
Effective Green, g (s)	7.1	42.7	31.6	31.6	8.2	8.2
Actuated g/C Ratio	0.12	0.72	0.54	0.54	0.14	0.14
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	191	1351	1000	760	220	197
v/s Ratio Prot	0.07	c0.49	c0.44		c0.03	
v/s Ratio Perm				0.05		0.01
v/c Ratio	0.61	0.68	0.82	0.09	0.21	0.04
Uniform Delay, d1	24.6	4.4	11.4	6.6	22.5	21.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.7	1.4	5.6	0.0	0.5	0.1
Delay (s)	30.3	5.8	17.0	6.7	23.0	22.0
Level of Service	C	A	B	A	C	C
Approach Delay (s)		8.6	16.2		22.4	
Approach LOS		A	B		C	

Intersection Summary				
HCM Average Control Delay	12.6	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.72			
Actuated Cycle Length (s)	58.9	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	61.5%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

LOS Engineering

PM Existing
3: Pala Rd (SR-76) & Sage Rd — HCM Unsignalized Intersection Capacity Analysis

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	8	912	854	4	6	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	8	960	899	4	6	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	903				1878	901
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	903				1878	901
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				92	97
cM capacity (veh/h)	753				78	337

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	968	903	16
Volume Left	8	0	6
Volume Right	0	4	9
cSH	753	1700	144
Volume to Capacity	0.01	0.53	0.11
Queue Length 95th (ft)	1	0	9
Control Delay (s)	0.3	0.0	33.0
Lane LOS	A		D
Approach Delay (s)	0.3	0.0	33.0
Approach LOS			D

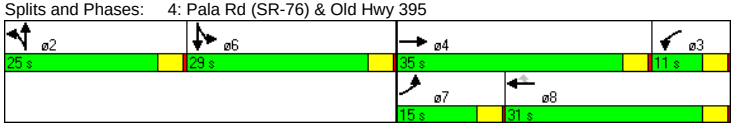
Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	64.4%	ICU Level of Service	C
Analysis Period (min)	15		

PM Existing
4: Pala Rd (SR-76) & Old Hwy 395 — Timings

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBT
Lane Configurations							
Volume (vph)	71	780	60	599	236	99	69
Turn Type	Prot		Prot		Perm		
Protected Phases	7	4	3	8		2	6
Permitted Phases					8		
Detector Phases	7	4	3	8	8	2	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	8.0	20.0	20.0	20.0	20.0
Total Split (s)	15.0	35.0	11.0	31.0	31.0	25.0	29.0
Total Split (%)	15.0%	35.0%	11.0%	31.0%	31.0%	25.0%	29.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead	Lead	Lag	Lag	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	None	None	None	None	Min	Min
Act Effct Green (s)	9.0	24.8	7.2	23.0	23.0	15.1	18.4
Actuated g/C Ratio	0.11	0.31	0.09	0.29	0.29	0.19	0.23
v/c Ratio	0.43	0.83	0.46	0.62	0.42	0.71	0.78
Control Delay	48.1	34.8	54.3	30.6	6.5	43.8	44.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.1	34.8	54.3	30.6	6.5	43.8	44.8
LOS	D	C	D	C	A	D	D
Approach Delay		35.8		25.8		43.8	44.8
Approach LOS		D		C		D	D

Intersection Summary			
Cycle Length: 100			
Actuated Cycle Length: 80.1			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 34.0		Intersection LOS: C	
Intersection Capacity Utilization 68.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 4: Pala Rd (SR-76) & Old Hwy 395



PM Existing
4: Pala Rd (SR-76) & Old Hwy 395 — Queues

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1900	1700	1700	1900	1700	1700	1900	1700	1700	1900	1700
Storage Length (ft)	330		0	150		150	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50	50	50	50		50	50	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.987				0.850		0.965			0.976	
Flt Protected	0.950			0.950				0.984			0.971	
Satd. Flow (prot)	1583	3493	0	1583	3539	1417	0	1769	0	0	1765	0
Flt Permitted	0.950			0.950				0.984			0.971	
Satd. Flow (perm)	1583	3493	0	1583	3539	1417	0	1769	0	0	1765	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10				248		16			11	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			462			899			4464	
Travel Time (s)		14.8			10.5			20.4			101.5	
Volume (vph)	71	780	75	60	599	236	73	99	60	181	69	55
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	75	821	79	63	631	248	77	104	63	191	73	58
Lane Group Flow (vph)	75	900	0	63	631	248	0	244	0	0	322	0
v/c Ratio	0.43	0.83		0.46	0.62	0.42		0.71			0.78	
Control Delay	48.1	34.8		54.3	30.6	6.5		43.8			44.8	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Delay	48.1	34.8		54.3	30.6	6.5		43.8			44.8	
Queue Length 50th (ft)	41	242		36	163	0		125			168	
Queue Length 95th (ft)	91	354		#96	249	58		217			281	
Internal Link Dist (ft)		572			382			819			4384	
Turn Bay Length (ft)	330			150		150						
Base Capacity (vph)	221	1322		146	1202	645		474			548	
Starvation Cap Reductn	0	0		0	0	0		0			0	
Spillback Cap Reductn	0	0		0	0	0		0			0	
Storage Cap Reductn	0	0		0	0	0		0			0	
Reduced v/c Ratio	0.34	0.68		0.43	0.52	0.38		0.51			0.59	

Intersection Summary
Area Type: Other
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

LOS Engineering

PM Existing
4: Pala Rd (SR-76) & Old Hwy 395 — HCM Signalized Intersection Capacity Analysis

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1900	1700	1700	1900	1700	1700	1900	1700	1700	1900	1700
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00			1.00	
Frt	1.00	0.99		1.00	1.00	0.85		0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98			0.97	
Satd. Flow (prot)	1583	3493		1583	3539	1417		1770			1765	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.98			0.97	
Satd. Flow (perm)	1583	3493		1583	3539	1417		1770			1765	
Volume (vph)	71	780	75	60	599	236	73	99	60	181	69	55
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	75	821	79	63	631	248	77	104	63	191	73	58
RTOR Reduction (vph)	0	7	0	0	0	176	0	13	0	0	8	0
Lane Group Flow (vph)	75	893	0	63	631	72	0	231	0	0	314	0
Turn Type	Prot			Prot		Perm	Split			Split		
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8						
Actuated Green, G (s)	6.9	24.8		5.1	23.0	23.0		15.1			18.4	
Effective Green, g (s)	6.9	24.8		5.1	23.0	23.0		15.1			18.4	
Actuated g/C Ratio	0.09	0.31		0.06	0.29	0.29		0.19			0.23	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0			3.0	
Lane Grp Cap (vph)	138	1091		102	1025	410		337			409	
v/s Ratio Prot	0.05	c0.26		0.04	c0.18			c0.13			c0.18	
v/s Ratio Perm						0.05						
v/c Ratio	0.54	0.82		0.62	0.62	0.18		0.69			0.77	
Uniform Delay, d1	34.7	25.2		36.2	24.4	21.1		29.9			28.5	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	
Incremental Delay, d2	4.3	4.9		10.6	1.1	0.2		5.7			8.4	
Delay (s)	39.1	30.1		46.8	25.5	21.3		35.6			36.9	
Level of Service	D	C		D	C	C		D			D	
Approach Delay (s)		30.8			25.8			35.6			36.9	
Approach LOS		C			C			D			D	

Intersection Summary				
HCM Average Control Delay	30.2	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.73			
Actuated Cycle Length (s)	79.4	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	68.4%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

LOS Engineering

PM Existing
6: Pala Rd (SR-76) & I-15 SB Ramps

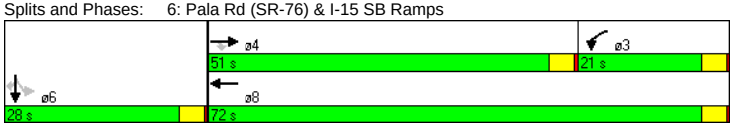
Timings

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Configurations						
Volume (vph)	717	273	125	556	5	433
Turn Type		Perm	Prot			Perm
Protected Phases	4		3	8	6	
Permitted Phases		4				6
Detector Phases	4	4	3	8	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	20.0	20.0	8.0	20.0	20.0	20.0
Total Split (s)	51.0	51.0	21.0	72.0	28.0	28.0
Total Split (%)	51.0%	51.0%	21.0%	72.0%	28.0%	28.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	None	None	None	None	C-Min	C-Min
Act Effct Green (s)	44.4	44.4	13.1	61.4	30.6	30.6
Actuated g/C Ratio	0.44	0.44	0.13	0.61	0.31	0.31
v/c Ratio	0.91	0.36	0.64	0.51	0.15	0.67
Control Delay	42.4	3.3	30.4	8.4	30.0	13.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.4	3.3	30.4	8.4	30.0	13.7
LOS	D	A	C	A	C	B
Approach Delay	31.6			12.5	16.2	
Approach LOS	C			B	B	

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 40 (40%), Referenced to phase 2: and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.91
Intersection Signal Delay: 22.0 Intersection LOS: C
Intersection Capacity Utilization 86.5% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 6: Pala Rd (SR-76) & I-15 SB Ramps



PM Existing
6: Pala Rd (SR-76) & I-15 SB Ramps

Queues

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1900	1700	1700	1900	1700	1700	1900	1700	1700	1900	1700
Storage Length (ft)	0		0	500		0	0		0	0		900
Storage Lanes	0		1	1		0	0		0	0		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)		50	50	50	50					50	50	50
Trailing Detector (ft)		0	0	0	0					0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.955	
Satd. Flow (prot)	0	1863	1417	1583	1863	0	0	0	0	0	1779	1417
Flt Permitted				0.950							0.955	
Satd. Flow (perm)	0	1863	1417	1583	1863	0	0	0	0	0	1779	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			284									359
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		654			1271			961			1209	
Travel Time (s)		14.9			28.9			21.8			27.5	
Volume (vph)	0	717	273	125	556	0	0	0	0	71	5	433
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	755	287	132	585	0	0	0	0	75	5	456
Lane Group Flow (vph)	0	755	287	132	585	0	0	0	0	0	80	456
v/c Ratio		0.91	0.36	0.64	0.51						0.15	0.67
Control Delay		42.4	3.3	30.4	8.4						30.0	13.7
Queue Delay		0.0	0.0	0.0	0.0						0.0	0.0
Total Delay		42.4	3.3	30.4	8.4						30.0	13.7
Queue Length 50th (ft)		403	1	68	89						39	48
Queue Length 95th (ft)		#647	45	m68	m8						80	177
Internal Link Dist (ft)		574			1191			881			1129	
Turn Bay Length (ft)				500								900
Base Capacity (vph)		892	827	269	1278						554	689
Starvation Cap Reductn		0	0	0	0						0	0
Spillback Cap Reductn		0	0	0	0						0	0
Storage Cap Reductn		0	0	0	0						0	0
Reduced v/c Ratio		0.85	0.35	0.49	0.46						0.14	0.66

Intersection Summary

Area Type: Other
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

PM Existing
6: Pala Rd (SR-76) & I-15 SB Ramps — HCM Signalized Intersection Capacity Analysis

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1900	1700	1700	1900	1700	1700	1900	1700	1700	1900	1700
Total Lost time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Lane Util. Factor		1.00	1.00	1.00	1.00						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.96	1.00
Satd. Flow (prot)		1863	1417	1583	1863						1779	1417
Flt Permitted		1.00	1.00	0.95	1.00						0.96	1.00
Satd. Flow (perm)		1863	1417	1583	1863						1779	1417
Volume (vph)	0	717	273	125	556	0	0	0	0	71	5	433
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	755	287	132	585	0	0	0	0	75	5	456
RTOR Reduction (vph)	0	0	158	0	0	0	0	0	0	0	0	250
Lane Group Flow (vph)	0	755	129	132	585	0	0	0	0	0	80	206
Turn Type			Perm	Prot						Perm		Perm
Protected Phases		4		3	8						6	
Permitted Phases			4							6		6
Actuated Green, G (s)		44.4	44.4	13.1	61.5						30.5	30.5
Effective Green, g (s)		44.4	44.4	13.1	61.5						30.5	30.5
Actuated g/C Ratio		0.44	0.44	0.13	0.62						0.30	0.30
Clearance Time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0						3.0	3.0
Lane Grp Cap (vph)		827	629	207	1146						543	432
v/s Ratio Prot		c0.41		c0.08	0.31							
v/s Ratio Perm			0.09								0.04	c0.15
v/c Ratio		0.91	0.21	0.64	0.51						0.15	0.48
Uniform Delay, d1		26.0	17.0	41.2	10.8						25.3	28.3
Progression Factor		1.00	1.00	0.61	0.76						1.00	1.00
Incremental Delay, d2		14.3	0.2	2.5	0.2						0.6	3.8
Delay (s)		40.3	17.2	27.5	8.3						25.9	32.0
Level of Service		D	B	C	A						C	C
Approach Delay (s)		33.9			11.9			0.0			31.1	
Approach LOS		C			B			A			C	

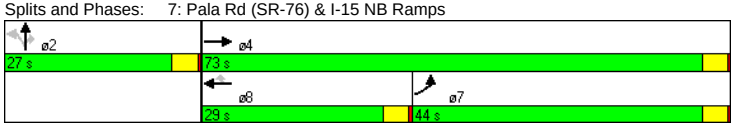
Intersection Summary				
HCM Average Control Delay	26.4	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.72			
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	86.5%	ICU Level of Service	E	
Analysis Period (min)	15			
c Critical Lane Group				

PM Existing
7: Pala Rd (SR-76) & I-15 NB Ramps — Timings

Lane Group	EBL	EBT	WBT	WBR	NBT	NBR
Lane Configurations						
Volume (vph)	594	213	351	50	4	121
Turn Type	Prot			Perm		Perm
Protected Phases	7	4	8		2	
Permitted Phases				8		2
Detector Phases	7	4	8	8	2	2
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	44.0	73.0	29.0	29.0	27.0	27.0
Total Split (%)	44.0%	73.0%	29.0%	29.0%	27.0%	27.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lag		Lead	Lead		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	None	None	None	C-Min	C-Min
Act Effct Green (s)	41.3	68.0	22.8	22.8	24.0	24.0
Actuated g/C Ratio	0.41	0.68	0.23	0.23	0.24	0.24
v/c Ratio	0.96	0.18	0.87	0.16	0.95	0.29
Control Delay	42.4	1.3	58.4	21.3	72.2	7.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.4	1.3	58.4	21.3	72.2	7.7
LOS	D	A	E	C	E	A
Approach Delay		31.6	53.8		56.8	
Approach LOS		C	D		E	

Intersection Summary			
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 56 (56%), Referenced to phase 2:NBTL and 6:, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 44.2		Intersection LOS: D	
Intersection Capacity Utilization 86.5%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 7: Pala Rd (SR-76) & I-15 NB Ramps



PM Existing
7: Pala Rd (SR-76) & I-15 NB Ramps

Queues

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1900	1700	1700	1900	1700	1700	1900	1700	1700	1900	1700
Storage Length (ft)	450		0	0		50	0		800	0		0
Storage Lanes	1		0	0		1	0		1	0		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50			50	50	50	50	50			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950							0.953				
Satd. Flow (prot)	1583	1863	0	0	1863	1417	0	1775	1417	0	0	0
Flt Permitted	0.950							0.953				
Satd. Flow (perm)	1583	1863	0	0	1863	1417	0	1775	1417	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						21			127			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1271			2232			991			1241	
Travel Time (s)		28.9			50.7			22.5			28.2	
Volume (vph)	594	213	0	0	351	50	380	4	121	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	625	224	0	0	369	53	400	4	127	0	0	0
Lane Group Flow (vph)	625	224	0	0	369	53	0	404	127	0	0	0
v/c Ratio	0.96	0.18			0.87	0.16		0.95	0.29			
Control Delay	42.4	1.3			58.4	21.3		72.2	7.7			
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0			
Total Delay	42.4	1.3			58.4	21.3		72.2	7.7			
Queue Length 50th (ft)	433	14			221	16		258	0			
Queue Length 95th (ft)	m#527	m15			#360	47		#451	46			
Internal Link Dist (ft)		1191			2152			911			1161	
Turn Bay Length (ft)	450					50			800			
Base Capacity (vph)	653	1285			466	370		425	436			
Starvation Cap Reductn	0	0			0	0		0	0			
Spillback Cap Reductn	0	0			0	0		0	0			
Storage Cap Reductn	0	0			0	0		0	0			
Reduced v/c Ratio	0.96	0.17			0.79	0.14		0.95	0.29			

Intersection Summary	
Area Type:	Other

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

LOS Engineering

PM Existing
7: Pala Rd (SR-76) & I-15 NB Ramps

HCM Signalized Intersection Capacity Analysis

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1900	1700	1700	1900	1700	1700	1900	1700	1700	1900	1700
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0	4.0			
Lane Util. Factor	1.00	1.00			1.00	1.00		1.00	1.00			
Frt	1.00	1.00			1.00	0.85		1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00		0.95	1.00			
Satd. Flow (prot)	1583	1863			1863	1417		1775	1417			
Flt Permitted	0.95	1.00			1.00	1.00		0.95	1.00			
Satd. Flow (perm)	1583	1863			1863	1417		1775	1417			
Volume (vph)	594	213	0	0	351	50	380	4	121	0	0	0
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	625	224	0	0	369	53	400	4	127	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	16	0	0	97	0	0	0
Lane Group Flow (vph)	625	224	0	0	369	37	0	404	30	0	0	0
Turn Type	Prot					Perm	Perm		Perm			
Protected Phases	7	4			8			2				
Permitted Phases						8	2		2			
Actuated Green, G (s)	41.3	68.1			22.8	22.8		23.9	23.9			
Effective Green, g (s)	41.3	68.1			22.8	22.8		23.9	23.9			
Actuated g/C Ratio	0.41	0.68			0.23	0.23		0.24	0.24			
Clearance Time (s)	4.0	4.0			4.0	4.0		4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0	3.0			
Lane Grp Cap (vph)	654	1269			425	323		424	339			
v/s Ratio Prot	c0.39	0.12			c0.20							
v/s Ratio Perm						0.03		0.23	0.02			
v/c Ratio	0.96	0.18			0.87	0.11		0.95	0.09			
Uniform Delay, d1	28.5	5.8			37.2	30.6		37.5	29.6			
Progression Factor	0.80	0.21			1.00	1.00		1.00	1.00			
Incremental Delay, d2	16.2	0.0			16.9	0.2		33.4	0.5			
Delay (s)	38.9	1.2			54.0	30.8		70.8	30.1			
Level of Service	D	A			D	C		E	C			
Approach Delay (s)		28.9			51.1			61.1			0.0	
Approach LOS		C			D			E			A	

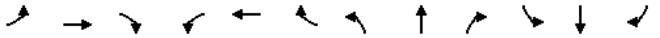
Intersection Summary			
HCM Average Control Delay	43.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

LOS Engineering

PM Existing
8: Pala Rd (SR-76) & Pankey Rd

HCM Unsignalized Intersection Capacity Analysis



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	349	27	1	434	7	14	0	1	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	367	28	1	457	7	15	0	1	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	464			396			612	848	198	647	858	232
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	464			396			612	848	198	647	858	232
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			96	100	100	100	100	100
cM capacity (veh/h)	1093			1159			377	297	810	355	292	770

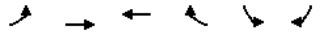
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	0	245	151	1	305	160	16	0
Volume Left	0	0	0	1	0	0	15	0
Volume Right	0	0	28	0	0	7	1	0
cSH	1700	1700	1700	1159	1700	1700	391	1700
Volume to Capacity	0.00	0.14	0.09	0.00	0.18	0.09	0.04	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	3	0
Control Delay (s)	0.0	0.0	0.0	8.1	0.0	0.0	14.6	0.0
Lane LOS				A			B	A
Approach Delay (s)	0.0			0.0			14.6	0.0
Approach LOS							B	A

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	22.2%	ICU Level of Service	A	
Analysis Period (min)	15			

LOS Engineering

PM Existing
10: Pala Rd (SR-76) & Rice Canyon Rd

HCM Unsignalized Intersection Capacity Analysis



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	13	297	405	8	8	10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	14	313	426	8	8	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	435				771	431
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	435				771	431
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				98	98
cM capacity (veh/h)	1125				364	625

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	326	435	19
Volume Left	14	0	8
Volume Right	0	8	11
cSH	1125	1700	474
Volume to Capacity	0.01	0.26	0.04
Queue Length 95th (ft)	1	0	3
Control Delay (s)	0.5	0.0	12.9
Lane LOS	A		B
Approach Delay (s)	0.5	0.0	12.9
Approach LOS			B

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	36.2%	ICU Level of Service	A
Analysis Period (min)	15		

LOS Engineering

PM Existing
11: Pala Rd (SR-76) & Couser Canyon Rd

HCM Unsignalized Intersection Capacity Analysis

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	282	20	8	408	11	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	297	21	8	429	12	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			318		754	307
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			318		754	307
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		97	100
cM capacity (veh/h)			1242		375	733

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	318	438	14
Volume Left	0	8	12
Volume Right	21	0	2
cSH	1700	1242	405
Volume to Capacity	0.19	0.01	0.03
Queue Length 95th (ft)	0	1	3
Control Delay (s)	0.0	0.2	14.2
Lane LOS		A	B
Approach Delay (s)	0.0	0.2	14.2
Approach LOS			B

Intersection Summary			
Average Delay		0.4	
Intersection Capacity Utilization		37.9%	ICU Level of Service A
Analysis Period (min)		15	

LOS Engineering

PM Existing
12: Pala Mesa Dr & Old Hwy 395

HCM Unsignalized Intersection Capacity Analysis

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	13	24	46	329	165	27
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	14	25	48	346	174	28
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	631	188	202			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	631	188	202			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	97	97	96			
cM capacity (veh/h)	429	854	1370			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	39	48	346	202
Volume Left	14	48	0	0
Volume Right	25	0	0	28
cSH	634	1370	1700	1700
Volume to Capacity	0.06	0.04	0.20	0.12
Queue Length 95th (ft)	5	3	0	0
Control Delay (s)	11.1	7.7	0.0	0.0
Lane LOS	B	A		
Approach Delay (s)	11.1	0.9		0.0
Approach LOS	B			

Intersection Summary			
Average Delay		1.3	
Intersection Capacity Utilization		27.3%	ICU Level of Service A
Analysis Period (min)		15	

LOS Engineering

PM Existing
14: Stewart Canyon Rd & Old Hwy 395 HCM Unsignalized Intersection Capacity Analysis

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	8	3	18	19	1	28	21	259	12	12	168	19
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	8	3	19	20	1	29	22	273	13	13	177	20
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	559	542	187	546	545	279	197			285		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	559	542	187	546	545	279	197			285		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	99	98	95	100	96	98			99		
cM capacity (veh/h)	414	436	855	428	434	760	1376			1277		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	31	51	22	285	13	197
Volume Left	8	20	22	0	13	0
Volume Right	19	29	0	13	0	20
cSH	613	574	1376	1700	1277	1700
Volume to Capacity	0.05	0.09	0.02	0.17	0.01	0.12
Queue Length 95th (ft)	4	7	1	0	1	0
Control Delay (s)	11.2	11.9	7.7	0.0	7.8	0.0
Lane LOS	B	B	A		A	
Approach Delay (s)	11.2	11.9	0.6		0.5	
Approach LOS	B	B				

Intersection Summary				
Average Delay	2.0			
Intersection Capacity Utilization	30.5%	ICU Level of Service	A	
Analysis Period (min)	15			

LOS Engineering

PM Existing
15: Reche Rd & Old Hwy 395 HCM Unsignalized Intersection Capacity Analysis

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	205	176	210	79	53	152
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	216	185	221	83	56	160
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	661	136	216			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	661	136	216			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	40	80	84			
cM capacity (veh/h)	358	913	1354			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	401	221	83	216
Volume Left	216	221	0	0
Volume Right	185	0	0	160
cSH	497	1354	1700	1700
Volume to Capacity	0.81	0.16	0.05	0.13
Queue Length 95th (ft)	191	15	0	0
Control Delay (s)	35.9	8.2	0.0	0.0
Lane LOS	E	A		
Approach Delay (s)	35.9	5.9		0.0
Approach LOS	E			

Intersection Summary				
Average Delay	17.6			
Intersection Capacity Utilization	59.9%	ICU Level of Service	B	
Analysis Period (min)	15			

LOS Engineering

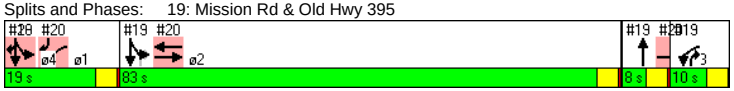
PM Existing
19: Mission Rd & Old Hwy 395 — Timings

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø1	ø4
Lane Configurations								
Volume (vph)	181	688	32	217	970	20		
Turn Type		Free		custom	Split			
Protected Phases	1 4		3	1 4	2	2	1	4
Permitted Phases		Free		2				
Detector Phases	1 4		3	1 4	2	2		
Minimum Initial (s)			4.0		4.0	4.0	4.0	4.0
Minimum Split (s)			20.0		20.0	20.0	8.0	20.0
Total Split (s)	29.0	0.0	8.0	29.0	83.0	83.0	19.0	10.0
Total Split (%)	24.2%	0.0%	6.7%	24.2%	69.2%	69.2%	16%	8%
Yellow Time (s)			3.5		3.5	3.5	3.5	3.5
All-Red Time (s)			0.5		0.5	0.5	0.5	0.5
Lead/Lag			Lead		Lag	Lag	Lead	Lag
Lead-Lag Optimize?			Yes					Yes
Recall Mode			None		None	None	None	None
Act Effct Green (s)	22.3	116.0	4.0	104.0	77.7	77.7		
Actuated g/C Ratio	0.19	1.00	0.03	0.90	0.67	0.67		
v/c Ratio	0.63	0.51	0.53	0.18	0.96	0.02		
Control Delay	56.3	1.4	85.2	1.1	39.8	7.1		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	56.3	1.4	85.2	1.1	39.8	7.1		
LOS	E	A	F	A	D	A		
Approach Delay	12.9		12.0			39.2		
Approach LOS	B		B			D		

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 116
Natural Cycle: 150
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.96
Intersection Signal Delay: 25.1 — Intersection LOS: C
Intersection Capacity Utilization 84.6% — ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 19: Mission Rd & Old Hwy 395



LOS Engineering

PM Existing
19: Mission Rd & Old Hwy 395 — Queues

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1900	1700	1700	1900
Storage Length (ft)	0	130		210	100	
Storage Lanes	1	1		1	1	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Turning Speed (mph)	15	9		9	15	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1583	1417	1863	1417	1583	1863
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1583	1417	1863	1417	1583	1863
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	30		30			30
Link Distance (ft)	434		4960			1035
Travel Time (s)	9.9		112.7			23.5
Volume (vph)	181	688	32	217	970	20
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	191	724	34	228	1021	21
Lane Group Flow (vph)	191	724	34	228	1021	21
v/c Ratio	0.63	0.51	0.53	0.18	0.96	0.02
Control Delay	56.3	1.4	85.2	1.1	39.8	7.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.3	1.4	85.2	1.1	39.8	7.1
Queue Length 50th (ft)	144	16	26	12	700	5
Queue Length 95th (ft)	m184	19	#76	18	#1059	14
Internal Link Dist (ft)	354		4880			955
Turn Bay Length (ft)		130		210	100	
Base Capacity (vph)	342	1417	64	1269	1082	1273
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.56	0.51	0.53	0.18	0.94	0.02

Intersection Summary

Area Type: Other
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

LOS Engineering

PM Existing
19: Mission Rd & Old Hwy 395 HCM Signalized Intersection Capacity Analysis

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1900	1700	1700	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1583	1417	1863	1417	1583	1863
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1583	1417	1863	1417	1583	1863
Volume (vph)	181	688	32	217	970	20
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	191	724	34	228	1021	21
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	191	724	34	228	1021	21
Turn Type		Free		custom	Split	
Protected Phases	1 4		3	1 4	2	2
Permitted Phases		Free		2		
Actuated Green, G (s)	22.3	115.9	4.0	99.9	77.6	77.6
Effective Green, g (s)	22.3	115.9	4.0	99.9	77.6	77.6
Actuated g/C Ratio	0.19	1.00	0.03	0.86	0.67	0.67
Clearance Time (s)			4.0		4.0	4.0
Vehicle Extension (s)			3.0		3.0	3.0
Lane Grp Cap (vph)	305	1417	64	1270	1060	1247
v/s Ratio Prot	c0.12		0.02	0.03	c0.64	0.01
v/s Ratio Perm		c0.51		0.13		
v/c Ratio	0.63	0.51	0.53	0.18	0.96	0.02
Uniform Delay, d1	43.0	0.0	55.0	1.3	17.8	6.4
Progression Factor	1.11	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.2	1.1	8.2	0.1	19.2	0.0
Delay (s)	51.1	1.1	63.2	1.4	37.1	6.4
Level of Service	D	A	E	A	D	A
Approach Delay (s)	11.5		9.4			36.4
Approach LOS	B		A			D

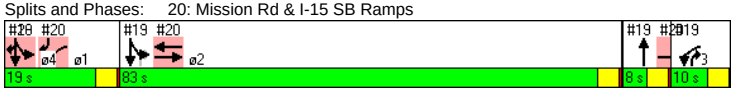
Intersection Summary			
HCM Average Control Delay	23.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	115.9	Sum of lost time (s)	4.0
Intersection Capacity Utilization	84.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

PM Existing
20: Mission Rd & I-15 SB Ramps Timings

Lane Group	EBT	WBL	WBT	SBT	SBR	ø3
Lane Configurations						
Volume (vph)	1096	44	314	2	557	
Turn Type		Prot			custom	
Protected Phases	2 3	1	2	4	1 4	3
Permitted Phases					4	
Detector Phases	2 3	1	2	4	1 4	
Minimum Initial (s)		4.0	4.0	4.0		4.0
Minimum Split (s)		8.0	20.0	20.0		20.0
Total Split (s)	91.0	19.0	83.0	10.0	29.0	8.0
Total Split (%)	75.8%	15.8%	69.2%	8.3%	24.2%	7%
Yellow Time (s)		3.5	3.5	3.5		3.5
All-Red Time (s)		0.5	0.5	0.5		0.5
Lead/Lag		Lead	Lag	Lag		Lead
Lead-Lag Optimize?				Yes		Yes
Recall Mode		None	None	None		None
Act Effct Green (s)	85.7	12.3	77.7	6.0	22.3	
Actuated g/C Ratio	0.74	0.11	0.67	0.05	0.19	
v/c Ratio	0.91	0.28	0.27	0.11	0.79	
Control Delay	10.1	52.2	8.7	57.1	11.9	
Queue Delay	6.9	0.0	0.0	0.6	0.0	
Total Delay	17.1	52.2	8.7	57.7	11.9	
LOS	B	D	A	E	B	
Approach Delay	17.1		14.0	12.7		
Approach LOS	B		B	B		

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 116		
Natural Cycle: 150		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 0.96		
Intersection Signal Delay: 15.4	Intersection LOS: B	
Intersection Capacity Utilization 72.8%	ICU Level of Service C	
Analysis Period (min) 15		

Splits and Phases: 20: Mission Rd & I-15 SB Ramps



Queues

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1900	1700	1700	1900	1700	1700	1900	1700	1700	1900	1700
Storage Length (ft)	0		0	285		0	0		0	0		200
Storage Lanes	0		0	1		0	0		0	0		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)		50		50	50					50	50	50
Trailing Detector (ft)		0		0	0					0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.990										0.850
Flt Protected				0.950							0.962	
Satd. Flow (prot)	0	1844	0	1583	1863	0	0	0	0	0	1792	1417
Flt Permitted				0.950							0.962	
Satd. Flow (perm)	0	1844	0	1583	1863	0	0	0	0	0	1792	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8										586
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		434			744			972			897	
Travel Time (s)		9.9			16.9			22.1			20.4	
Volume (vph)	0	1096	85	44	314	0	0	0	0	8	2	557
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1154	89	46	331	0	0	0	0	8	2	586
Lane Group Flow (vph)	0	1243	0	46	331	0	0	0	0	0	10	586
v/c Ratio		0.91		0.28	0.27						0.11	0.79
Control Delay		10.1		52.2	8.7						57.1	11.9
Queue Delay		6.9		0.0	0.0						0.6	0.0
Total Delay		17.1		52.2	8.7						57.7	11.9
Queue Length 50th (ft)		62		33	98						8	0
Queue Length 95th (ft)		m88		70	143						26	125
Internal Link Dist (ft)		354			664			892			817	
Turn Bay Length (ft)				285								200
Base Capacity (vph)		1364		205	1273						93	766
Starvation Cap Reductn		1		0	0						0	0
Spillback Cap Reductn		101		0	0						23	0
Storage Cap Reductn		0		0	0						0	0
Reduced v/c Ratio		0.98		0.22	0.26						0.14	0.77

Intersection Summary	
Area Type:	Other

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1900	1700	1700	1900	1700	1700	1900	1700	1700	1900	1700
Total Lost time (s)		4.0		4.0	4.0						4.0	4.0
Lane Util. Factor		1.00		1.00	1.00						1.00	1.00
Frt		0.99		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.96	1.00
Satd. Flow (prot)		1845		1583	1863						1791	1417
Flt Permitted		1.00		0.95	1.00						0.96	1.00
Satd. Flow (perm)		1845		1583	1863						1791	1417
Volume (vph)	0	1096	85	44	314	0	0	0	0	8	2	557
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1154	89	46	331	0	0	0	0	8	2	586
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	0	0	0	473
Lane Group Flow (vph)	0	1241	0	46	331	0	0	0	0	0	10	113
Turn Type				Prot						Split		custom
Protected Phases		2 3		1	2					4	4	1 4
Permitted Phases												4
Actuated Green, G (s)		85.6		12.3	77.6						6.0	22.3
Effective Green, g (s)		85.6		12.3	77.6						6.0	22.3
Actuated g/C Ratio		0.74		0.11	0.67						0.05	0.19
Clearance Time (s)				4.0	4.0						4.0	
Vehicle Extension (s)				3.0	3.0						3.0	
Lane Grp Cap (vph)		1363		168	1247						93	273
v/s Ratio Prot		c0.67		0.03	0.18						0.01	c0.08
v/s Ratio Perm												
v/c Ratio		0.91		0.27	0.27						0.11	0.41
Uniform Delay, d1		12.1		47.7	7.7						52.4	41.1
Progression Factor		0.18		1.00	1.00						1.00	1.00
Incremental Delay, d2		5.5		0.9	0.1						0.5	1.0
Delay (s)		7.7		48.6	7.8						52.9	42.1
Level of Service		A		D	A						D	D
Approach Delay (s)		7.7			12.8			0.0			42.3	
Approach LOS		A			B			A			D	

Intersection Summary			
HCM Average Control Delay	17.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	115.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	72.8%	ICU Level of Service	C
Analysis Period (min)	15		

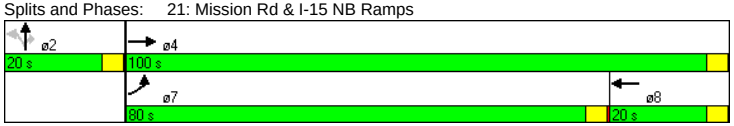
c Critical Lane Group

Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Configurations					
Volume (vph)	901	187	164	2	77
Turn Type	Prot				Perm
Protected Phases	7	4	8	2	
Permitted Phases					2
Detector Phases	7	4	8	2	2
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0
Total Split (s)	80.0	100.0	20.0	20.0	20.0
Total Split (%)	66.7%	83.3%	16.7%	16.7%	16.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	None	None	Min	Min
Act Effct Green (s)	66.2	84.1	13.6	13.9	13.9
Actuated g/C Ratio	0.62	0.79	0.13	0.13	0.13
v/c Ratio	0.96	0.13	0.74	0.76	0.32
Control Delay	41.4	2.9	66.7	69.7	14.1
Queue Delay	7.8	0.0	0.0	0.0	0.0
Total Delay	49.2	2.9	66.7	69.7	14.1
LOS	D	A	E	E	B
Approach Delay		41.3	66.7	52.3	
Approach LOS		D	E	D	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 106.5
Natural Cycle: 100
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.96
Intersection Signal Delay: 45.9 — Intersection LOS: D
Intersection Capacity Utilization 83.9% — ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 21: Mission Rd & I-15 NB Ramps



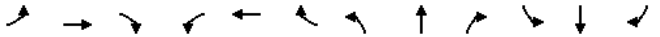
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1900	1700	1700	1900	1700	1700	1900	1700	1700	1900	1700
Storage Length (ft)	300		0	0		0	0		200	0		0
Storage Lanes	1		0	0		0	0		1	0		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50			50		50	50	50			
Trailing Detector (ft)	0	0			0		0	0	0			
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.998				0.850			
Flt Protected	0.950							0.953				
Satd. Flow (prot)	1583	1863	0	0	1859	0	0	1775	1417	0	0	0
Flt Permitted	0.950							0.953				
Satd. Flow (perm)	1583	1863	0	0	1859	0	0	1775	1417	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1				81			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		744			1271			1082			1005	
Travel Time (s)		16.9			28.9			24.6			22.8	
Volume (vph)	901	187	0	0	164	3	166	2	77	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	948	197	0	0	173	3	175	2	81	0	0	0
Lane Group Flow (vph)	948	197	0	0	176	0	0	177	81	0	0	0
v/c Ratio	0.96	0.13			0.74			0.76	0.32			
Control Delay	41.4	2.9			66.7			69.7	14.1			
Queue Delay	7.8	0.0			0.0			0.0	0.0			
Total Delay	49.2	2.9			66.7			69.7	14.1			
Queue Length 50th (ft)	624	28			132			134	0			
Queue Length 95th (ft)	#970	43			#228			#240	46			
Internal Link Dist (ft)		664			1191			1002			925	
Turn Bay Length (ft)	300								200			
Base Capacity (vph)	1043	1517			285			273	286			
Starvation Cap Reductn	79	0			0			0	0			
Spillback Cap Reductn	0	0			0			0	0			
Storage Cap Reductn	0	0			0			0	0			
Reduced v/c Ratio	0.98	0.13			0.62			0.65	0.28			

Intersection Summary

Area Type: Other
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

PM Existing
21: Mission Rd & I-15 NB Ramps

HCM Signalized Intersection Capacity Analysis



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1900	1700	1700	1900	1700	1700	1900	1700	1700	1900	1700
Total Lost time (s)	4.0	4.0			4.0			4.0	4.0			
Lane Util. Factor	1.00	1.00			1.00			1.00	1.00			
Frt	1.00	1.00			1.00			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (prot)	1583	1863			1858			1775	1417			
Flt Permitted	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (perm)	1583	1863			1858			1775	1417			
Volume (vph)	901	187	0	0	164	3	166	2	77	0	0	0
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	948	197	0	0	173	3	175	2	81	0	0	0
RTOR Reduction (vph)	0	0	0	0	1	0	0	0	70	0	0	0
Lane Group Flow (vph)	948	197	0	0	175	0	0	177	11	0	0	0
Turn Type	Prot						Perm		Perm			
Protected Phases	7	4			8			2				
Permitted Phases							2		2			
Actuated Green, G (s)	66.2	84.1			13.9			13.9	13.9			
Effective Green, g (s)	66.2	84.1			13.9			13.9	13.9			
Actuated g/C Ratio	0.62	0.79			0.13			0.13	0.13			
Clearance Time (s)	4.0	4.0			4.0			4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0			3.0	3.0			
Lane Grp Cap (vph)	989	1478			244			233	186			
v/s Ratio Prot	c0.60	0.11			c0.09							
v/s Ratio Perm								0.10	0.01			
v/c Ratio	0.96	0.13			0.72			0.76	0.06			
Uniform Delay, d1	18.6	2.5			44.2			44.4	40.3			
Progression Factor	1.00	1.00			1.00			1.00	1.00			
Incremental Delay, d2	19.1	0.0			9.7			13.3	0.1			
Delay (s)	37.7	2.6			53.8			57.7	40.4			
Level of Service	D	A			D			E	D			
Approach Delay (s)		31.7			53.8			52.3			0.0	
Approach LOS		C			D			D			A	

Intersection Summary			
HCM Average Control Delay	37.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	106.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	83.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

LOS Engineering

PM Existing
22: Stewart Canyon Rd & Horse Ranch Creek Rd

HCM Unsignalized Intersection Capacity Analysis

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Yield			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	17	3	4	0	0	36
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	18	3	4	0	0	38
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	27	19	38			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	27	19	38			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	100	100			
cM capacity (veh/h)	985	1059	1572			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	21	4	38
Volume Left	18	4	0
Volume Right	3	0	38
cSH	995	1572	1700
Volume to Capacity	0.02	0.00	0.02
Queue Length 95th (ft)	2	0	0
Control Delay (s)	8.7	7.3	0.0
Lane LOS	A	A	
Approach Delay (s)	8.7	7.3	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	3.4		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

LOS Engineering

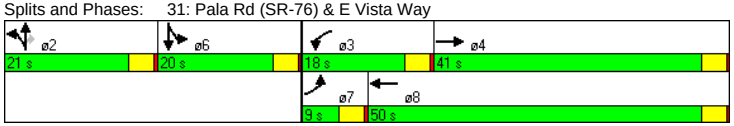
PM Existing
31: Pala Rd (SR-76) & E Vista Way — Timings

Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBT
Lane Configurations							
Volume (vph)	70	981	375	693	62	348	68
Turn Type	Prot		Prot			Perm	
Protected Phases	7	4	3	8	2		6
Permitted Phases						2	
Detector Phases	7	4	3	8	2	2	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	8.0	20.0	20.0	20.0	20.0
Total Split (s)	9.0	41.0	18.0	50.0	21.0	21.0	20.0
Total Split (%)	9.0%	41.0%	18.0%	50.0%	21.0%	21.0%	20.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead	Lag	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			
Recall Mode	None	None	None	None	Max	Max	Max
Act Effct Green (s)	5.0	37.0	14.0	46.0	17.0	17.0	16.0
Actuated g/C Ratio	0.05	0.37	0.14	0.46	0.17	0.17	0.16
v/c Ratio	0.94	0.96	0.92	0.87	0.84	0.67	0.44
Control Delay	134.9	48.1	70.6	37.3	65.1	10.9	33.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	134.9	48.1	70.6	37.3	65.1	10.9	33.0
LOS	F	D	E	D	E	B	C
Approach Delay		52.9		48.8	33.2		33.0
Approach LOS		D		D	C		C

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.96
Intersection Signal Delay: 46.8 — Intersection LOS: D
Intersection Capacity Utilization 79.4% — ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 31: Pala Rd (SR-76) & E Vista Way



LOS Engineering

PM Existing
31: Pala Rd (SR-76) & E Vista Way — Queues

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1900	1700	1700	1900	1700	1700	1900	1700	1700	1900	1700
Storage Length (ft)	300		150	450		0	0		200	0		0
Storage Lanes	1		0	2		0	0		1	0		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.975			0.997				0.850		0.939	
Flt Protected	0.950			0.950				0.964			0.999	
Satd. Flow (prot)	1583	3451	0	3072	1857	0	0	1796	1417	0	1747	0
Flt Permitted	0.950			0.950				0.964			0.999	
Satd. Flow (perm)	1583	3451	0	3072	1857	0	0	1796	1417	0	1747	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27			1				366		35	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		710			526			797			552	
Travel Time (s)		16.1			12.0			18.1			12.5	
Volume (vph)	70	981	199	375	693	15	182	62	348	3	68	58
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	74	1033	209	395	729	16	192	65	366	3	72	61
Lane Group Flow (vph)	74	1242	0	395	745	0	0	257	366	0	136	0
v/c Ratio	0.94	0.96		0.92	0.87			0.84	0.67		0.44	
Control Delay	134.9	48.1		70.6	37.3			65.1	10.9		33.0	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	134.9	48.1		70.6	37.3			65.1	10.9		33.0	
Queue Length 50th (ft)	48	394		129	414			160	0		58	
Queue Length 95th (ft)	#138	#546		#218	#649			#295	88		117	
Internal Link Dist (ft)		630			446			717			472	
Turn Bay Length (ft)	300			450					200			
Base Capacity (vph)	79	1294		430	855			305	545		309	
Starvation Cap Reductn	0	0		0	0			0	0		0	
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.94	0.96		0.92	0.87			0.84	0.67		0.44	

Intersection Summary

Area Type: Other
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

LOS Engineering

PM Existing
31: Pala Rd (SR-76) & E Vista Way

HCM Signalized Intersection Capacity Analysis

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1900	1700	1700	1900	1700	1700	1900	1700	1700	1900	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95		0.97	1.00			1.00	1.00		1.00	
Frt	1.00	0.97		1.00	1.00			1.00	0.85		0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.96	1.00		1.00	
Satd. Flow (prot)	1583	3450		3072	1857			1796	1417		1748	
Flt Permitted	0.95	1.00		0.95	1.00			0.96	1.00		1.00	
Satd. Flow (perm)	1583	3450		3072	1857			1796	1417		1748	
Volume (vph)	70	981	199	375	693	15	182	62	348	3	68	58
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	74	1033	209	395	729	16	192	65	366	3	72	61
RTOR Reduction (vph)	0	17	0	0	1	0	0	0	304	0	29	0
Lane Group Flow (vph)	74	1225	0	395	744	0	0	257	62	0	107	0
Turn Type	Prot			Prot			Split		Perm	Split		
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases									2			
Actuated Green, G (s)	5.0	37.0		14.0	46.0			17.0	17.0		16.0	
Effective Green, g (s)	5.0	37.0		14.0	46.0			17.0	17.0		16.0	
Actuated g/C Ratio	0.05	0.37		0.14	0.46			0.17	0.17		0.16	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	79	1277		430	854			305	241		280	
v/s Ratio Prot	0.05	c0.36		c0.13	0.40			c0.14			c0.06	
v/s Ratio Perm									0.04			
v/c Ratio	0.94	0.96		0.92	0.87			0.84	0.26		0.38	
Uniform Delay, d1	47.3	30.8		42.4	24.3			40.2	36.0		37.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	79.2	16.2		24.3	9.7			23.7	2.6		3.9	
Delay (s)	126.5	47.0		66.7	34.1			63.9	38.6		41.5	
Level of Service	F	D		E	C			E	D		D	
Approach Delay (s)		51.4			45.4			49.0			41.5	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM Average Control Delay	48.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

LOS Engineering

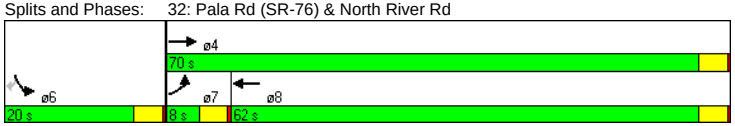
PM Existing
32: Pala Rd (SR-76) & North River Rd

Timings

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Volume (vph)	37	1268	931	187	162
Turn Type	Prot				Perm
Protected Phases	7	4	8	6	
Permitted Phases					6
Detector Phases	7	4	8	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0
Total Split (s)	8.0	70.0	62.0	20.0	20.0
Total Split (%)	8.9%	77.8%	68.9%	22.2%	22.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	None	None	Max	Max
Act Effct Green (s)	4.0	64.8	60.0	16.0	16.0
Actuated g/C Ratio	0.04	0.73	0.68	0.18	0.18
v/c Ratio	0.57	0.98	0.88	0.69	0.43
Control Delay	74.3	33.8	22.8	48.7	9.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	74.3	33.8	22.8	48.7	9.1
LOS	E	C	C	D	A
Approach Delay		35.0	22.8	30.3	
Approach LOS		C	C	C	

Intersection Summary		
Cycle Length: 90		
Actuated Cycle Length: 88.8		
Natural Cycle: 90		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 0.98		
Intersection Signal Delay: 29.7	Intersection LOS: C	
Intersection Capacity Utilization 85.0%	ICU Level of Service E	
Analysis Period (min) 15		

Splits and Phases: 32: Pala Rd (SR-76) & North River Rd



LOS Engineering

PM Existing
32: Pala Rd (SR-76) & North River Rd — Queues

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1900	1900	1700	1700	1700
Storage Length (ft)	150			0	50	0
Storage Lanes	1			0	1	1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50		50	50
Trailing Detector (ft)	0	0	0		0	0
Turning Speed (mph)	15			9	15	9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.986			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1583	1863	1837	0	1583	1417
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1583	1863	1837	0	1583	1417
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			13			171
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30	30		30	
Link Distance (ft)		1356	1400		1286	
Travel Time (s)		30.8	31.8		29.2	
Volume (vph)	37	1268	931	108	187	162
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	39	1335	980	114	197	171
Lane Group Flow (vph)	39	1335	1094	0	197	171
v/c Ratio	0.57	0.98	0.88		0.69	0.43
Control Delay	74.3	33.8	22.8		48.7	9.1
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	74.3	33.8	22.8		48.7	9.1
Queue Length 50th (ft)	22	591	482		106	0
Queue Length 95th (ft)	#70	#1029	#836		#201	54
Internal Link Dist (ft)		1276	1320		1206	
Turn Bay Length (ft)	150				50	
Base Capacity (vph)	69	1366	1246		285	396
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.57	0.98	0.88		0.69	0.43

Intersection Summary
Area Type: Other
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

LOS Engineering

PM Existing
32: Pala Rd (SR-76) & North River Rd — HCM Signalized Intersection Capacity Analysis

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1900	1900	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1583	1863	1837		1583	1417
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1583	1863	1837		1583	1417
Volume (vph)	37	1268	931	108	187	162
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	39	1335	980	114	197	171
RTOR Reduction (vph)	0	0	4	0	0	141
Lane Group Flow (vph)	39	1335	1090	0	197	30
Turn Type	Prot					Perm
Protected Phases	7	4	8		6	
Permitted Phases						6
Actuated Green, G (s)	2.4	66.4	60.0		16.0	16.0
Effective Green, g (s)	2.4	66.4	60.0		16.0	16.0
Actuated g/C Ratio	0.03	0.73	0.66		0.18	0.18
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	42	1368	1219		280	251
v/s Ratio Prot	0.02	c0.72	0.59		c0.12	
v/s Ratio Perm						0.02
v/c Ratio	0.93	0.98	0.89		0.70	0.12
Uniform Delay, d1	43.9	11.2	12.6		35.0	31.3
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	109.9	18.6	8.7		13.8	1.0
Delay (s)	153.8	29.9	21.2		48.8	32.3
Level of Service	F	C	C		D	C
Approach Delay (s)		33.4	21.2		41.1	
Approach LOS		C	C		D	

Intersection Summary			
HCM Average Control Delay	29.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	90.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	85.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

LOS Engineering

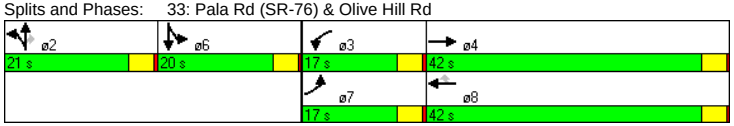
PM Existing
33: Pala Rd (SR-76) & Olive Hill Rd

Timings

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT
Lane Configurations									
Volume (vph)	90	1297	215	905	74	81	318	120	60
Turn Type	Prot		Prot		Perm		Perm	Split	
Protected Phases	7	4	3	8		2		6	6
Permitted Phases					8		2		
Detector Phases	7	4	3	8	8	2	2	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	8.0	20.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	17.0	42.0	17.0	42.0	42.0	21.0	21.0	20.0	20.0
Total Split (%)	17.0%	42.0%	17.0%	42.0%	42.0%	21.0%	21.0%	20.0%	20.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	None	None	None	None	Max	Max	Max	Max
Act Effct Green (s)	10.7	38.0	13.0	42.5	42.5	17.0	17.0	16.0	16.0
Actuated g/C Ratio	0.10	0.38	0.13	0.42	0.42	0.17	0.17	0.16	0.16
v/c Ratio	0.57	1.05	1.10	0.63	0.12	0.52	0.67	0.50	0.43
Control Delay	56.0	71.0	133.3	26.2	5.3	44.5	13.5	45.9	28.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.0	71.0	133.3	26.2	5.3	44.5	13.5	45.9	28.9
LOS	E	E	F	C	A	D	B	D	C
Approach Delay		70.1		44.1		23.5			37.1
Approach LOS		E		D		C			D

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.10	
Intersection Signal Delay: 51.8	Intersection LOS: D
Intersection Capacity Utilization 79.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 33: Pala Rd (SR-76) & Olive Hill Rd



PM Existing
33: Pala Rd (SR-76) & Olive Hill Rd

Queues

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1900	1700	1700	1900	1700	1700	1900	1700	1700	1900	1700
Storage Length (ft)	250		0	250		200	0		150	150		0
Storage Lanes	1		0	1		1	0		1	1		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995				0.850			0.850		0.921	
Flt Protected	0.950			0.950				0.977		0.950		
Satd. Flow (prot)	1583	3522	0	1583	3539	1417	0	1820	1417	1583	1716	0
Flt Permitted	0.950			0.950				0.977		0.950		
Satd. Flow (perm)	1583	3522	0	1583	3539	1417	0	1820	1417	1583	1716	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4				78			310		48	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		585			663			961			1186	
Travel Time (s)		13.3			15.1			21.8			27.0	
Volume (vph)	90	1297	45	215	905	74	71	81	318	120	60	67
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	95	1365	47	226	953	78	75	85	335	126	63	71
Lane Group Flow (vph)	95	1412	0	226	953	78	0	160	335	126	134	0
v/c Ratio	0.57	1.05		1.10	0.63	0.12		0.52	0.67	0.50	0.43	
Control Delay	56.0	71.0		133.3	26.2	5.3		44.5	13.5	45.9	28.9	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay	56.0	71.0		133.3	26.2	5.3		44.5	13.5	45.9	28.9	
Queue Length 50th (ft)	58	~521		~164	258	0		94	14	74	49	
Queue Length 95th (ft)	109	#658		#312	340	29		160	103	133	107	
Internal Link Dist (ft)		505			583			881			1106	
Turn Bay Length (ft)	250			250		200			150	150		
Base Capacity (vph)	198	1341		206	1505	647		309	498	253	315	
Starvation Cap Reductn	0	0		0	0	0		0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0		0	0	0	0	
Storage Cap Reductn	0	0		0	0	0		0	0	0	0	
Reduced v/c Ratio	0.48	1.05		1.10	0.63	0.12		0.52	0.67	0.50	0.43	

Intersection Summary	
Area Type:	Other
~	Volume exceeds capacity, queue is theoretically infinite.
	Queue shown is maximum after two cycles.
#	95th percentile volume exceeds capacity, queue may be longer.
	Queue shown is maximum after two cycles.

PM Existing
33: Pala Rd (SR-76) & Olive Hill Rd

HCM Signalized Intersection Capacity Analysis

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1900	1700	1700	1900	1700	1700	1900	1700	1700	1900	1700
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	1.00	
Satd. Flow (prot)	1583	3522		1583	3539	1417		1820	1417	1583	1715	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	1.00	
Satd. Flow (perm)	1583	3522		1583	3539	1417		1820	1417	1583	1715	
Volume (vph)	90	1297	45	215	905	74	71	81	318	120	60	67
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	95	1365	47	226	953	78	75	85	335	126	63	71
RTOR Reduction (vph)	0	2	0	0	0	45	0	0	258	0	40	0
Lane Group Flow (vph)	95	1410	0	226	953	33	0	160	77	126	94	0
Turn Type	Prot			Prot		Perm	Split		Perm	Split		
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8			2			
Actuated Green, G (s)	9.3	38.8		13.0	42.5	42.5		17.0	17.0	16.0	16.0	
Effective Green, g (s)	9.3	38.8		13.0	42.5	42.5		17.0	17.0	16.0	16.0	
Actuated g/C Ratio	0.09	0.38		0.13	0.42	0.42		0.17	0.17	0.16	0.16	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	146	1356		204	1492	597		307	239	251	272	
v/s Ratio Prot	0.06	c0.40		c0.14	c0.27			c0.09		c0.08	0.05	
v/s Ratio Perm						0.02			0.05			
v/c Ratio	0.65	1.04		1.11	0.64	0.06		0.52	0.32	0.50	0.34	
Uniform Delay, d1	44.2	31.0		43.9	23.1	17.3		38.2	36.8	38.8	37.7	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	9.9	35.3		94.9	0.9	0.0		6.2	3.6	7.0	3.4	
Delay (s)	54.1	66.3		138.8	24.0	17.3		44.4	40.4	45.8	41.2	
Level of Service	D	E		F	C	B		D	D	D	D	
Approach Delay (s)		65.6			44.2			41.7			43.4	
Approach LOS		E			D			D			D	

Intersection Summary			
HCM Average Control Delay	52.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	100.8	Sum of lost time (s)	20.0
Intersection Capacity Utilization	79.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

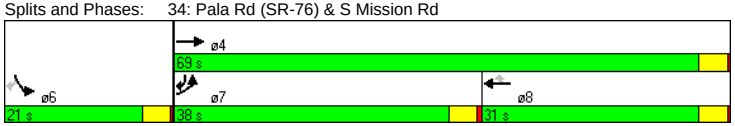
PM Existing
34: Pala Rd (SR-76) & S Mission Rd

Timings

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	867	799	774	106	113	432
Turn Type	Prot			Perm		pm+ov
Protected Phases	7	4	8		6	7
Permitted Phases				8		6
Detector Phases	7	4	8	8	6	7
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0	8.0
Total Split (s)	38.0	69.0	31.0	31.0	21.0	38.0
Total Split (%)	42.2%	76.7%	34.4%	34.4%	23.3%	42.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead		Lag	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes		Yes
Recall Mode	None	None	None	None	Max	None
Act Effct Green (s)	29.7	56.9	23.2	23.2	17.3	51.1
Actuated g/C Ratio	0.36	0.69	0.28	0.28	0.21	0.62
v/c Ratio	0.83	0.65	0.82	0.23	0.18	0.29
Control Delay	31.6	9.7	35.7	6.4	30.7	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.6	9.7	35.7	6.4	30.7	8.4
LOS	C	A	D	A	C	A
Approach Delay		21.1	32.1		13.0	
Approach LOS		C	C		B	

Intersection Summary		
Cycle Length: 90		
Actuated Cycle Length: 82.4		
Natural Cycle: 70		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 0.83		
Intersection Signal Delay: 22.8	Intersection LOS: C	
Intersection Capacity Utilization 62.6%	ICU Level of Service B	
Analysis Period (min) 15		

Splits and Phases: 34: Pala Rd (SR-76) & S Mission Rd



PM Existing
34: Pala Rd (SR-76) & S Mission Rd — Queues

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1900	1900	1700	1700	1700
Storage Length (ft)	500			300	500	0
Storage Lanes	2			1	2	2
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Turning Speed (mph)	15			9	15	9
Lane Util. Factor	0.97	1.00	0.95	1.00	0.97	0.88
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3072	1863	3539	1417	3072	2493
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3072	1863	3539	1417	3072	2493
Right Turn on Red				Yes		No
Satd. Flow (RTOR)				112		
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30	30		30	
Link Distance (ft)		565	451		1333	
Travel Time (s)		12.8	10.3		30.3	
Volume (vph)	867	799	774	106	113	432
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	913	841	815	112	119	455
Lane Group Flow (vph)	913	841	815	112	119	455
v/c Ratio	0.83	0.65	0.82	0.23	0.18	0.29
Control Delay	31.6	9.7	35.7	6.4	30.7	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.6	9.7	35.7	6.4	30.7	8.4
Queue Length 50th (ft)	232	203	220	0	29	63
Queue Length 95th (ft)	308	304	291	37	53	92
Internal Link Dist (ft)		485	371		1253	
Turn Bay Length (ft)	500			300	500	
Base Capacity (vph)	1212	1346	1117	524	646	1591
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.62	0.73	0.21	0.18	0.29

Intersection Summary
Area Type: Other

LOS Engineering

PM Existing
34: Pala Rd (SR-76) & S Mission Rd — HCM Signalized Intersection Capacity Analysis

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1900	1900	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	1.00	0.95	1.00	0.97	0.88
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3072	1863	3539	1417	3072	2493
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3072	1863	3539	1417	3072	2493
Volume (vph)	867	799	774	106	113	432
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	913	841	815	112	119	455
RTOR Reduction (vph)	0	0	0	80	0	0
Lane Group Flow (vph)	913	841	815	32	119	455
Turn Type	Prot			Perm		pm+ov
Protected Phases	7	4	8		6	7
Permitted Phases				8		6
Actuated Green, G (s)	29.7	56.9	23.2	23.2	17.3	47.0
Effective Green, g (s)	29.7	56.9	23.2	23.2	17.3	47.0
Actuated g/C Ratio	0.36	0.69	0.28	0.28	0.21	0.57
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1110	1290	999	400	647	1547
v/s Ratio Prot	c0.30	0.45	c0.23		0.04	c0.11
v/s Ratio Perm				0.02		0.08
v/c Ratio	0.82	0.65	0.82	0.08	0.18	0.29
Uniform Delay, d1	23.9	7.1	27.5	21.7	26.7	9.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.0	1.2	5.2	0.1	0.6	0.1
Delay (s)	28.9	8.3	32.7	21.7	27.3	9.2
Level of Service	C	A	C	C	C	A
Approach Delay (s)		19.0	31.4		12.9	
Approach LOS		B	C		B	

Intersection Summary				
HCM Average Control Delay	21.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	82.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

LOS Engineering

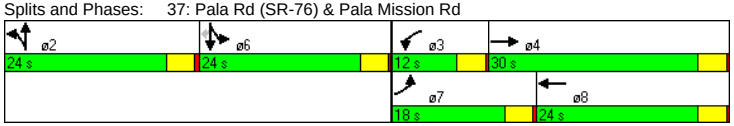
PM Existing
37: Pala Rd (SR-76) & Pala Mission Rd — Timings

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT	SBR
Lane Configurations								
Volume (vph)	165	179	15	213	11	19	19	136
Turn Type	Prot		Prot		Split			Perm
Protected Phases	7	4	3	8	2	2	6	
Permitted Phases								6
Detector Phases	7	4	3	8	2	2	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	8.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	18.0	30.0	12.0	24.0	24.0	24.0	24.0	24.0
Total Split (%)	20.0%	33.3%	13.3%	26.7%	26.7%	26.7%	26.7%	26.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	None	None	None	Max	Max	None	None
Act Effct Green (s)	11.5	23.9	6.5	13.2	28.3	28.3	7.5	7.5
Actuated g/C Ratio	0.17	0.35	0.09	0.19	0.42	0.42	0.11	0.11
v/c Ratio	0.66	0.17	0.12	0.66	0.02	0.04	0.19	0.51
Control Delay	41.1	14.2	36.9	34.7	21.9	17.3	32.6	13.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.1	14.2	36.9	34.7	21.9	17.3	32.6	13.2
LOS	D	B	D	C	C	B	C	B
Approach Delay		26.5		34.9		18.7	17.3	
Approach LOS		C		C		B	B	

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 66.9
Natural Cycle: 75
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.66
Intersection Signal Delay: 26.6 — Intersection LOS: C
Intersection Capacity Utilization 40.6% — ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 37: Pala Rd (SR-76) & Pala Mission Rd



LOS Engineering

PM Existing
37: Pala Rd (SR-76) & Pala Mission Rd — Queues

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1900	1700	1700	1900	1700	1700	1900	1700	1700	1900	1700
Storage Length (ft)	250		0	250		0	200		0	0		50
Storage Lanes	1		0	1		0	1		0	0		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	50
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.987			0.994			0.953				0.850
Flt Protected	0.950			0.950			0.950				0.977	
Satd. Flow (prot)	1583	3493	0	1583	1852	0	1583	1775	0	0	1820	1417
Flt Permitted	0.950			0.950			0.950				0.977	
Satd. Flow (perm)	1583	3493	0	1583	1852	0	1583	1775	0	0	1820	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			2			9				143
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		941			1076			1007			1565	
Travel Time (s)		21.4			24.5			22.9			35.6	
Volume (vph)	165	179	17	15	213	9	11	19	9	17	19	136
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	174	188	18	16	224	9	12	20	9	18	20	143
Lane Group Flow (vph)	174	206	0	16	233	0	12	29	0	0	38	143
v/c Ratio	0.66	0.17		0.12	0.66		0.02	0.04			0.19	0.51
Control Delay	41.1	14.2		36.9	34.7		21.9	17.3			32.6	13.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Delay	41.1	14.2		36.9	34.7		21.9	17.3			32.6	13.2
Queue Length 50th (ft)	69	24		7	92		4	6			15	0
Queue Length 95th (ft)	#163	63		26	172		18	28			45	49
Internal Link Dist (ft)		861			996			927			1485	
Turn Bay Length (ft)	250			250			200					50
Base Capacity (vph)	314	1393		170	495		669	755			453	460
Starvation Cap Reductn	0	0		0	0		0	0			0	0
Spillback Cap Reductn	0	0		0	0		0	0			0	0
Storage Cap Reductn	0	0		0	0		0	0			0	0
Reduced v/c Ratio	0.55	0.15		0.09	0.47		0.02	0.04			0.08	0.31

Intersection Summary

Area Type: Other
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

LOS Engineering

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1900	1700	1700	1900	1700	1700	1900	1700	1700	1900	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	1.00		1.00	1.00			1.00	1.00
Frt	1.00	0.99		1.00	0.99		1.00	0.95			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.98	1.00
Satd. Flow (prot)	1583	3493		1583	1852		1583	1776			1820	1417
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			0.98	1.00
Satd. Flow (perm)	1583	3493		1583	1852		1583	1776			1820	1417
Volume (vph)	165	179	17	15	213	9	11	19	9	17	19	136
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	174	188	18	16	224	9	12	20	9	18	20	143
RTOR Reduction (vph)	0	8	0	0	2	0	0	6	0	0	0	131
Lane Group Flow (vph)	174	198	0	16	231	0	12	23	0	0	38	12
Turn Type	Prot			Prot			Split			Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases												6
Actuated Green, G (s)	9.6	21.8		1.3	13.5		27.0	27.0			5.9	5.9
Effective Green, g (s)	9.6	21.8		1.3	13.5		27.0	27.0			5.9	5.9
Actuated g/C Ratio	0.13	0.30		0.02	0.19		0.38	0.38			0.08	0.08
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	211	1058		29	347		594	666			149	116
v/s Ratio Prot	c0.11	0.06		0.01	c0.12		0.01	c0.01			c0.02	
v/s Ratio Perm												0.01
v/c Ratio	0.82	0.19		0.55	0.67		0.02	0.04			0.26	0.10
Uniform Delay, d1	30.4	18.6		35.1	27.2		14.2	14.3			31.0	30.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	22.3	0.1		20.8	4.8		0.1	0.1			0.9	0.4
Delay (s)	52.7	18.6		55.8	31.9		14.2	14.3			31.9	31.0
Level of Service	D	B		E	C		B	B			C	C
Approach Delay (s)		34.2			33.5			14.3			31.2	
Approach LOS		C			C			B			C	

Intersection Summary			
HCM Average Control Delay	32.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	72.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	40.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Appendix F

SANDAG's State Route V/C Ratio Formulas

RE: County 2030 Cumulative run - Fallbook map question
From:**Calandra, Mike** (mca@sandag.org)
Sent: Tue 12/30/08 3:08 PM
To: 'Justin Rasas' (justin@losengineering.com)
Cc: 'Nick Ortiz' (francisco.ortiz@sdcounty.ca.gov); 'Bob Citrano' (robert.citrano@sdcounty.ca.gov); Yu, Limeng (lyu@sandag.org)

Justin, below is the V/C lookup table we use to define LOS in the transportation model:

LOS A	0.00 - 0.30
LOS B	0.31 - 0.50
LOS C	0.51 - 0.70
LOS D	0.71 - 0.85
LOS E	0.86 - 0.99
LOS F	1.00+

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RE: County 2030 Cumulative run - Fallbook map question

From:**Calandra, Mike** (mca@sandag.org)
Sent: Mon 12/29/08 3:42 PM
To: 'Justin Rasas' (justin@losengineering.com); Yu, Limeng (lyu@sandag.org); Bob Citrano (robert.citrano@sdcounty.ca.gov)
Cc: Nick Ortiz (francisco.ortiz@sdcounty.ca.gov)

Justin, let me try and clear some of this up for you:

1. The fields AMVOL and PMVOL are bi-directional 3 hour peak period volumes. If you apply the peak hour factors, the result is a bi-directional volume for one peak hour. This volume should probably be split into two, one for each direction. For each link, you should go through these 4 calculations and use the highest V/C value to define the LOS for State Routes ~
    a. IFTVLA / IFTCPA = V/C ratio for the AM in the FROM-TO direction
    b. ITFVLA / ITFCPA = V/C ratio for the AM in the TO-FROM direction
    c. IFTVLP / IFTCPP = V/C ratio for the PM in the FROM-TO direction
    d. IFTVLP / ITFCPP = V/C ratio for the PM in the TO-FROM direction

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Appendix G

SANDAG's *2006 CMP* Update excerpts & Caltrans Flow Rates

2006
CONGESTION MANAGEMENT PROGRAM UPDATE

JULY 2006

This report was financed with federal funds from the U.S. Department of Transportation, Federal Highway Administration, and state funds from the California Department of Transportation

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Exhibit D-1
Level of Service (LOS) Definitions
(Generally used by Caltrans)

The concept of Level of Service (LOS) is defined as a qualitative measure describing operational conditions within a traffic stream, and their perception by motorists and/or passengers. A Level of Service[1] definition generally describes these conditions in terms of such factors as speed, travel time, freedom to maneuver, comfort and convenience, and safety. Levels of Service definitions can generally be categorized as follows:

LOS	D/C[2]	Congestion/Delay	Traffic Description
(Used for freeways, expressways and conventional highways[3])			
"A"	<0.41	None	Free flow.
"B"	0.42-0.62	None	Free to stable flow, light to moderate volumes.
"C"	0.63-0.79	None to minimal	Stable flow, moderate volumes, freedom to maneuver noticeably restricted.
"D"	0.80-0.92	Minimal to substantial	Approaches unstable flow, heavy volumes, very limited freedom to maneuver.
"E"	0.93-1.00	Significant	Extremely unstable flow, maneuverability and psychological comfort extremely poor.
(Used for conventional highways)			
"F"	>1.00	Considerable	Forced or breakdown. Delay measured in average flow, travel speed (MPH). Signalized segments experience delays >60.0 seconds/vehicle.
(Used for freeways and expressways)			
"F0"	1.01-1.25	Considerable 0-1 hour delay	Forced flow, heavy congestion, long queues form behind breakdown points, stop and go.
"F1"	1.26-1.35	Severe 1-2 hour delay	Very heavy congestion, very long queues.
"F2"	1.36-1.45	Very severe 2-3 hour delay	Extremely heavy congestion, longer queues, more numerous breakdown points, longer stop periods.
"F3"	>1.46	Extremely severe 3+ hours of delay	Gridlock.

[1] Level of Service can generally be calculated using "Table 3.1. LOS Criteria for Basic Freeway Sections" from the latest Highway Capacity Manual. However, contact Caltrans for more specific information on determining existing "free-flow" freeway speeds.

[2] Demand/Capacity ratio used for forecasts (V/C ratio used for operational analysis, where V = volume)

[3] Arterial LOS is based upon average "free-flow" travel speeds, and should refer to definitions in Table 11.1 in the HCM.

GUIDE FOR THE PREPARATION

OF

TRAFFIC IMPACT STUDIES

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

December 2002

Transition between LOS "C" and LOS "D" Criteria

(Reference Highway Capacity Manual)

BASIC FREEWAY SEGMENTS @ 65 mi/hr

LOS	Maximum Density (pc/mi/ln)	Minimum Speed (mph)	Maximum v/c	Maximum Service Flow Rate (pc/hr/ln)
A	11	65.0	0.30	710
B	18	65.0	0.50	1170
C	26	64.6	0.71	1680
D	35	59.7	0.89	2090
E	45	52.2	1.00	2350

SIGNALIZED INTERSECTIONS and RAMP TERMINALS

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

MULTI-LANE HIGHWAYS @ 55 mi/hr

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

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