

June 30, 2009

Mr. Jim Bell
Director of Public Works
City of Rancho Palos Verdes
30940 Hawthorne Blvd.
Rancho Palos Verdes, CA 90275

Subject: Preliminary Trip Analysis for Future City Hall Sites

Dear Mr. Bell:

BACKGROUND

The City is in the process of considering remodeling or relocating City Hall. There are three possible sites where the future City Hall might be located: 1) the existing location; 2) Hesse Park; or 3) Ladera Linda School. The City is interested in a preliminary analysis of any traffic impacts that might occur with trips associated with City Hall. Exhibits and traffic count data can be found in the Appendix.

ANALYSIS

City Hall

Site 1) is located on Hawthorne Boulevard approximately ½ mile north of Palos Verdes Drive West. Hawthorne Boulevard is a 4 lane divided highway at this point with a non-signalized intersection at the City Hall entrance.

Machine counters were placed at four locations (Exhibit 1) at the existing City Hall site for two days to determine the existing trips associated with the City Hall:

- A) Counters were placed on Hawthorne Boulevard to count the traffic in both directions in front of City Hall. The average traffic volume at this location was 1,602 vehicles in the 8:00 AM peak hour and 2,030 in the 2:30 PM peak hour. The average daily traffic (ADT) volume was 17,751 vehicles per day (vpd).
- B) A counter was placed on Point Vicente Park road to count the traffic entering and leaving the City Hall complex. The average traffic volume was 68 vehicles in the 7:00 AM peak hour and 68 vehicles in the 12:45 peak hour. The ADT volume was 625 vpd.

- C) A counter was placed on the road just west of Point Vicente Park road which runs south just before the entrance to the parking lot. The average traffic volume on this road during the 7:00 AM peak hour was 33 vehicles and 24 vehicles during the 4:15 PM peak hour. The ADT volume was 256 vpd.
- D) A counter was placed on the north/south driveway just west of the City Hall. The average traffic volume at this location was 55 vehicles during the 10:30 AM peak hour and 40 vehicles during the 1:15 PM peak hour. The ADT volume was 168 vpd.

Based on these counts, the worse case scenario of the existing City Hall traffic volumes would be the counts taken at point "B". The existing City Hall site generates 68 peak AM and PM trips. The total average daily trips are 625 for the existing City Hall. (See Exhibit 2)

The average daily traffic (ADT) at the existing City Hall location on Hawthorne Boulevard is 17,751. The City's 1974 General Plan states that the ADT on Hawthorne Boulevard was 27,100 west of Indian Peak Road and 15,000 to 20,000 at Palos Verdes Drive West and Hawthorne Boulevard. As you can see, the traffic in the vicinity of the City Hall has decreased since 1974.

Fred Hesse Park

Site 2) is located on Hawthorne Boulevard approximately 2.1 miles north of the existing City Hall entrance and north of Crest Road. The entrance to the park for northbound traffic is from Locklenna Lane on the south side of the park. The entrance for southbound traffic is from Hawthorne Boulevard on the north side of the park. Hawthorne Boulevard has a raised median with a left turn pocket to turn west into Locklenna Lane. Verde Ridge Road is on the north side of the park

The average traffic volume on Hawthorne Boulevard in front of the park was 1,331 for the 7:45 AM peak hour and 1,484 for the 2:45 PM peak hour. The ADT volume was 14,900 vpd.

The average traffic volume on Locklenna Lane was 31 vehicles for the 8:30 AM peak hour and 37 vehicles for the 5:15 PM peak hour. The ADT volume was 338 vpd.

The average traffic volume on Verde Ridge Road was 48 vehicles for the 10:30 AM peak hour and 51 vehicles for the 1:15 peak hour. The ADT volume was 462 vpd.

The average daily traffic on Hawthorne Boulevard at Fred Hesse Park was 14,900 in 2009 compared to 27,100 in 1974. The traffic volume in 2009 was only 55% of the traffic volume in 1974. The projected traffic from the General Plan never materialized or has taken a different route. (See Exhibit 3)

The increase in traffic volume at Fred Hesse Park due to proposed City Hall traffic is not significant when added to Hawthorne Boulevard at the entrance to the park. For the worse case scenario, it was assumed that all the proposed City Hall traffic would access from Hawthorne Boulevard. The proposed City Hall would add 625 daily trips to Hawthorne Boulevard. This is a 4.2% increase in daily traffic on Hawthorne Boulevard and not considered significant.

The General Plan does not provide any guide lines to establish significant impact thresholds for two-lane roadways. Therefore, the Los Angeles County Traffic Impact Analysis Report Guidelines dated January 1, 1997 was used for the analysis of Locklenna Lane and Verde Ridge Road.

The roadway directional split on Locklenna Lane and Verde Ridge Road is approximately 60/40 which provides a total capacity of 2,650 passenger cars per hour (PCPH).

	PCPH W/O Project	2 Ln 60/40 Split Road Capacity	PCPH City Hall	PCPH With Project	% Capacity W/O Proj	% Capacity W/ Project	% Increase
Locklenna Lane							
AM	31	2,650	68	99	1.2%	3.7%	2.5%
PM	37	2,650	68	105	1.4%	4.0%	2.6%
Verde Ridge Road							
AM	48	2,650	68	116	1.8%	4.4%	2.6%
PM	51	2,650	68	119	1.9%	4.5%	2.6%

PCPH = Passenger Car Per Hour

The project is deemed to have a significant impact on two-lane roadways when it adds 4% PCPH based on LOS of the pre-project conditions. Based on a LOS of C, the proposed City Hall project will add 2.6% PCPH to Locklenna Lane and Verde Ridge Road which is not a significant impact by definition.

Ladera Linda School

Site 3) is located on Forrestal Drive just north of Pirate Drive approximately 0.3 miles north of Palos Verdes Drive South. Ladera Linda School is now a Montessori school and community center. Forrestal Drive is a two lane 40 foot residential collector street.

The average traffic volume on Forrestal Drive just south of Pirate Drive was 167 vehicles during the 8:15 AM peak hour and 169 vehicles during the 2:45 PM peak hour.

The ADT volume was 1,611 vpd. This traffic count includes traffic from the existing Montessori school as well as neighboring residents. The counts were made on Wednesday 3/4/09 and Thursday 3/5/09 of a normal school week. (See Exhibit 2)

A study was done to determine the trips associated with the use of the Ladera Linda School site as an elementary school versus the Montessori school currently at the site. The study was based on the Institute of Transportation Engineers (ITE) Trip Generation Manual, 8th Edition.

The estimated trip ends for this analysis were calculated based on the average size of the land use identified in the ITE Manual. The estimated trip ends for the elementary school were based on Land Use 520 – Elementary School. The estimated trip ends were 552 for the AM peak hour and 352 for the PM peak hour.

The trip ends for the Montessori school were based on Land Use 534 - Private School K-8 – Weekday. The estimated trip ends were 441 for the AM peak hour and 324 for the PM peak hour. The trip ends for the elementary school were more than the Montessori school.

The General Plan does not provide any guide lines to establish significant impact thresholds for two-lane roadways. Therefore, the Los Angeles County Traffic Impact Analysis Report Guidelines dated January 1, 1997, was used for the analysis of Forrestal Road.

The roadway directional split on Forrestal Drive is approximately 50/50 which provides a total capacity of 2,800 passenger cars per hour (PCPH).

	PCPH W/O Project	2 Ln50/50 Split Road Capacity	PCPH City Hall	PCPH With Project	% Capacity W/O Proj	% Capacity W/ Project	% Increase
Forrestal Drive							
AM	167	2,800	68	235	6.0%	8.4%	2.4%
PM	169	2,800	68	237	6.0%	8.5%	2.5%

PCPH = Passenger Car Per Hour

The project is deemed to have a significant impact on two-lane roadways when it adds 4% PCPH based on LOS of the pre-project conditions. Based on a LOS of C, the project will add 2.5% PCPH on Forrestal Drive which is not a significant impact by definition.

CONCLUSION

The preliminary analysis of the traffic impacts of relocating the City Hall was conducted. This preliminary analysis determined there would be no significant traffic impacts to:

- the roadways surrounding Fred Hesse Park (Hawthorne Boulevard, Locklenna Lane and Verde Ridge Road).
- Forrestal Drive south of Pirate Drive (Ladera Linda School site).

We appreciate the opportunity to be of service to the City of Rancho Palos Verdes. Should you have any questions regarding this study, please contact Mrs. Joanne Itagaki (562) 908-6226 or Mr. Ken Hanson (562) 908-6239.

Sincerely,

WILLDAN ENGINEERING



Joanne Itagaki
Traffic Consultant

APPENDIX

- Exhibit 1 – City Hall Average Traffic Volumes/Count Locations
- Exhibit 2 – Traffic Count Summaries
- Exhibit 3 – Excerpts from the 1974 General Plan
- Traffic count data sheets

EXHIBIT 1

CITY HALL AVERAGE TRAFFIC VOLUMES

LOCATION	AM PEAK HOUR	PM PEAK HOUR	ADT
A	1,602	2,030	17,751
B	68	68	625
C	33	24	256
D	55	40	168

CITY HALL COUNT LOCATIONS



EXHIBIT 2

City Hall Counts

Hawthorne Blvd. - (Location A)

3/4/2009						
Vehicles	Peak Hr	Northbound	Peak Hr	Southbound	Peak Hr	Combined
AM	8:00	948	8:00	603	8:00	1,551
PM	2:30	1,125	2:30	844	2:30	1,969
Total	-	9,722	-	7,426	ADT	17,148

3/5/2009						
Vehicles	Peak Hr	Northbound	Peak Hr	Southbound	Peak Hr	Combined
AM	8:00	1,024	7:45	645	8:00	1,653
PM	2:45	1,210	2:30	882	2:45	2,090
Total	-	10,417	-	7,937	ADT	18,354

Combined Average						
Vehicles	Peak Hr	Northbound	Peak Hr	Southbound	Peak Hr	Combined
AM	8:00	986	8:00	624	8:00	1,602
PM	2:30	1,168	2:30	863	2:30	2,030
Total	-	10,070	-	7,681	ADT	17,751

Point Vicente Park Rd. (Location B)

3/4/2009						
Vehicles	Peak Hr	Eastbound	Peak Hr	Westbound	Peak Hr	Combined
AM	10:45	37	7:15	45	10:45	68
PM	5:00	48	1:00	35	1:00	58
Total	-	310	-	296	ADT	606

3/5/2009						
Vehicles	Peak Hr	Eastbound	Peak Hr	Westbound	Peak Hr	Combined
AM	10:45	30	7:00	55	7:00	67
PM	4:45	53	12:45	42	12:45	77
Total	-	327	-	316	ADT	643

Combined Average						
Vehicles	Peak Hr	Eastbound	Peak Hr	Westbound	Peak Hr	Combined
AM	10:45	34	7:00	50	7:00	68
PM	4:45	51	12:45	39	12:45	68
Total	-	318	-	306	ADT	624

EXHIBIT 2

Road W/O Point Vicente Park (Location C)

3/4/2009						
Vehicles	Peak Hr	Southbound	Peak Hr	Northbound	Peak Hr	Combined
AM	7:15	25	7:00	15	7:15	40
PM	4:15	10	1:30	10	1:30	19
Total	-	105	-	52	ADT	157

3/5/2009						
Vehicles	Peak Hr	Southbound	Peak Hr	Northbound	Peak Hr	Combined
AM	6:45	17	10:45	10	7:00	25
PM	4:15	23	3:00	10	4:15	28
Total	-	116	-	63	ADT	179

Combined Average						
Vehicles	Peak Hr	Northbound	Peak Hr	Southbound	Peak Hr	Combined
AM	7:00	21	7:15	13	7:00	33
PM	4:15	17	3:00	10	4:15	24
Total	-	110	-	57	ADT	167

Driveway W/O City Hall (Location D)

3/4/2009						
Vehicles	Peak Hr	Southbound	Peak Hr	Northbound	Peak Hr	Combined
AM	10:45	10	10:45	44	10:45	54
PM	1:15	8	2:30	30	1:15	36
Total	-	35	-	210	ADT	245

3/5/2009						
Vehicles	Peak Hr	Southbound	Peak Hr	Northbound	Peak Hr	Combined
AM	10:30	15	10:30	40	10:30	55
PM	2:00	14	1:00	37	1:00	43
Total	-	60	-	206	ADT	266

Combined Average						
Vehicles	Peak Hr	Southbound	Peak Hr	Northbound	Peak Hr	Combined
AM	10:30	13	10:30	42	10:30	55
PM	2:00	11	2:30	34	1:15	40
Total	-	47	-	208	ADT	255

EXHIBIT 2

FRED HESSE PARK

Hawthorne Blvd at Fred Hesse Park

3/4/2009						
Vehicles	Peak Hr	Northbound	Peak Hr	Southbound	Peak Hr	Combined
AM	7:45	843	8:00	552	8:00	1,362
PM	2:30	749	2:30	693	2:30	1,442
Total	-	7,671	-	6,651	ADT	14,322

3/5/2009						
Vehicles	Peak Hr	Northbound	Peak Hr	Southbound	Peak Hr	Combined
AM	7:45	814	8:00	498	7:45	1,300
PM	2:45	789	2:30	756	2:45	1,526
Total	-	8,085	-	7,394	ADT	15,479

Combined Average						
Vehicles	Peak Hr	Northbound	Peak Hr	Southbound	Peak Hr	Combined
AM	7:45	829	8:00	525	7:45	1,331
PM	2:45	769	2:30	725	2:45	1,484
Total	-	7,878	-	7,022	ADT	14,900

Verde Ridge Road

3/4/2009						
Vehicles	Peak Hr	Eastbound	Peak Hr	Westbound	Peak Hr	Combined
AM	8:15	36	10:45	19	8:15	50
PM	3:00	25	3:00	23	3:00	48
Total	-	270	-	172	ADT	442

3/5/2009						
Vehicles	Peak Hr	Eastbound	Peak Hr	Westbound	Peak Hr	Combined
AM	7:30	31	7:30	15	7:30	46
PM	3:00	25	2:45	28	3:00	53
Total	-	279	-	203	ADT	482

Combined Average						
Vehicles	Peak Hr	Eastbound	Peak Hr	Westbound	Peak Hr	Combined
AM	10:30	34	10:30	17	10:30	48
PM	2:00	25	2:30	26	1:15	51
Total	-	274	-	187	ADT	461

EXHIBIT 2

Locklenna Lane

3/4/2009						
Vehicles	Peak Hr	Eastbound	Peak Hr	Westbound	Peak Hr	Combined
AM	8:00	18	9:30	13	11:00	25
PM	7:15	13	5:15	30	5:15	39
Total	-	141	-	168	ADT	309

3/5/2009						
Vehicles	Peak Hr	Eastbound	Peak Hr	Westbound	Peak Hr	Combined
AM	7:15	20	8:30	17	8:30	37
PM	1:15	18	5:00	22	1:15	34
Total	-	167	-	201	ADT	368

Combined Average						
Vehicles	Peak Hr	Eastbound	Peak Hr	Westbound	Peak Hr	Combined
AM	7:15	19	8:30	15	8:30	31
PM	1:15	16	5:15	26	5:15	37
Total	-	154	-	184	ADT	338

EXHIBIT 2

Ladera Linda School

Forrestal Drive

3/4/2009						
Vehicles	Peak Hr	Northbound	Peak Hr	Southbound	Peak Hour	Combined
AM	8:15	81	8:15	86	8:15	167
PM	2:45	85	3:00	66	3:00	145
Total	-	762	-	761	ADT	1,523

3/5/2009						
Vehicles	Peak Hr	Northbound	Peak Hr	Southbound	Peak Hour	Combined
AM	8:15	75	8:15	92	8:15	167
PM	4:30	101	5:15	86	5:15	178
Total	-	851	-	849	ADT	1,700

Combined Average						
Vehicles	Peak Hr	Northbound	Peak Hr	Southbound	Peak Hour	Combined
AM	8:15	78	8:15	89	8:15	167
PM	4:30	93	5:15	76	5:15	162
Total	-	807	-	805	ADT	1,612

LADERA LINDA SCHOOL

Estimated Trip Ends

Land Use 520 Elementary School - Weekday

Students	Number of Students	Directional Distribution				Avg rate	Average Vehicle TE	Daily Vehicle Trip Ends	
		Entering	Vehicles	Exiting	Vehicles			AM	PM
AM	630	55%	347	45%	284	0.45	284	AM	552
PM	642	45%	289	55%	353	0.28	180	PM	352
								TOTAL	904
Employees									
AM	50	54%	23	46%	28	5.37	269		
PM	50	45%	23	55%	28	3.45	173		

Estimated Trip Ends

Land Use 534 Private School K-8 - Weekday

Students	Number of Students	Entering	Vehicles	Exiting	Vehicles	Avg rate	Average Vehicle TE	Daily Vehicle Trip Ends	
								AM	PM
AM	322	55%	177	45%	145	0.9	290	AM	441
PM	340	47%	160	53%	180	0.6	204	PM	324
								TOTAL	765
Employees									
AM	33	54%	18	46%	15	4.57	151		
PM	34	47%	16	53%	18	3.54	120		

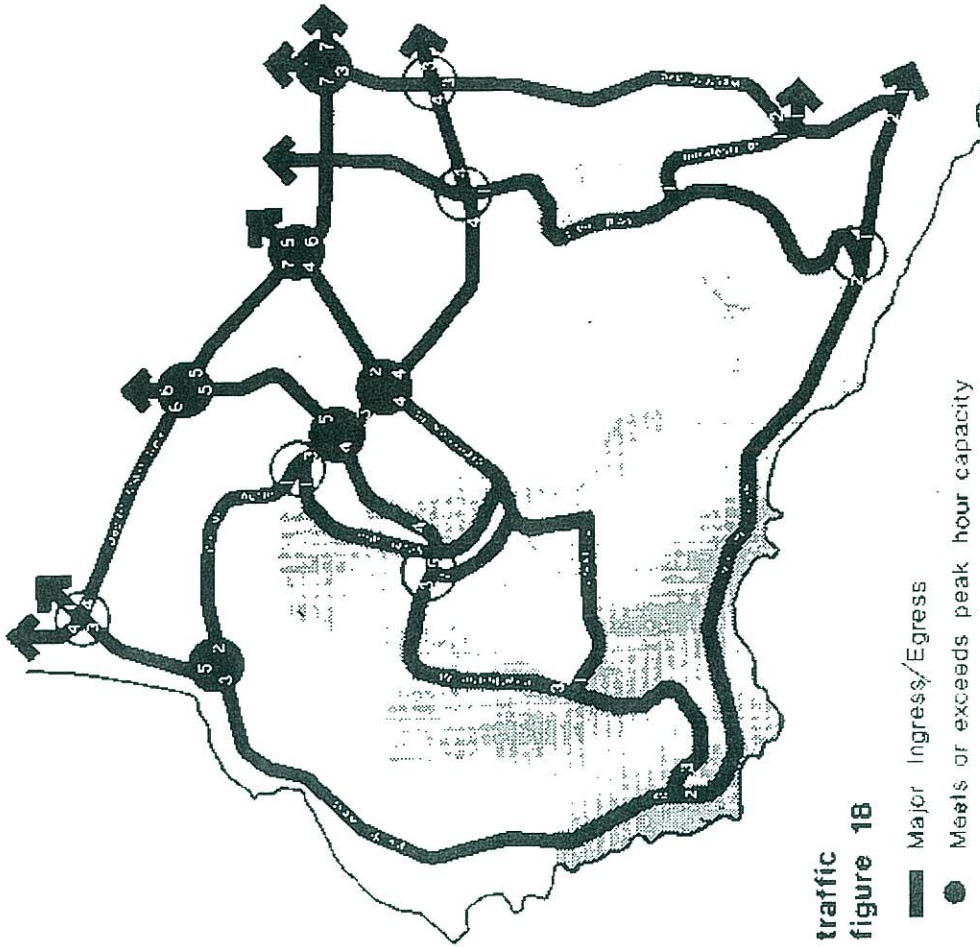
EXHIBIT 3

TABLE 11

Traffic Analysis

ON	AT	1974 24 Hour Traffic	Morning Peak Hour		Current Outbound Capacity	Percent Capacity	Projected Peak Hour Volume	Projected Outbound Capacity	Projected Percent Capacity
			Outbound	Total					
AT/ON CORDON LINE									
Grenshaw Blvd.	s/o P.V. Dr. N.	20,000	1,180	1,790	2,100	56%	1,377	2,100	66%
Hawthorne Blvd.	s/o P.V. Dr. N.	23,600 (1973)	1,325	1,885	2,100	63%	1,545	2,100	74%
Miraleste Dr./ 9th Street	w/o Western Ave. (via Colimita)	9,000 (1973)	830	840	800	78%	737	800	92%
P. V. Dr. East	s/o P.V. Dr. N.	9,850 (1973)	650	870	700	93%	758	700	108%
P. V. Dr. North	w/o Grenshaw	16,100 (1973)	790	1,375	800	99%	924	1,700	54%
P. V. Dr. North	w/o Hawthorne	17,000 (1973)	1,450	1,755	800	181%	1,687	1,700	100%
P. V. Dr. North	e/o P.V. Dr. E.	24,650 (1973)	1,470	2,025	2,100	70%	1,720	2,100	82%
P. V. Dr. North	w/o Silver Spur	12,400 (1973)	490	895	800	61%	573	1,700	34%
P. V. Dr. North	w/o Western	24,100	1,720	2,370	2,100	82%	2,007	2,100	96%
P. V. Dr. West	w/o P.V. Dr. N.	25,100	1,500	2,250	800	188%	1,755	1,700	103%
Silver Spur Rd.	s/o P.V. Dr. N.	12,700 (1973)	770	990	800	96%	898	800	112%
Western Ave.	s/o P.V. Dr. N.	24,700	1,125	1,630	2,100	54%	1,316	2,100	63%
25th Street	w/o Western Ave. (P. V. Dr. East)	7,200	475	655	800	59%	556	800	70%
WITHIN CORDON LINE									
Hawthorne Blvd.	w/o Indian Peak	27,100	1,575	1,990	2,100	75%	1,843	2,100	88%
Silver Spur Rd.	n/o Montemalaga	9,700 (1973)	560	750	800	70%	655	800	82%

EXHIBIT 3



traffic figure 18

- Major Ingress/Egress
 - Meets or exceeds peak hour capacity
 - Nearing peak hour capacity (80% or greater)
- | | | |
|---|-----------------|-----------------------|
| 1 | < 10,000 | vehicles per 24 hours |
| 2 | 10,000 - 15,000 | " |
| 3 | 15,000 - 20,000 | " |
| 4 | 20,000 - 25,000 | " |
| 5 | 25,000 - 30,000 | " |
| 6 | 30,000 - 35,000 | " |
| 7 | 35,000 + | " |

Beyond the Peninsula, the area generally referred to as the South Bay (Redondo Beach, Torrance, Lomita, Hermosa Beach, portions of Los Angeles City and County, etc.) has many streets which are currently nearing, equalling, or exceeding traffic capacities. The capacity-deficient arterials which are of major concern to this analysis include: Pacific Coast Highway, Crenshaw Boulevard, Hawthorne Boulevard, Gaffey Street, and Palos Verdes Boulevard (Voorhees, pg. 34). Aware of the serious nature of traffic problems, many South Bay cities have proposed new roads and/or more efficient control devices to alleviate congestion. The streets most heavily impacted by Peninsula generated traffic lie almost totally within Torrance and the San Pedro area. The Circulation Element of the Torrance Comprehensive General Plan (August, 1974) calls for the development of new streets and the up-grading of some existing streets. Analysis suggests, however, that while these problems will relieve the internal street system of Torrance, only minor beneficial effects will result on those streets most heavily impacted by Peninsula-generated traffic. Discussions with representatives of Los Angeles City's Community Planning Division (San Pedro) indicate no major street proposals are pending which would significantly change traffic in the San Pedro area.

LOC. A

Transportation Studies, Inc.

2680 Walnut Avenue, Suite C
Tustin, CA. 92780

Location: : HAWTHORNE BOULEVARD
Segment: : AT CITY HALL
Client: : WILLDAN ENGINEER

Site: RPV
Date: 03/04/09

Interval	NB				SB				Combined		Day:	Wednesday
	AM	PM	AM	PM	AM	PM	AM	PM				
12:00	3	11	182	713	4	21	108	456	7	32	290	1,169
12:15	6		160		7		114		13		274	
12:30	0		219		7		133		7		352	
12:45	2		152		3		101		5		253	
01:00	6	19	149	641	2	25	96	437	8	44	245	1,078
01:15	3		173		0		131		3		304	
01:30	2		150		10		102		12		252	
01:45	8		169		13		108		21		277	
02:00	3	9	162	902	2	4	145	745	5	13	307	1,647
02:15	0		232		0		170		0		402	
02:30	2		240		1		184		3		424	
02:45	4		268		1		246		5		514	
03:00	3	7	310	1,059	1	4	216	733	4	11	526	1,792
03:15	1		307		1		198		2		505	
03:30	0		222		1		177		1		399	
03:45	3		220		1		142		4		362	
04:00	2	18	184	704	0	4	168	626	2	22	352	1,330
04:15	2		162		0		166		2		328	
04:30	2		190		0		140		2		330	
04:45	12		168		4		152		16		320	
05:00	15	86	162	701	3	31	155	634	18	117	317	1,335
05:15	16		180		2		167		18		347	
05:30	24		167		10		166		34		333	
05:45	31		192		16		146		47		338	
06:00	34	258	138	498	21	199	152	483	55	457	290	981
06:15	50		156		34		121		84		277	
06:30	88		118		46		112		134		230	
06:45	86		86		98		98		184		184	
07:00	112	605	86	301	76	414	98	338	188	1,019	184	639
07:15	123		77		66		75		189		152	
07:30	176		74		128		92		304		166	
07:45	194		64		144		73		338		137	
08:00	212	948	48	202	132	603	74	270	344	1,551	122	472
08:15	250		64		162		89		412		153	
08:30	284		44		149		46		433		90	
08:45	202		46		160		61		362		107	
09:00	165	622	42	128	84	335	61	193	249	957	103	321
09:15	144		30		79		54		223		84	
09:30	149		34		86		43		235		77	
09:45	164		22		86		35		250		57	
10:00	139	577	28	70	80	323	33	100	219	900	61	170
10:15	152		20		72		23		224		43	
10:30	124		12		80		25		204		37	
10:45	162		10		91		19		253		29	
11:00	153	618	9	25	88	407	10	41	241	1,025	19	66
11:15	142		5		98		17		240		22	
11:30	155		8		100		9		255		17	
11:45	168		3		121		5		289		8	
Totals	3,778		5,944		2,370		5,056		6,148		11,000	
Split%	61.5		54.0		38.5		46.0					

Day Totals 9.722 7.426 17.148
Day Splits 56.7 43.3

Peak Hour 08:00 02:30 08:00 02:30 08:00 02:30
Volume 948 1,125 603 844 1,551 1,969
Factor 0.83 0.91 0.93 0.86 0.90 0.94

LOCA

Transportation Studies, Inc.

2680 Walnut Avenue, Suite C
Tustin, CA. 92780

Location: : HAWTHORNE BOULEVARD
Segment: : AT CITY HALL
Client: : WILLDAN ENGINEER

Site: RPV
Date: 03/05/09

Interval	NB				SB				Combined		Day:	Thursday
	AM		PM		AM		PM		AM	PM		
12:00	8	16	206	712	7	22	142	486	15	38	348	1,198
12:15	1		170		5		118		6		288	
12:30	3		172		8		108		11		280	
12:45	4		164		2		118		6		282	
01:00	4	7	153	644	2	7	124	537	6	14	277	1,181
01:15	1		168		1		137		2		305	
01:30	0		143		2		132		2		275	
01:45	2		180		2		144		4		324	
02:00	1	11	177	862	2	12	154	719	3	23	331	1,581
02:15	4		200		5		156		9		356	
02:30	4		222		4		176		8		398	
02:45	2		263		1		233		3		496	
03:00	3	10	347	1,157	1	5	248	823	4	15	595	1,980
03:15	2		358		0		225		2		583	
03:30	1		242		1		174		2		416	
03:45	4		210		3		176		7		386	
04:00	1	18	238	808	2	8	176	611	3	26	414	1,419
04:15	3		205		1		163		4		368	
04:30	4		178		2		142		6		320	
04:45	10		187		3		130		13		317	
05:00	18	78	191	761	6	33	162	731	24	111	353	1,492
05:15	17		204		0		190		17		394	
05:30	18		194		8		208		26		402	
05:45	25		172		19		171		44		343	
06:00	35	247	168	593	21	206	155	524	56	453	323	1,117
06:15	38		178		40		142		78		320	
06:30	68		140		41		119		109		259	
06:45	106		107		104		108		210		215	
07:00	114	642	108	335	67	437	106	360	181	1,079	214	695
07:15	146		86		66		94		212		180	
07:30	177		86		134		86		311		172	
07:45	205		55		170		74		375		129	
08:00	216	1,024	64	231	144	629	81	294	360	1,653	145	525
08:15	268		59		181		58		449		117	
08:30	272		56		150		80		422		136	
08:45	268		52		154		75		422		127	
09:00	183	685	56	171	112	359	54	196	295	1,044	110	367
09:15	146		40		83		57		229		97	
09:30	173		41		88		45		261		86	
09:45	183		34		76		40		259		74	
10:00	136	610	28	81	84	340	34	114	220	950	62	195
10:15	168		26		85		34		253		60	
10:30	152		13		91		24		243		37	
10:45	154		14		80		22		234		36	
11:00	150	660	12	54	86	421	14	63	236	1,081	26	117
11:15	160		19		108		19		268		38	
11:30	160		10		108		16		268		26	
11:45	190		13		119		14		309		27	
Totals	4,008		6,409		2,479		5,458		6,487		11,867	
Split%	61.8		54.0		38.2		46.0					
Day Totals		10,417				7,937				18,354		
Day Splits		56.8				43.2						
Peak Hour	08:00		02:45		07:45		02:30		08:00		02:45	
Volume	1,024		1,210		645		882		1,653		2,090	
Factor	0.94		0.84		0.89		0.89		0.92		0.88	

LOLB

Transportation Studies, Inc.

2680 Walnut Avenue, Suite C
Tustin, CA. 92780

Location: : POINT VICENTE PARK
Segment: : CO CITY HALL
Client: : WILLDAN ENGINEER

Site: RPV
Date: 03/04/09

Interval	EB				WB				Combined				Day:	Wednesday
	AM		PM		AM		PM		AM		PM			
12:00	2	2	12	30	0	2	6	21	2	4	18	51		
12:15	0		8		2		10		2		18			
12:30	0		8		0		2		0		10			
12:45	0		2		0		3		0		5			
01:00	0	3	3	23	0	1	11	35	0	4	14	58		
01:15	0		6		0		14		0		20			
01:30	0		6		1		4		1		10			
01:45	3		8		0		6		3		14			
02:00	1	1	5	22	0	0	5	16	1	1	10	38		
02:15	0		9		0		2		0		11			
02:30	0		4		0		4		0		8			
02:45	0		4		0		5		0		9			
03:00	0	0	10	22	0	0	4	16	0	0	14	38		
03:15	0		6		0		6		0		12			
03:30	0		2		0		2		0		4			
03:45	0		4		0		4		0		8			
04:00	0	0	8	29	0	0	3	20	0	0	11	49		
04:15	0		12		0		8		0		20			
04:30	0		6		0		6		0		12			
04:45	0		3		0		3		0		6			
05:00	0	1	9	48	0	2	2	6	0	3	11	54		
05:15	0		4		1		0		1		4			
05:30	0		23		1		0		1		23			
05:45	1		12		0		4		1		16			
06:00	0	4	8	14	2	9	1	4	2	13	9	18		
06:15	0		4		2		1		2		5			
06:30	0		2		1		1		1		3			
06:45	4		0		4		1		8		1			
07:00	0	12	1	2	6	39	0	2	6	51	1	4		
07:15	0		0		12		1		12		1			
07:30	10		1		16		1		26		2			
07:45	2		0		5		0		7		0			
08:00	4	12	0	3	12	30	0	1	16	42	0	4		
08:15	6		1		5		0		11		1			
08:30	0		0		5		0		5		0			
08:45	2		2		8		1		10		3			
09:00	6	24	1	1	9	39	0	0	15	63	1	1		
09:15	6		0		14		0		20		0			
09:30	4		0		8		0		12		0			
09:45	8		0		8		0		16		0			
10:00	3	26	0	1	8	26	2	2	11	52	2	3		
10:15	8		0		5		0		13		0			
10:30	3		0		6		0		9		0			
10:45	12		1		7		0		19		1			
11:00	8	29	0	1	8	25	0	0	16	54	0	1		
11:15	7		1		8		0		15		1			
11:30	10		0		8		0		18		0			
11:45	4		0		1		0		5		0			
Totals	114		196		173		123		287		319			
Split%	39.7		61.4		60.3		38.6							
Day Totals		310				296				606				
Day Splits		51.2				48.8								
Peak Hour	10:45		05:00		07:15		01:00		10:45		01:00			
Volume	37		48		45		35		68		58			
Factor	0.77		0.52		0.70		0.63		0.89		0.73			

LOC. B

Transportation Studies, Inc.

2680 Walnut Avenue, Suite C
Tustin, CA. 92780

Location: : POINT VICENTE PARK
Segment: : ~~6~~/O CITY HALL
Client: : WILLDAN ENGINEER

Site: RPV
Date: 03/05/09

Interval Begin	EB		WB		Combined		Day:	Thursday				
	AM	PM	AM	PM	AM	PM						
12:00	0	3	18	35	0	0	6	21	0	3	24	56
12:15	0		11		0		2		0		13	
12:30	0		1		0		4		0		5	
12:45	3		5		0		9		3		14	
01:00	0	1	13	40	0	1	18	37	0	2	31	77
01:15	0		9		0		10		0		19	
01:30	0		8		0		5		0		13	
01:45	1		10		1		4		2		14	
02:00	0	0	7	26	0	0	8	27	0	0	15	53
02:15	0		4		0		6		0		10	
02:30	0		6		0		8		0		14	
02:45	0		9		0		5		0		14	
03:00	0	0	6	32	0	0	8	30	0	0	14	62
03:15	0		4		0		8		0		12	
03:30	0		11		0		6		0		17	
03:45	0		11		0		8		0		19	
04:00	0	0	11	35	0	0	6	25	0	0	17	60
04:15	0		8		0		10		0		18	
04:30	0		8		0		6		0		14	
04:45	0		8		0		3		0		11	
05:00	0	0	10	50	0	0	2	6	0	0	12	56
05:15	0		9		0		2		0		11	
05:30	0		26		0		1		0		27	
05:45	0		5		0		1		0		6	
06:00	0	1	4	12	1	8	2	3	1	9	6	15
06:15	0		4		1		0		1		4	
06:30	1		2		1		1		2		3	
06:45	0		2		5		0		5		2	
07:00	2	12	1	1	7	55	0	1	9	67	1	2
07:15	1		0		17		0		18		0	
07:30	7		0		22		0		29		0	
07:45	2		0		9		1		11		1	
08:00	4	12	1	4	2	14	0	2	6	26	1	6
08:15	2		2		1		2		3		4	
08:30	6		1		3		0		9		1	
08:45	0		0		8		0		8		0	
09:00	3	15	2	2	5	28	1	1	8	43	3	3
09:15	4		0		4		0		8		0	
09:30	8		0		5		0		13		0	
09:45	0		0		14		0		14		0	
10:00	4	16	0	0	2	34	0	1	6	50	0	1
10:15	3		0		7		0		10		0	
10:30	4		0		13		0		17		0	
10:45	5		0		12		1		17		1	
11:00	15	30	0	0	7	22	0	0	22	52	0	0
11:15	5		0		4		0		9		0	
11:30	5		0		7		0		12		0	
11:45	5		0		4		0		9		0	
Totals	90		237		162		154		252		391	
Split%	35.7		60.6		64.3		39.4					
Day Totals		327				316				643		
Day Splits		50.9				49.1						
Peak Hour	10:45		04:45		07:00		12:45		07:00		12:45	
Volume	30		53		55		42		67		77	
Factor	0.50		0.51		0.63		0.58		0.58		0.62	

LOC. C

Transportation Studies, Inc.

2680 Walnut Avenue, Suite C
Tustin, CA. 92780

Location : ROAD W/O POINTVICENTE
Segment : CITY HALL
Client : WILLDAN ENGINEER

Site: RPV
Date: 03/04/09

Interval	SB				NB				Combined		Day:	Wednesday
	AM		PM		AM		PM		AM	PM		
12:00	0	0	1	6	0	0	2	3	0	0	3	9
12:15	0		3		0		1		0		4	
12:30	0		2		0		0		0		2	
12:45	0		0		0		0		0		0	
01:00	0	0	2	7	0	0	0	4	0	0	2	11
01:15	0		1		0		0		0		1	
01:30	0		0		0		0		0		0	
01:45	0		4		0		4		0		8	
02:00	0	0	4	6	0	0	4	6	0	0	8	12
02:15	0		1		0		2		0		3	
02:30	0		0		0		0		0		0	
02:45	0		1		0		0		0		1	
03:00	0	0	1	3	0	0	1	1	0	0	2	4
03:15	0		0		0		0		0		0	
03:30	0		0		0		0		0		0	
03:45	0		2		0		0		0		2	
04:00	0	0	3	9	0	0	0	1	0	0	3	10
04:15	0		2		0		1		0		3	
04:30	0		2		0		0		0		2	
04:45	0		2		0		0		0		2	
05:00	0	0	4	4	0	0	2	2	0	0	6	6
05:15	0		0		0		0		0		0	
05:30	0		0		0		0		0		0	
05:45	0		0		0		0		0		0	
06:00	2	9	0	2	1	4	0	0	3	13	0	2
06:15	2		0		0		0		2		0	
06:30	1		1		0		0		1		1	
06:45	4		1		3		0		7		1	
07:00	2	16	1	1	1	15	0	0	3	31	1	1
07:15	4		0		4		0		8		0	
07:30	10		0		6		0		16		0	
07:45	0		0		4		0		4		0	
08:00	11	17	0	0	1	2	0	0	12	19	0	0
08:15	4		0		1		0		5		0	
08:30	1		0		0		0		1		0	
08:45	1		0		0		0		1		0	
09:00	5	10	0	0	0	2	0	0	5	12	0	0
09:15	0		0		0		0		0		0	
09:30	3		0		0		0		3		0	
09:45	2		0		2		0		4		0	
10:00	5	11	0	0	2	6	0	0	7	17	0	0
10:15	4		0		0		0		4		0	
10:30	0		0		0		0		0		0	
10:45	2		0		4		0		6		0	
11:00	1	4	0	0	2	6	0	0	3	10	0	0
11:15	3		0		4		0		7		0	
11:30	0		0		0		0		0		0	
11:45	0		0		0		0		0		0	
Totals	67		38		35		17		102		55	
Split%	65.7		69.1		34.3		30.9					

Day Totals		105		52		157
Day Splits		66.9		33.1		
Peak Hour	07:15	04:15		07:00	01:30	
Volume	25	10		15	10	
Factor	0.57	0.63		0.63	0.63	

LOC. C

Transportation Studies, Inc.

2680 Walnut Avenue, Suite C
Tustin, CA. 92780

Location : ROAD W/O POINTVICENTE
Segment : CITY HALL
Client : WILLDAN ENGINEER

Site: RPV
Date: 03/05/09

Interval Begin	SB				NB				Combined				Day:	Thursday
	AM		PM		AM		PM		AM		PM			
12:00	0	0	6	11	0	0	0	5	0	0	6	16		
12:15	0		1		0		4		0		5			
12:30	0		2		0		1		0		3			
12:45	0		2		0		0		0		2			
01:00	0	0	4	8	0	0	2	8	0	0	6	16		
01:15	0		4		0		1		0		5			
01:30	0		0		0		0		0		0			
01:45	0		0		0		5		0		5			
02:00	0	0	4	5	0	0	3	3	0	0	7	8		
02:15	0		0		0		0		0		0			
02:30	0		0		0		0		0		0			
02:45	0		1		0		0		0		1			
03:00	0	0	5	11	0	0	0	10	0	0	5	21		
03:15	0		4		0		6		0		10			
03:30	0		1		0		2		0		3			
03:45	0		1		0		2		0		3			
04:00	0	0	3	21	0	0	0	3	0	0	3	24		
04:15	0		12		0		1		0		13			
04:30	0		4		0		2		0		6			
04:45	0		2		0		0		0		2			
05:00	0	0	5	7	0	0	2	5	0	0	7	12		
05:15	0		2		0		0		0		2			
05:30	0		0		0		2		0		2			
05:45	0		0		0		1		0		1			
06:00	1	4	0	1	0	0	0	1	1	4	0	2		
06:15	1		0		0		0		1		0			
06:30	0		1		0		1		0		2			
06:45	2		0		0		0		2		0			
07:00	5	17	0	0	2	8	0	0	7	25	0	0		
07:15	2		0		0		0		2		0			
07:30	8		0		4		0		12		0			
07:45	2		0		2		0		4		0			
08:00	2	7	0	2	2	2	0	1	4	9	0	3		
08:15	2		1		0		1		2		2			
08:30	1		1		0		0		1		1			
08:45	2		0		0		0		2		0			
09:00	3	6	0	0	1	5	0	0	4	11	0	0		
09:15	2		0		2		0		4		0			
09:30	1		0		2		0		3		0			
09:45	0		0		0		0		0		0			
10:00	0	4	0	0	0	4	0	0	0	8	0	0		
10:15	1		0		0		0		1		0			
10:30	2		0		0		0		2		0			
10:45	1		0		4		0		5		0			
11:00	2	12	0	0	1	8	0	0	3	20	0	0		
11:15	6		0		1		0		7		0			
11:30	3		0		4		0		7		0			
11:45	1		0		2		0		3		0			
Totals	50		66		27		36		77		102			
Split%	64.9		64.7		35.1		35.3							

Day Totals	116				63				179			
Day Splits	64.8				35.2							
Peak Hour	06:45	04:15	10:45	03:00	07:00	04:15						
Volume	17	23	10	10	25	28						
Factor	0.53	0.48	0.63	0.42	0.52	0.54						

LOC. D

Transportation Studies, Inc.

2680 Walnut Avenue, Suite C
Tustin, CA. 92780

Location : DRIVEWAY
Segment : W/O CITY HALL
Client : WILLDAN ENGINEER

Site: RPV
Date: 03/04/09

Interval	SB			NB			Combined		Day:	Wednesday		
	AM	PM		AM	PM		AM	PM				
12:00	0	2	0	4	4	6	0	10	4	8	0	14
12:15	2		2		2		4		4		6	
12:30	0		2		0		6		0		8	
12:45	0		0		0		0		0		0	
01:00	0	2	2	6	0	6	8	29	0	8	10	35
01:15	0		2		0		15		0		17	
01:30	0		0		0		4		0		4	
01:45	2		2		6		2		8		4	
02:00	0	0	4	7	0	0	7	20	0	0	11	27
02:15	0		0		0		2		0		2	
02:30	0		2		0		8		0		10	
02:45	0		1		0		3		0		4	
03:00	0	0	0	0	0	0	14	19	0	0	14	19
03:15	0		0		0		5		0		5	
03:30	0		0		0		0		0		0	
03:45	0		0		0		0		0		0	
04:00	0	0	0	0	0	0	6	10	0	0	6	10
04:15	0		0		0		4		0		4	
04:30	0		0		0		0		0		0	
04:45	0		0		0		0		0		0	
05:00	0	0	0	0	0	0	0	4	0	0	0	4
05:15	0		0		0		0		0		0	
05:30	0		0		0		0		0		0	
05:45	0		0		0		4		0		4	
06:00	0	0	0	0	0	0	4	10	0	0	4	10
06:15	0		0		0		4		0		4	
06:30	0		0		0		0		0		0	
06:45	0		0		0		2		0		2	
07:00	0	0	0	2	0	0	0	0	0	0	0	2
07:15	0		0		0		0		0		0	
07:30	0		2		0		0		0		2	
07:45	0		0		0		0		0		0	
08:00	0	0	0	0	0	2	0	4	0	2	0	4
08:15	0		0		0		4		0		4	
08:30	0		0		0		0		0		0	
08:45	0		0		2		0		2		0	
09:00	0	1	0	0	10	32	0	0	10	33	0	0
09:15	1		0		16		0		17		0	
09:30	0		0		2		0		2		0	
09:45	0		0		4		0		4		0	
10:00	0	5	1	1	4	20	4	4	4	25	5	5
10:15	0		0		4		0		4		0	
10:30	0		0		0		0		0		0	
10:45	5		0		12		0		17		0	
11:00	0	5	0	0	13	34	0	0	13	39	0	0
11:15	0		0		12		0		12		0	
11:30	5		0		7		0		12		0	
11:45	0		0		2		0		2		0	
Totals	15		20		100		110		115		130	
Split%	13.0		15.4		87.0		84.6					
Day Totals		35				210				245		
Day Splits		14.3				85.7						
Peak Hour	10:45		01:15		10:45		02:30		10:45		01:15	
Volume	10		8		44		30		54		36	
Factor	0.50		0.50		0.85		0.54		0.79		0.53	

LOC D

Transportation Studies, Inc.

2680 Walnut Avenue, Suite C

Tustin, CA. 92780

Location : DRIVEWAY
 Segment : W/O CITY HALL
 Client : WILLDAN ENGINEER

Site: RPV
 Date: 03/05/09

Interval	SB				NB				Combined				Day:	Thursday
	AM		PM		AM		PM		AM		PM			
12:00	0	0	0	3	0	7	20	27	0	7	20	30		
12:15	0		0		0		3		0		3			
12:30	0		0		0		0		0		0			
12:45	0		3		7		4		7		7			
01:00	0	2	4	6	0	4	19	37	0	6	23	43		
01:15	0		2		0		6		0		8			
01:30	0		0		0		4		0		4			
01:45	2		0		4		8		6		8			
02:00	0	0	4	14	0	0	6	21	0	0	10	35		
02:15	0		4		0		2		0		6			
02:30	0		3		0		7		0		10			
02:45	0		3		0		6		0		9			
03:00	0	0	0	5	0	0	0	20	0	0	0	25		
03:15	0		4		0		8		0		12			
03:30	0		0		0		2		0		2			
03:45	0		1		0		10		0		11			
04:00	0	0	3	3	0	0	11	13	0	0	14	16		
04:15	0		0		0		0		0		0			
04:30	0		0		0		0		0		0			
04:45	0		0		0		2		0		2			
05:00	0	0	0	1	0	0	0	2	0	0	0	3		
05:15	0		1		0		1		0		2			
05:30	0		0		0		0		0		0			
05:45	0		0		0		1		0		1			
06:00	0	0	0	0	0	4	4	4	0	4	4	4		
06:15	0		0		0		0		0		0			
06:30	0		0		4		0		4		0			
06:45	0		0		0		0		0		0			
07:00	0	1	0	0	0	2	0	0	0	3	0	0		
07:15	0		0		0		0		0		0			
07:30	0		0		0		0		0		0			
07:45	1		0		2		0		3		0			
08:00	0	0	0	0	0	0	0	0	0	0	0	0		
08:15	0		0		0		0		0		0			
08:30	0		0		0		0		0		0			
08:45	0		0		0		0		0		0			
09:00	0	8	0	0	0	17	0	0	0	25	0	0		
09:15	0		0		0		0		0		0			
09:30	2		0		4		0		6		0			
09:45	6		0		13		0		19		0			
10:00	0	7	0	0	6	18	0	0	6	25	0	0		
10:15	0		0		0		0		0		0			
10:30	3		0		6		0		9		0			
10:45	4		0		6		0		10		0			
11:00	4	10	0	0	24	30	0	0	28	40	0	0		
11:15	4		0		4		0		8		0			
11:30	0		0		0		0		0		0			
11:45	2		0		2		0		4		0			
Totals	28		32		82		124		110		156			
Split%	25.5		20.5		74.5		79.5							
Day Totals		60				206				266				
Day Splits		22.6				77.4								
Peak Hour	10:30		02:00		10:30		01:00		10:30		01:00			
Volume	15		14		40		37		55		43			
Factor	0.94		0.88		0.42		0.49		0.49		0.47			

Transportation Studies, Inc.

2680 Walnut Avenue, Suite C
Tustin, CA. 92780

Location : HAWTHORNE BOULEVARD
Segment : AT FRED HESSE PARK
Client : WILLDAN ENGINEER

Site: RPV
Date: 03/04/09

Interval Begin	NB				SB				Combined				Day:
	AM		PM		AM		PM		AM		PM		
12:00	4	11	119	500	14	34	104	406	18	45	223	906	Wednesday
12:15	5		116		10		108		15		224		
12:30	0		136		9		110		9		246		
12:45	2		129		1		84		3		213		
01:00	4	17	104	474	4	22	120	437	8	39	224	911	
01:15	4		114		5		119		9		233		
01:30	3		118		8		96		11		214		
01:45	6		138		5		102		11		240		
02:00	12	17	112	642	5	13	155	592	17	30	267	1,234	
02:15	2		143		1		146		3		289		
02:30	1		169		3		137		4		306		
02:45	2		218		4		154		6		372		
03:00	4	6	190	641	4	9	234	688	8	15	424	1,329	
03:15	1		172		2		168		3		340		
03:30	1		155		2		132		3		287		
03:45	0		124		1		154		1		278		
04:00	3	27	152	547	2	18	174	627	5	45	326	1,174	
04:15	6		126		2		147		8		273		
04:30	8		133		3		149		11		282		
04:45	10		136		11		157		21		293		
05:00	17	74	124	523	5	44	164	643	22	118	288	1,166	
05:15	17		123		7		170		24		293		
05:30	16		134		13		155		29		289		
05:45	24		142		19		154		43		296		
06:00	35	300	126	446	23	165	164	538	58	465	290	984	
06:15	42		128		38		135		80		263		
06:30	110		106		38		133		148		239		
06:45	113		86		66		106		179		192		
07:00	84	562	62	242	62	400	24	74	146	962	86	316	
07:15	103		58		90		6		193		64		
07:30	180		56		136		6		316		62		
07:45	195		66		112		38		307		104		
08:00	184	810	31	158	114	552	58	147	298	1,362	89	305	
08:15	224		44		116		35		340		79		
08:30	240		48		146		21		386		69		
08:45	162		35		176		33		338		68		
09:00	138	494	39	130	74	350	37	91	212	844	76	221	
09:15	118		32		94		23		212		55		
09:30	115		35		94		19		209		54		
09:45	123		24		88		12		211		36		
10:00	124	470	25	72	81	343	22	42	205	813	47	114	
10:15	129		20		66		10		195		30		
10:30	99		17		100		5		199		22		
10:45	118		10		96		5		214		15		
11:00	122	481	14	27	82	398	6	18	204	879	20	45	
11:15	124		6		89		7		213		13		
11:30	103		3		94		4		197		7		
11:45	132		4		133		1		265		5		
Totals	3,269		4,402		2,348		4,303		5,617		8,705		
Split%	58.2		50.6		41.8		49.4						
Day Totals		7,671				6,651				14,322			
Day Splits		53.6				46.4							
Peak Hour	07:45		02:30		08:00		02:30		08:00		02:30		
Volume	843		749		552		693		1,362		1,442		
Factor	0.88		0.86		0.78		0.74		0.88		0.85		

Transportation Studies, Inc.

2680 Walnut Avenue, Suite C
Tustin, CA. 92780

Location : HAWTHORNE BOULEVARD
Segment : AT FRED HESSE PARK
Client : WILLDAN ENGINEER

Site: RPV
Date: 03/05/09

Interval	NB				SB				Combined				Day:	Thursday
	AM		PM		AM		PM		AM		PM			
12:00	4	15	111	483	2	8	98	426	6	23	209	909		
12:15	5		130		2		120		7		250			
12:30	1		126		4		78		5		204			
12:45	5		116		0		130		5		246			
01:00	2	3	106	476	2	2	128	466	4	5	234	942		
01:15	0		128		0		114		0		242			
01:30	0		124		0		90		0		214			
01:45	1		118		0		134		1		252			
02:00	3	10	134	620	1	3	147	621	4	13	281	1,241		
02:15	2		142		0		134		2		276			
02:30	3		144		2		168		5		312			
02:45	2		200		0		172		2		372			
03:00	7	13	200	719	2	3	227	736	9	16	427	1,455		
03:15	3		211		1		189		4		400			
03:30	1		178		0		149		1		327			
03:45	2		130		0		171		2		301			
04:00	7	26	128	546	2	8	164	561	9	34	292	1,107		
04:15	5		143		0		156		5		299			
04:30	6		145		1		112		7		257			
04:45	8		130		5		129		13		259			
05:00	23	89	146	556	0	11	149	653	23	100	295	1,209		
05:15	20		156		2		178		22		334			
05:30	18		134		2		170		20		304			
05:45	28		120		7		156		35		276			
06:00	31	308	117	489	7	62	182	623	38	370	299	1,112		
06:15	48		146		8		139		56		285			
06:30	96		130		18		140		114		270			
06:45	133		96		29		162		162		258			
07:00	88	625	74	276	46	354	130	473	134	979	204	749		
07:15	133		78		47		125		180		203			
07:30	200		72		123		113		323		185			
07:45	204		52		138		105		342		157			
08:00	154	788	53	181	116	498	93	343	270	1,286	146	524		
08:15	208		41		114		86		322		127			
08:30	248		43		118		102		366		145			
08:45	178		44		150		62		328		106			
09:00	139	570	45	155	114	363	70	239	253	933	115	394		
09:15	128		44		94		78		222		122			
09:30	147		39		70		50		217		89			
09:45	156		27		85		41		241		68			
10:00	126	499	28	81	86	341	58	148	212	840	86	229		
10:15	133		26		80		30		213		56			
10:30	110		11		89		26		199		37			
10:45	130		16		86		34		216		50			
11:00	123	506	16	51	86	376	18	76	209	882	34	127		
11:15	113		13		80		26		193		39			
11:30	120		14		102		14		222		28			
11:45	150		8		108		18		258		26			
Totals	3,452		4,633		2,029		5,365		5,481		9,998			
Split%	63.0		46.3		37.0		53.7							
Day Totals		8,085				7,394				15,479				
Day Splits		52.2				47.8								
Peak Hour	07:45		02:45		08:00		02:30		07:45		02:45			
Volume	814		789		498		756		1,300		1,526			
Factor	0.82		0.93		0.83		0.83		0.89		0.89			

Transportation Studies, Inc.

2680 Walnut Avenue, Suite C
Tustin, CA. 92780

Location: : VERDE RIDGE ROAD
Segment: : EL RODEO DR TO EL RODEO DR
Client: : WILLDAN ENGINEER

Site: RPV
Date: 03/04/09

Interval	EB				WB				Combined				Day:	Wednesday
	AM		PM		AM		PM		AM		PM			
12:00	0	1	2	12	0	0	2	8	0	1	4	20		
12:15	1		8		0		3		1		11			
12:30	0		0		0		2		0		2			
12:45	0		2		0		1		0		3			
01:00	0	0	2	14	0	0	1	8	0	0	3	22		
01:15	0		1		0		2		0		3			
01:30	0		5		0		4		0		9			
01:45	0		6		0		1		0		7			
02:00	0	3	1	15	0	0	2	9	0	3	3	24		
02:15	0		4		0		1		0		5			
02:30	1		6		0		2		1		8			
02:45	2		4		0		4		2		8			
03:00	1	1	6	25	0	0	8	23	1	1	14	48		
03:15	0		6		0		6		0		12			
03:30	0		4		0		2		0		6			
03:45	0		9		0		7		0		16			
04:00	0	3	6	19	0	0	4	12	0	3	10	31		
04:15	0		2		0		2		0		4			
04:30	3		7		0		2		3		9			
04:45	0		4		0		4		0		8			
05:00	0	2	0	13	0	0	6	17	0	2	6	30		
05:15	1		2		0		1		1		3			
05:30	0		7		0		6		0		13			
05:45	1		4		0		4		1		8			
06:00	5	19	6	18	0	1	3	13	5	20	9	31		
06:15	4		5		0		1		4		6			
06:30	3		4		0		5		3		9			
06:45	7		3		1		4		8		7			
07:00	6	21	2	9	0	5	3	7	6	26	5	16		
07:15	3		3		4		3		7		6			
07:30	10		2		1		1		11		3			
07:45	2		2		0		0		2		2			
08:00	3	33	1	4	2	14	2	8	5	47	3	12		
08:15	14		2		5		4		19		6			
08:30	14		0		5		2		19		2			
08:45	2		1		2		0		4		1			
09:00	6	16	1	7	2	6	2	6	8	22	3	13		
09:15	4		2		1		1		5		3			
09:30	3		3		2		1		5		4			
09:45	3		1		1		2		4		3			
10:00	7	15	0	2	4	10	0	3	11	25	0	5		
10:15	3		1		1		3		4		4			
10:30	3		1		2		0		5		1			
10:45	2		0		3		0		5		0			
11:00	6	16	0	2	9	19	1	3	15	35	1	5		
11:15	2		1		4		0		6		1			
11:30	4		1		3		1		7		2			
11:45	4		0		3		1		7		1			
Totals	130		140		55		117		185		257			
Split%	70.3		54.5		29.7		45.5							
Day Totals		270				172				442				
Day Splits		61.1				38.9								
Peak Hour	08:15		03:00		10:45		03:00		08:15		03:00			
Volume	36		25		19		23		50		48			
Factor	0.64		0.69		0.53		0.72		0.66		0.75			

Transportation Studies, Inc.

2680 Walnut Avenue, Suite C
Tustin, CA. 92780

Location: : VERDE RIDGE ROAD
Segment: : EL RODEO DR TO EL RODEO DR
Client: : WILLDAN ENGINEER

Site: RPV
Date: 03/05/09

Interval	EB				WB				Combined		Day:	Thursday
	AM		PM		AM		PM		AM	PM		
12:00	3	3	8	14	1	1	2	9	4	4	10	23
12:15	0		2		0		0		0		2	
12:30	0		2		0		2		0		4	
12:45	0		2		0		5		0		7	
01:00	0	0	3	15	0	1	8	20	0	1	11	35
01:15	0		6		1		4		1		10	
01:30	0		0		0		6		0		6	
01:45	0		6		0		2		0		8	
02:00	0	0	2	11	0	1	0	9	0	1	2	20
02:15	0		3		1		5		1		8	
02:30	0		3		0		1		0		4	
02:45	0		3		0		3		0		6	
03:00	1	1	7	25	0	0	8	28	1	1	15	53
03:15	0		9		0		10		0		19	
03:30	0		4		0		7		0		11	
03:45	0		5		0		3		0		8	
04:00	0	4	4	18	0	2	1	13	0	6	5	31
04:15	2		6		2		3		4		9	
04:30	1		3		0		5		1		8	
04:45	1		5		0		4		1		9	
05:00	1	7	3	14	0	0	4	17	1	7	7	31
05:15	2		4		0		0		2		4	
05:30	0		4		0		10		0		14	
05:45	4		3		0		3		4		6	
06:00	5	15	4	22	1	1	6	23	6	16	10	45
06:15	1		6		0		4		1		10	
06:30	3		6		0		6		3		12	
06:45	6		6		0		7		6		13	
07:00	5	23	6	10	0	12	4	7	5	35	10	17
07:15	2		2		4		2		6		4	
07:30	12		1		4		0		16		1	
07:45	4		1		4		1		8		2	
08:00	7	27	0	10	2	13	6	13	9	40	6	23
08:15	8		4		5		6		13		10	
08:30	7		2		4		0		11		2	
08:45	5		4		2		1		7		5	
09:00	4	19	1	3	2	7	2	4	6	26	3	7
09:15	9		1		2		2		11		3	
09:30	2		0		1		0		3		0	
09:45	4		1		2		0		6		1	
10:00	10	27	0	2	4	10	0	2	14	37	0	4
10:15	6		1		3		1		9		2	
10:30	8		1		2		1		10		2	
10:45	3		0		1		0		4		0	
11:00	3	8	0	1	1	10	0	0	4	18	0	1
11:15	1		1		4		0		5		1	
11:30	1		0		3		0		4		0	
11:45	3		0		2		0		5		0	
Totals	134		145		58		145		192		290	
Split%	69.8		50.0		30.2		50.0					
Day Totals		279				203				482		
Day Splits		57.9				42.1						
Peak Hour	07:30		03:00		07:30		02:45		07:30		03:00	
Volume	31		25		15		28		46		53	
Factor	0.65		0.69		0.75		0.70		0.72		0.70	

Transportation Studies, Inc.

2680 Walnut Avenue, Suite C
Tustin, CA. 92780

Location: : LOCKLENN LANE
Segment: : WINDPORT TO DRIFTWOOD
Client: : WILLDAN ENGINEER

Site: RPV
Date: 03/04/09

Interval	EB				WB				Combined				Day:	Wednesday
	AM		PM		AM		PM		AM		PM			
12:00	0	0	2	9	0	1	2	12	0	1	4	21		
12:15	0		6		0		6		0		12			
12:30	0		0		1		2		1		2			
12:45	0		1		0		2		0		3			
01:00	0	0	1	5	0	0	3	5	0	0	4	10		
01:15	0		3		0		1		0		4			
01:30	0		1		0		1		0		2			
01:45	0		0		0		0		0		0			
02:00	0	0	3	10	0	4	0	3	0	4	3	13		
02:15	0		1		0		2		0		3			
02:30	0		3		2		0		2		3			
02:45	0		3		2		1		2		4			
03:00	1	1	1	7	1	1	8	20	2	2	9	27		
03:15	0		2		0		3		0		5			
03:30	0		0		0		3		0		3			
03:45	0		4		0		6		0		10			
04:00	0	1	3	7	0	0	5	16	0	1	8	23		
04:15	1		1		0		2		1		3			
04:30	0		0		0		6		0		6			
04:45	0		3		0		3		0		6			
05:00	2	3	1	8	0	0	1	25	2	3	2	33		
05:15	1		3		0		4		1		7			
05:30	0		2		0		13		0		15			
05:45	0		2		0		7		0		9			
06:00	0	4	2	5	0	1	6	15	0	5	8	20		
06:15	1		2		1		2		2		4			
06:30	2		1		0		3		2		4			
06:45	1		0		0		4		1		4			
07:00	2	13	4	11	1	7	4	9	3	20	8	20		
07:15	4		6		3		0		7		6			
07:30	5		0		2		5		7		5			
07:45	2		1		1		0		3		1			
08:00	2	18	6	12	1	5	0	6	3	23	6	18		
08:15	3		3		0		1		3		4			
08:30	5		2		2		4		7		6			
08:45	8		1		2		1		10		2			
09:00	2	6	0	1	0	6	0	5	2	12	0	6		
09:15	0		0		0		2		0		2			
09:30	1		0		3		3		4		3			
09:45	3		1		3		0		6		1			
10:00	1	2	1	2	2	10	0	6	3	12	1	8		
10:15	1		1		5		3		6		4			
10:30	0		0		1		1		1		1			
10:45	0		0		2		2		2		2			
11:00	4	15	1	1	2	10	1	1	6	25	2	2		
11:15	3		0		2		0		5		0			
11:30	3		0		2		0		5		0			
11:45	5		0		4		0		9		0			
Totals	63		78		45		123		108		201			
Split%	58.3		38.8		41.7		61.2							
Day Totals		141				168				309				
Day Splits		45.6				54.4								
Peak Hour	08:00		07:15		09:30		05:15		11:00		05:15			
Volume	18		13		13		30		25		39			
Factor	0.56		0.54		0.65		0.58		0.69		0.65			

Transportation Studies, Inc.

2680 Walnut Avenue, Suite C
Tustin, CA. 92780

Location: : LOCKLENNA LANE
Segment: : WINDPORT TO DRIFTWOOD
Client: : WILLDAN ENGINEER

Site: RPV
Date: 03/05/09

Interval Begin	EB				WB				Combined		Day:	Thursday
	AM		PM		AM		PM		AM	PM		
12:00	1	1	3	10	0	0	2	9	1	1	5	19
12:15	0		0		0		3		0		3	
12:30	0		5		0		0		0		5	
12:45	0		2		0		4		0		6	
01:00	0	1	1	16	0	0	3	17	0	1	4	33
01:15	1		6		0		5		1		11	
01:30	0		6		0		4		0		10	
01:45	0		3		0		5		0		8	
02:00	0	0	3	16	0	0	2	12	0	0	5	28
02:15	0		5		0		6		0		11	
02:30	0		4		0		2		0		6	
02:45	0		4		0		2		0		6	
03:00	0	0	2	10	0	0	5	16	0	0	7	26
03:15	0		1		0		5		0		6	
03:30	0		4		0		2		0		6	
03:45	0		3		0		4		0		7	
04:00	0	1	1	7	0	1	3	11	0	2	4	18
04:15	0		2		0		2		0		4	
04:30	0		1		0		4		0		5	
04:45	1		3		1		2		2		5	
05:00	0	1	1	7	0	0	6	22	0	1	7	29
05:15	1		2		0		6		1		8	
05:30	0		2		0		4		0		6	
05:45	0		2		0		6		0		8	
06:00	0	8	1	9	0	3	5	15	0	11	6	24
06:15	2		1		0		2		2		3	
06:30	2		6		1		6		3		12	
06:45	4		1		2		2		6		3	
07:00	1	17	3	13	2	11	3	12	3	28	6	25
07:15	6		4		3		2		9		6	
07:30	8		4		4		7		12		11	
07:45	2		2		2		0		4		2	
08:00	4	13	2	2	1	10	1	12	5	23	3	14
08:15	2		0		3		5		5		5	
08:30	6		0		3		4		9		4	
08:45	1		0		3		2		4		2	
09:00	5	15	0	0	4	14	2	9	9	29	2	9
09:15	8		0		7		5		15		5	
09:30	0		0		2		1		2		1	
09:45	2		0		1		1		3		1	
10:00	1	10	0	0	5	13	4	6	6	23	4	6
10:15	4		0		2		1		6		1	
10:30	3		0		2		1		5		1	
10:45	2		0		4		0		6		0	
11:00	1	9	0	1	0	8	0	0	1	17	0	1
11:15	4		0		4		0		8		0	
11:30	1		1		2		0		3		1	
11:45	3		0		2		0		5		0	
Totals	76		91		60		141		136		232	
Split%	55.9		39.2		44.1		60.8					
Day Totals		167				201				368		
Day Splits		45.4				54.6						
Peak Hour	07:15		01:15		08:30		05:00		08:30		01:15	
Volume	20		18		17		22		37		34	
Factor	0.63		0.75		0.61		0.92		0.62		0.77	

Transportation Studies, Inc.

2680 Walnut Avenue, Suite C
Tustin, CA. 92780

Location : FORRESTAL DRIVE
Segment : S/O PIRATE DRIVE
Client : WILLDAN ENGINEER

Site: RPV
Date: 03/04/09

Interval	NB				SB				Combined				Day:	Wednesday
	AM		PM		AM		PM		AM		PM			
12:00	0	0	16	43	0	0	23	60	0	0	39	103		
12:15	0		15		0		12		0		27			
12:30	0		8		0		18		0		26			
12:45	0		4		0		7		0		11			
01:00	1	1	4	27	0	1	6	35	1	2	10	62		
01:15	0		8		0		3		0		11			
01:30	0		6		1		16		1		22			
01:45	0		9		0		10		0		19			
02:00	0	1	13	69	0	0	5	44	0	1	18	113		
02:15	1		12		0		19		1		31			
02:30	0		13		0		8		0		21			
02:45	0		31		0		12		0		43			
03:00	0	1	16	70	1	2	18	66	1	3	34	136		
03:15	1		21		0		16		1		37			
03:30	0		17		1		14		1		31			
03:45	0		16		0		18		0		34			
04:00	0	2	17	71	0	4	12	50	0	6	29	121		
04:15	2		15		1		12		3		27			
04:30	0		14		0		10		0		24			
04:45	0		25		3		16		3		41			
05:00	3	9	10	63	3	14	17	51	6	23	27	114		
05:15	1		23		3		10		4		33			
05:30	2		13		4		12		6		25			
05:45	3		17		4		12		7		29			
06:00	0	6	18	65	2	33	10	37	2	39	28	102		
06:15	1		18		8		9		9		27			
06:30	3		17		14		17		17		34			
06:45	2		12		9		1		11		13			
07:00	8	30	7	35	13	79	6	20	21	109	13	55		
07:15	7		9		18		4		25		13			
07:30	4		13		20		5		24		18			
07:45	11		6		28		5		39		11			
08:00	8	72	12	38	12	75	4	20	20	147	16	58		
08:15	14		9		18		1		32		10			
08:30	20		10		27		11		47		21			
08:45	30		7		18		4		48		11			
09:00	17	42	11	24	23	68	8	25	40	110	19	49		
09:15	14		6		17		12		31		18			
09:30	6		4		11		1		17		5			
09:45	5		3		17		4		22		7			
10:00	5	26	5	19	6	30	2	6	11	56	7	25		
10:15	7		7		3		2		10		9			
10:30	9		3		6		1		15		4			
10:45	5		4		15		1		20		5			
11:00	4	38	2	10	12	40	0	1	16	78	2	11		
11:15	12		4		8		1		20		5			
11:30	10		4		8		0		18		4			
11:45	12		0		12		0		24		0			
Totals	228		534		346		415		574		949			
Split%	39.7		56.3		60.3		43.7							
Day Totals		762				761				1,523				
Day Splits		50.0				50.0								
Peak Hour	08:15		02:45		08:15		03:00		08:15		02:45			
Volume	81		85		86		66		167		145			
Factor	0.68		0.69		0.80		0.92		0.87		0.84			

Transportation Studies, Inc.

2680 Walnut Avenue, Suite C
Tustin, CA. 92780

Location : FORRESTAL DRIVE
Segment : S/O PIRATE DRIVE
Client : WILLDAN ENGINEER

Site: RPV
Date: 03/05/09

Interval	NB				SB				Combined		Day:	Thursday
	AM		PM		AM		PM		AM	PM		
12:00	0	2	18	50	0	1	20	48	0	3	38	98
12:15	1		9		1		11		2		20	
12:30	1		11		0		7		1		18	
12:45	0		12		0		10		0		22	
01:00	0	0	10	46	0	0	12	38	0	0	22	84
01:15	0		10		0		8		0		18	
01:30	0		12		0		7		0		19	
01:45	0		14		0		11		0		25	
02:00	1	2	12	61	0	0	17	57	1	2	29	118
02:15	0		11		0		12		0		23	
02:30	0		16		0		18		0		34	
02:45	1		22		0		10		1		32	
03:00	0	1	24	83	0	1	23	63	0	2	47	146
03:15	0		21		1		10		1		31	
03:30	1		20		0		22		1		42	
03:45	0		18		0		8		0		26	
04:00	0	1	17	93	0	3	22	79	0	4	39	172
04:15	0		25		0		19		0		44	
04:30	1		30		1		24		2		54	
04:45	0		21		2		14		2		35	
05:00	0	3	18	89	3	10	12	84	3	13	30	173
05:15	0		32		1		17		1		49	
05:30	0		22		3		40		3		62	
05:45	3		17		3		15		6		32	
06:00	2	9	21	65	3	35	14	50	5	44	35	115
06:15	2		11		8		16		10		27	
06:30	2		16		11		14		13		30	
06:45	3		17		13		6		16		23	
07:00	7	34	13	57	12	75	29	37	19	109	42	94
07:15	3		17		14		4		17		21	
07:30	12		13		30		1		42		14	
07:45	12		14		19		3		31		17	
08:00	13	73	8	26	18	86	3	9	31	159	11	35
08:15	17		7		20		4		37		11	
08:30	18		6		25		2		43		8	
08:45	25		5		23		0		48		5	
09:00	15	45	5	19	24	73	4	7	39	118	9	26
09:15	9		6		12		0		21		6	
09:30	9		2		19		2		28		4	
09:45	12		6		18		1		30		7	
10:00	4	29	4	14	11	47	3	4	15	76	7	18
10:15	9		8		15		0		24		8	
10:30	6		2		9		1		15		3	
10:45	10		0		12		0		22		0	
11:00	11	43	1	6	15	40	1	2	26	83	2	8
11:15	9		1		10		1		19		2	
11:30	8		2		5		0		13		2	
11:45	15		2		10		0		25		2	
Totals	242		609		371		478		613		1,087	
Split%	39.5		56.0		60.5		44.0					
Day Totals		851				849				1,700		
Day Splits		50.1				49.9						
Peak Hour	08:15		04:30		08:15		05:15		08:15		05:15	
Volume	75		101		92		86		167		178	
Factor	0.75		0.79		0.92		0.54		0.87		0.72	