

**Table 1
EXISTING TRAFFIC VOLUMES [1]
Canyon Hills Project**

20-Feb-2003

INT.	INTERSECTION	DATE	DIR	AM PEAK HOUR		PM PEAK HOUR	
				BEGAN	VOLUME	BEGAN	VOLUME
1	I-210 Eastbound Ramps and Sunland Boulevard	10/10/02	NB SB EB WB	7:15	0 1,077 767 1,222	5:00	0 939 1,348 759
2	I-210 Westbound Ramps and Sunland Boulevard	10/10/02	NB SB EB WB	7:15	282 538 1,213 2,173	5:00	738 256 1,982 1,164
3	I-210 Eastbound Off-Ramp and La Tuna Canyon Road	10/10/02	NB SB EB WB	7:30	0 58 436 730	5:00	2 89 683 429
4	Development Area A Access/ I-210 Westbound Ramps and La Tuna Canyon Road	10/10/02	NB SB EB WB	7:30	544 0 204 269	4:45	351 0 298 136
5	Tujunga Canyon Boulevard and Foothill Boulevard	10/10/02	NB SB EB WB	7:30	376 725 1,312 592	5:00	1,080 365 866 1,124
6	Tujunga Canyon Boulevard and La Tuna Canyon Rd/Honolulu Ave	10/10/02	NB SB EB WB	7:30	513 1,385 198 0	5:00	1,251 670 344 0
7	Development Area B Access (West) and La Tuna Canyon Road	10/10/02	NB SB EB WB	7:30	0 0 436 732	5:00	0 0 683 439
8	Development Area B Access (East) and La Tuna Canyon Road	10/10/02	NB SB EB WB	7:30	0 0 436 732	5:00	0 0 683 439
9	I-210 Eastbound On-Ramp and La Tuna Canyon Road	10/10/02	NB SB EB WB	7:30	0 0 481 734	5:00	0 0 754 435

[1] Counts conducted by Accutek.

**Table 2
PROJECT TRIP GENERATION [1]
Canyon Hills Project**

20-Feb-2003

LAND USE	SIZE	DAILY TRIP ENDS [2] VOLUMES	AM PEAK HOUR VOLUMES [2]			PM PEAK HOUR VOLUMES [2]		
			IN	OUT	TOTAL	IN	OUT	TOTAL
Single Family Residential [3]	280 DU	2,680	53	158	211	181	102	283
Equestrian Park [4]	3 Acres	14	1	0	1	0	1	1
TOTAL		2,694	54	158	212	181	103	284

[1] Source: ITE "Trip Generation", 6th Edition, 1997.

[2] Trips are one-way traffic movements, entering or leaving.

[3] ITE Land Use Code 210 (Single Family Residential) trip generation average rates.

[4] ITE Land Use Code 417 (Regional Park) trip generation average rates. The peak hour of generator trip rates were used in order to provide a conservative analysis for the equestrian park.

**Table 3
LIST OF RELATED PROJECTS [1]
Canyon Hills Project**

27-Feb-2003

MAP NO.	PROJECT	LOCATION	LAND USE	SIZE	STATUS
1	99-169	6723 Foothill Boulevard	Fast-Food Restaurant	3,050 SF	Proposed
2	00-4015	7611 Foothill Boulevard	Mini-Market (expansion)	3,827 SF	Proposed
3	00-3267 [2]	6520 Foothill Boulevard (Tujunga Shopping Center)	Shopping Center	46,814 SF	Under Construction
4	97-0155	7344 Apperson Street	Church (expansion)	8,000 SF	Proposed
5	00-0687	6901 Foothill Boulevard	Auto Repair	6,080 SF	Proposed
6	00-2989	8250 Foothill Boulevard	Auto Repair	25,000 SF	Proposed
7		Duke Development/Hill View Estates	Single-Family Residential	10 DU	Approved
8	01-3434	ARCO Station 7200 Foothill Boulevard	Gas Station Convenience Store Car Wash	20 fuel pos. 3,600 SF	Proposed
9		Residential Project	Single-Family Residential	125 DU	Proposed
10	[3]	Verdugo Hills Family YMCA Project 6840 Foothill Boulevard	YMCA expansion	7,508 SF	Proposed
11		Foothill Boulevard between Foothill Place and Wentworth Street	Golf Course	160 Acres	Proposed
12	[4]	All Nations Church Foothill Boulevard east of Wheatland Ave and I-210 Ramps	Sanctuary/Chapel/Sunday School/Administrative Office Gymnasium Tennis Courts	52,000 GSF 8,000 GSF 5 Courts	Approved
13		K-Mart Expansion Southwest corner of Foothill Boulevard and Woodward Avenue	Discount Store (Expansion)	56,426 GSF	Proposed

[1] Source: City of Los Angeles Department of Transportation and Department of Planning.

[2] Source: "Traffic Impact Study, Tujunga Shopping Center," prepared by LLG Engineers, February, 2000.

[3] Source: "Traffic Impact Study, Verdugo Hills Family YMCA Project," prepared by LLG Engineers, June, 2002.

[4] Source: "Traffic Impact Study, All Nations Church," prepared by LLG Engineers, September, 1999.

**Table 4
RELATED PROJECTS TRIP GENERATION [1]
Canyon Hills Project**

27-Feb-2003

LAND USE	SIZE	DAILY TRIP ENDS [2] VOLUMES	AM PEAK HOUR VOLUMES [2]			PM PEAK HOUR VOLUMES [2]		
			IN	OUT	TOTAL	IN	OUT	TOTAL
1 Fast Food Rest w/Drive Thru [3] Less 50 % Pass-by [4]	3,050 GSF	1,513 (757)	78 (39)	75 (38)	153 (77)	53 (27)	49 (25)	102 (51)
2 Mini-Market [3] Less 50 % Pass-by [4]	3,827 GSF	1,276 (638)	57 (29)	57 (29)	114 (57)	47 (24)	47 (24)	94 (47)
3 Tujunga Shopping Center [5]	46,814 GSF	3,580	108	89	197	135	137	272
4 Church [6]	8,000 GSF	73	3	3	6	3	2	5
5 Auto Care Center [7] Less 10 % Pass-by [4]	6,080 GLSF	200 (20)	12 (1)	6 (1)	18 (2)	10 (1)	10 (1)	20 (2)
6 Auto Care Center [7] Less 10 % Pass-by [4]	25,000 GLSF	840 (84)	48 (5)	26 (3)	74 (7)	42 (4)	42 (4)	84 (8)
7 Single-Family Residential [8]	10 DU	96	2	6	8	6	4	10
8 Gas Station/Car Wash/Mini Mart [9] Less 50 % Pass-by [4]	20 Fuel Pos.	3,057 (1,528)	109 (54)	104 (52)	213 (106)	132 (66)	132 (66)	264 (132)
9 Single-Family Residential [8]	125 DU	1,273	24	73	97	84	47	131
10 YMCA [10]	7,508 GSF	595	52	47	99	46	54	100
11 Golf Course [11]	160 Acres	680	50	10	60	30	30	60
12 All Nations Church [12]		830	24	21	45	30	123	153
13 K-Mart Expansion Project [13]	56,426 SF	3,767	25	13	38	94	94	188
TOTAL		14,752	464	409	873	591	652	1,243

[1] Source: ITE "Trip Generation", 6th Edition, 1997.

[2] Trips are one-way traffic movements, entering or leaving.

[3] Source: LADOT

[4] Pass-by trip reduction credit per LADOT policy.

[5] Source: "Traffic Impact Study, Tujunga Shopping Center" prepared by LLG Engineers, February 2000.

[6] ITE Land Use Code 560 (Church)trip generation rates.

[7] ITE Land Use Code 840 (Automobile Care Center) trip generation rates. Daily trip ends volumes were calculated based on the assumption that PM peak hour trips generally represent ten percent of the daily trip ends volume.

[8] ITE Land Use Code 210 (Single Family Residential) trip generation rates.

[9] ITE Land Use Code 846 (Gas Station/Car Wash/Mini-Market) trip generation rates.

[10] Source: "Traffic Impact Study, Verdugo Hills Family YMCA Project, " prepared by LLG Engineers, June 2002.

[11] Source: Los Angeles Golf Club, Draft Environmental Impact Report, Planning Associates, Inc., February, 1996.

[12] Source: "Traffic Impact Study, All Nations Church, " prepared by LLG Engineers, September, 1999.

[13] Source: "Traffic Impact Study, K-Mart Expansion Project," prepared by Associated Transportation Engineers. Information provided by LADOT.

**Table 6
SUMMARY OF VOLUME TO CAPACITY RATIOS
AND LEVELS OF SERVICE
AM AND PM PEAK HOURS
Canyon Hills Project**

20-Feb-2003

NO.	INTERSECTION	PEAK HOUR	[1] YEAR 2002 EXISTING		[2] YEAR 2009 W/ AMBIENT GROWTH		[3] YEAR 2009 W/ RELATED PROJECTS		[4] YEAR 2009 W/PROPOSED PROJECT		CHANGE V/C [(4)-(3)]	SIGNIF. IMPACT	[5] YEAR 2009 W/ PROJECT MITIGATION		CHANGE V/C [(5)-(3)]	MITI- GATED
			V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS			V/C	LOS		
1	I-210 Eastbound Ramps and Sunland Boulevard	AM	0.816	D	0.940	E	0.949	E	0.951	E	0.002	NO	0.951	E	0.002	---
		PM	0.775	C	0.893	D	0.907	E	0.909	E	0.002	NO	0.909	E	0.002	---
2	I-210 Westbound Ramps and Sunland Boulevard	AM	0.871	D	1.003	F	1.008	F	1.014	F	0.006	NO	1.014	F	0.006	---
		PM	0.613	B	0.708	C	0.721	C	0.724	C	0.003	NO	0.724	C	0.003	---
3	I-210 Eastbound Ramps and La Tuna Canyon Road	AM	0.348	A	0.397	A	0.398	A	0.417	A	0.019	NO	0.417	A	0.019	---
		PM	0.353	A	0.402	A	0.404	A	0.462	A	0.058	NO	0.462	A	0.058	---
4	Development Area A Access/ I-210 WB Ramps and La Tuna Canyon Road	AM	0.611	B	0.696	B	0.700	C	0.787	C	0.087	YES	0.630	B	-0.070	YES
		PM	0.522	A	0.595	A	0.598	A	0.661	B	0.063	NO	0.529	A	-0.069	---
5	Tujunga Canyon Boulevard and Foothill Boulevard	AM	0.889	D	1.024	F	0.989	E	0.998	E	0.009	NO	0.998	E	0.009	---
		PM	0.885	D	1.019	F	0.974	E	0.981	E	0.007	NO	0.981	E	0.007	---
6	Tujunga Canyon Boulevard and La Tuna Canyon Rd/Honolulu Ave	AM	1.040	F	1.186	F	0.586	A	0.604	B	0.018	NO	0.534	A	-0.052	---
		PM	0.938	E	1.069	F	0.639	B	0.649	B	0.010	NO	0.579	A	-0.060	---
7	Development Area B Access (West) and La Tuna Canyon Road	AM	0.305	A	0.348	A	0.348	A	0.367	A	0.019	NO	0.367	A	0.019	---
		PM	0.285	A	0.324	A	0.325	A	0.337	A	0.012	NO	0.337	A	0.012	---
8	Development Area B Access (East) and La Tuna Canyon Road	AM	0.305	A	0.348	A	0.348	A	0.373	A	0.025	NO	0.373	A	0.025	---
		PM	0.285	A	0.324	A	0.325	A	0.343	A	0.018	NO	0.343	A	0.018	---
9	I-210 EB On-Ramp and La Tuna Canyon Road	AM	0.303	A	0.346	A	0.347	A	0.359	A	0.012	NO	0.359	A	0.012	---
		PM	0.435	A	0.496	A	0.496	A	0.522	A	0.026	NO	0.522	A	0.026	---

**Table 8
SUMMARY OF STREET SEGMENT ANALYSIS
Canyon Hills Project**

27-Feb-2003

Location	Time Period	[1] Average Existing Volume	[2] Capacity	[3] Existing V/C Ratio ([1]/[2])	Existing LOS	Proposed Project		[6] Existing W/Project Volume	[7] Existing W/Project V/C Ratio ([6]/[2])	Existing W/Project LOS	[8] Change in V/C Ratio ([7]-[3])	[9] Impact?
						[4] Total Project Distribution %	[5] Project Traffic Volume					
1 La Tuna Canyon Road west of Development Area B Access (West)	AM Peak Hr	1,192	2,650	0.45	A	10.0% In 10.0% Out	5 16	1,213	0.46	A	0.01	No
	PM Peak Hr	1,473	2,800	0.53	A	10.0% In 10.0% Out	18 10	1,501	0.54	A	0.01	No

[1] Existing AM, PM and ADT Volumes based on traffic counts conducted by Accutek on October 17 and 25, 2002.

The traffic volumes shown represent the average traffic volume of the two days of counts.

See Appendix A summary data worksheets of the 24-hour traffic counts

[2] Capacity in passenger cars per hour based on directional split at the analyzed street segment. Values based on

Two-Lane Roadways significant impact thresholds set forth in the County of Los Angeles' "Traffic Impact Analysis Report Guidelines," January, 1997.

[3] Volume to capacity ratio. Column [1] divided by column [2].

[4] Total distribution of inbound and outbound project traffic at the analyzed street segment. See Exhibit 6, Project Trip Distribution.

[5] The project volume includes inbound and outbound trips based on the proposed project daily volumes of 2,694 net daily trip ends (1,347 inbound and 1,347 outbound), AM volumes of 212 net new trips (54 inbound and 158 outbound), and PM volumes of 284 net new trips (181 inbound and 103 outbound). See Table 2, Project Trip Generation.

The number of forecasted project trips on the specific street segment is derived from multiplying the directional percentage of traffic assigned to the street segment by the respective forecast number of total project inbound and outbound trips shown on Table 2.

[6] Column [1] plus the total of the volumes shown in Column [5]

[7] Column [6] divided by column [2].

[8] Column [7] minus column [3].

**Table 9
ACCIDENT RATES FOR LA TUNA CANYON ROAD
BETWEEN SUNLAND BOULEVARD AND I-210 FREEWAY
Canyon Hills Project**

27-Feb-2003

[1] YEAR	[2] 24-HOUR ADT VOLUME	[3] NUMBER OF ACCIDENTS	[4] ACCIDENT RATE (PER MILLION VMT)
1990	10,549	18	0.935
1991	10,722	20	1.022
1992	10,901	18	0.905
1993	11,086	11	0.544
1994	11,277	16	0.777
1995	11,475	24	1.146
1996	11,679	26	1.220
1997	11,892	10	0.461
1998	12,112	17	0.769
1999	12,341	26	1.154
2000	12,578	16	0.697
2001	12,825	N/A	N/A
2002	13,081	N/A	N/A

[1] Year in which the accidents occurred. Accident history data collected from January 1, 1990 through December 31, 2000.

[2] ADT volume calculated based on the an annual growth rate of 2%. The ADT volume was factored based on the 2002 average 24-hour traffic count.

[3] Number of accidents recorded along La Tuna Canyon Road between Sunland Boulevard and I-210 Westbound Ramps.

[4] Accident Rate for the 5-mile section of La Tuna Canyon Road based on the following equation:

$$\text{Accident Rate} = (\#\text{Accidents} \times 10^6) / (365 \times \#\text{Years} \times \text{ADT} \times \text{Length of Segment})$$

**Table 10
CONGESTION MANAGEMENT PLAN (CMP)
TRAFFIC IMPACT ASSESSMENT
Canyon Hills Project**

20-Feb-2003

CMP STATION	LOCATION	PEAK HOUR	FORECASTED PROJECT TRIPS	CMP TRAFFIC IMPACT ASSESSMENT THRESHOLD	CMP TRAFFIC IMPACT ASSESSMENT REQUIRED
26	Angeles Crest Highway and I-210 WB Off Ramp La Canada - Flintridge	AM	0	50	NO
		PM	0	50	NO
1059	I-210 Freeway Eastbound at Terra Bella Street	AM	16	150	NO
		PM	54	150	NO
1059	I-210 Freeway Westbound at Terra Bella Street	AM	47	150	NO
		PM	30	150	NO
1060	I-210 Freeway Eastbound west of SR-134 and SR-710	AM	47	150	NO
		PM	31	150	NO
1060	I-210 Freeway Westbound west of SR-134 and SR-710	AM	16	150	NO
		PM	54	150	NO