

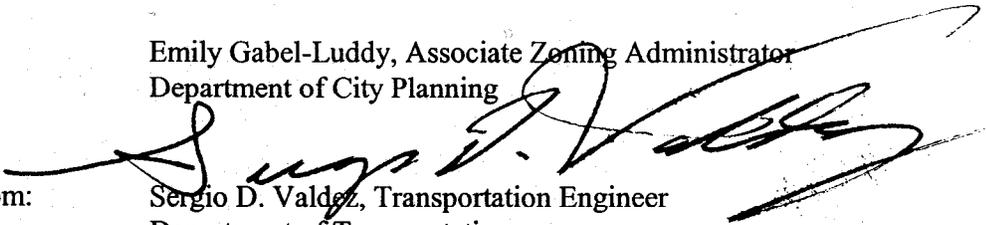
**CITY OF LOS ANGELES**  
**INTER-DEPARTMENTAL CORRESPONDENCE**

I-210 Freeway & La Tuna Canyon Road  
 DOT Case No. SFV 03-009

Date: July 17, 2003

To: Emily Gabel-Luddy, Associate Zoning Administrator  
 Department of City Planning

From: Sergio D. Valdez, Transportation Engineer  
 Department of Transportation



**Subject: TRAFFIC ASSESSMENT FOR THE PROPOSED 280 SINGLE FAMILY DWELLING UNITS (CANYON HILLS) AND AN EQUESTRIAN PARK AT I-210 FREEWAY AND LA TUNA CANYON ROAD.**

The Department of Transportation (DOT) has completed the traffic assessment for the proposed 280 single-family dwelling units and an equestrian park in Tujunga. The proposed development will be constructed on approximately 887 acres of vacant land. The development will be located on approximately 202 acres, with the remaining 685 acres preserved as open space. Construction is estimated to begin in 2004, with an estimated completion in 2009. This traffic assessment is based on a traffic study prepared by Linscott, Law and Greenspan Engineers (dated March 2003). After a careful review of the pertinent data, DOT has determined that the traffic study, as revised, adequately describes the project related traffic impacts of the proposed development.

**DISCUSSION AND FINDINGS**

The proposed residential development will consists of 211 homes (Development Area "A") north of I-210 Freeway and 69 homes (Development Area "B") south of the I-210 Freeway. The equestrian park will be located on three-acres adjacent to La Tuna Canyon Road west of Development Area "B". The project will generate 2,694 daily trips with 212 trips in the a.m. peak hour and 284 trips in the p.m. peak hour. The trip generation estimates are based on formulas published by the Institute of Transportation Engineers (ITE) Trip Generation, 6th Edition, 1997 and shown below:

Land Use	Size	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
			In	Out	Total	In	Out	Total
<i>Propose:</i>		Total						
Single Family Residential*	280 DU*	2,680	53	158	211	181	102	283
Equestrian Park**	3 Acres	14	1	0	1	0	1	1
<b>TOTAL</b>		<b>2,694</b>	<b>54</b>	<b>158</b>	<b>212</b>	<b>181</b>	<b>103</b>	<b>284</b>

\* ITE Land Use Code 210; DU = Dwelling Units  
 \*\* Compatible to ITE Land Use Code 417, Regional Park

The traffic study was revised by modifying the striping at the studied intersections to reflect the existing conditions and by adjusting assumed functional right-turn only lanes at Foothill Boulevard and Tujunga Canyon Boulevard and at I-210 Freeway eastbound off-ramp and La Tuna Canyon Road, to conform with DOT policies and procedures: "Assumed unmarked lanes will be allowed in the capacity calculation if the lane is a minimum of 22 feet wide, with no bus stops and low pedestrian volume in the peak hour."

**ATTACHMENT A**

**Canyon Hills Project  
North and south sides of the I-210 Foothill Freeway at La Tuna Canyon Road**

Summary of Volume to Capacity Ratios (V/C) and Levels of Service (LOS)  
July 17, 2003

Intersection	Peak Hour	Year 2002 Existing		Year 2009 w/o Project		Year 2009 w/ Project		Impact	2009 w/ Mitigation		Mitigated
		V/C	LOS	V/C	LOS	V/C	LOS	Δ V/C	V/C	LOS	Δ V/C
I-210 Fwy EB Off-ramp & Sunland Blvd <sup>1</sup>	AM	0.659	B	0.776	C	0.779	C	0.003	----	----	----
	PM	0.761	C	0.904	E	0.907	E	0.003	----	----	----
I-210 Fwy WB Off-ramp & Sunland Blvd <sup>1</sup>	AM	0.707	C	0.828	D	0.834	D	0.006	----	----	----
	PM	0.531	A	0.633	B	0.636	B	0.003	----	----	----
I-210 Fwy EB Off-ramp & La Tuna Canyon Rd	AM	0.348	A	0.401	A	0.420	A	0.019	----	----	----
	PM	0.350	A	0.404	A	0.462	A	0.058	----	----	----
I-210 Fwy WB Ramps & La Tuna Canyon Rd	AM	0.677	B	0.653	B	0.754	C	0.101 <sup>2</sup>	0.603	B	-0.050
	PM	0.404	A	0.467	A	0.533	A	0.066	0.426	A	-0.041
Tujunga Canyon Blvd & Foothill Blvd <sup>1</sup>	AM	0.816	D	0.997	E	1.005	F	0.008	----	----	----
	PM	0.707	C	0.867	D	0.882	D	0.015	----	----	----
Tujunga Canyon Blvd / Honolulu Ave & La Tuna Canyon Rd	AM	0.505	A	0.590	A	0.608	B	0.018	----	----	----
	PM	0.549	A	0.644	B	0.654	B	0.010	----	----	----
Project "B" west driveway & La Tuna Canyon Rd	AM	0.305	A	0.351	A	0.370	A	0.019	----	----	----
	PM	0.285	A	0.327	A	0.339	A	0.012	----	----	----
Project "B" east driveway & La Tuna Canyon Rd	AM	0.305	A	0.351	A	0.375	A	0.024	----	----	----
	PM	0.285	A	0.327	A	0.346	A	0.019	----	----	----
I-210 Fwy EB On-ramp & La Tuna Canyon Rd	AM	0.303	A	0.349	A	0.355	A	0.006	----	----	----
	PM	0.323	A	0.372	A	0.428	A	0.056	----	----	----

<sup>1</sup> Existing signalized ATISAC intersection

<sup>2</sup> Significant Traffic Impact

DOT has determined that the proposed project will have a significant traffic impact at the intersection of the I-210 Freeway westbound ramps and La Tuna Canyon Road/Future Development "A" driveway, as shown in the summary of volume-to-capacity (V/C) ratios and levels of service (LOS) at the study intersections (see Attachment A).

In order to mitigate the traffic impact at the intersection of the I-210 Freeway westbound ramps and La Tuna Canyon Road/Future Development "A" driveway to less than significant level, the project's traffic consultant has proposed to install a traffic signal at this intersection. DOT agrees that the installation of a traffic signal at this location will mitigate the significant traffic impact. Since the intersection includes a freeway ramp, review and approval from Caltrans must be obtained as well. If Caltrans does not approve the installation of the traffic signal, the applicant will have to propose an alternate mitigation measure to the satisfaction of DOT for this location. DOT will require the developer to fund the design and implementation of an Automated Traffic Surveillance and Control (ATSAC) System at this intersection. DOT has determined that funding the design and installation of ATSAC will mitigate the traffic impact at this intersection. The Department of Transportation recommends that the following Project Requirements be adopted as conditions of project approval to guarantee that all potentially significant traffic impacts are mitigated to less than significant levels, as well as to mitigate potential access and circulation impacts along the project's frontage.

## **PROJECT REQUIREMENTS**

### **A. Highway Dedication and Improvements**

La Tuna Canyon Road is a designated Secondary Highway in the Streets and Highways Element of the City's General Plan. La Tuna Canyon Road currently consists of a variable width roadway with predominantly unimproved sidewalk. Standard Plan S-470-0, effective November 10, 1999, dictates that the standard cross section for a Secondary Highway is a 35-foot half-roadway on a 45-foot half right-of-way. The applicant shall dedicate and widen along the entire project frontage on La Tuna Canyon Road to bring the roadway and right-of-way up to the standard required by the General Plan. Relocate and modify any streetlights, curbs and gutters, trees, utilities, etc. as required.

The applicant should contact the Bureau of Engineering, Department of Public Works (BOE) to ensure compliance with these requirements of the municipal code. Furthermore, additional street improvements may be required; the applicant should contact the BOE to set up a meeting with DOT to determine the requirements.

### **B. Intersection Mitigation Measures**

#### I-210 Freeway westbound ramps at La Tuna Canyon Road/Future Development "A" project driveway

Fund the design and implementation of a future ATSAC System for this intersection. ATSAC improvements shall be guaranteed through a cash payment, in full to the Los Angeles Department of Transportation prior to the issuance of any building permit. The current estimate per intersection of an ATSAC System is \$100,000. The cost of ATSAC improvements is reviewed and adjusted periodically. The actual cost may change depending on when payment is made.

The above transportation improvements, including all necessary dedications, widening, and signal installation, shall be guaranteed before the issuance of any building permit through the B-Permit process of the Bureau of Engineering and encroachment permit of Caltrans. Prior to setting the bond amount of the B-Permit, the BOE shall require that the developer's engineer or contractor to contact DOT's B-

Permit Coordinator at (213) 580-5322 to arrange a pre-design meeting to finalize the design for the required transportation improvements. These measures shall be constructed and completed, before the issuance of any certificate of occupancy, to the satisfaction of DOT, the BOE, and Caltrans.

**C. Equestrian Park**

Activities, including but not limited to competitions and shows, where mass gathering of spectators and participants are anticipated, shall be prohibited as land use for the equestrian park.

**D. Site Access and Internal Circulation**

This determination does not include approval of the project's driveways, internal circulation, and parking scheme. Adverse traffic impacts could occur due to access and circulation issues.

1. Driveway to Future Development "A" on La Tuna Canyon Road at I-210 westbound ramps shall be aligned as the north leg of this proposed signalize intersection.
2. To avoid vehicles encroaching onto the public right-of-way, a minimum 40-foot reservoir space (distance between property line and first parking stall and/or gate) shall be provided at each driveway.
3. The proposed driveways at Development "B" south of the I-210 Freeway shall be located away from any blind curve along La Tuna Canyon Road. Queuing and merging area be provided for ingress and egress vehicles respectively. To reduce the number of conflict points along La Tuna Canyon Road, it is recommended that only one driveway be designed to serve Development "B".
4. Backing in or out on to arterial highways or collector streets is not permitted; therefore, the path and location of all trucks and vehicles with horse trailers shall be indicated on the site plan.
5. A minimum of two lanes in each direction with left turn channelization be provided along the project frontage on La Tuna Canyon Road.

Final DOT approval shall be obtained prior to issuance of any building permits. This should be accomplished by submitting a detailed site/driveway plan, at a scale of at least 1" = 40', to DOT's Valley Development Review Section at 6262 Van Nuys Boulevard, Ste. 320, Van Nuys, 91401, as soon as possible but prior to submittal of building plans for plan check by the Department of Building and Safety.

If you have any further questions, you may contact Mr. Ray Lau at (818) 374-4699.

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Attachment

- c: Dale Thrush, Second Council District  
Irwin Chodash, DOT East Valley District  
Armen Hovanessian, DOT Metro Programs  
Timothy Conger, DOT Geometric Design  
Ina Van Der Laan, DOT Signal Design  
Jim Williams, DOT ATSAC Operations  
John Afford, DOT Accounting  
Randall Tsurutani, BOE Valley District  
Linda Arnold, BOE Land Development  
✓Sarah Drobis, Linscott, Law and Greenspan Engineers

**CITY OF LOS ANGELES**  
INTER-DEPARTMENTAL CORRESPONDENCE

I-210 Freeway & La Tuna Canyon Road  
DOT Case No. SFV 03-009

Date: August 1, 2003

To: Emily Gabel-Luddy, Associate Zoning Administrator  
Department of City Planning

From:   
Sergio D. Valdez, Transportation Engineer  
Department of Transportation

Subject: **CLARIFICATION TO THE TRAFFIC ASSESSMENT LETTER FOR THE PROPOSED 280 SINGLE FAMILY DWELLING UNITS (CANYON HILLS) AND AN EQUESTRIAN PARK AT I-210 FREEWAY AND LA TUNA CANYON ROAD.**

A request has been received from the Canyon Hills' residential and equestrian park traffic consultant, Linscott, Law and Greenspan Engineers (LLG), for the Department of Transportation (DOT) to clarify certain items in the traffic assessment (TA) letter dated July 17, 2003. The assessment was for the proposed 280 single-family dwelling units and an equestrian park in Tujunga. The traffic assessment was based on a traffic study prepared by LLG dated March 2003.

DOT would like to clarify and revise as follows:

- A. *Delete and replace the second paragraph on page 2 of the TA letter to read,*

"In order to mitigate the traffic impact at the intersection of the I-210 Freeway westbound ramps and La Tuna Canyon Road/Future Development "A" driveway to less than significant level, the project's traffic consultant has proposed to install a traffic signal at this intersection. DOT agrees that the installation of a traffic signal at this location will mitigate the significant traffic impact. Since the intersection includes a freeway ramp, review and approval from Caltrans must be obtained as well. If Caltrans does not approve the installation of the traffic signal, the applicant will have to propose an alternate mitigation measure to the satisfaction of DOT for this location. DOT will require the developer to fund the design and installation of a traffic signal compatible with Automated Traffic Surveillance and Control (ATSAC)/Adaptive Traffic Control System (ATCS) at this intersection. DOT has determined that funding the design and installation of a traffic signal compatible with ATSAC/ATCS will mitigate the traffic impact at this intersection. The Department of Transportation recommends that the following Project Requirements be adopted as conditions of project approval to guarantee that all potentially significant traffic impacts are mitigated to less than significant levels, as well as to mitigate potential access and circulation impacts along the project's frontage."

- B. *Delete and replace Section B of the Project Requirements on page 2 of the TA letter to read,*

**"Intersection Mitigation Measures**

**I-210 Freeway westbound ramps at La Tuna Canyon Road/Future Development "A" project driveway**

**Fund the design and installation of a traffic signal compatible with ATSAC/ATCS for this intersection.**

Emily Gabel-Luddy

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August 1, 2003

The above transportation improvements, including all necessary dedications, widening, and signal installation, shall be guaranteed before the issuance of any building permit through the B-Permit process of the Bureau of Engineering and encroachment permit of Caltrans. Prior to setting the bond amount of the B-Permit, the BOE shall require that the developer's engineer or contractor to contact DOT's B-Permit Coordinator at (213) 580-5322 to arrange a pre-design meeting to finalize the design for the required transportation improvements. These measures shall be constructed and completed, before the issuance of any certificate of occupancy, to the satisfaction of DOT, the BOE, and Caltrans."

C. *Delete and replace Section D.3 of the Project Requirements on page 3 of the TA letter to read,*

"The proposed driveways at Development "B" south of the I-210 Freeway shall be located away from any blind curve along La Tuna Canyon Road. Queuing and merging area be provided for ingress and egress vehicles respectively. DOT recommends that minimal number of driveways be designed to serve Development "B", but the number of driveways shall be consistent with the requirement(s) of other city department."

If you have any further questions, you may contact Mr. Ray Lau at (818) 374-4699.

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c: Dale Thrush, Second Council District  
Irwin Chodash, DOT East Valley District  
Armen Hovanesian, DOT Metro Programs  
Timothy Conger, DOT Geometric Design  
Ina Van Der Laan, DOT Signal Design  
Jim Williams, DOT ATSAC Operations  
John Afford, DOT Accounting  
Randall Tsurutani, BOE Valley District  
Linda Arnold, BOE Land Development  
✓ Sarah Drobis, Linscott, Law and Greenspan Engineers

**TRAFFIC IMPACT STUDY  
CANYON HILLS PROJECT  
LOS ANGELES, CALIFORNIA**

**INTRODUCTION**

This traffic analysis has been conducted to identify and evaluate the potential traffic impacts of the proposed Canyon Hills project. The project site is bisected by the I-210 Freeway in the Sunland-Tujunga area of the City of Los Angeles, California. The project site is bounded by residential and open space areas to the north, east and west, and La Tuna Canyon Road to the south. The project site location and general vicinity are shown on Figure 1.

The traffic analysis follows the City of Los Angeles traffic study guidelines and is consistent with traffic impact assessment guidelines set forth in the *2002 Congestion Management Program for Los Angeles County*, County of Los Angeles Metropolitan Transportation Authority, June 2002 (CMP). This traffic analysis evaluates potential project-related impacts at nine study intersections in the vicinity of the project site. The study intersections were determined by City of Los Angeles Department of Transportation (LADOT) staff. The Critical Movement Analysis method was used to determine Volume-to-Capacity ratios and Levels of Service for the study intersections.

This study (i) presents existing traffic volumes, (ii) forecasts future traffic volumes with the related projects, (iii) forecasts future traffic volumes with the proposed project, and (iv) determines project-related impacts, and (v) presents recommendations for mitigation measures, where required.

## **PROJECT DESCRIPTION**

The project site consists of approximately 887 acres and is currently vacant. The proposed Canyon Hills project consists of the development of single-family homes with 280 dwelling units. The development will be located on approximately 202 acres, with the remaining 685 acres of the project site preserved as open space. The residential developments will be located on the easterly half of the project site, along both the north and south sides of the I-210 Freeway. As proposed, 211 homes will be constructed on approximately 150 acres north of the I-210 Freeway (Development Area A). The remaining 69 homes will be constructed on approximately 52 acres south of the I-210 Freeway (Development Area B). In addition, the development area south of the I-210 Freeway will include a three-acre equestrian park adjacent to La Tuna Canyon Road and west of Development Area B. The equestrian park will be available for public use and provide a staging area for local equestrians. The construction of the project is estimated to begin in 2004, with an estimated completion in 2009. The Canyon Hills project site plan is displayed in [Figure 2](#).

## **SITE ACCESS**

The site access scheme for the proposed Canyon Hills project is illustrated in [Figure 2](#). Access to the project site will be provided via three access points on La Tuna Canyon Road as follows:

The residential components north of the I-210 Freeway (Development Area A) and south of the I-210 Freeway (Development Area B) will have separate and independent site access and internal circulation schemes. Development Area A will have vehicular access via the proposed construction of the north leg of the existing intersection of the I-210 Freeway westbound on/off ramps and La Tuna Canyon Road.

Access for Development Area B will be provided via two proposed intersections to La Tuna Canyon Road west of the I-210 interchange. Full left-turn and right-turn ingress and egress movement from La Tuna Canyon Road are proposed at these intersections. Further west on La Tuna Canyon Road, a separate driveway will be provided for the equestrian park.

Onsite circulation will be provided via internal roadways. The internal roadways will be two-way and provide access to the single-family residences. It should be noted that no connection is planned between the two Development Areas.

### **EXISTING STREET SYSTEM**

Immediate access to the site is provided via La Tuna Canyon Road. The following nine study intersections were selected by City of Los Angeles staff for analysis of potential impacts due to the proposed project:

1. I-210 Eastbound Ramps and Sunland Boulevard.<sup>1</sup>
2. I-210 Westbound Ramps and Sunland Boulevard.<sup>1</sup>
3. I-210 Eastbound Off-Ramp and La Tuna Canyon Road.<sup>2</sup>
4. Development Area A Access/I-210 Westbound Ramps and La Tuna Canyon Road.<sup>2</sup>
5. Tujunga Canyon Boulevard and Foothill Boulevard.<sup>1</sup>
6. Tujunga Canyon Boulevard and La Tuna Canyon Road/Honolulu Avenue.<sup>1</sup>
7. Development Area B Access (West) and La Tuna Canyon Road.<sup>2</sup>
8. Development Area B Access (East) and La Tuna Canyon Road.<sup>2</sup>
9. I-210 Eastbound On-Ramp and La Tuna Canyon Road.<sup>2</sup>

As noted, four of the nine study intersections selected for analysis are controlled by traffic signals.

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<sup>1</sup>Signalized Intersection

<sup>2</sup>Unsignalized Intersection

The remaining five study intersections are currently unsignalized. The existing lane configurations at the nine study intersections are displayed in [Figure 3](#). A brief description of the important roadways in the project vicinity is provided in the following paragraphs.

*The Foothill (I-210) Freeway* is a major freeway route that runs from the San Bernardino (I-10) Freeway-Orange (SR-57) Freeway junction in the City of Pomona to the east and joins the Golden State (I-5) Freeway near the City of San Fernando to the northwest. In the project vicinity, four mainline lanes are provided in each direction. An interchange with La Tuna Canyon Road is located in the immediate project vicinity. Both eastbound and westbound on- and off-ramps are provided at the La Tuna Canyon Road interchange.

*Foothill Boulevard* is a major east-west roadway which is located north of the project site. Two through travel lanes are generally provided in each direction along Foothill Boulevard. In the project vicinity, exclusive left-turn lanes are provided in both directions at major intersections. Parking is generally permitted along Foothill Boulevard in the project vicinity. The posted speed limit on Foothill Boulevard is 35 miles per hour (MPH) in the project vicinity.

*Tujunga Canyon Boulevard* is a major north-south roadway which is located east of the project site and becomes Honolulu Avenue at the intersection with La Tuna Canyon Road. Tujunga Canyon Boulevard generally provides one through travel lane in each direction in the project vicinity. Exclusive left-turn lanes are provided in both directions at the intersection with Foothill Boulevard and in the northbound direction at the intersection with La Tuna Canyon Road. An exclusive right-turn only lane is provided in the southbound direction along Tujunga Canyon Boulevard at the intersection with Foothill Boulevard. Parking is generally not permitted along Tujunga Canyon Boulevard adjacent to the study intersections. The posted speed limit on Tujunga Canyon Boulevard is 30 MPH in the project vicinity.

*La Tuna Canyon Road* is a secondary east-west roadway located immediately adjacent to the project site. Two through travel lanes are generally provided in each direction along La Tuna Canyon Road in the project vicinity. However, there are two ½ -mile segments located west of the project site (approximately 0.5 mile and 1.5 miles west of the I-210 Freeway Eastbound Off-Ramp and La Tuna Canyon Road intersection, respectively) where only one lane is provided in each direction.

Exclusive left-turn lanes are provided in the westbound direction at the intersections with the I-210 Freeway Eastbound Ramps, and in the eastbound direction at the intersection with Tujunga Canyon Boulevard. Parking is generally prohibited along La Tuna Canyon Road in the project vicinity. The posted speed limit on La Tuna Canyon Road is 50 MPH in the project vicinity.

*Sunland Boulevard* is a major east-west roadway located to the north and west of the project site. Two to three through travel lanes are generally provided in each direction along Sunland Boulevard in the project vicinity. An exclusive left-turn lane is provided in the eastbound direction at the intersection with the I-210 Freeway Westbound Ramps. Curbside parking is prohibited along both sides of Sunland Boulevard in the project vicinity. The posted speed limit on Sunland Boulevard is 45 MPH in the project vicinity.

### **Existing Transit System**

The closest Metropolitan Transportation Authority (MTA) bus routes to the project site is approximately two miles away. Brief descriptions of the nearest bus lines operating in the project vicinity are provided in the following paragraphs.

#### MTA Transit Routes 90 and 91

MTA Transit Routes 90 and 91 provide service through portions of Downtown Los Angeles, Glendale, Tujunga, Sunland, Lakeview Terrace and Sylmar. Transit Routes 90 and 91 serve Foothill Boulevard with stops at the Commerce Avenue, Tujunga Canyon Boulevard, and Lowell Avenue. Headways for both Transit Routes 90 and 91 are four buses per hour in the northbound and southbound directions during the AM peak hour, and two buses per hour in the northbound and southbound directions during the PM peak hour. It should be noted that the nearest bus stop to the project site is provided along Foothill Boulevard near Tujunga Canyon Boulevard and is approximately two miles from the project site (i.e., as measured from the project's access to Development Area A on La Tuna Canyon Road across from the I-210 Freeway westbound ramps, traveling east on La Tuna Canyon Road, and then traveling north on Tujunga Canyon Road to the MTA bus stop on Foothill Boulevard).

## TRAFFIC COUNTS

Manual counts of vehicular turning movements were conducted at each of the nine study intersections during the weekday morning (AM) and afternoon (PM) commuter periods to determine the peak hour traffic volume. The manual traffic counts were conducted on Thursday, October 10, 2002. It should be noted that the traffic counts were not conducted during summer months or near holidays when overall system-wide traffic volumes are lower due to schools being out of session and vacations, which would represent more atypical travel patterns. It was confirmed that the local schools in the area were in session at the time that the manual traffic counts were conducted. Further, the traffic counts were conducted mid-week (i.e., Tuesday, Wednesday, or Thursday), which usually represent typical travel patterns.

LADOT requires that the traffic impact analyses examine existing and future conditions for the highest one hour of traffic during the morning (AM) peak commuter period, as well as the afternoon (PM) peak commuter period. Accordingly, the manual counts were conducted at the study intersections from 7:00 to 10:00 AM to determine the AM peak commuter hour, and from 3:00 to 6:00 PM to determine the PM peak commuter hour. Traffic volumes at the study intersections show the typical peak periods between 7:00 to 10:00 AM and 3:00 to 6:00 PM generally associated with peak commuter hours. The AM and PM peak hour traffic volumes are the highest traffic volume observed for a consecutive 60 minute period (one hour) during the respective peak commuter periods. Based on a review of the traffic count data in the project vicinity, the AM peak hour traffic volume commences at either 7:15 or 7:30 AM, depending on the study intersection, while the PM peak hour traffic volume commences at either 4:45 or 5:00 PM, depending on the study intersection.

The 2002 AM and PM peak hour manual counts of turning vehicles at the nine study intersections are summarized in [Table 1](#). The existing 2002 traffic volumes at the study intersections during the AM and PM peak hours are shown on [Figures 4](#) and [5](#), respectively. Summary data worksheets of the 2002 manual counts are contained in [Appendix A-1](#).

The 2002 AM and PM peak hour traffic counts were also compared to previous traffic counts conducted at the study intersections during the weekday commuter peak periods in September, 2001. The 2001 manual traffic counts were conducted on Thursday, September 20, 2001. It should be noted that, similar to the 2002 manual traffic count, the 2001 traffic counts were not conducted during summer months or near holidays when overall system-wide traffic volumes are lower due to schools being out of session and vacations, which would represent more atypical travel patterns. It was confirmed that the local schools in the area were in session at the time that the 2001 manual traffic counts were conducted. Further, the 2001 traffic counts were conducted mid-week (i.e., Tuesday, Wednesday, or Thursday), which usually represent typical travel patterns. For reference, the summary data worksheets of the 2001 manual counts are contained in [Appendix A-2](#).

The 2001 traffic count data was compared to the 2002 data for purposes of validating the more recent traffic counts, as well as to determine any significant changes in local traffic patterns. Based on this comparison, it was determined that the 2002 traffic count data are generally consistent and demonstrate that the 2002 numbers are accurate. Therefore, the most recent 2002 traffic count data was used for purposes of preparing the traffic impact assessment.

In addition, automatic 24-hour machine traffic counts were conducted on La Tuna Canyon Road west of the I-210 Freeway interchange on two separate days: Thursday, October 17, and Friday, October 25, 2002. The 24-hour traffic count for La Tuna Canyon Road on Thursday, October 17, 2002 was 12,448 vehicles (6,857 eastbound, 5,591 westbound). The 24-hour count for La Tuna Canyon Road on Friday, October 25, 2002 was 13,714 vehicles (7,999 eastbound, 5,715 westbound). Thus, based on the two days of traffic count data, the Average Daily Traffic (ADT) on La Tuna Canyon Road is 13,081 vehicles per day. Copies of the ADT counts are provided in [Appendix A-3](#).

## PROJECT TRAFFIC GENERATION

Traffic volumes expected to be generated by the proposed project during the AM and PM peak hours, as well as on a daily basis, were estimated using rates published in the Institute of Transportation Engineers' (ITE) *Trip Generation* manual, 6<sup>th</sup> Edition, 1997. Traffic volumes expected to be generated by the proposed residential project were forecast based on the number of single-family residential dwelling units. Traffic volumes expected to be generated by the equestrian park were forecast based on number of acres.

ITE Land Use Code 210 (Single Family Residential) average trip generation rates were used to forecast the traffic volumes expected to be generated by the single-family residential component of the proposed project. However, the ITE *Trip Generation* manual does not include a specific trip generation rate for an equestrian park. Therefore, ITE Land Use Code 417 (Regional Park) average peak hour of generator trip generation rates were used to forecast the traffic volumes expected to be generated by the equestrian park component of the proposed project. The ITE Regional Park land use includes sites with hiking trails, lakes, pools, ball fields, picnic facilities, etc., which activities will not occur in the equestrian park. Therefore, the trip generation forecast for the equestrian park using the ITE Regional Park trip generation rates likely overstates the number of vehicular trips that will be generated by the equestrian park and the trip generation forecast for the equestrian park portion of the Canyon Hills project provides a conservative ("worst case") analysis. The project trip generation forecast for the proposed project is summarized in Table 2.

As shown in Table 2, the proposed project is expected to generate 212 net new vehicle trips (54 inbound and 158 outbound) during the AM peak hour. During the PM peak hour, the proposed project is expected to generate 284 net new vehicle trips (181 inbound and 103 outbound). Over a 24-hour period, the proposed project is forecasted to generate 2,694 net new daily trip ends during a

typical weekday (1,347 inbound and 1,347 outbound trips).

### **PROJECT TRIP DISTRIBUTION**

The regional distribution patterns were determined consistent with the procedures outlined in the CMP. The CMP provides generalized trip distribution factors based on regional modeling efforts. Those distribution factors show Regional Statistical Areas (RSAs)-level trip making origins and destinations for work and non-work trip purposes. Those regional distribution pattern for the proposed project was based on the Appendix D, Exhibit D-3, which provides general origin and destination trip distributions from the project study area RSA to throughout the Los Angeles basin. The regional RSA-level trip distribution percentages (for work trip purposes) were then assigned to the local roadway system. The project traffic was assigned to the local roadway system and study intersections based on a traffic distribution pattern which reflected the proposed project land uses, the proposed site access scheme, existing traffic movements, characteristics of the surrounding roadway system, and nearby residential areas. This procedure of determining the project distribution pattern is also consistent with trip distribution and assignment methodologies utilized in the traffic engineering industry. The distribution pattern was reviewed and approved by LADOT.

The project traffic distribution percentages forecast for the nine study intersections are provided in Figure 6. The forecast project traffic volumes at the study intersections for the AM and PM peak hours are displayed in Figures 7 and 8, respectively.

### **RELATED PROJECTS**

A forecast of on-street traffic conditions prior to the occupancy of the proposed project was prepared by incorporating the potential trips associated with other known development projects (related projects) in the area. With this information, the potential impact of the proposed project can be

evaluated within the context of the cumulative impact of all ongoing development. The related projects research was based on information on file at the City of Los Angeles Departments of Planning and Transportation, as well as the City of Glendale Department of Transportation. The list of related projects in the area is presented in Table 3. The location of the related projects is displayed on Figure 9. The list of related projects was reviewed and approved by LADOT staff.

Traffic volumes expected to be generated by the related projects were estimated using accepted generation rates published in the ITE *Trip Generation* manual, 6<sup>th</sup> Edition, 1997. However, if a traffic impact study was prepared for a specific related project, the traffic volumes expected to be generated by that project were based on the corresponding traffic impact study. The related projects' respective traffic generation for the AM and PM peak hours, as well as on a daily basis for a typical weekday, is presented in Table 4. The anticipated distribution of the related projects traffic volumes at the nine study intersections during the AM and PM peak hours is shown on Figures 10 and 11, respectively.

In order to account for unknown related projects not included in this analysis, the existing traffic volumes were increased at an annual rate of two percent (2%) per year to the year 2009 (i.e., the anticipated year of project build-out). Application of the annual ambient growth factor allows for a conservative worst case forecast of future traffic volumes in the area. The ambient growth factor was determined by LADOT staff.

## **TRAFFIC IMPACT ANALYSIS AND METHODOLOGY**

The nine study intersections were evaluated using the Critical Movement Analysis (CMA) method of analysis which determines Volume-to Capacity ( $v/c$ ) ratio on a critical lane basis. The overall intersection V/C ratio is subsequently assigned a Levels of Service (LOS) value to describe intersection operations. The Levels of Service vary from LOS A (free flow) to LOS F (jammed condition). A description of the CMA method and corresponding Levels of Service is provided in Appendix B.

### Impact Criteria and Thresholds

The relative impact of the added project traffic volumes expected to be generated by the proposed Canyon Hills project during the AM and the PM peak hours were evaluated based on analysis of future operating conditions at the nine study intersections, without and then with the proposed project. The previously discussed capacity analysis procedures were utilized to evaluate the future volume-to-capacity relationships and service level characteristics at each study intersection.

The significance of the potential impacts of project generated traffic at each study intersection was identified using the traffic impact criteria set forth in LADOT's "Traffic Study Policies and Procedures," November 1993. According to the City's published traffic study policies and procedures, a significant transportation impact is determined based on the following sliding scale criteria provided in Table 5.

<b>Table 5</b> <b>LADOT INTERSECTION IMPACT THRESHOLD CRITERIA</b> <b>Canyon Hills Project</b>		
<b>Final v/c</b>	<b>Level of Service</b>	<b>Project Related Increase in v/c</b>
>0.700-0.800	C	equal to or greater than 0.04
>0.800-0.900	D	equal to or greater than 0.02
> 0.900	E-F	equal to or greater than 0.01

Source: LADOT's *Traffic Study Policies and Procedures*, November, 1993.

As part of this analysis, the following roadway improvements were assumed in the year 2009 future pre-project conditions based on City of Los Angeles planned improvements, as well as on information provided in the Tujunga Shopping Center Project Traffic Impact Study, prepared by

LLG Engineers, February, 2000:

- As a mitigation for the Tujunga Shopping Center project (currently under construction), which was approved by the City of Los Angeles Department of Planning on August 18, 2000, the Tujunga Canyon Boulevard and Foothill Boulevard intersection will be improved to accommodate dual left-turn lanes and a shared through/right-turn lane at the northbound Tujunga Canyon Boulevard approach to the intersection. A Class “B” Application/Permit has been issued for the construction of this improvement (April 18, 2002). This improvement measure is anticipated to be complete prior to completion and occupancy of the Tujunga Shopping Center in spring 2003.
  
- The City of Los Angeles is currently reconfiguring and widening the intersection of Tujunga Canyon Road and La Tuna Canyon Road/Honolulu Avenue to provide an exclusive left-turn lane and two through travel lanes at the northbound approach (Honolulu Avenue) to the intersection. In addition, two through travel lanes and one right-turn only lane will be provided at the southbound approach (Tujunga Canyon Boulevard) to the intersection. The eastbound (La Tuna Canyon Road) approach to the intersection will provide one right-turn and one left-turn lane. Based on information provided by City of Los Angeles Department of Public Works staff, the construction project is scheduled to be complete by early spring, 2003. In its prior condition, the Tujunga Canyon Boulevard and La Tuna Canyon Road/Honolulu Avenue intersection provided one left-turn and one through travel lane in the northbound direction (Honolulu Avenue approach), one combination through-right turn lane in the southbound direction (Tujunga Canyon Boulevard approach), and one left-turn and one-right turn lane in the eastbound direction (La Tuna Canyon Road approach).

### **Traffic Impact Analysis Scenarios**

Pursuant to LADOT’s traffic study policies and procedures, Level of Service calculations have been prepared for the following scenarios:

- (a) Existing traffic conditions.



to continue to operate at LOS D or better during the AM and/or PM peak hours with the addition of ambient growth traffic. The following four study intersections are expected to operate at LOS E or F during the peak hours shown below with the addition of ambient growth traffic:

- |  |  |
|--|--|
| · No. 1: I-210 EB Ramps/Sunland Boulevard        | AM Peak Hour: $v/c=0.940$ , LOS E                                      |
| · No. 2: I-210 WB Ramps/Sunland Boulevard        | AM Peak Hour: $v/c=1.003$ , LOS F                                      |
| · No. 5: Tujunga Canyon Blvd/Foothill Boulevard  | AM Peak Hour: $v/c=1.024$ , LOS F<br>PM Peak Hour: $v/c=1.019$ , LOS F |
| · No. 6: Tujunga Canyon Blvd/La Tuna Canyon Road | AM Peak Hour: $v/c=1.186$ , LOS F<br>PM Peak Hour: $v/c=1.069$ , LOS F |

The existing with ambient growth traffic volumes at the study intersections for the AM and PM peak hours are displayed on [Figures 12](#) and [13](#), respectively.

#### **With Related Projects**

The Levels of Service at the study intersections were incrementally increased by the addition of traffic generated by the related projects listed in [Table 3](#). As presented in Column [3] of [Table 6](#), six of the nine study intersections are expected to operate at LOS D or better during the AM and PM peak hours with the addition of growth in ambient traffic and the traffic due to the related projects. The following three study intersections are anticipated to operate at LOS E or F with the addition of growth in ambient traffic and related projects traffic during the peak hours:

- |   |  |
|---|--|
| · No. 1: I-210 EB Ramps/Sunland Boulevard       | AM Peak Hour: $v/c=0.949$ , LOS E<br>PM Peak Hour: $v/c=0.907$ , LOS E |
| · No. 2: I-210 WB Ramps/Sunland Boulevard       | AM Peak Hour: $v/c=1.008$ , LOS F                                      |
| · No. 5: Tujunga Canyon Blvd/Foothill Boulevard | AM Peak Hour: $v/c=0.989$ , LOS E<br>PM Peak Hour: $v/c=0.974$ , LOS E |

The future pre-project (existing, ambient growth and related projects) traffic volumes for the AM and PM peak hours are shown on [Figures 14](#) and [15](#), respectively. The road improvements described above for the Tujunga Canyon Boulevard/Foothill Boulevard intersection and the Tujunga

Canyon Boulevard/La Tuna Canyon Road/Honolulu Avenue intersection (see “Impact Criteria and Thresholds” discussion) have been incorporated into the “Year 2009 W/Related Project” in Column [3] of Table 6 and the “Future 2009 Pre-Project Traffic Volumes” in Figures 14 and 15. As a result, the future pre-project traffic volumes for the AM and PM peak hours for the Tujunga Canyon Boulevard/La Tuna Canyon Road/Honolulu intersection (i.e., study intersection No. 6) will operate at LOS A and B, respectively.

### **With Proposed Project**

As shown in Column [4] of Table 6, application of the City’s significance threshold criteria to the “With Proposed Project” scenario indicates that the proposed project is expected to create a significant transportation impact at one of the nine study intersections during the AM and/or PM peak hours as shown below:

No. 4	<u>Development Area A Access/I-210 Freeway Westbound Ramps and La Tuna Canyon Road</u>
	AM peak hour <i>v/c</i> ratio increase of 0.087 [0.700 to 0.787 (LOS C)]

As indicated in Table 6, incremental but not significant impacts are noted at the remaining eight study intersections due to development of the proposed project. The future with project (existing, ambient growth, related projects and proposed project) traffic volumes at the study intersections for the AM and PM peak hours are shown in Figures 16 and 17, respectively.

## PROJECT MITIGATION

The following provides an overview of the proposed mitigation measure which is expected to reduce the one identified significant traffic impact due to the Canyon Hills project to a less than significant level.

### Int. No. 4: Development Area A Access/I-210 Westbound Ramps and La Tuna Canyon Road

The recommended mitigation consists of the installation of a traffic signal. This measure is anticipated to fully mitigate the project-related significant impact at this intersection. The v/c ratio in the AM peak hour is expected to improve from 0.787 (LOS C) to 0.630 (LOS B), and in the PM peak hour from 0.661 (LOS B) to 0.529 (LOS A) with the proposed measure.

## TRAFFIC SIGNAL WARRANT ANALYSIS

Traffic signal warrants were prepared as outlined in Chapter 9, Index 9-01.2, Traffic Signal Warrants, of the California Department of Transportation (Caltrans) *Traffic Manual* for the I-210 Westbound Ramps/Project Driveway and La Tuna Canyon Road intersection. The I-210 Westbound Ramps and La Tuna Canyon Road intersection is currently an unsignalized “T” intersection. The proposed project driveway will act as the north leg of the intersection, with the development of the Canyon Hills project. Copies of the Caltrans Traffic Manual traffic signal warrants as well as the traffic signal warrant data worksheets are provided in Appendix C.

In the signal warrant analysis for the I-210 Westbound Ramps and La Tuna Canyon Road intersection, La Tuna Canyon Road was assumed to be the major street, which provides two or more approach lanes to the intersection. The I-210 Westbound Ramps/project driveway was assumed to be the minor street, which will provide two or more approach lanes to the intersection. In addition, the Caltrans traffic signal warrants applicable to the speed limit of 50 mph for La Tuna Canyon Road were utilized.

Caltrans Warrant No. 11 (Peak Hour Volume) was prepared with the projected Future 2009 With Project AM and PM peak hour volumes. As shown in the signal warrant worksheets, Warrant No 11 was met at the intersection of I-210 Westbound Ramps/project driveway and La Tuna Canyon Road. Thus, it is recommended that a traffic signal be installed at this intersection in conjunction with the development of the proposed project. Therefore, for purposes of this traffic analysis, the recommendation of the installation of a traffic signal at this intersection as a mitigation measure is appropriate.

## **REVIEW OF LA TUNA CANYON ROAD**

### **Two-Lane Roadway Segment Analysis**

The project's potential traffic impacts for the segment of La Tuna Canyon Road, from the western boundary of proposed Development Area B easterly to Tujunga Canyon Boulevard, have been thoroughly addressed within this study through the analysis of intersection operations (specifically at the intersections of La Tuna Canyon Road with Tujunga Canyon Boulevard, I-210 Freeway Westbound Ramps/Development Area A access, I-210 Freeway Eastbound Ramps, Development Area B (east) access, and Development Area B (west) access). The project's potential impacts at these La Tuna Canyon Road intersections are summarized in Table 6.

To supplement the intersection analysis, an additional review of the project's potential traffic impacts was prepared for the segment of La Tuna Canyon Road west of proposed Development Area B. This portion of La Tuna Canyon Road differs from the segment adjacent to the project site, and easterly thereof, as the roadway narrows to provide two lanes of travel (one lane in each direction).

Within this two-lane roadway segment, the capacity of La Tuna Canyon Road is reduced, thereby resulting in potential traffic impacts related to the project that may not be readily apparent in the LADOT traffic impact analysis methodology (which focuses primarily on operation at intersections, which are the typical constraint point in an urban street network).

It should be noted that the LADOT “Traffic Study Policies and Procedures” document provides no methodology (or significant traffic impact thresholds) related to the analysis of two-lane roadway segments of Secondary and Major Highways. Therefore, in order to assess the project-related impacts on the two-lane segment of La Tuna Canyon Road west of proposed Development Area B, the County of Los Angeles methodology set forth in the County of Los Angeles’ *Traffic Impact Analysis Report Guidelines*, January 1, 1997, for determining significant impacts on two-lane roadways was used. In the County’s methodology, a total capacity in passenger cars per hour (pcph) is assigned to the two-lane roadway segment based on the directional split of the traffic volume. The capacity (in pcph) is used with the hourly traffic volume to determine the volume to capacity ratio and corresponding LOS. The determination of whether a proposed project would have a significant transportation impact is based on the project-related percentage increase in the traffic volume (pcph) as compared to the calculated capacity of the two-lane roadway (v/c ratio), and the pre-project LOS. The County of Los Angeles impact thresholds for two-lane roadways are shown in Table 7.

<b>Table 7</b>				
<b>COUNTY OF LOS ANGELES</b>				
<b>TWO-LANE ROADWAY IMPACT THRESHOLD CRITERIA</b>				
<b>Canyon Hills Project</b>				
<b>Directional Split</b>	<b>Total Capacity (pcph)</b>	<b>Project Related Increase in v/c</b>		
		<b>Pre-Project v/c and LOS</b>		
		<b>C</b>	<b>D</b>	<b>E/F</b>
50/50	2,800	≥0.04	≥0.02	≥0.01

60/40	2,650	≥0.04	≥0.02	≥0.01
70/30	2,500	≥0.04	≥0.02	≥0.01
80/20	2,300	≥0.04	≥0.02	≥0.01
90/10	2,100	≥0.04	≥0.02	≥0.01
100/0	2,000	≥0.04	≥0.02	≥0.01

As previously noted, automatic 24-hour machine traffic counts were conducted for the street segment study location on Thursday, October 17, and Friday, October 25, 2002. Copies of the current 24-hour machine traffic counts for the study locations are contained in [Appendix A-3](#).

The existing and forecast existing with project AM and PM peak hour volumes at the study location is summarized in [Table 8](#). The existing average volumes are shown in Column [1]. The capacity of the street segment (in passenger cars per hour) based on the directional split of traffic volume is shown in Column [2]. The existing volume to capacity (v/c) ratio and corresponding LOS for the study location is presented in Column [3]. The total project trip distribution percentage for the study location is shown in Column [4]. The project traffic volume for the study location is presented in Column [5]. The forecast existing with project volumes for the study location is presented in Column [6]. The forecast existing with project v/c ratio and corresponding LOS for the study location is presented in Column [7]. Finally, the change in the v/c ratio due to the added project traffic on the street segment is presented in Column [8].

As shown in Column [3] of [Table 8](#), the two-lane segment of La Tuna Canyon Road is presently operating at LOS A during the AM and PM peak hours under existing conditions. As shown in Column [7] of [Table 8](#), the two-lane segment of La Tuna Canyon Road is anticipated to continue to operate at LOS A during both the AM and PM peak hours with the addition of the project related traffic. Therefore, no mitigation measures are required or recommended.

### **Safety Review**

A traffic safety review of La Tuna Canyon Road between Sunland Boulevard and the I-210 Freeway Westbound Ramps was also performed as part of this traffic study. Required data includes the annual number of accidents at this location and the annual number of vehicles that travel on this segment of La Tuna Canyon Road. This information is used to determine an accident rate for this portion of La Tuna Canyon Road. The accident rate is expressed as the number of accidents per million vehicle-miles of travel.

Traffic accident data from January 1990 through December 2000 (the most recent data available) was provided by the LADOT Records Division for this analysis. The annual number of vehicles that travel on La Tuna Canyon Road was estimated based on the mathematical average of the daily traffic (ADT) counts collected on October 17 and 25, 2002. The segment length was determined to be approximately five miles. Based on the number of reported accidents, the annual number of vehicles, and the segment length, the accident rate for the study street segment was calculated.

As previously noted, the average 24-hour traffic volume count was 13,081 ADT for La Tuna Canyon Road, west of the I-210 Freeway interchange. There were 202 traffic accidents reported during the 11-year period from January 1990 through December 2000 on La Tuna Canyon Road between Sunland Boulevard and I-210 Westbound Ramps. A list of the reported traffic accidents, as well as articles regarding the traffic accident history along La Tuna Canyon Road is provided for reference in Appendix D. The following equation, from the *Traffic Engineering Handbook*, ITE, 1999, is utilized to obtain the section rate in terms of accidents per million vehicle-miles of travel:

Where:

- A = number of reported accidents,
- T = time frame of the analysis in years,
- V = average daily trips (ADT), and
- L = the section length in miles.

Thus,

Based on the above calculation, the section rate for La Tuna Canyon Road between Sunland Boulevard and I-210 Westbound Ramps is estimated to be 0.769 accidents per million vehicle-miles of travel. The City of Los Angeles does not provide a significance threshold for purposes of determining whether a traffic accident rate indicates that a roadway segment is safe or unsafe. For comparison purposes, however, the County of Los Angeles Department of Public Works (LACDPW) has provided average traffic accident rates for various roadways throughout the County. The rate of reported accidents on La Tuna Canyon Road is less than half the LACDPW average accident rate of 1.82 accidents per million vehicle-miles of travel for mountain roads with a design speed greater than 35 mph. A comparison of the rate of reported accidents along La Tuna Canyon Road to other roadways surveyed by LACDPW indicates that La Tuna Canyon Road between Sunland Boulevard and I-210 Freeway Westbound Ramps has a relatively lower rate of accidents.

As previously noted, the average 24-hour traffic volume count in 2002 was 13,081 ADT for La Tuna

Canyon Road, west of the I-210 Freeway interchange. The 24-hour ADT volumes were estimated for years 1990 through 2000 based on the assumption that traffic volumes have increased at an annual rate of two percent (2%) per year. For example, the 2002 ADT volume of 13,081 was decreased by 24% to reflect the estimated traffic volume of 10,549 ADT in 1990. The accident rates for the five-mile segment of La Tuna Canyon Road between Sunland Boulevard and I-210 Westbound Ramps were calculated on a yearly basis for the traffic accident data researched (1990 through 2000). The calculated accident rates for each year (in terms of million vehicle miles traveled) are shown in Table 9.

As shown in Table 9, during the 1997 through 2000 period the accident rates were below 0.769 accidents per million vehicle miles traveled, except for year 1999. Based on a review of the yearly accident rates, no trend is readily apparent in the accident rates from year to year. In recent years, accident rates have generally been lower than in prior years. For example, the accident rates in 1997, 1998 and 2000 were all lower than the accident rates from 1990-1996 (except for 1995). It is clear, however, that accident rates did not increase in relation to the increase in traffic volumes on La Tuna Canyon Road during the 11-year period. Therefore, the small increase in traffic on La Tuna Canyon Road due to the proposed project is not anticipated to significantly increase the accident rates along the roadway.

Research of accident history along La Tuna Canyon Road also indicates that fatal accidents and other serious have occurred on a portion of La Tuna Canyon Road west of the I-210 Freeway when drivers have lost control of their vehicles due to flood conditions. In particular, on La Tuna Canyon Road, three fatal accidents and one other serious accident (in 1979, 1987, 1994, and 1996) occurred near Elben Avenue, which is located west of Development Area B, that resulted in legal action against the City of Los Angeles, which ended in monetary settlements paid by the City. At least one of those accidents (in 1994) involved a crash with a trash truck. In order to remedy the conditions that led to those accidents, in 1997 the City of Los Angeles modified and reconstructed portions of La Tuna Canyon Road, in particular near Elben Avenue, to address safety issues related to pavement drainage. In addition, in September 1997, the Los Angeles City Council banned heavy trucks weighing in excess of 6000 pounds along La Tuna Canyon Road from Sunland Boulevard to the I-

210 Freeway. It should be noted that since these measures were implemented in 1997, no fatal accidents have occurred on this particular section of La Tuna Canyon Road.

Based on the foregoing data and analysis, the measures implemented by the City in 1997 have been effective in eliminating the fatalities and significantly reducing other serious accidents that previously occurred on La Tuna Canyon Road under flood conditions. Therefore, the small increase in traffic on this portion of La Tuna Canyon Road relating to the proposed project should not significantly increase the type of accident that occurred along that stretch of road prior to 1997.

#### **CONGESTION MANAGEMENT PLAN TRAFFIC IMPACT ASSESSMENT**

The CMP is a state-mandated program that was enacted by the State Legislature with the passage of Proposition 111 in 1990. The program is intended to address the impact of local growth on the regional transportation system.

As required by the CMP, a Traffic Impact Assessment (TIA) has been prepared to determine the potential impacts on designated monitoring locations on the CMP highway system. The analysis has been prepared in accordance with procedures outlined in the CMP. A summary of the CMP traffic impact assessment is provided in Table 10.

#### **Intersections**

Table 10 provides a summary of the CMP intersection monitoring location (CMP Station No. 26) in the vicinity of the proposed project. The CMP TIA guidelines require that intersection monitoring locations must be examined if the proposed project will add 50 or more trips during either the AM or PM weekday peak periods. The proposed project will add not 50 or more trips during the AM or

PM peak hours at CMP intersection monitoring location which is the threshold for preparing a traffic impact assessment, as stated in the CMP manual. Therefore, no further review of potential impacts to intersection monitoring locations which are part of the CMP highway system is required.

### **Freeways**

Table 10 provides a summary of the CMP freeway monitoring locations (CMP Station Nos. 1059 and 1060) in the vicinity of the proposed project. The CMP TIA guidelines require that freeway monitoring locations must be examined if the proposed project will add 150 or more trips (in either direction) during either the AM or PM weekday peak hours. The proposed project will not add 150 or more trips (in either direction) during either the AM or PM weekday peak hours at CMP mainline freeway monitoring locations which is the threshold for preparing a traffic impact assessment, as stated in the CMP manual. Therefore, no further review of potential impacts to freeway monitoring locations which are part of the CMP highway system is required.

### **Transit**

As required by the CMP, a review has been made of the CMP transit service. As previously discussed, the nearest existing transit service is provided approximately two miles from the proposed project site.

Pursuant to the CMP guidelines, since no fixed route transit services operate within one mile of the proposed Development Areas, the proposed project is not forecast to generate a demand for any net new transit trips during the weekday AM or PM peak hours. Thus, no project impacts on existing or future transit services in the project area are expected to occur as a result of the proposed project.

## **CONCLUSIONS**

The proposed Canyon Hills project consists of the development of single-family housing with 280 dwelling units. The residential developments will be located on the easterly half of the project site, along both the north and south side of the I-210 Freeway (211 units north of the I-210 Freeway, 69

units south of the I-210 Freeway). In addition, an equestrian park of approximately three acres is proposed south of the I-210 and west of Development Area B. Development of the proposed project is planned to be completed in year 2009.

In order to evaluate the potential impacts to the local street system, nine intersections were analyzed to determine changes in operations following occupancy and utilization of the proposed project. It is concluded that Int No. 4 (Development Area A Access/I-210 WB Ramps and La Tuna Canyon Road intersection) will be significantly impacted by the construction and occupancy of the proposed project. Project mitigation consisting of a traffic signal installation measure is proposed at that intersection in response to the forecast proposed project-related impacts. The proposed mitigation measure is anticipated to eliminate the significant project-related traffic impacts at that intersection.

To supplement the intersection analysis, an additional review of the project's potential traffic impacts was prepared for the segment of La Tuna Canyon Road west of proposed Development Area B. The two-lane segment of La Tuna Canyon Road is presently operating at LOS A during the AM and PM peak hours under existing conditions, and is anticipated to continue to operate at LOS A during both the AM and PM peak hours with the addition of the project-related traffic, indicating no significant impact due to the project. Therefore, no further mitigation measures are required or recommended.

In addition, a traffic safety review of La Tuna Canyon Road between Sunland Boulevard and the I-210 Freeway Westbound Ramps was performed as part of this traffic study. Traffic accident data from January 1990 through December 2000 was provided by the LADOT Records Division for this analysis. Accident rates were calculated for each year for the section of La Tuna Canyon Road, and it was concluded that the accident rates did not increase in relation to the increase in traffic volumes on La Tuna Canyon Road during the 11-year period. Therefore, the small increase in traffic on La Tuna Canyon Road due to the proposed project is not anticipated to significantly increase the accident rates along La Tuna Canyon Road.

In response to several fatal and serious accidents that occurred along La Tuna Canyon Road that resulted in legal action against the City with subsequent settlements, the City installed improvements along La Tuna Canyon Road to address safety issues related to pavement drainage. In addition, the

Los Angeles City Council banned heavy trucks weighing in excess of 6000 pounds along La Tuna Canyon Road from Sunland Boulevard to the I-210 Freeway. Based on a review of the accident history for that road segment, no fatal accidents have occurred on this particular section of La Tuna Canyon Road after those improvement measures were implemented in 1997. Therefore, the measures implemented by the City have been effective in eliminating the fatalities and significantly reducing other serious accidents that previously occurred. Accordingly, the small increase in traffic on this portion of La Tuna Canyon Road relating to the proposed project should not significantly increase the type of accident that occurred along that stretch of road prior to 1997.