
4.0. ENVIRONMENTAL IMPACT ANALYSIS

4.3. TRANSPORTATION/CIRCULATION

The following section is based upon a traffic analysis prepared by Crain & Associates entitled, “Traffic Analysis for the Proposed Bradley Landfill and Recycling Center Transition Master Plan” and dated August 2005. The traffic study and modeling data, including turning movements and graphics, is provided in Appendix E.

ENVIRONMENTAL SETTING

The Bradley Landfill and Recycling Center (BLRC) or “project site” is located in the Sun Valley Planning Area of the northeastern San Fernando Valley. The project site is located north of Tujunga Avenue and east of San Fernando Road (Figure 4.3-1). The project area is primarily industrial in nature with a concrete processing operation as an immediate neighbor.

Freeways

The Golden State Freeway (I-5) is southwest of the project site and is the closest regional facility. The Golden State Freeway runs through the State of California and beyond. In the project vicinity, the I-5 has four to five lanes in each direction with on- and off-ramps at Tuxford Street, Penrose Street, and Sheldon Street. The I-5 freeway connects to the Ronald Regan Freeway, Foothill Freeway, and San Diego Freeway to the north. It connects with the Hollywood Freeway southwest of the project site.

The Hollywood Freeway (State Highway 170) is approximately two and three quarters of a mile southwest of the project site and provides four lanes in each direction. The Hollywood Freeway originates off of the Golden State Freeway between Branford Street and Sheldon Street and continues southerly through the San Fernando Valley where it becomes the 101 Freeway north of Ventura Boulevard.

The Foothill Freeway (I-210) is north of the project site and provides regional east-west service from the I-5 to Pasadena, San Dimas, and Pomona. The Foothill Freeway provides three to four lanes with a high-occupancy (HOV) lane in each direction.

Figure 4.3-1, Project Location Map

Streets and Highways

In the City of Los Angeles, a Major Highway is described as a roadway designed to carry over 30,000 vehicles per day ultimately designed for three to four travel lanes per direction during peak hours. A Secondary Highway is designed to supplement the through-traffic carrying characteristics of the major highways. They are designed to carry 20,000 to 30,000 vehicles per day, with typically two travel lanes in each direction.

San Fernando Road is a designated Major Highway and situated southwest of the project site. A small portion of the project site borders San Fernando Road but access will not be taken from this roadway. Two lanes in each direction are provided in the project vicinity with left-turn channelization at major intersections. The roadway is bordered by the Southern Pacific Railroad/MTA railroad tracks currently used by Metrolink to the northwest. The railroad tracks separate San Fernando Road from “Little San Fernando Road”, a discontinuous roadway northwest of the tracks.

Glenoaks Boulevard is a Major Highway which runs northwest to southeast on the eastern side of the project site. A portion of the project site is bordered by Glenoaks Boulevard but no project access will be taken from Glenoaks Boulevard. Currently, there is access from Glenoaks Boulevard to the existing gas plant. The roadway provides two lanes in each direction with left-turn channelization and a bikeway on approximately 80 feet.

Tuxford Street is designated as a Major Highway by the City of Los Angeles. Tuxford Street is southeast of the project site and provides freeway on- and off-ramps for the Golden State Freeway. Two lanes in each direction are provided on approximately 70 feet of roadway.

Peoria Street is designated as a Secondary Highway on the west side of Glenoaks Boulevard and is designated as a Collector Street east of Glenoaks Boulevard. The street segment west of Glenoaks Boulevard is along a portion of the southeastern part of the project. Peoria Street provides one lane of travel in each direction on 30 to 36 feet of roadway.

Tujunga Avenue borders a portion of the site and contains both main driveways into the project site. Tujunga Avenue is designated as a Secondary Highway in the project vicinity. This roadway varies in width from 30 to 36 feet and generally provides one lane in each direction.

Bradley Avenue is a roadway with one lane in each direction which spans from Tujunga Avenue to Penrose Street as a Secondary Highway in the project vicinity. Bradley Avenue is the southeastern gateway into the project area. This roadway provides over 40 feet of roadway surface.

Sheldon Street is designated as a Secondary Highway in the project vicinity and is located northwest of the project site. It provides two lanes in each direction and is signalized at San Fernando Road and Glenoaks Boulevard. Sheldon Street is approximately 60 feet in width.

Penrose Street is designated as a Secondary Highway. West of Bradley Avenue, Penrose Street provides two lanes in each direction. However, east of Bradley Avenue only one lane in each direction is provided.

Existing (2005) Traffic Volumes

Traffic volume count data with truck volumes were obtained by recent counts performed during one day in April 2004. Traffic volumes during the a.m. and p.m. peak periods for the major streets in the study area were then increased by 2% to reflect growth during the past year. Existing (2005) volumes are summarized below.

In accordance with direction from LADOT and due to the existing high volume of trucks in the project area, the data collected was converted to passenger car equivalents and is shown for the nine study intersections in Figure 4 of Appendix E.

The Golden State Freeway carries approximately 170,000 vehicles per day (vpd) with 13,100 vpd during the peak hours. The Hollywood Freeway carries approximately 190,000 vpd and the Foothill Freeway carries approximately 96,000 vpd in the vicinity of the project.

San Fernando Road carries approximately 15,000 vpd in the vicinity of the project site. Directional volumes are 600 vehicles per hour (vph) northbound and 700 vph southbound during the morning peak hour and 1,000 vph northbound with 700 vph southbound during the evening peak hours.

Glenoaks Boulevard carries approximately 14,000 vpd in the vicinity of the project site. Directional volumes are 500 vph northbound and 800 vph southbound during the morning peak hours and 900 vph northbound with 700 vph southbound during the evening peak hours.

The average daily volume for Tuxford Street in the vicinity of the proposed site is approximately 12,000 vpd. Directional daily traffic is approximately 500 vph eastbound and approximately 700 vph westbound during the morning peak hours and 700 vph eastbound with 500 vph westbound during the evening peak hours.

Peoria Street carries estimated daily traffic of approximately 1,050 vpd. Directional daily traffic volumes are approximately 40 vph eastbound and approximately 70 vph westbound during the morning peak hours and 50 vph eastbound with 40 vph westbound during the evening peak hours.

Bradley Avenue carries approximately 1,200 vpd in the vicinity of the project site. Directional volumes are 200 vph northbound and 100 vph southbound during the morning peak hours and 250 vph northbound with 120 vph southbound during the evening peak hours.

Sheldon Street carries an estimated daily traffic volume of approximately 15,000 vpd. Directional daily traffic volumes are approximately 750 vph eastbound and approximately 730 vph westbound during the morning peak hours and 800 vph eastbound with 700 vph westbound during the evening peak hours.

Existing Public Transit

Transit services operate near the project site. The Los Angeles County Metropolitan Transportation Authority (LACMTA) has developed an extensive system of bus and rail routes to provide transit patrons with a high level of connectivity throughout the region. In addition, Metrolink provides service through the area with stations in Sylmar, Burbank, and Sun Valley. The routes which operate within walking distance of the project site are described below. As can be seen, the project site is well-served by direct transit links and when transfer opportunities are considered, many areas of Los Angeles are accessible via transit from the project site. Due to the proximity of project and readily accessible transit links, some employees and visitors may choose transit as a viable alternative to driving.

Bus Routes

Bus Route 94-394 operates along San Fernando Road in the project vicinity and provides service between Downtown Los Angeles, Glendale, Burbank, Sun Valley, Pacoima, San Fernando, and Sylmar. Route 94 operates between Downtown Los Angeles and Olive View Medical Center. Route 394 operates between Downtown Los Angeles and the Sylmar/San Fernando Metrolink Station with limited stop service. These lines operate Monday through Friday with limited service on Saturdays, Sundays, and Holidays. Headways are approximately 12 minutes during peak periods with Lines 94 and 394 alternating during the peak periods with as little as two minutes between each.

Bus Route Cluster 92-93-410 operates along Glenoaks Boulevard in the project vicinity and provides service between Downtown Los Angeles, Glendale, Burbank, and the Sylmar/San Fernando Metrolink Station. Routes 92 and 93 differ in service within Glendale and Burbank, and Route 410 provides limited stop express service. In the project vicinity, the headways are approximately 22 minutes during the morning peak period and seven minutes during the evening peak period.

Bus Route 152 provides service between Woodland Hills, Panorama City, Sun Valley, North Hollywood, and Burbank. Nine minute headways are provided during peak periods on Mondays through Fridays and limited service is provided on Saturdays, Sundays, and holidays. The service is provided along Tuxford Street in the project vicinity.

Bus Route 166 provides service between Chatsworth, Northridge, Pacoima, Sun Valley, North Hollywood, and Studio City and in the project vicinity operates along Glenoaks Boulevard. The bus operates Mondays through Fridays with 14 minute headways during peak periods in Sun Valley. Limited service is provided on Saturdays, Sundays, and holidays.

Rail Transit

The Antelope Valley Line of the Metrolink provides service to/from the Antelope Valley and Santa Clarita to/from the Sun Valley, Sylmar/San Fernando Metrolink Stations. In addition, it provides service to/from Downtown Los Angeles and Burbank to/from the Sun Valley, Sylmar/San Fernando Metrolink Stations. The Sun Valley station is located south of Penrose Avenue near the intersection of Sunland Boulevard and San Fernando Road. The service rate is dependent on the number of zones traveled. Service is provided weekdays with one half hour headways during peaks, weekends, and holidays.

As shown by the above information, the project site is well-served by direct transit links and when transfer opportunities are considered, many areas of Los Angeles are accessible via transit from the project site. Due to the proximity of the project site and readily accessible transit links, some employees and visitors may choose transit as a viable alternative to driving.

Analysis of Existing Roadway Traffic Conditions

An analysis of current traffic conditions was conducted on the local and regional streets and highways serving the project area. Detailed traffic analyses of existing conditions were performed at the intersections most likely to be impacted based on existing and therefore likely routes of travel to and from the project site. These assumptions have been concurred in by the Los Angeles Department of Transportation (LADOT). These nine intersections are as follows (Figure 4.3-2):

1. San Fernando Road and Sheldon Street
2. Glenoaks Boulevard and Peoria Street
3. I-5 NB Off/SB On Ramps and Tuxford Street (not signalized)
4. I-5 NB On Ramp and Tuxford Street (not signalized)
5. San Fernando Road and Tuxford Street
6. Bradley Avenue and Tuxford Street
7. Glenoaks Boulevard and Tuxford Street
8. I-5 SB On/Off Ramps and Penrose Street (not signalized)
9. Bradley Avenue and Penrose Street

Figure 4.3-2, Study Intersections Map

The traffic analysis was performed through the use of established traffic engineering techniques such as the Circular Number 212 of the Transportation Research Board discussed below. The new traffic counts were utilized to reflect any recent changes in traffic demand patterns. Other data pertaining to intersection geometrics, parking-related curb restrictions, truck traffic, and signal operations were obtained through field surveys of the study locations.

As required by LADOT, the methodology used in this study for the intersection analysis and evaluation of traffic operations at each study intersection is based on procedures outlined in Circular Number 212 of the Transportation Research Board.¹ In the discussion of Critical Movement Analysis (CMA) for signalized intersections, procedures have been developed for determining operating characteristics of an intersection in terms of the "Level of Service" provided for different levels of traffic volume and other variables, such as the number of signal phases. The term "Level of Service" (LOS) describes the quality of traffic flow. LOS A to C operate quite well. LOS D typically is the level for which a metropolitan area street system is designed. LOS E represents volumes at or near the capacity of the highway which might result in stoppages of momentary duration and fairly unstable flow. LOS F occurs when a facility is overloaded and is characterized by stop-and-go traffic with stoppages of long duration.

A determination of the LOS at an intersection, where traffic volumes are known or have been projected, can be obtained through a summation of the critical movement volumes at that intersection. Once the sum of critical movement volumes has been obtained, the values indicated in Table 4.3-1 can be used to determine the applicable LOS. Note that the phase refers to the number of traffic signal phases such as through and/or left turn signalization. For example, if the north/south receives a green light, yellow, and red then the east/west receives a green light then that is a two phase operation. If one of the directions includes a left-turn indication then that could be a third phase.

**Table 4.3-1
Critical Movement Volume Ranges* for Determining Levels of Service**

Level of Service	Maximum Sum of Critical Volumes (VPH)		
	Two Phase	Three Phase	Four or More Phases
A	900	855	825
B	1,050	1,000	965
C	1,200	1,140	1,100
D	1,350	1,275	1,225
E	1,500	1,425	1,375
F	-----Not Applicable-----		
* For planning applications only, i.e., not appropriate for operations and design applications.			

¹ *Interim Materials on Highway Capacity, Circular Number 212, Transportation Research Board, 1980.*

"Capacity" represents the maximum total hourly movement volume of vehicles in the critical lanes which has a reasonable expectation of passing through an intersection under prevailing roadway and traffic conditions. For planning purposes, capacity equates to the maximum value of LOS E, as indicated in Table 4.3-1. The CMA indices used in this study were calculated by dividing the sum of critical movement volumes by the appropriate capacity value for the type of signal control present or proposed at the study intersections. Thus, the LOS corresponding to a range of CMA values are shown in Table 4.3-2. Unsignalized locations were evaluated in the same manner but with a reduced capacity to simulate the additional delay which may occur.

**Table 4.3-2
Level of Service as a Function of CMA Values**

Level of Service	Description of Operating Characteristics	Range of CMA Values
A	Uncongested operations; all vehicles clear in a single cycle.	< 0.60
B	Same as above.	> 0.60 < 0.70
C	Light congestion; occasional backups on critical approaches.	> 0.70 < 0.80
D	Congestion of critical approaches, but intersection functional. Vehicles required to wait through more than one cycle during short peaks. No long-standing lines formed.	> 0.80 < 0.90
E	Severe congestion with some long-standing lines on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements.	> 0.90 < 1.00
F	Forced flow with stoppages of long duration.	> 1.00

The project site is located in an area which has many industrial uses. These land uses have a tendency to create an increased amount of truck traffic in the area. Therefore, when traffic was counted previously at the intersections, the types and numbers of trucks were noted. Previous counts at intersections in the study area indicate an approximate average of 10% volume of trucks. Since trucks in the area occupy more space and time to conduct their turning movements, the existing conditions were modified to reflect the truck traffic by increasing the volumes by 10% to account for truck traffic in the area. By applying this analysis procedure to the study intersections, the CMA value and the corresponding LOS for existing traffic conditions were calculated. Those values, for existing (2005) a.m. and p.m. peak hour conditions, are shown in Table 4.3-3.

**Table 4.3-3
Critical Movement Analysis Summary Existing (2005) Traffic Conditions**

No.	Intersection	AM Peak Hour		PM Peak Hour	
		CMA	LOS	CMA	LOS
1	San Fernando Rd & Sheldon St.	0.679	B	0.810	D
2	Glenoaks Blvd & Peoria St.	0.364	A	0.484	A
3	I-5 NB Off/SB On Ramps & Tuxford St.	0.583	A	0.672	B
4	I-5 NB On Ramp & Tuxford St.	0.458	A	0.553	A
5	San Fernando Rd & Tuxford St.	0.639	B	0.746	C
6	Bradley Ave & Tuxford St.	0.533	A	0.920	E
7	Glenoaks Blvd & Tuxford St.	0.649	B	0.753	C
8	I-5 SB On/Off Ramps & Penrose St.	0.506	A	0.589	A
9	Bradley Ave & Penrose St.	0.428	A	0.491	A

Analysis of Existing Freeway Conditions

An examination was also made of freeway conditions on the regional facilities serving the project study area and along routes that would most likely be used by transfer trucks to remove solid waste from the project site to outlying landfills. Freeway segments were selected for this analysis based on their location in relation to the project, the existing transfer truck routes, and availability of published information from Caltrans and the Metropolitan Transportation Authority's Congestion Management Program. The segments analyzed are:

- Golden State Freeway (I-5) north of the Hollywood Freeway (S-170) to the truck access ramp onto the Antelope Valley Freeway (Rte-14)
- Hollywood Freeway (S-170) between Sherman Way and Vanowen Street
- Foothill Freeway (I-210) at Terra Bella Street
- Antelope Valley Freeway (Rte-14) from the Golden State Freeway (I-5) Truck Ramp to Avenue G

Current traffic volumes on these freeway segments were obtained from several sources. Daily traffic volumes on the segments analyzed were obtained from the most current Caltrans published data.² In addition, a.m. and p.m. peak hour volumes were taken from the Los Angeles County 2002 CMP, where available. All of the freeway traffic volumes from 2002 were growth-factored by two percent per year, consistent with the LADOT requirements for intersection traffic analysis. Existing freeway geometrics (e.g., number of mainline travel lanes) for each of the segments analyzed were determined from CMP data and field surveys. Segment peak hour traffic capacities were computed for each direction using established Highway Capacity Manual (HCM) methodology. As detailed in procedures discussed in the HCM Chapter 3, each mainline travel was assumed to have a capacity of 2,000 vph. The total directional capabilities were then computed and used in conjunction with the previously determined peak hour directional freeway segment volumes to calculate the existing 2005 freeway levels of services in the project vicinity. The level of service definitions for the freeway segments are provided in Table 4.3-4. Table 4.3-5 details the existing 2005 study freeway segment volumes and level of service.

² 2003 Traffic volumes on California State Highways Website, State of California Department of Transportation, Sacramento, California.

**Table 4.3-4
Freeway Mainline Level of Service Definitions**

Demand to Capacity (D/C) Ratio*	LOS**
0.00 – 0.35	A
> 0.35 – 0.54	B
> 0.54 – 0.77	C
> 0.77 – 0.93	D
> 0.93 – 1.00	E
<1.00 – 1.25	F(0)
>1.25 – 1.35	F(1)
>1.35 – 1.45	F(2)
>1.45	F(3)
<p><i>* Demand is the projected volume of traffic on a freeway segment; Capacity is calculated based upon the number of through lanes on the freeway segment</i></p> <p><i>** LOS F(1) through F(3) represent severe congestion (travel speeds less than 25 mph for more than one hour).</i></p> <p><i>Source: Los Angeles County Metropolitan Authority, Congestion Management Program, 2002.</i></p>	

**Table 4.3-5
Existing (2005) Freeway Conditions**

Location	Period	Direction	No. Lanes	Freeway Capacity	Daily Volume	Peak Hour Volume	D/C* Ratio	LOS
Hollywood Freeway (S-170) between Sherman Way and Vanowen Street	AM	N/B	4	8,000	177,840	5,608	0.701	C
	AM	S/B	4	8,000		8,518	1.065	F(0)
	PM	N/B	4	8,000		6,560	0.820	D
	PM	S/B	4	8,000		5,954	0.744	C
Foothill Freeway (I-210) at Terra Bella Street	AM	E/B	4	8,000	112,320	6,715	0.839	D
	AM	W/B	4	8,000		4,492	0.562	C
	PM	E/B	4	8,000		4,651	0.581	C
	PM	W/B	4	8,000		4,492	0.562	C
Golden State Freeway (I-5) North of Hollywood Freeway (S-170)	AM	N/B	6	12,000	195,520	9,329	0.777	D
	AM	S/B	6	12,000		12,920	1.077	F(0)
	PM	N/B	6	12,000		16,359	1.363	F(2)
	PM	S/B	6	12,000		12,920	1.077	F(0)
Golden State Freeway (I-5) at Burbank Boulevard	AM	N/B	6	12,000	191,360	6,798	0.567	C
	AM	S/B	6	12,000		8,376	0.698	C
	PM	N/B	6	12,000		7,905	0.659	C
	PM	S/B	6	12,000		7,185	0.599	C
Golden State Freeway (I-5) at Terra Bella Street, Pacoima	AM	N/B	5	10,000	317,200	9,375	0.938	E
	AM	S/B	5	10,000		12,945	1.295	F(1)
	PM	N/B	5	10,000		14,121	1.412	F(2)
	PM	S/B	5	10,000		8,655	0.866	D
Golden State Freeway (I-5) at Ronald Reagan Freeway (Rt-118)	AM	N/B	5	10,000	288,080	8,818	0.882	D
	AM	S/B	5	10,000		12,177	1.218	F(0)
	PM	N/B	5	10,000		13,283	1.328	F(1)
	PM	S/B	5	10,000		8,141	0.814	D
Golden State Freeway (I-5) at Brand Avenue, Mission Hills	AM	N/B	4	8,000	159,120	4,495	0.562	C
	AM	S/B	4	8,000		6,207	0.776	D
	PM	N/B	4	8,000		6,770	0.846	D
	PM	S/B	4	8,000		4,150	0.519	B
Golden State Freeway (I-5) s/o San Diego Freeway (Rt	AM	N/B	3	6,000	138,320	4,204	0.701	C

405)	AM	S/B	3	6,000		5,572	0.929	D
	PM	N/B	3	6,000		5,475	0.913	D
	PM	S/B	3	6,000		4,301	0.717	C
Golden State Freeway (I-5) at Roxford Street, Sylmar	AM	N/B	6	12,000	274,560	8,586	0.716	C
	AM	S/B	6	12,000		11,382	0.949	E
	PM	N/B	6	12,000		11,182	0.932	E
	PM	S/B	6	12,000		8,786	0.732	C
Golden State Freeway (I-5) at Foothill Freeway (Rte 210), Truck Route	AM	N/B	6	12,000	248,560	7,737	0.645	C
	AM	S/B	6	12,000		10,255	0.855	D
	PM	N/B	6	12,000		10,076	0.840	D
	PM	S/B	6	12,000		7,916	0.660	C
Golden State Freeway (I-5) at Begin Truck Freeway	AM	N/B	2	4,000	35,880	1,476	0.369	B
	AM	S/B	2	4,000		1,956	0.489	B
	PM	N/B	2	4,000		1,922	0.481	B
	PM	S/B	2	4,000		1,510	0.378	B
Golden State Freeway (I-5) at Junction Rte 14 – Truck Route	AM	N/B	2	4,000	48,880	2,035	0.509	B
	AM	S/B	2	4,000		2,697	0.674	C
	PM	N/B	2	4,000		2,651	0.663	C
	PM	S/B	2	4,000		2,082	0.521	B
Antelope Valley Freeway (Rte 14) at San Fernando Road	AM	N/B	5	10,000	160,160	2,745	0.275	A
	AM	S/B	5	10,000		9,761	0.976	E
	PM	N/B	5	10,000		8,698	0.870	D
	PM	S/B	5	10,000		3,689	0.369	B
Antelope Valley Freeway (Rte 14) at Placerita Canyon, Santa Clarita	AM	N/B	5	10,000	148,720	2,540	0.254	A
	AM	S/B	5	10,000		9,004	0.900	D
	PM	N/B	5	10,000		8,081	0.808	D
	PM	S/B	5	10,000		3,463	0.346	A
Antelope Valley Freeway (Rte 14) at Sierra Highway	AM	N/B	5	10,000	139,360	2,380	0.238	A
	AM	S/B	5	10,000		8,436	0.844	D
	PM	N/B	5	10,000		7,571	0.757	C
	PM	S/B	5	10,000		3,245	0.325	A
Antelope Valley Freeway (Rte 14) at Sand Canyon Road, Santa Clarita	AM	N/B	5	10,000	109,200	1,899	0.190	A
	AM	S/B	5	10,000		6,733	0.673	C
	PM	N/B	5	10,000		6,042	0.604	C
	PM	S/B	5	10,000		2,590	0.259	A
Antelope Valley Freeway (Rte 14) at Agua Dulce Canyon Road	AM	N/B	4	8,000	95,680	1,762	0.220	A
	AM	S/B	4	8,000		6,246	0.781	D

	PM	N/B	4	8,000		5,606	0.701	C
	PM	S/B	4	8,000		2,402	0.300	A
Antelope Valley Freeway (Rte 14) at Escondido Canyon Road	AM	N/B	3	6,000	93,600	1,739	0.290	A
	AM	S/B	3	6,000		6,165	1.028	F(0)
	PM	N/B	3	6,000		5,533	0.922	D
	PM	S/B	3	6,000		2,371	0.395	B
Antelope Valley Freeway (Rte 14) at Santiago Road	AM	N/B	3	6,000	92,560	2,370	0.395	B
	AM	S/B	3	6,000		5,274	0.879	D
	PM	N/B	3	6,000		5,148	0.858	D
	PM	S/B	3	6,000		2,652	0.442	B
Antelope Valley Freeway (Rte 14) at Vincent, Angeles Forest Highway	AM	N/B	2	4,000	96,720	1,889	0.472	B
	AM	S/B	2	4,000		4,160	1.040	F(0)
	PM	N/B	2	4,000		4,160	1.040	F(0)
	PM	S/B	2	4,000		2,185	0.546	C
Antelope Valley Freeway (Rte 14) at Avenue S	AM	N/B	2	4,000	72,800	1,896	0.474	B
	AM	S/B	2	4,000		4,219	1.055	F(0)
	PM	N/B	2	4,000		4,118	1.030	F(0)
	PM	S/B	2	4,000		2,112	0.531	B
Antelope Valley Freeway (Rte 14) at Junction 138, Palmdale Boulevard, Palmdale	AM	N/B	3	6,000	79,040	2,054	0.342	A
	AM	S/B	3	6,000		4,571	0.762	C
	PM	N/B	3	6,000		4,462	0.744	C
	PM	S/B	3	6,000		2,298	0.383	B
Antelope Valley Freeway (Rte 14) at Avenue M, Lancaster	AM	N/B	3	6,000	89,440	2,433	0.406	B
	AM	S/B	3	6,000		5,415	0.903	D
	PM	N/B	3	6,000		5,285	0.881	D
	PM	S/B	3	6,000		2,723	0.454	B
Antelope Valley Freeway (Rte 14) at Avenue L, Lancaster	AM	N/B	3	6,000	87,360	2,401	0.400	B
	AM	S/B	3	6,000		5,345	0.891	D
	PM	N/B	3	6,000		5,217	0.870	D
	PM	S/B	3	6,000		2,687	0.448	B
Antelope Valley Freeway (Rte 14) at Avenue J-8/20 th Street W., Lancaster	AM	N/B	3	6,000	55,120	1,549	0.258	A
	AM	S/B	3	6,000		3,446	0.574	C
	PM	N/B	3	6,000		3,363	0.561	C
	PM	S/B	3	6,000		1,733	0.289	A
Antelope Valley Freeway (Rte 14) at Avenue I, Lancaster	AM	N/B	3	6,000	45,760	1,311	0.219	A
	AM	S/B	3	6,000		2,918	0.486	B
	PM	N/B	3	6,000		2,849	0.475	B

	PM	S/B	3	6,000		1,467	0.245	A
Antelope Valley Freeway (Rte 14) at Avenue G	AM	N/B	2	4,000	37,960	1,074	0.269	A
	AM	S/B	2	4,000		2,391	0.598	C
	PM	N/B	2	4,000		2,334	0.584	C
	PM	S/B	2	4,000		1,202	0.301	A
* D/C is the Demand to Capacity Ratio.								

ENVIRONMENTAL IMPACT

Thresholds of Significance

LADOT defines a significant traffic impact attributable to a project based upon the resulting LOS and CMA value for an intersection and the project-related increase in CMA value, as shown in Table 4.3-6.

**Table 4.3-6
LADOT Criteria for Significant Traffic Impact**

LOS	Final CMA Value	Project-Related Increase in CMA Value
C	0.700 – 0.800	equal to or greater than 0.040
D	> 0.800 – 0.900	equal to or greater than 0.020
E, F	> 0.900	equal to or greater than 0.010

Source: Draft L.A. CEQA Thresholds Guide, May, 1998.

For the purpose of CMP Transportation Impact Analysis (TIA), a project impact is considered to be significant if the Proposed Project increases traffic demand on a CMP facility by two percent of capacity (change greater than or equal to 0.02), causing or worsening a LOS F condition at a location. If the facility is already at LOS F, a significant impact occurs when the Proposed Project increases traffic demand on a CMP facility by 2% of capacity ($V/C \geq 0.02$).

Project Impacts

Impact 4.3-1: The Proposed Project would generate additional traffic which could affect the existing traffic load and the capacity of the street system serving the project area. (Potentially Significant Unless Mitigated)

Traffic Generation

Traffic-generating characteristics of many land uses have been extensively surveyed and documented in studies conducted under the auspices of the Institute of Transportation Engineers (ITE). The most recent information is available in the ITE 6th and 7th Edition Trip Generation manuals. However, the current landfill and proposed TS/MRF are not typical land uses. Therefore trip generation has been based upon empirical data collected at the BLRC site and operational characteristics associated with transporting waste material³. Conservative (i.e., higher) assumptions were made when ranges of values were considered. Most of the vehicles to and from the site are trucks. Truck trips were converted to Passenger Car Equivalents (PCEs) with smaller trucks converted to 1.5 PCE and the soil and transfer trucks converted to 2.0 PCE's as requested by LADOT. This conversion accounts for the larger volume of the trucks, longer acceleration time from a stop and the additional time needed to conduct turning moves. It also yields a greater number of vehicle trips and

³ Operational characteristics include typical tons per load, based on the capacity of different types of trucks and the actual weight of loads as measured at the scale house.

therefore, provides a more conservative analysis.

In the current baseline condition, the landfill accepts approximately 1,500 tons of solid waste, 92 tons of recyclables and 1,260 tons of green and wood waste, 5,500 tons of imported dirt and 200 tons of inert material per day. However, acceptance can vary from day to day. In order to provide a check on calculations of the existing trip generation, vehicular counts were conducted at the project driveways. Existing operational characteristics of traffic at the BLRC, with typical arrival and departure patterns at the landfill, were measured at the BLRC driveways and compared to operational characteristics to calibrate typical existing BLRC trips (see Appendix E).

Several types of vehicles bring waste to the landfill. These include dump trucks, trash trucks which carry an average of 5.6 tons per load, transfer trucks at 23 tons per load, 18 ton vehicles for dirt, 10 ton vehicles for inert and green waste which currently comes in at an average of 6.2 tons per vehicle. Traffic analysis of the proposed project was conducted for four scenarios: (1) Phase I (2007); (2) Phase I with TS/MRF Construction (2007); (3) Phase II With Landfill Closure, (2008); and (4) Completed Project (2012).

BLRC is currently permitted to accept 10,000 tpd of solid waste for landfilling on a daily basis. As part of the Phase I transitional vertical expansion, the project applicant proposes to voluntarily reduce this permitted level to 7,000 tpd. The Phase I project also includes increased capacity for green and wood waste processing and materials recycling. Import of dirt and inert materials would continue to occur during Phase I at the same levels as the existing baseline. In addition, Phase I would include the construction of the proposed new TS/MRF. The traffic analysis of Phase I evaluated two scenarios, with and without TS/MRF construction. Both scenarios included the transitional vertical expansion at 7,000 tpd of MSW and 6,500 tpd of dirt and inert materials, expanded green and wood waste processing and expanded MRF.

Phase II final landfill closure would take place as soon as the landfill closes in April, 2007 and includes the importation of dirt of approximately 340 trucks per day for approximately 250 days to cap the landfill, and discontinue acceptance of waste for disposal in the landfill in order to transition the use of the site from a landfill to a TS/MRF. At the conclusion of landfill closure activities, the completed project would include the TS/MRF at 4,000 tpd/1,000 tpd, respectively, and continuation of the expanded green and wood waste processing begun in Phase I (2,500 tpd). Upon project completion, solid waste will be transported to the site and compacted prior to loading onto transfer trucks for transport to off site locations. Each construction phase and project completion trip generation was based upon existing data projected to the future with conservative estimates based upon operational experience at BLRC and other landfills and TS operated by the project applicant (see Appendix E).

Table 4.3-7 provides a summary of the existing vehicular trip generation, and projected trip generation for Phase I, Phase I Construction, Phase II construction (including landfill closure), and Phase II Project Completion. Detailed calculations of trip generation are contained in Appendix E to this EIR. Table 4.3-8 shows project trip generation by phase in PCEs. As shown in these tables, the highest daily vehicular trip generation occurs during Phase II Construction (landfill closure), and the highest daily trip generation in

**Table 4.3-7
Trip Generation by Project Phase**

		Existing	Phase I	Phase I Construction	Phase II Construction ^b	Completed Project ^c
Automobiles						
Employees	Daily	332	425	425	813	714
	AM Peak	48	61	61	118	103
	PM Peak	46	59	59	76	62
Trucks						
Solid Waste, Green/Wood Waste & Recycling	Daily	1,138	2,350	2,350	3,246	3,246
	AM Peak	98	203	203	262	262
	PM Peak	110	211	211	305	305
Imported Dirt & Inert Materials	Daily	660	660	900	340	-
	AM Peak	50	50	66	26	-
	PM Peak	94	94	112	24	-
Total	Daily	2,130	3,435	3,675	4,399	3,960
	AM Peak	196	312	328	406	365
	PM Peak	250	364	382	405	367
<p><i>For the assumptions used in determining the trip generation, see Tables 3-4, 3-9, and 3-13 in Section 3.0, Project Description.</i></p> <p>^b <i>Includes TS/MRF operation and landfill closure activities</i></p> <p>^c <i>Includes TS/MRF operation only</i></p>						

PCE's occurs during Phase I. The highest a.m. and p.m. peak hour trip generation, in PCEs, occurs during Phase I.

**Table 4.3-8
Project Trip Generation in Passenger Car Equivalents¹**

Time Period	I/B	PCE	O/B	PCE	Total	PCE
Existing (calibrated)						
Daily					2,130	3,356
AM Peak Hour	115	163	80	127	195	290
PM Peak Hour	92	147	110	167	202	314
Phase I Project						
Daily					3,425	5,519
AM Peak Hour	185	273	127	210	312	483
PM Peak Hour	164	270	200	305	364	575
Phase II Project During Landfill Closure						
Daily					4,399	6,551
AM Peak Hour	253	340	153	237	406	577
PM Peak Hour	187	290	218	305	405	595
Phase II Project Complete						
Daily					3,693	5,796
AM Peak Hour	227	302	138	210	365	512
PM Peak Hour	173	265	194	270	367	535

1. Total project trips, employees and trucks, vehicles and PCE.

Trip Distribution and Traffic Assignment

Determination of the geographic distribution of generated trips was the next step in the process. A primary factor affecting trip distribution is the relative distribution origin and destination of the trash and transfer trucks. Trash trucks will be coming to BLRC from the local community and beyond in both Phase I and Phase II. During Phase I, transfer trucks also bring solid waste to the landfill for disposal. During Phase II, transfer trucks will be transporting solid waste to remote landfills. The estimated distribution, based upon the landfill's current experience, anticipated routes, and origin/destination points is detailed in Table 4.3-9 and portrayed in Figures 4.3-3, 4.3-4, 4.3-5, and 4.3-6 for trash trucks and transfer trucks from Phase I, construction dirt from Phase I, and transfer trucks for solid waste and dirt from Phase II, respectively.

**Table 4.3-9
Directional Trip Distribution**

Direction	Percentage of Trips			
	Trash/Other Trucks	Construction Dirt Phase I	Transfer Trucks Phase I	Transfer Trucks Phase II SW & Dirt
North	35%	50%	0%	95%
South	47%	50%	100%	5%
East	3%	0%	0%	0%
West	15%	0%	0%	0%
Total	100%	100%	100%	100%

Figure 4.3-3, Project Trip Distribution for Trash Trucks

Figure 4.3-4, Project Trip Distribution for Transfer Trucks – Transfer Station

Figure 4.3-5, Project Trip Distribution for Construction Dirt Phase I

Figure 4.3-6, Project Trip Distribution – Transfer Trucks – SW & Dirt Phase 2

The assignment of project traffic to the street and highway systems was accomplished in two steps. Using the directional distribution percentages for the streets, the number of trips in each direction was calculated for the trash trucks and the transfer trucks. The second step was to assign these trips to specific routes serving the project area. This assignment is based upon anticipated origin/destination points and current landfill experience. The results of the traffic assignments are shown in Figures 6(a) through 6(f) of Appendix E and depict the estimates of the a.m. and p.m. peak hour project traffic on the nearby street system.

Future Traffic Conditions

Other projects under development could add substantial amounts of traffic to the project area. For this reason, the analysis of future traffic conditions has been expanded to include potential traffic from as yet undeveloped or unoccupied projects. Briefly, the methodology for estimating future traffic volumes was as follows: First, current traffic volumes were determined by traffic counts. Next a traffic growth factor of 2.0 percent compounded annually was applied to develop 2007, 2008, and 2012 "baseline" figures. Traffic expected to be generated from cumulative developments in the study area was then added to the baseline traffic volumes to form the basis for a 2007, 2008, and 2012 "without project" condition. Finally, project traffic, was analyzed as an incremental addition to the 2007 without project condition for Phase I, 2008 for Construction Phase II project and 2012 for project completion.

Traffic Growth

Based on an analysis of the trends in traffic growth in the central Los Angeles area over the last several years, a conservative (i.e., erring to the high side) annual traffic growth factor of 2.0 percent was used to account for increases in traffic resulting from projects not yet proposed or outside of the study area. This growth factor, compounded annually, was applied to the 2005 traffic volumes altered to PCE equivalents to develop an estimate of baseline volumes for future study years 2007, 2008, and 2012.

Related Projects

In addition to the use of the 2.0 percent annual growth rate, listings of potential projects located in the study area were obtained from the LADOT and field verified. From a review of these lists, it was determined that traffic from 28 potential projects near the study site would produce additional traffic at the study intersections. Traffic expected to be generated from these related projects was estimated by applying the trip generation rates in Table 4.3-10.

The locations of the related projects are shown in Figure 4.3-19 and the projects are listed and described in Table 4.3-11. The estimates of traffic generated by each project are also displayed in Table 4.3-11. To determine the 2007, 2008, and 2012 "null" or no-project traffic condition, the traffic expected to be generated by the cumulative developments was combined with the 2005 peak hour traffic increased by 2.0 percent per year to 2007, 2008 and 2012. The resulting Without Project (2007, 2008 and 2012) a.m. and p.m. peak hour traffic estimates are shown in Figures 4.3-7 through 4.3-12. These estimates form the basis for "future baseline" values for determining project traffic impacts on the street system.

Future Highway System Improvements

No highway improvements in the project area were identified in the City of Los Angeles Five-Year Capital Improvements Program (CIP). As a result, the future roadway network was assumed to remain in its current condition.

Analysis of Future Traffic Conditions (Without and With Project)

The analysis of future conditions in the project area was performed using the same critical lane analysis procedures described previously. For future project conditions, the roadway system was not considered to be improved from existing conditions. Traffic volumes for the analysis were developed as follows:

- Future year benchmark traffic volumes for the without project condition were determined by combining the area traffic growth with new traffic generated by cumulative development in the vicinity of the project site and existing landfill development in PCEs.
- Traffic volumes generated by the project in PCE's were then combined with these benchmark volumes to arrive at the "With Project" traffic analysis and to determine traffic impacts directly attributable to the proposed development. This analysis was conducted for Phase I, Phase II Construction, and Project Completion.

The projected traffic volumes for all the "With Project" conditions are shown in Figures 4.3-13 through 4.3-18.

Figure 4.3-7, Future Without Project AM Peak Hour Traffic Volume (2007)

Figure 4.3-8, Future Without Project PM Peak Hour Traffic Volume 2007

Figure 4.3-9, Future Without Project AM Peak Hour Traffic Volume 2008

Figure 4.3-10, Future without Project PM Peak Hour Traffic Volume 2008

Figure 4.3-11, Future Without Project AM Peak Hour Traffic Volume 2012

Figure 4.3-12, Future Without Project PM Peak Hour Traffic Volume 2012

Figure 4.3-13, Future Without Project AM Peak Hour Traffic Volumes 2007 – Phase I Construction

Figure 4.3-14, Future with Project PM Peak Hour Traffic Volumes 2007 –Phase I Construction

Figure 4.3-15, Future with Project AM Peak Hour Traffic Volumes 2008 – Phase II Construction

Figure 4.3-16, Future with Project PM Peak Hour Traffic Volumes 2008 Phase II Construction

Figure 4.3-17, Future With Project AM Peak Hour Traffic Volumes 2012 Phase II Complete

Figure 4.3-18 Future with Project PM Peak Hour Traffic Volumes 2012 Phase II Complete

**Table 4.3-10
Related Projects Trip Generation Rates and Equations**

<u>General Light Industrial (per 1,000 sf) – LU 110</u>	
Daily:	T=6.97 (A)
AM Peak Hour:	T=0.92 (A); I/B=88%; O/B=12%
PM Peak Hour:	T=0.98 (A); I/B=12%; O/B=88%
<u>Industrial Park (per 1,000 sf) – LU 130</u>	
Daily:	T=6.96 (A)
AM Peak Hour:	T=0.89 (A); I/B=82%; O/B=18%
PM Peak Hour:	T=0.92 (A); I/B=21%; O/B=79%
<u>Mini-Warehouse (per 1,000 sf) – LU 151</u>	
Daily:	T=2.50 (A)
AM Peak Hour:	T=0.15 (A); I/B=59%; O/B=41%
PM Peak Hour:	T=0.26 (A); I/B=51%; O/B=49%
<u>Single Family Detached Housing (per dwelling unit) – LU 210</u>	
Daily:	T=9.57 (D)
AM Peak Hour:	T=0.75 (D); I/B=25%; O/B=75%
PM Peak Hour:	T=1.01 (D); I/B=64%; O/B=36%
<u>Apartment (per dwelling unit) – LU 220</u>	
Daily:	T=6.63 (D)
AM Peak Hour:	T=0.51 (D); I/B=16%; O/B=84%
PM Peak Hour:	T=0.62 (D); I/B=67%; O/B=33%
<u>Congregate Care Facility (per dwelling unit) – LU 252</u>	
Daily:	T=2.15 (D)
AM Peak Hour:	T=0.06 (D); I/B=61%; O/B=39%
PM Peak Hour:	T=0.17 (D); I/B=56%; O/B=44%
<u>Recreational Community Center (per 1,000 sf) – LU 495</u>	
Daily:	T=9.11 (A)
AM Peak Hour:	T=0.72 (A); I/B=54%; O/B=46%
PM Peak Hour:	T=0.66 (A); I/B=54%; O/B=46%
<u>Private School (per student) – LU 521</u>	
Daily*:	T=5.596 (S)
AM Peak Hour:	T=0.92 (S); I/B=60%; O/B=40%
PM Peak Hour:	T=0.20 (S); I/B=38%; O/B=62%
<u>Day Care Center (per student) – LU 565</u>	
Daily:	T=4.52 (S)
AM Peak Hour:	T=0.81 (S); I/B=53%; O/B=47%
PM Peak Hour:	T=0.86 (S); I/B=47%; O/B=53%
<u>Library (per 1,000 sf) – LU 590</u>	
Daily:	T=54.00 (A)
AM Peak Hour:	T=1.06 (A); I/B=72%; O/B=28%

PM Peak Hour:	T=7.09 (A); I/B=48%; O/B=52%	
<u>Specialty Retail (per 1,000 sf) – LU 814</u>		
Daily:	T=40.67 (A)	
AM Peak Hour**:	T=1.2201 (A); I/B=60%; O/B=40%	
PM Peak Hour:	T=2.59 (A); I/B=43%; O/B=57%	
<u>Shopping Center (per 1,000 sf) – LU 820</u>		
Daily:	Ln(T)=0.643 Ln(A) + 5.866	
AM Peak Hour:	Ln(T)=0.596 Ln(A) + 2.329; I/B=61%; O/B=39%	
PM Peak Hour:	Ln(T)=0.660 Ln(A) + 3.403; I/B=48%; O/B=52%	
T = trip ends	I/B = inbound	O/B = outbound
A = building area in 1,000's of square feet	D = dwelling unit	
S = student		
* Daily rate note available; estimated by summation of a.m. & p.m. rates and multiplied by a factor of 5.		
** San Diego Traffic Generators, San Diego Association of Governments, 1998.		
<u>Trip Generation, 6th Edition, Institute of Transportation Engineers, 1997.</u>		

Figure 4.3-19, Related Projects

**Table 4.3-11
Related Projects Trip Generation**

Map No.	Address	Size	Project Description	Daily	AM Peak Hour			PM Peak Hour		
					I/B	O/B	Total	I/B	O/B	Total
1	Dronfield Av. & Osborne St. ¹	2 ac	Boundless Playground	152	0	0	0	5	5	10
2	S/E Corner Foothill Blvd & Osborne St. ²	80,000 sf	Children's Museum	1,480	90	Negl.	90	Negl.	125	125
3	11840 Foothill Blvd.	75 du 15,375 sf	Apartment Recreation center/day care	497 <u>140</u> 637	6 <u>6</u> 12	32 <u>5</u> 37	38 <u>11</u> 49	31 <u>5</u> 36	16 <u>5</u> 21	47 <u>10</u> 57
4	11681 Foothill Blvd.	56 du	Apartment	371	5	24	29	23	12	35
5	S/E Corner Foothill Blvd & Gladstone Ave. ¹	52,000 sf	Hansen Dam Skate Park	N/A	N/A	N/A	N/A	55	68	123
6	S/W Foothill Blvd & I-210 Fwy Ramp ¹	9 soccer fld 4 softball fld	Hansen Dam Soccer Fields Complex	1,800	48	72	120	144	96	240
7	10323 Norris Ave.	61,000 sf	General light industrial	425	49	7	56	7	53	60
8	12448 Osborne St.	60,140 sf	Warehouse for movie set	298	22	5	27	7	24	31
9	12653 Osborne St.	300,000 sf	General light industrial	2,091	243	33	276	35	259	294
10	12450 Branford St.	550,000 sf	Industrial park	3,828	402	88	490	106	400	506
11	9752 Laurel Canyon Blvd.	2,516 sf	Fast-food restaurant w/drive through	1,248	64	61	125	44	40	84
12	9221 Arleta Ave.	96 du	Adult living & nursing facility	206	4	2	6	9	7	16
13	9040 Laurel Canyon Blvd.	18,760 sf	Shopping center	2,324	36	23	59	100	108	208
14	12700 Sheldon St.	48,000 sf	Cabinet shop & wholesale dress maker	1,952	35	23	58	53	71	124
15	11121 Pendleton Blvd. ³	3,000 tons	Mixed waste site	440	39	91	130	50	40	90
16	11051 Pendleton Blvd. ⁴	284,600 sf	Swap meet	N/A	319	176	495	112	292	404
17	11050 Pendleton Blvd. ³	115,158 sf	Maintenance facility	1,340	40	47	87	84	128	212
18	8652 Sunland Blvd.	11,000 sf 8,000 sf	Shopping Center Office	1,649 <u>191</u> 1,840	26 <u>22</u> 48	17 <u>3</u> 20	43 <u>25</u> 68	70 <u>15</u> 85	76 <u>73</u> 149	146 <u>88</u> 234
19	9040 Sunland Blvd.	5,040 sf 50 st 1,859 sf	Church Day care/school Medical Clinic	46 226 <u>58</u> 330	2 22 <u>1</u> 25	2 19 <u>1</u> 22	4 41 <u>2</u> 47	2 20 <u>5</u> 27	1 23 <u>5</u> 29	3 43 <u>10</u> 56
20	11022 Olinda St.	94,044 sf	Self storage mini-warehouse	235	8	6	14	12	12	24

Map No.	Address	Size	Project Description	Daily	AM Peak Hour			PM Peak Hour		
					I/B	O/B	Total	I/B	O/B	Total
21	8000 Glenoaks Blvd.	44 du	Single family homes	421	8	25	33	28	16	44
22	11134 Saticoy St.	416 st 72 st	Private elementary school Preschool/day care	2,328	230	153	383	32	51	83
				<u>325</u> 2,653	<u>31</u> 261	<u>27</u> 180	<u>58</u> 441	<u>29</u> 61	<u>33</u> 84	<u>62</u> 145
23	7201 Lankershim Blvd. ⁵	3,695 sf 4,343 sf	Fast food restaurant w/drive through Laundromat	1,889	77	81	158	65	59	124
24	7526 Laurel Canyon Blvd. ³	N/A	Retail with residential use	329	26	18	44	15	21	36
25	8101 Tujunga Avenue		Motorcross	200	0	0	0	25	25	50
26	12506 Montague Avenue ⁶	1,000 tpd	Cordova Construction Services Expansion	182	20	5	25	8	19	27
27	9143 De Garmo Avenue	6,700 tpd	Community/Crown Recycling Increase	2,233	250	63	313	100	235	335
28	San Fernando Road & Tuxford Street	750 tpd	Sun Valley Paper Stock Increase	250	28	7	35	11	27	38

1. *Traffic Impact Study for Proposed Major League Baseball Youth Academy Hansen Dam Recreation Area, November 2001.*
2. *Technical Letter to Mr. Robert Takasaki, Re: Children's Museum Project-Hansen Dam Recreation Area Alternative Site, LADOT, April 2000.*
3. *Provided by LADOT.*
4. *Traffic Analysis for an Open Air Market Place Located on Pendleton Street, East of Glenoaks Boulevard, Sun Valley, Crain & Associates, April 2000.*
5. *Traffic Impact Study for Proposed McDonald's Restaurant and Lucy's Laundromat at Lankershim Boulevard and Sherman Way, North Hollywood (EAF No. 2000-2143), Crain & Associates, September 2000.*
6. *Estimated Project.*

Phase I Impacts

The results of the CMA and LOS values of future traffic conditions at the study intersections for the Phase I component of the Proposed Project (transitional landfill height increase, with permitted acceptance of 7,000 tpd, increased greenwaste/MRF capacity) are summarized in Table 4.3-12. Separate columns are included to show the effects of this activity with the import of fill dirt for TS/MRF construction (i.e., Phase I Construction). As indicated in Table 4.3-12, Phase I and Phase I Construction are expected to have significant impacts at three study intersections.

**Table 4.3-12
Summary of Critical Movement Analysis – Future (2007) Traffic Conditions – Without and With
Phase I and Phase I Construction Traffic**

No	Intersection	Peak Hour	W/O Project		Phase I Project			Phase I Construction		
			CMA	LOS	CMA	LOS	Impact	CMA	LOS	Impact
1	San Fernando Road & Sheldon Street	AM	0.761	C	0.765	C	0.004	0.765	C	0.004
		PM	0.919	E	0.927	E	0.008	0.927	E	0.008
2	Glenoaks Boulevard & Peoria Street	AM	0.453	A	0.472	A	0.019	0.472	A	0.019
		PM	0.591	A	0.609	B	0.018	0.609	B	0.018
3	I-5 NB Off/SB On Ramps & Tuxford Street	AM	0.685	B	0.697	B	0.012	0.697	B	0.012
		PM	0.759	C	0.769	C	0.010	0.769	C	0.010
4	I-5 NB On Ramp & Tuxford Street	AM	0.517	A	0.526	A	0.009	0.529	A	0.012
		PM	0.652	B	0.669	B	0.017	0.669	B	0.017
5	San Fernando Road & Tuxford Street	AM	0.711	C	0.721	C	0.010	0.721	C	0.010
		PM	0.879	D	0.896	D	0.017	0.896	D	0.017
6	Bradley Avenue & Tuxford Street	AM	0.593	A	0.657	B	0.064	0.667	B	0.074
		PM	1.006	F	1.179	F	0.173	1.093	F	0.087
7	Glenoaks Boulevard & Tuxford Street	AM	0.792	C	0.803	D	0.011	0.803	D	0.011
		PM	0.887	D	0.892	D	0.005	0.892	D	0.005
8	I-5 SB On/Off Ramps & Penrose Street	AM	0.609	B	0.673	B	0.064	0.683	B	0.074
		PM	0.696	B	0.792	C	0.096	0.814	D	0.118
9	Bradley Avenue & Penrose Street	AM	0.505	A	0.570	A	0.065	0.586	A	0.081
		PM	0.611	B	0.716	C	0.105	0.734	C	0.123

During the remainder of the construction period, after completion of the peak volumes of dirt import reflected in the Phase I Construction scenario, lower traffic impacts would be expected to result from construction of the proposed TS/MRF. An average of 30 to 35 truck deliveries per day would be expected (although 100 truck deliveries could occur on days when concrete is being poured). Following framing (including pouring of the concrete), a total of 30 to 50 workers construction would be at the project site. Trip generation associated with construction workers would be approximately 20-35 automobile trips (based upon average vehicle ridership of 1.5 persons per car) during each of the a.m. and p.m. peak hours (i.e., arriving in the morning and leaving in the afternoon). The traffic volumes generated by the construction of this component of the Proposed Project would be temporary and short term. Impacts would not exceed those that would result during the import of dirt.

Phase II Construction Impacts

The results of the CMA and LOS values of future traffic conditions at the study intersections for Phase II Construction (which includes expanded green and wood waste capacity begun in Phase I, new TS/MRF operation, and landfill closure) are summarized in Table 4.3-13. As shown in Table 4.3-13, Phase II construction is expected to have significant impacts at four study intersections.

**Table 4.3-13
Summary of Critical Movement Analysis Future (2008) Traffic Conditions – Without and With
Phase II Construction Project**

No.	Intersection	Peak Hour	Without Project		With Project		
			CMA	LOS	CMA	LOS	Impact
1	San Fernando Road and Sheldon Street	AM	0.774	C	0.783	C	0.009
		PM	0.935	E	0.952	E	0.017
2	Glenoaks Boulevard and Peoria Street	AM	0.460	A	0.500	A	0.040
		PM	0.601	B	0.632	B	0.031
3	I-5 NB Off/SB On Ramps and Tuxford Street	AM	0.696	B	0.720	C	0.024
		PM	0.773	C	0.793	C	0.020
4	I-5 NB On Ramp and Tuxford Street	AM	0.527	A	0.539	A	0.012
		PM	0.663	B	0.671	B	0.008
5	San Fernando Road and Tuxford Street	AM	0.724	C	0.738	C	0.014
		PM	0.895	D	0.905	E	0.010
6	Bradley Avenue and Tuxford Street	AM	0.604	B	0.683	B	0.079
		PM	1.027	F	1.072	F	0.045
7	Glenoaks Boulevard and Tuxford Street	AM	0.806	D	0.826	D	0.020
		PM	0.902	E	0.913	E	0.011
8	I-5 SB On/Off Ramps and Penrose Street	AM	0.620	B	0.663	B	0.043
		PM	0.708	C	0.738	C	0.030
9	Bradley Avenue and Penrose Street	AM	0.515	A	0.558	A	0.043
		PM	0.621	B	0.666	B	0.045

Bold indicates a significant impact (LADOT Revised Scale)

Impacts at Project Completion

The results of the CMA and LOS values of future traffic conditions at the study intersections for Project Completion (TS/MRF at stabilized operation, expanded green and wood waste operations begun in Phase I) are summarized in Table 4.3-14. As shown in Table 4.3-14, project completion is expected to have significant impacts at three study intersections.

Table 4.3-14

Summary of Critical Movement Analysis Future (2012) Traffic Conditions – Without and With Project Completion

No.	Intersection	Peak Hour	Without Project		With Project		
			CMA	LOS	CMA	LOS	Impact
1	San Fernando Road and Sheldon Street	AM	0.833	D	0.841	D	0.008
		PM	1.007	F	1.022	F	0.015
2	Glenoaks Boulevard and Peoria Street	AM	0.491	A	0.527	A	0.036
		PM	0.643	B	0.670	B	0.027
3	I-5 NB Off/SB On Ramps and Tuxford Street	AM	0.748	C	0.768	C	0.020
		PM	0.832	D	0.851	D	0.019
4	I-5 NB On Ramp and Tuxford Street	AM	0.567	A	0.571	A	0.004
		PM	0.712	C	0.712	C	0.000
5	San Fernando Road and Tuxford Street	AM	0.781	C	0.790	C	0.009
		PM	0.960	E	0.964	E	0.004
6	Bradley Avenue and Tuxford Street	AM	0.651	B	0.710	C	0.059
		PM	1.109	F	1.143	F	0.034
7	Glenoaks Boulevard and Tuxford Street	AM	0.863	D	0.881	D	0.018
		PM	0.967	E	0.978	E	0.011
8	I-5 SB On/Off Ramps and Penrose Street	AM	0.664	B	0.686	B	0.022
		PM	0.759	C	0.779	C	0.020
9	Bradley Avenue and Penrose Street	AM	0.552	A	0.577	A	0.025
		PM	0.665	B	0.694	B	0.029

Bold indicates a significant impact (LADOT Revised Scale)

Mitigation:

The following mitigation measures shall be in place or guaranteed satisfactorily to the City of Los Angeles prior to initiating each phase of the proposed project. Prior to Phase I Construction improvements at Bradley Avenue/Tuxford Street, I-5 Southbound On/Off Ramps/Penrose Street, and Bradley Avenue/Penrose Street shall be in place. Prior to Phase II Construction, improvements at San Fernando Road/Sheldon Street and Glenoaks Boulevard/Tuxford Street shall be in place.

Phase I

- 4.3-1 Bradley Avenue and Tuxford Street – Prohibit parking on the north side of Tuxford Street east of Bradley Avenue and on the south side of Tuxford Street west of Bradley Avenue to convert existing east and westbound lane configurations from left turn lane, through lane and shared through/right to a dedicated left turn lane, two through lanes and dedicated right turn lane. Participate in the contribution towards funding for the ATC/ATCS signal system improvements.
- 4.3-2 I-5 Southbound On/Off Ramps and Penrose Street – Design and install a new traffic signal at this currently unsignalized location. Caltrans approval will be required to implement this improvement.

- 4.3-3 Bradley Avenue and Penrose Street – Convert existing single southbound left/through/right shared lane to a dedicated right-turn only lane and one through/right shared lane. Improve eastbound lane configurations from one left-turn only lane and one through lane to one left-turn only lane and one through/right shared lane.
- 4.3-4 San Fernando Road and Sheldon Street – Participate in the contribution towards funding for the City of Los Angeles expanded signal system improvement where traffic signals are interconnected known as Automated Traffic Surveillance and Control (ATSAC)/Adaptive Traffic Control System (ATCS). This improvement provides for increased capacity at the intersection. The ATSAC/ATCS provides signal synchronization through monitoring upstream and downstream traffic volumes and delay. The synchronization is enhanced through computer enhancement and manual monitoring by a centralized control system.
- 4.3-5 Glenoaks Boulevard and Tuxford Street – Participate in the contribution towards funding for the ATSAC/ATCS expanded signal system improvements.

Impact 4.3-2: The Proposed Project would generate additional traffic which could exceed a level of service standard established by the County Congestion Management Agency. (Less Than Significant)

To address the increasing public concern that traffic congestion was impacting the quality of life and economic vitality of the State of California, the Congestion Management Program (CMP) was enacted by Proposition 111.

The intent of the CMP is to provide the analytical basis for transportation decisions through the State Transportation Improvement Program (STIP) process. A countywide approach has been established by the Metropolitan Transportation Authority, the local CMP agency, to implement the statutory requirements of the CMP. The countywide approach includes designating a highway network that includes all State highways and principal arterials within the County and monitoring the network's LOS standards. This monitoring of the CMP network is one of the responsibilities of local jurisdictions. If LOS standards deteriorate, then local jurisdictions must prepare a deficiency plan to be in conformance with the countywide plan.

Furthermore, all development projects which are required to prepare an EIR are subject to the Land Use Analysis program of the CMP. This requirement will provide decision-makers with the project-specific traffic impacts created by large projects on the CMP highway network. The traffic impact analysis (TIA) to be included in an EIR requires that all freeway segments where the project adds 150 or more trips, in either direction, during the peak hours be analyzed. An analysis is also required at all CMP intersections where the project will add 50 or more trips during the peak hour. There are no CMP intersections where the project will add 50 or more trips in either direction during either the a.m. or p.m. peak hours. An analysis of freeway conditions on the Golden State Freeway, Hollywood, Antelope Valley and Foothill Freeways in the vicinity of the project and potential routes was conducted. The freeway segments that were analyzed were chosen as the most likely to carry project-related traffic, based upon the projected distribution of trips shown in Figures 4.3-3 and 4.3-4. In addition, as noted in Table 4.3-9, 95% of the transfer truck traffic associated with the proposed TS/MRF would utilize freeways to the north of the project site to transport waste to outlying

landfills in the Antelope Valley.

Based upon the 2003 Annual Average Daily Truck Traffic on the California State Highway System database prepared by Caltrans (2004), the Table 4.3-15 summarizes the percentage of trucks that are currently on the Golden State (I-5) and Antelope Valley (Hwy 14) Freeways. The project will increase the number of trucks on these systems and is demonstrated below with a note as to the percentage increase in trucks due to the project. The project does not increase the percentage of trucks on any of the segments more than 1.2%, which is less than the 2% significance criteria for overall traffic as identified by the CMP, and is not anticipated to result in significant regional impacts to any regional highway segment. The Hollywood Freeway carries approximately 4.4% trucks daily, and the Foothill Freeway carries between 6.3% and 9.5% trucks daily in the vicinity of the project site. Less than 1% growth in trucks is anticipated on these two regional facilities due to the Proposed Project.

**Table 4.3-15
Existing and Future Percentage of Trucks on Regional Freeway Segments**

Location	Percentage of Trucks Compared to All Vehicles		
	Existing (2005)	Future with Project Completion	Difference
I-5 at Hollywood Freeway	7.4%	7.7%	0.3%
I-5 at Simi Freeway	8.0%	8.4%	0.4%
I-5 at 405 Freeway	9.6%	10.4%	0.8%
I-5 at 210 Freeway	9.1%	9.5%	0.4%
Hwy 14 at San Fernando Road	4.5%	5.3%	0.8%
Hwy 14 at Angeles Forest Hwy	4.9%	6.1%	1.2%
Hwy 14 at Palmdale Boulevard	5.3%	6.1%	0.8%

A summary of the current, future without project, and future with project conditions for Phase I, Phase II including closure, and Project Completion follows in Tables 4.3-16, 4.3-17, and 4.3-18. Review of these tables indicates that the project would not cause or worsen a LOS F segment or increase traffic demand by two percent of capacity at LOS F for the freeway segments analyzed according to the CMP TIA requirements. Therefore, project impacts on these regional facilities would be less than significant.

As noted in Table 4.3-9, approximately 5% of transfer truck traffic carrying waste from the proposed BLRC TS/MRF to be disposed at outlying landfills would arrive and depart from the south. This traffic represents disposal that would occur at the El Sobrante Landfill in Riverside County. A traffic study prepared for the expansion of this landfill in 1994⁴ concluded that the proposed landfill expansion would not impact Interstate 15 or State Route 91, which provide regional access to the landfill. The study also found that all intersections, with the exception of I-15/Temescal Canyon Road would operate at acceptable levels of service with the

4 *Draft Environmental Impact Report for El Sobrante Landfill Expansion, Section 4.5.1 Transportation and Circulation, Riverside County Waste Management Department, April 1994. This section is hereby incorporated by reference and is available for review at the City of Los Angeles, Department of City Planning, Environmental Review Section, 200 N Spring St, Room 750, Los Angeles, CA 90012, during normal business hours.*

project. Mitigation measures were identified at I-15/Temescal Canyon Road to reduce the project impact to less than significant. The traffic analysis conducted for the El Sobrante Landfill Expansion reflected that at least 50% of the waste disposed at El Sobrante would be generated outside Riverside County. Since the Proposed Project would not cause the tonnage limits at El Sobrante, upon which the traffic analysis for the expansion was based, the Proposed Project would not result in impacts to I-15, SR-91, Temescal Canyon Road and other roadways serving the El Sobrante Landfill as a result of transfer of waste from the BLRC TS/MRF for disposal at El Sobrante Landfill.

Mitigation: No mitigation measures are required.

**Table 4.3-16
Future (2007) Freeway Volumes and Levels of Service**

Location	Peak Period	Direction	No. Lanes	Freeway Capacity	Future 2007 Without Project				Future 2007 With Phase I Project					% of Project Impact	
					Daily Volume	Peak Hour Volume	D/C* Ratio	LOS	Daily Project Only	Daily Volume	Peak Hour Project Only	Peak Hour Volume	D/C* Ratio		LOS
Hollywood Freeway (S-170) between Sherman Way and Vanowen Street	AM	N/B	4	8,000	184,954	5,832	0.729	C	285	185,239	12	5,844	0.731	C	0.2%
		S/B	4	8,000		8,859	1.107	F(0)			11	8,870	1.109	F(0)	0.1%
	PM	N/B	4	8,000		6,822	0.853	D			13	6,835	0.854	D	0.2%
		S/B	4	8,000		6,192	0.774	D			13	6,205	0.776	D	0.2%
Foothill Freeway (I-210) at Terra Bella Street	AM	E/B	4	8,000	116,813	6,984	0.873	D	338	117,151	25	7,009	0.876	D	0.4%
		W/B	4	8,000		4,672	0.584	C			27	4,699	0.587	C	0.6%
	PM	E/B	4	8,000		4,837	0.605	C			32	4,869	0.609	C	0.7%
		W/B	4	8,000		4,672	0.584	C			32	4,704	0.588	C	0.7%
Golden State Freeway (I-5) North of Hollywood Freeway (S-170)	AM	N/B	6	12,000	203,341	9,702	0.809	D	1,011	204,352	67	9,769	0.814	D	0.7%
		S/B	6	12,000		13,437	1.120	F(0)			59	13,496	1.125	F(0)	0.4%
	PM	N/B	6	12,000		17,013	1.418	F(2)			82	17,095	1.425	F(2)	0.5%
		S/B	6	12,000		13,437	1.120	F(0)			78	13,515	1.126	F(0)	0.6%
Golden State Freeway (I-5) at Burbank Boulevard	AM	N/B	6	12,000	199,014	7,070	0.589	C	338	199,352	35	7,105	0.592	C	0.5%
		S/B	6	12,000		8,711	0.726	C			32	8,743	0.729	C	0.4%
	PM	N/B	6	12,000		8,221	0.685	C			40	8,261	0.688	C	0.5%
		S/B	6	12,000		7,472	0.623	C			39	7,511	0.626	C	0.5%
Golden State Freeway (I-5) at Terra Bella Street, Pacoima	AM	N/B	5	10,000	329,888	9,750	0.975	E	1,011	330,899	32	9,782	0.978	E	0.3%
		S/B	5	10,000		13,463	1.346	F(1)			32	13,495	1.350	F(1)	0.2%
	PM	N/B	5	10,000		14,686	1.469	F(3)			51	14,737	1.474	F(3)	0.3%
		S/B	5	10,000		9,001	0.900	D			51	9,052	0.905	D	0.6%
Golden State Freeway (I-5) at Ronald Reagan Freeway (Rte-118)	AM	N/B	5	10,000	299,603	9,171	0.917	D	1,011	300,614	32	9,203	0.920	D	0.3%
		S/B	5	10,000		12,664	1.266	F(1)			32	12,696	1.270	F(1)	0.3%
	PM	N/B	5	10,000		13,814	1.381	F(2)			51	13,865	1.387	F(2)	0.4%
		S/B	5	10,000		8,467	0.847	D			51	8,518	0.852	D	0.6%
Golden State Freeway (I-5) at Brand Avenue, Mission Hills	AM	N/B	4	8,000	165,485	4,675	0.584	C	1,011	166,496	32	4,707	0.588	C	0.7%
		S/B	4	8,000		6,455	0.807	D			32	6,487	0.811	D	0.5%
	PM	N/B	4	8,000		7,041	0.880	D			51	7,092	0.887	D	0.7%
		S/B	4	8,000		4,316	0.540	B			51	4,367	0.546	C	1.2%
Golden State Freeway (I-5) s/o San Diego Freeway (Rte 405)	AM	N/B	3	6,000	143,853	4,372	0.729	C	1,011	144,864	32	4,404	0.734	C	0.7%
		S/B	3	6,000		5,795	0.966	E			32	5,827	0.971	E	0.5%
	PM	N/B	3	6,000		5,694	0.949	E			51	5,745	0.958	E	0.9%
		S/B	3	6,000		4,473	0.746	C			51	4,524	0.754	C	1.1%
Golden State Freeway (I-5) at Roxford Street, Sylmar	AM	N/B	6	12,000	285,542	8,929	0.744	C	1,011	286,553	32	8,961	0.747	C	0.4%
		S/B	6	12,000		11,837	0.986	E			32	11,869	0.989	E	0.3%

	PM	N/B	6	12,000		11,629	0.969	E			51	11,680	0.973	E	0.4%
		S/B	6	12,000		9,137	0.761	C			51	9,188	0.766	C	0.6%
Golden State Freeway (I-5) at Foothill Freeway (Rte 210), Truck	AM	N/B	6	12,000	285,502	8,046	0.671	C	1,011	259,513	32	8,078	0.673	C	0.4%
		S/B	6	12,000		10,665	0.889	D			32	10,697	0.891	D	0.3%
	PM	N/B	6	12,000		10,479	0.873	D			51	10,530	0.878	D	0.5%
		S/B	6	12,000		8,232	0.686	C			51	8,284	0.690	C	0.6%
Golden State Freeway (I-5) at Begin Truck Freeway	AM	N/B	2	4,000	37,315	1,535	0.384	B	1,011	38,326	32	1,567	0.392	B	2.0%
		S/B	2	4,000		2,034	0.509	B			32	2,066	0.517	B	1.5%
	PM	N/B	2	4,000		1,999	0.500	B			51	2,050	0.513	B	2.5%
		S/B	2	4,000		1,570	0.393	B			51	1,621	0.405	B	3.1%
Golden State Freeway (I-5) at Junction Rte 14 – Truck Route	AM	N/B	2	4,000	50,835	2,116	0.529	B	1,011	51,846	32	2,148	0.537	B	1.5%
		S/B	2	4,000		2,805	0.701	C			32	2,837	0.709	C	1.1%
	PM	N/B	2	4,000		2,757	0.689	C			51	2,808	0.702	C	1.8%
		S/B	2	4,000		2,165	0.541	C			51	2,216	0.554	C	2.3%
Antelope Valley Freeway (Rte 14) at San Fernando Road	AM	N/B	5	10,000	166,566	2,855	0.286	A	1,011	167,577	32	2,887	0.289	A	1.1%
		S/B	5	10,000		10,151	1.015	F(0)			32	10,183	1.018	F(0)	0.3%
	PM	N/B	5	10,000		9,046	0.905	D			51	9,097	0.910	D	0.6%
		S/B	5	10,000		3,837	0.384	B			51	3,888	0.389	B	1.3%
Antelope Valley Freeway (Rte 14) at Placerita Canyon, Santa Clarita	AM	N/B	5	10,000	154,669	2,642	0.264	A	1,011	155,680	32	2,674	0.267	A	1.2%
		S/B	5	10,000		9,364	0.936	E			32	9,396	0.940	E	0.3%
	PM	N/B	5	10,000		8,404	0.840	D			51	8,455	0.846	D	0.6%
		S/B	5	10,000		3,602	0.360	B			51	3,653	0.365	B	1.4%
Antelope Valley Freeway (Rte 14) at Sierra Highway	AM	N/B	5	10,000	144,934	2,475	0.248	A	1,011	145,945	32	2,507	0.251	A	1.3%
		S/B	5	10,000		8,773	0.877	D			32	8,805	0.881	D	0.4%
	PM	N/B	5	10,000		7,874	0.787	D			51	7,925	0.793	D	0.6%
		S/B	5	10,000		3,375	0.338	A			51	3,426	0.343	A	1.5%
Antelope Valley Freeway (Rte 14) at Sand Canyon Road, Santa Clarita	AM	N/B	5	10,000	113,568	1,975	0.198	A	1,011	114,579	32	2,007	0.201	A	1.6%
		S/B	5	10,000		7,002	0.700	C			32	7,034	0.703	C	0.5%
	PM	N/B	5	10,000		6,284	0.628	C			51	6,335	0.634	C	0.8%
		S/B	5	10,000		2,694	0.269	A			51	2,745	0.275	A	1.9%
Antelope Valley Freeway (Rte 14) at Agua Dulce Canyon Road	AM	N/B	4	8,000	99,507	1,832	0.229	A	1,011	100,518	32	1,864	0.233	A	1.7%
		S/B	4	8,000		6,496	0.812	D			32	6,528	0.816	D	0.5%
	PM	N/B	4	8,000		5,830	0.729	C			51	5,881	0.735	C	0.9%
		S/B	4	8,000		2,498	0.312	A			51	2,549	0.319	A	2.0%
Antelope Valley Freeway (Rte 14) at Escondido Canyon Road	AM	N/B	3	6,000	97,344	1,809	0.302	A	1,011	98,355	32	1,841	0.307	A	1.7%
		S/B	3	6,000		6,412	1.069	F(0)			32	6,444	1.074	F(0)	0.5%
	PM	N/B	3	6,000		5,754	0.959	E			51	5,805	0.968	E	0.9%
		S/B	3	6,000		2,466	0.411	B			51	2,517	0.420	B	2.0%
Antelope Valley Freeway (Rte 14) at Santiago Road	AM	N/B	3	6,000	96,262	2,465	0.411	B	1,011	97,273	32	2,497	0.416	B	1.3%
		S/B	3	6,000		5,485	0.914	D			32	5,517	0.920	D	0.6%
	PM	N/B	3	6,000		5,354	0.892	D			51	5,405	0.901	D	0.9%
		S/B	3	6,000		2,758	0.460	B			51	2,809	0.468	B	1.8%

Antelope Valley Freeway (Rte 14) at Vincent, Angeles Forest Highway	AM	N/B	2	4,000	100,589	1,965	0.491	B	1,011	101,600	32	1,997	0.499	B	1.6%
		S/B	2	4,000		4,326	1.082	F(0)			32	4,358	1.090	F(0)	0.7%
	PM	N/B	2	4,000		4,326	1.082	F(0)			51	4,377	1.094	F(0)	1.2%
		S/B	2	4,000		2,272	0.568	C			51	2,323	0.581	C	2.2%
Antelope Valley Freeway (Rte 14) at Avenue S	AM	N/B	2	4,000	75,712	1,972	0.493	B	1,011	76,723	32	2,004	0.501	B	1.6%
		S/B	2	4,000		4,388	1.097	F(0)			32	4,420	1.105	F(0)	0.7%
	PM	N/B	2	4,000		4,283	1.071	F(0)			51	4,334	1.084	F(0)	1.2%
		S/B	2	4,000		2,207	0.552	C			51	2,258	0.565	C	2.3%
Antelope Valley Freeway (Rte 14) at Rte 138, Palmdale Boulevard	AM	N/B	2	4,000	82,202	2,136	0.534	B	505	82,707	16	2,152	0.538	B	0.7%
		S/B	2	4,000		4,754	1.189	F(0)			16	4,770	1.193	F(0)	0.3%
	PM	N/B	2	4,000		4,640	1.160	F(0)			26	4,666	1.167	F(0)	0.6%
		S/B	2	4,000		2,390	0.598	C			26	2,416	0.604	C	1.1%
Antelope Valley Freeway (Rte 14) at Avenue M, Lancaster	AM	N/B	3	6,000	93,018	2,530	0.422	B	505	93,523	16	2,546	0.424	B	0.6%
		S/B	3	6,000		5,632	0.939	E			16	5,648	0.941	E	0.3%
	PM	N/B	3	6,000		5,496	0.916	D			26	5,522	0.920	D	0.5%
		S/B	3	6,000		2,832	0.472	B			26	2,858	0.476	B	0.9%
Antelope Valley Freeway (Rte 14) at Avenue L, Lancaster	AM	N/B	3	6,000	90,854	2,497	0.416	B	505	91,359	16	2,513	0.419	B	0.6%
		S/B	3	6,000		5,559	0.927	D			16	5,575	0.929	D	0.3%
	PM	N/B	3	6,000		5,426	0.904	D			26	5,452	0.909	D	0.5%
		S/B	3	6,000		2,794	0.466	B			26	2,820	0.470	B	0.9%
Antelope Valley Freeway (Rte 14) at Avenue J-8/20 th St. W., Lancaster	AM	N/B	3	6,000	57,325	1,611	0.269	A	505	57,830	16	1,627	0.271	A	1.0%
		S/B	3	6,000		3,584	0.597	C			16	3,600	0.600	C	0.4%
	PM	N/B	3	6,000		3,498	0.583	C			26	3,524	0.597	C	0.7%
		S/B	3	6,000		1,802	0.300	A			26	1,828	0.305	A	1.4%
Antelope Valley Freeway (Rte 14) at Avenue I, Lancaster	AM	N/B	3	6,000	47,590	1,363	0.227	A	505	48,095	16	1,379	0.230	A	1.2%
		S/B	3	6,000		3,035	0.506	B			16	3,051	0.509	B	0.5%
	PM	N/B	3	6,000		2,963	0.494	B			26	2,989	0.498	B	0.9%
		S/B	3	6,000		1,526	0.254	A			26	1,552	0.259	A	1.7%
Antelope Valley Freeway (Rte 14) at Avenue G	AM	N/B	2	4,000	39,478	1,117	0.279	A	505	39,983	16	1,113	0.283	A	1.4%
		S/B	2	4,000		2,487	0.622	C			16	2,503	0.626	C	0.6%
	PM	N/B	2	4,000		2,427	0.607	C			26	2,453	0.613	C	1.1%
		S/B	2	4,000		1,250	0.313	A			26	1,276	0.319	A	2.0%

* D/C is the Demand to Capacity Ratio

**Table 4.3-17
Future (2008) Freeway Volumes and Levels of Service**

Location	Peak Period	Direction	No. Lanes	Freeway Capacity	Future 2008 Without Project				Future 2008 With Phase II Construction Project					% of Project Impact	
					Daily Volume	Peak Hour Volume	D/C* Ratio	LOS	Daily Project Only	Daily Volume	Peak Hour Project Only	Peak Hour Volume	D/C* Ratio		LOS
Hollywood Freeway (S-170) between Sherman Way and Vanowen Street	AM	N/B	4	8,000	192,067	5,944	0.743	C	262	192,329	6	5,950	0.744	C	0.1%
		S/B	4	8,000		9,029	1.129	F(0)			3	9,032	1.129	F(0)	0.0%
	PM	N/B	4	8,000		6,954	0.869	D			4	6,958	0.870	D	0.1%
		S/B	4	8,000		6,311	0.789	D			5	6,316	0.790	D	0.1%
Foothill Freeway (I-210) at Terra Bella Street	AM	E/B	4	8,000	121,306	7,118	0.890	D	328	121,634	10	7,128	0.891	D	0.1%
		W/B	4	8,000		4,762	0.595	C			16	4,778	0.597	C	0.3%
	PM	E/B	4	8,000		4,930	0.616	C			13	4,943	0.618	C	0.3%
		W/B	4	8,000		4,762	0.595	C			14	4,776	0.597	C	0.3%
Golden State Freeway (I-5) N/O Hollywood Freeway (S-170)	AM	N/B	6	12,000	211,162	9,889	0.824	D	1,243	212,405	50	9,939	0.828	D	0.5%
		S/B	6	12,000		13,695	1.141	F(0)			45	13,740	1.145	F(0)	0.3%
	PM	N/B	6	12,000		17,341	1.445	F(2)			41	17,382	1.449	F(2)	0.2%
		S/B	6	12,000		13,695	1.141	F(0)			54	13,749	1.146	F(0)	0.4%
Golden State Freeway (I-5) at Burbank Boulevard	AM	N/B	6	12,000	206,669	7,206	0.601	C	328	206,997	19	7,225	0.602	C	0.3%
		S/B	6	12,000		8,879	0.740	C			9	8,888	0.741	C	0.1%
	PM	N/B	6	12,000		8,379	0.698	C			12	8,391	0.699	C	0.1%
		S/B	6	12,000		7,616	0.635	C			14	7,630	0.636	C	0.2%
Golden State Freeway (I-5) at Terra Bella Street, Pacoima	AM	N/B	5	10,000	336,232	9,938	0.994	E	1,243	337,475	38	9,976	0.998	E	0.4%
		S/B	5	10,000		13,722	1.372	F(2)			36	13,758	1.376	F(2)	0.3%
	PM	N/B	5	10,000		14,968	1.497	F(3)			32	15,000	1.500	F(3)	0.2%
		S/B	5	10,000		9,174	0.917	D			57	9,231	0.923	D	0.6%
Golden State Freeway (I-5) at Ronald Reagan Freeway (Rte 118)	AM	N/B	5	10,000	305,365	9,347	0.935	E	1,243	306,608	38	9,385	0.939	E	0.4%
		S/B	5	10,000		12,908	1.291	F(1)			36	12,944	1.294	F(1)	0.3%
	PM	N/B	5	10,000		14,080	1.408	F(2)			32	14,112	1.411	F(2)	0.2%
		S/B	5	10,000		8,629	0.863	D			57	8,686	0.869	D	0.7%
Golden State Freeway (I-5) at Brand Avenue, Mission Hills	AM	N/B	4	8,000	168,667	4,765	0.596	C	1,243	169,910	38	4,803	0.600	C	0.8%
		S/B	4	8,000		6,579	0.822	D			36	6,615	0.827	D	0.5%
	PM	N/B	4	8,000		7,176	0.897	D			32	7,208	0.901	D	0.4%
		S/B	4	8,000		4,399	0.550	C			57	4,456	0.557	C	1.3%
Golden State Freeway (I-5) s/o San Diego Freeway (Rte 405)	AM	N/B	3	6,000	146,619	4,456	0.743	C	1,243	147,862	38	4,494	0.749	C	0.8%
		S/B	3	6,000		5,906	0.984	E			36	5,942	0.990	E	0.6%
	PM	N/B	3	6,000		5,804	0.967	E			32	5,836	0.973	E	0.5%
		S/B	3	6,000		4,559	0.760	C			57	4,616	0.769	C	1.2%
Golden State Freeway (I-5) at Roxford Street, Sylmar	AM	N/B	6	12,000	291,034	9,101	0.758	C	1,243	292,277	38	9,139	0.762	C	0.4%
		S/B	6	12,000		12,065	1.005	F(0)			36	12,101	1.008	F(0)	0.3%

	PM	N/B	6	12,000		11,853	0.988	E			32	11,885	0.990	E	0.3%
		S/B	6	12,000		9,313	0.776	D			57	9,370	0.781	D	0.6%
Golden State Freeway (I-5) at Foothill Freeway (Rte 210) Truck Route	AM	N/B	6	12,000	263,474	8,201	0.683	C	1,243	264,717	38	8,239	0.687	C	0.5%
		S/B	6	12,000		10,870	0.906	D			36	10,906	0.909	D	0.3%
	PM	N/B	6	12,000		10,681	0.890	D			32	10,713	0.893	D	0.3%
		S/B	6	12,000		8,391	0.699	C			57	8,448	0.704	C	0.7%
Golden State Freeway (I-5) at Begin Truck Route	AM	N/B	2	4,000	38,033	1,565	0.391	B	1,243	39,276	38	1,603	0.401	B	2.4%
		S/B	2	4,000		2,073	0.518	B			36	2,109	0.527	B	1.7%
	PM	N/B	2	4,000		2,037	0.509	B			32	2,069	0.517	B	1.5%
		S/B	2	4,000		1,601	0.400	B			57	1,658	0.415	B	3.4%
Golden State Freeway (I-5) at Junction Rte 14 Truck Route	AM	N/B	2	4,000	51,813	2,157	0.539	B	1,243	53,056	38	2,195	0.549	C	1.7%
		S/B	2	4,000		2,859	0.715	C			36	2,895	0.724	C	1.2%
	PM	N/B	2	4,000		2,810	0.703	C			32	2,842	0.711	C	1.1%
		S/B	2	4,000		2,207	0.552	C			57	2,264	0.566	C	2.5%
Antelope Valley Freeway (Rte 14) at San Fernando Road	AM	N/B	5	10,000	169,770	2,910	0.291	A	1,243	171,013	38	2,948	0.295	A	1.3%
		S/B	5	10,000		10,347	1.035	F(0)			36	10,383	1.038	F(0)	0.3%
	PM	N/B	5	10,000		9,220	0.922	D			32	9,252	0.925	D	0.3%
		S/B	5	10,000		3,910	0.391	B			57	3,967	0.397	B	1.4%
Antelope Valley Freeway (Rte 14) at Placerita Canyon, Santa Clarita	AM	N/B	5	10,000	157,643	2,692	0.269	A	1,243	158,886	38	2,730	0.273	A	1.4%
		S/B	5	10,000		9,544	0.954	E			36	9,580	0.958	E	0.4%
	PM	N/B	5	10,000		8,566	0.857	D			32	8,598	0.860	D	0.4%
		S/B	5	10,000		3,671	0.367	B			57	3,728	0.373	B	1.5%
Antelope Valley Freeway (Rte 14) at Sierra Highway	AM	N/B	5	10,000	147,722	2,523	0.252	A	1,243	148,965	38	2,561	0.256	A	1.5%
		S/B	5	10,000		8,942	0.894	D			36	8,978	0.898	D	0.4%
	PM	N/B	5	10,000		8,025	0.803	D			32	8,057	0.806	D	0.4%
		S/B	5	10,000		3,440	0.344	A			57	3,497	0.350	A	1.6%
Antelope Valley Freeway (Rte 14) at Sand Canyon Road, Santa Clarita	AM	N/B	5	10,000	115,752	2,013	0.201	A	1,243	116,995	38	2,051	0.205	A	1.9%
		S/B	5	10,000		7,137	0.714	C			36	7,173	0.717	C	0.5%
	PM	N/B	5	10,000		6,405	0.641	C			32	6,437	0.644	C	0.5%
		S/B	5	10,000		2,745	0.275	A			57	2,802	0.280	A	2.0%
Antelope Valley Freeway (Rte 14) at Agua Dulce Canyon Road	AM	N/B	4	8,000	101,421	1,868	0.234	A	1,243	102,664	38	1,906	0.238	A	2.0%
		S/B	4	8,000		6,621	0.828	D			36	6,657	0.832	D	0.5%
	PM	N/B	4	8,000		5,942	0.743	C			32	5,974	0.747	C	0.5%
		S/B	4	8,000		2,546	0.318	A			57	2,603	0.325	A	2.2%
Antelope Valley Freeway (Rte 14) at Escondido Canyon Road	AM	N/B	3	6,000	99,216	1,843	0.307	A	1,243	100,459	38	1,881	0.314	A	2.0%
		S/B	3	6,000		6,535	1.089	F(0)			36	6,571	1.095	F(0)	0.5%
	PM	N/B	3	6,000		5,865	0.978	E			32	5,897	0.983	E	0.5%
		S/B	3	6,000		2,513	0.419	B			57	2,570	0.428	B	2.2%
Antelope Valley Freeway (Rte 14) at Santiago Road	AM	N/B	3	6,000	98,114	2,512	0.419	B	1,243	99,357	38	2,550	0.425	B	1.5%
		S/B	3	6,000		5,590	0.932	E			36	5,626	0.938	E	0.6%
	PM	N/B	3	6,000		5,457	0.910	D			32	5,489	0.915	D	0.6%
		S/B	3	6,000		2,811	0.469	B			57	2,868	0.478	B	2.0%

Antelope Valley Freeway (Rte 14) at Vincent, Angeles Forest Highway	AM	N/B	2	4,000	102,523	2,002	0.501	B	1,243	103,766	38	2,040	0.510	B	1.9%
		S/B	2	4,000		4,410	1.103	F(0)			36	4,446	1.112	F(0)	0.8%
	PM	N/B	2	4,000		4,410	1.103	F(0)			32	4,442	1.111	F(0)	0.7%
		S/B	2	4,000		2,316	0.579	C			57	2,373	0.593	C	2.4%
Antelope Valley Freeway (Rte 14) at Avenue S	AM	N/B	2	4,000	77,168	2,010	0.503	B	1,243	78,411	38	2,048	0.512	B	1.9%
		S/B	2	4,000		4,472	1.118	F(0)			36	4,508	1.127	F(0)	0.8%
	PM	N/B	2	4,000		4,365	1.091	F(0)			32	4,397	1.099	F(0)	0.7%
		S/B	2	4,000		2,249	0.562	C			57	2,306	0.577	C	2.5%
Antelope Valley Freeway (Rte 14) at Rte 138, Palmdale Boulevard	AM	N/B	3	6,000	83,782	2,177	0.363	B	622	84,404	19	2,196	0.366	B	0.9%
		S/B	3	6,000		4,845	0.808	D			18	4,863	0.811	D	0.4%
	PM	N/B	3	6,000		4,730	0.788	D			16	4,746	0.791	D	0.3%
		S/B	3	6,000		2,436	0.406	B			29	2,465	0.411	B	1.2%
Antelope Valley Freeway (Rte 14) at Avenue M, Lancaster	AM	N/B	3	6,000	94,806	2,579	0.430	B	622	95,428	19	2,598	0.433	B	0.7%
		S/B	3	6,000		5,740	0.957	E			18	5,758	0.960	E	0.3%
	PM	N/B	3	6,000		5,602	0.934	E			16	5,618	0.936	E	0.3%
		S/B	3	6,000		2,886	0.481	B			29	2,915	0.486	B	1.0%
Antelope Valley Freeway (Rte 14) at Avenue L, Lancaster	AM	N/B	3	6,000	92,602	2,545	0.424	B	622	92,224	19	2,564	0.427	B	0.7%
		S/B	3	6,000		5,666	0.944	E			18	5,684	0.947	E	0.3%
	PM	N/B	3	6,000		5,530	0.922	D			16	5,546	0.924	D	0.3%
		S/B	3	6,000		2,848	0.475	B			29	2,877	0.480	B	1.0%
Antelope Valley Freeway (Rte 14) at Ave J-8/20 th St W., Lancaster	AM	N/B	3	6,000	58,427	1,642	0.274	A	622	59,049	19	1,661	0.277	A	1.1%
		S/B	3	6,000		3,653	0.609	C			18	3,671	0.612	C	0.5%
	PM	N/B	3	6,000		3,565	0.594	C			16	3,581	0.597	C	0.4%
		S/B	3	6,000		1,837	0.306	A			29	1,866	0.311	A	1.6%
Antelope Valley Freeway (Rte 14) at Avenue I, Lancaster	AM	N/B	3	6,000	48,506	1,390	0.232	A	622	49,128	19	1,409	0.235	A	1.3%
		S/B	3	6,000		3,093	0.516	B			18	3,111	0.519	B	0.6%
	PM	N/B	3	6,000		3,020	0.503	B			16	3,036	0.506	B	0.5%
		S/B	3	6,000		1,555	0.259	A			29	1,584	0.264	A	1.8%
Antelope Valley Freeway (Rte 14) at Avenue G	AM	N/B	2	4,000	40,238	1,138	0.285	A	622	40,860	19	1,157	0.289	A	1.6%
		S/B	2	4,000		2,534	0.634	C			18	2,552	0.638	C	
	PM	N/B	2	4,000		2,474	0.619	C			16	2,490	0.623	C	
		S/B	2	4,000		1,274	0.319	A			29	1,303	0.326	A	