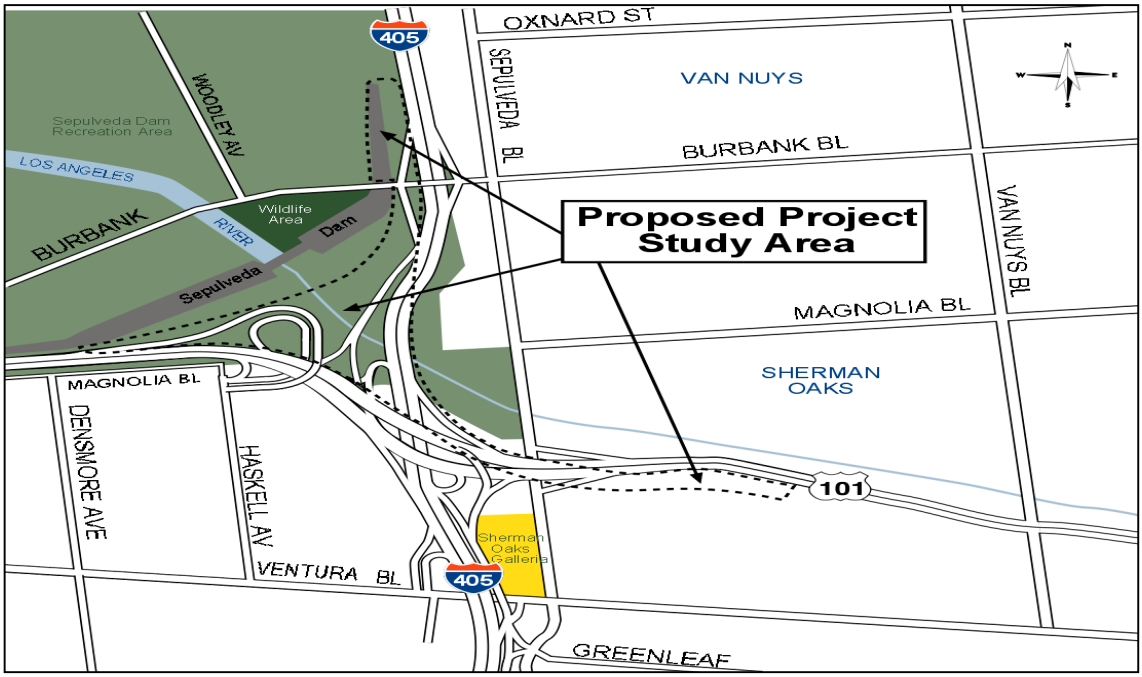
SOUTHBOUND INTERSTATE-405 (SAN DIEGO FREEWAY) TO THE U.S. HIGHWAY-101 (VENTURA FREEWAY) CONNECTOR IMPROVEMENT PROJECT

Alternatives to Reduce Congestion at America's Most Traveled Interchange

LOS ANGELES COUNTY, CALIFORNIA
DISTRICT 7– LA – 405, PM 39.4/40.5
LA – 101, PM 17.0/19.4
EA 199610

DRAFT ENVIRONMENTAL ASSESSMENT/INITIAL STUDY (EA/IS) and SECTION 4(f) EVALUATION



Prepared by the
California Department of Transportation

The environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 U.S.C. 327.

APRIL 2008

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GENERAL INFORMATION ABOUT THIS DOCUMENT

What is this document?
The California Department of Transportation (the Department, or "Caltrans") and the Federal Highway Administration (FHWA) have prepared this Environmental Assessment/Initial Study (EA/IS) to examine the potential environmental impacts associated with the alternatives being considered as part of this proposed project, which is located in the City of Los Angeles, in the County of Los Angeles, California. This document describes why the project is being proposed, the project alternatives, the existing environment that could be affected by the project, the potential impacts associated with each alternative, and the proposed avoidance, minimization and/or mitigation measures.

What you should do:

- Please read this Environmental Assessment/Initial Study (EA/IS). Additional copies of this document are available for review at:

District 7 Environmental Planning Office,
California Department of Transportation
100 S. Main Street, Suite 100 MS 16A (4th Floor)
Los Angeles, CA 90012
(213) 897-0703

Los Angeles Public Library
Central Branch
630 West 5th Street
Los Angeles, CA 90071
(213) 228-7000

Los Angeles Public Library
Van Nuys Branch
6250 Sylmar Avenue (Mall)
Van Nuys, CA 91401
(818) 756-8453

- A public hearing will take place to discuss this proposed project. Please refer to the attached cover letter for the details.

- The Department welcomes your comments. If you have any comments regarding the proposed project, please attend the said public hearing and/or send your written comments to the Department by the deadline stated in the attached cover letter. Please send any written comments, questions, or concerns to:

  Mr. Ronald J. Kosinski
  Deputy District Director
  Division of Environmental Planning
  California Department of Transportation
  100 S. Main Street, Suite MS 16A
  Los Angeles, CA 90012

  - Submit comments via email to eduardo_aguilar@dot.ca.gov by the deadline listed in the attached cover letter.

What happens next:
After the deadline posted in the attached cover letter, the comments are received from the public, the reviewing agencies and elected officials, the Department and the Federal Highway

Administration may: (1) give environmental approval to the proposed project, (2) undertake additional environmental studies, or (3) abandon the project. If the project is given environmental approval and funding is appropriated, the Department could design and construct all or part of the project.

For individuals with sensory disabilities, this document can be made available in Braille, large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Division of Environmental Planning, Attn. Mr. Ronald J. Kosinski (address above); (213) 897-0703 Voice, or use the California Relay Service TTY number (800) 735-2929.

It should be noted that at a future date FHWA or another Federal Agency may publish a notice in the Federal Register, pursuant to 23 USC §139(l), indicating that a final action has been taken on this project by FHWA or another Federal agency. If such notice is published, a lawsuit or other legal claim will be barred unless it is filed within 180 days after the date of publication of the notice (or within such shorter time period as is specified in the Federal laws pursuant to which judicial review of the Federal agency action is allowed). If no notice is published, then the lawsuit or claim can be filed as long as the periods of time provided by other Federal laws that govern claims are met.

SCH#
07-LOS-405- PM 39.4/40.5
07-LOS-405- PM 17.0/19.4
07262-199610
IRS-HE 13

I-405/US-101 Connector Improvement Project
Interstate 405, from the I-405/US-101 Interchange to the Burbank Boulevard Overcrossing, PM 39.4 to PM 40.5 and US Highway 101, from the I-405/US-101 Interchange to 0.5 Mile South of Hayvenhurst Avenue Undercrossing, PM 17.0 to PM 19.4

DRAFT ENVIRONMENTAL ASSESSMENT/INITIAL STUDY (EA/IS)
and
Section 4(f) Evaluation

The environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 U.S.C. 327.

Submitted Pursuant to: (State) Division 13, California Public Resources Code
(Federal) 42 USC 4332(2)(C) and 49 U.S.C. 303

THE STATE OF CALIFORNIA
Department of Transportation

4/11/08

Aziz Elattar
Office Chief, District 7-Los Angeles
Division of Environmental Planning
California Department of Transportation

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Summary

The California Department of Transportation (the Department, or “Caltrans”) proposes to replace the existing non-standard connector, from the southbound San Diego Freeway (Interstate-405) to the northbound Ventura Freeway (U.S. Highway-101), with an upgraded connector. The new 50 mph two-lane connector would replace the current 20 mph single-lane connector. This would be accomplished by constructing a new bridge structure crossing over the spillway of the Sepulveda Dam. The Department has considered nine (9) alternatives, eight (8) of which are variations on this connector improvement proposal. Currently, four (4) alternatives remain under consideration, including the No-Build Alternative.

The existing non-standard connector experiences extensive congestion, delays, and queue lengths throughout the day. The purpose of the project is to improve safety, operation, capacity, and traffic flow through the interchange by replacing the existing 20 mph single-lane connector, with a new 50 mph two-lane connector.

The “No Build” alternative calls for the existing connector to remain as is. The remaining three (3) “Build” alternatives, that remain under consideration, each share the following common features:

- Each calls for the replacement of the existing 20 mph single-lane connector (from the southbound I-405 to the northbound U.S.-101), with a new 50 mph two-lane connector bridge that encroaches upon and spans over the spillway of the Sepulveda Dam.
- Each eliminates the existing erratic and conflicting traffic weaving patterns between the Burbank Boulevard on-ramp traffic seeking to access the southbound I-405 mainline, versus the traffic attempting to access the U.S.-101 connectors from the southbound I-405 mainline.
- Each requires the realignment/reconstruction of the Burbank Boulevard on-ramp to the southbound I-405 and/or the U.S.-101.
- Each requires the realignment and reconstruction of the current U.S. Army Corps of Engineers service road (on the northwest side of the interchange) related to the operation and maintenance of the Sepulveda Dam. This is to allow space for the new, upgraded connector.
- Each poses a visual impact to the historic Sepulveda Dam, which is a Section 4(f) resource. For more information about this visual impact, please reference Section 2.1.8, entitled, “Cultural Resources.”

As discussed in the body of this document, there would be various alternative-specific permanent impacts, as well as, short-term impacts associated with construction such as noise, dust, and access problems around the project site. This document discusses measures to minimize these impacts. Since these construction-related impacts would not be permanent, they are considered below the level of significance as defined by the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA).

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Summary of Impacts. The table below summarizes project-related impacts to the Human, Physical, and Biological Environment. Please refer to the appropriate section and discussion for more details, and avoidance, minimization, and/or compensation measures planned for any project-related impacts.

	ALTERNATIVE 1 IMPACTS	ALTERNATIVE 2 IMPACTS	ALTERNATIVE 3 IMPACTS
HUMAN ENVIRONMENT			
Land Use	The existing environment is highly urbanized and predominantly built-out with little or no room for geometrical improvements that would prompt any changes in land use or zoning.	The existing environment is highly urbanized and predominantly built-out with little or no room for geometrical improvements that would prompt any changes in land use or zoning.	The existing environment is highly urbanized and predominantly built-out with little or no room for geometrical improvements that would prompt any changes in land use or zoning.
Growth	This project is not anticipated to induce growth beyond existing projections.	This project is not anticipated to induce growth beyond existing projections.	This project is not anticipated to induce growth beyond existing projections.
Community Impacts	1) Loss of access to the US-101 freeway from Burbank Boulevard 2) Increase in traffic on surrounding surface streets as traffic is redistributed to alternate access points to US-101. 3) Temporary traffic/circulation impacts related to construction.	Temporary traffic/circulation impacts related to construction.	Temporary traffic/circulation impacts related to construction.
Utilities, Community Facilities and Emergency Services	Temporary traffic/circulation impacts related to construction.	Temporary traffic/circulation impacts related to construction.	Temporary traffic/circulation impacts related to construction.
PHYSICAL ENVIRONMENT			
Hydrology and Floodplain	Construction of fly-over bridge structure that will encroach upon the Sepulveda Dam spillway.	Construction of fly-over bridge structure that will encroach upon the Sepulveda Dam spillway.	Construction of fly-over bridge structure that will encroach upon the Sepulveda Dam spillway.
Water Quality and Stormwater	Encroachment on Sepulveda Dam spillway will create opportunity for increased stormwater runoff, but these impacts are mitigable.	Encroachment on Sepulveda Dam spillway will create opportunity for increased stormwater runoff, but these impacts are mitigable.	Encroachment on Sepulveda Dam spillway will create opportunity for increased stormwater runoff, but these impacts are mitigable.
Geology/Soils/Seismic/Topography	No adverse impacts have been identified.	No adverse impacts have been identified.	No adverse impacts have been identified.

	ALTERNATIVE 1 IMPACTS	ALTERNATIVE 2 IMPACTS	ALTERNATIVE 3 IMPACTS
PHYSICAL ENVIRONMENT (continued)			
Hazardous Waste/Materials	No adverse impacts have been identified.	No adverse impacts have been identified.	No adverse impacts have been identified
Air Quality	No adverse impacts have been identified.	No adverse impacts have been identified.	No adverse impacts have been identified.
Noise	1) Future noise levels after completion of the project are anticipated to increase by 2 decibels, but these impacts are mitigable. 2) Temporary increase in noise levels during construction, but these impacts are mitigable.	1) Future noise levels after completion of the project are anticipated to increase by 2 decibels, but these impacts are mitigable. 2) Temporary increase in noise levels during construction, but these impacts are mitigable.	1) Future noise levels after completion of the project are anticipated to increase by 2 decibels, but these impacts are Mitigable. 2) Temporary increase in noise levels during construction, but these impacts are mitigable.
BIOLOGICAL ENVIRONMENT			
Natural Communities	Impacts to approximately 25-30 Coast Live Oak riparian trees.	Impacts to approximately 25-30 Coast Live Oak riparian trees.	Impacts to approximately 25-30 Coast Live Oak riparian trees.
Wetlands and Other Waters	No adverse impacts have been identified.	Construction of new loop structure will encroach upon Sepulveda Basin Wildlife Refuge.	Construction of new loop structure will encroach upon Sepulveda Basin Wildlife Refuge.
Plant Species	No adverse impacts have been identified.	No adverse impacts have been identified.	No adverse impacts have been identified.
Animal Species	No adverse impacts have been identified.	No adverse impacts have been identified.	No adverse impacts have been identified.
Threatened and Endangered Species	Potential to impact Burrowing Owl habitat.	Potential to impact Burrowing Owl habitat.	Potential to impact Burrowing Owl habitat.

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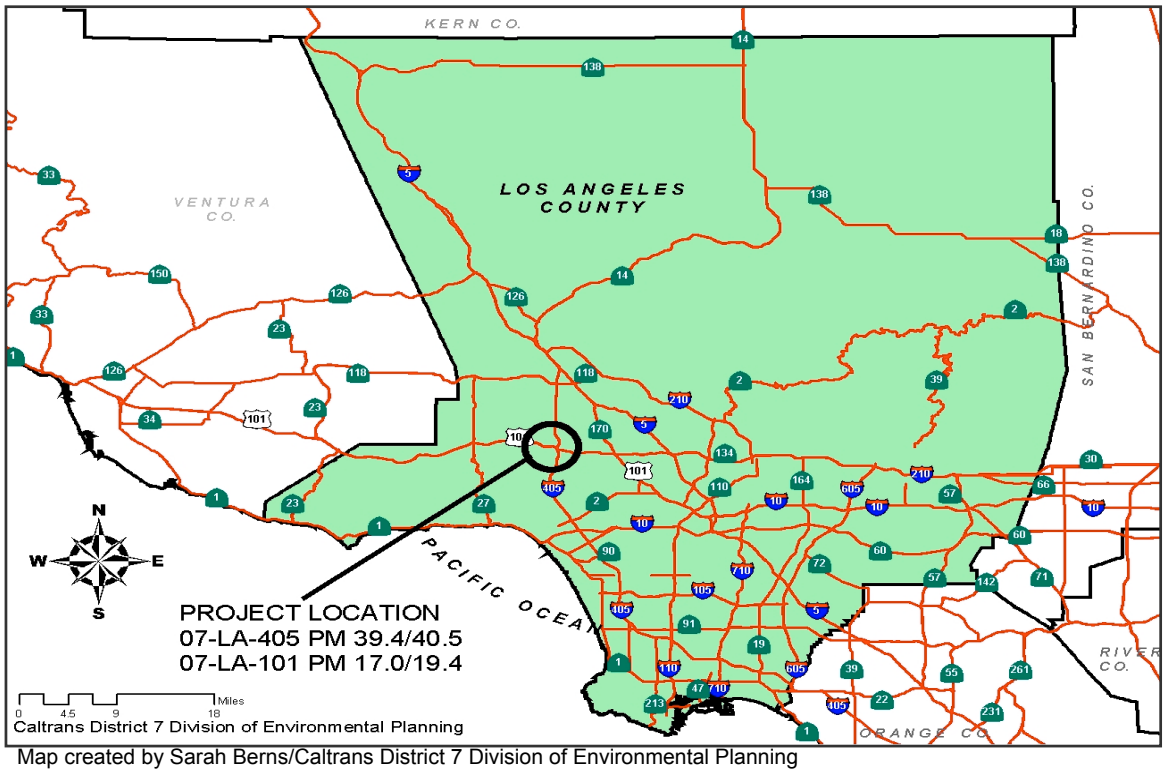
CHAPTER 1 | PROPOSED PROJECT

The Southbound Interstate-405 (San Diego Freeway) to the U.S. Highway-101 (Ventura Freeway) Connector Improvement Project

1.1 INTRODUCTION

The Interstate Route-405 (I-405) also known as the San Diego Freeway is an interstate/interregional commuter freeway that originates at Interstate Route-5 (I-5) in the City of Irvine, in Orange County and ends at I-5 near the community of Mission Hills in the City of Los Angeles, the County of Los Angeles. I-405 is part of the National Highway System and is a north/south route that is classified as an Urban Principle Arterial. The US Highway 101 (US-101) corridor is a major north-south route beginning in Downtown Los Angeles area and continues north toward San Francisco through the Counties of Los Angeles and Ventura. Within the study area of this proposed project, the northbound/southbound (NB/SB) US-101 freeway traverses in an east-west direction, serving the San Fernando Valley community of Sherman Oaks in City of Los Angeles, in the County of Los Angeles.

Figure 1. Regional Project Location



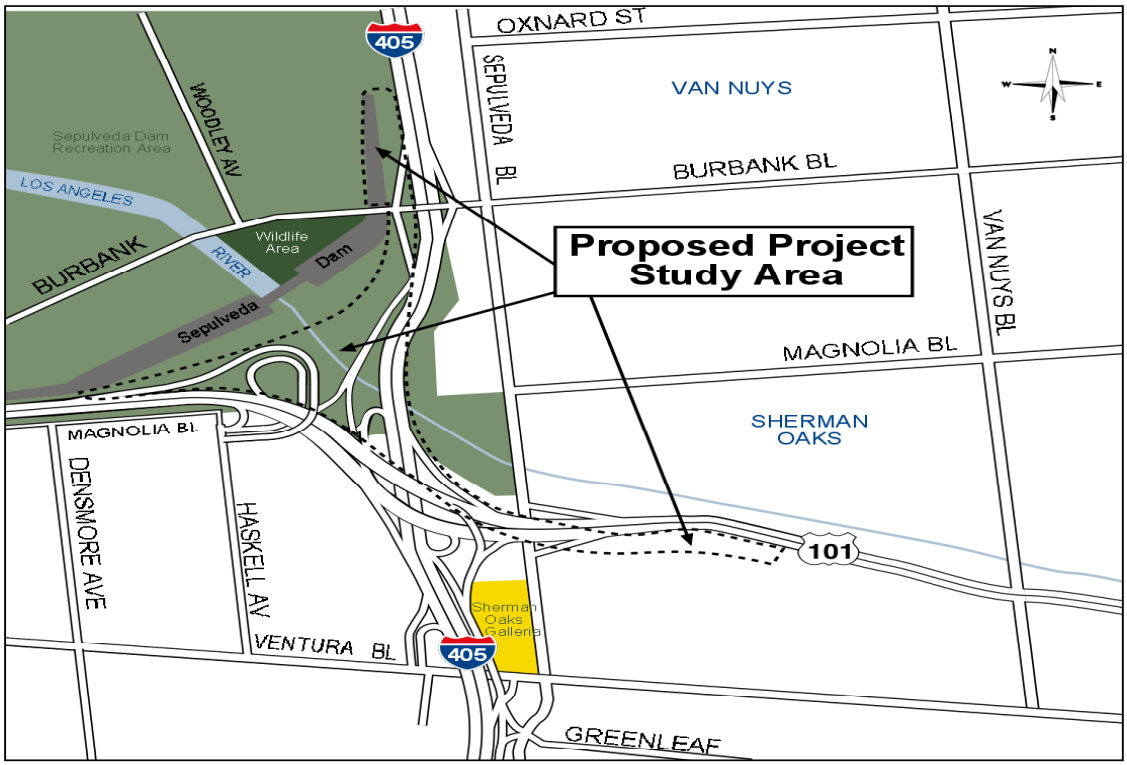
Map created by Sarah Berns/Caltrans District 7 Division of Environmental Planning

The California Department of Transportation (the Department, or "Caltrans") proposes to replace the existing non-standard connector, from the SB San Diego Freeway (Interstate-405) to the NB Ventura Freeway (U.S. Highway-101), with an upgraded connector. The new 50-mph two-lane connector would replace the current 20-mph single-lane connector. This would be accomplished by constructing a new, fly-over bridge structure crossing over the spillway of the Sepulveda Dam. The Department has considered nine (9) alternatives, eight (8) of which are variations on this

connector improvement proposal. Currently, four (4) alternatives remain under consideration, including the No-Build Alternative.

The proposed project was initiated by U.S. Congressman Brad Sherman and has the support of other elected officials. At this time, this project is programmed only through the Project Approval/Environmental Document [PA/ED] phase (the current phase). There is currently no funding programmed for the construction of this proposed project. If approved, the project will be funded from the State Transportation Improvement Program (STIP) and the Regional Transportation Improvement Program (RTIP).

Figure 2. Proposed Project Study Area



1.2 THE PROPOSED PROJECT: PURPOSE AND NEED

The existing non-standard connector experiences extensive congestion, delays, and queue lengths throughout the day. The purpose of the project is to improve safety, operation, capacity, and traffic flow through the interchange by replacing the existing 20-mph single-lane connector, with a new 50-mph two-lane connector.

1.2.1 DISCUSSION OF PURPOSE

The Southern California Association of Governments (SCAG), along with the Offices of Mayor Antonio Villaraigosa and U.S. Congressman Brad Sherman have identified this interchange as in need of improvement to relieve congestion and improve safety, operation, capacity, and traffic flow.

The I-405/US-101 interchange is critical to the effective operation of the entire freeway system in the San Fernando Valley and the Los Angeles region as a whole. The SB I-405 to the NB US-101 connector is considered one of the busiest in the nation. The purpose of this project is to:

- To transfer through-vehicle trips to the regional highway system.
- To provide congestion relief in order to improve traffic flow.
- To provide a balanced circulation system and reduce out of direction travel.
- To improve the operational and safety design to meet current standards to the greatest extent possible.
- To enhance the safety throughout the project area while minimizing environmental and socioeconomic impacts.

The following discussion summarizes the present and future conditions of the existing I-405/US-101 project area that constitutes the need for action. Several project alternatives have been developed to meet the purpose and need. If no improvements are made, the I-405/US-101 project area will continue as a “bottleneck” condition during peak hour traffic.

Improvements to Safety, Operation, Capacity, and Traffic Flow. In the existing condition, the SB I-405 to NB US-101 connector is considered to be one of the busiest in the world, and experiences heavy congestion, long delays, and high accident rates. Undesirable conditions on the SB I-405 freeway in the vicinity of the US-101 connector are attributable to a number of factors, including high volumes, low ramp design speed, and limited ramp capacity. All of the proposed build alternatives result in improved conditions on the freeway mainline, and produce similar operational improvements. The existing single-lane connector from SB I-405 to NB US-101 has a sharp, non-conventional curve with a design speed of 20 miles-per-hour. Replacing the existing connector with a two-lane, 50 mile-per-hour ramp is expected to improve flow through the area and reduce the spillback from the ramp queue on to the I-405 freeway mainline. This connector improvement is included in all of the proposed alternatives.

A weaving segment is a length of highway over which traffic streams cross paths through lane-changing maneuvers, formed between merge and diverge points. In all build alternatives, the new configuration would eradicate the weaving segment between the existing Burbank Boulevard on-ramp and the US-101 connector diverge. Weaving areas are attributable to significant disruption in traffic flow, particularly with high metering volumes, as opposing movements compete for merge space. Elimination of the weaving segment will provide improved average speed and level of service, as well as enhance safety, operation, capacity, and flow along the SB I-405 freeway in this area.

1.2.2 DISCUSSION OF NEED

The I-405 freeway carries an average of 115,000 to 160,000 vehicles per day in the vicinity of the Sepulveda Basin, and the US-101 carries an average of 160,000 to 165,000 vehicles per day in this area. The connector between the SB I-405 freeway and the US-101 carries over 50,000 vehicles per day, with just over half of those vehicles heading to the NB US-101 freeway and the remaining heading to SB US-101. The existing connector is a non-standard, single-lane structure with an operational speed of 20 miles-per-hour, and the facility is not sufficient to handle the traffic demand. As previously mentioned, vehicles form a queue at this location that frequently backs up onto the I-405 mainline, with a weaving segment between the existing Burbank Boulevard on-ramp and the US-101 connector diverge that contributes to high accident rates.

Accident Rates at Interchange versus the State Average. Accident data and three-year average accident rates for segments of I-405 and US-101 within the project study area are summarized in Table 1 below. The following rates are derived from the Traffic Accident Surveillance and Analysis System (TASAS) database from July 1, 2004 to June 30, 2007.

Table 1. Summary of Accident Rate Data within Project Limits

Post Mile	Total Number of Accidents	Actual Accident Rates (per million vehicle miles)			Average Accident Rates (per million vehicle miles)		
		F	F+I	All Reported Accidents	F	F+I	All Reported Accidents
Southbound I-405 Mainline							
39.5-40.28	142.00	0.00	1.50	1.45	0.01	0.34	1.08
Burbank Boulevard On-Ramp to Southbound I-405							
40.081	11.00	0.00	0.10	1.12	0.00	0.32	0.80
Southbound I-405 to US-101 Connector							
39.754	34.00	0.00	0.22	0.63	0.00	0.06	0.25
Northbound US-101 Connector to Southbound I-405							
17.473R	29.00	0.00	0.21	1.04	0.00	0.13	0.40
Southbound US-101 Connector to Southbound I-405							
17.251L	14.00	0.00	0.15	0.54	0.01	0.19	0.55
Northbound US-101 Mainline							
17.3-18.0	131.00	0.00	0.55	1.08	0.00	0.29	0.70
	Denotes Actual Accident Rates that exceed statewide average rates						

Source: Caltrans TASAS (Traffic Accident Surveillance and Analysis System), Table B Rates Summary
Notes: 1) F= accidents involving at least one fatality.
2) F+I = accidents involving either a fatality or injury.

According to TASAS Selective Record Data, (142) accidents occurred on the SB I-405 mainline within the project limits. From the total of (142) accidents, 55.6 percent were rear end collisions, 33.1 percent were sideswipes, 9.2 percent were object collisions and the remaining involved broadsides or overturns. The primary collision factor for 40.8 percent of all accidents was speeding, and 11.3 percent involved improper turns. The total accident rate record for the time reveals actual accident rates higher than the state average for similar facilities [1.45 accidents per million vehicle miles (MVM) compared to state averages of 1.08 accidents per MVM respectively]. Implementation of any of the project build alternatives would aid in the reduction of these accident rates, through an improvement of traffic flow through the interchange and an elimination of weaving segments.

Capacity, Transportation Demand, and Safety

Existing Access and Freeway Connector Capacity and Volume. The IBI Group has prepared a Traffic Analysis Report (2007) that analyzed (19) access and freeway connector ramps in the project area. The SB I-405 connector ramp to the NB US-101 was flagged as it currently operates at capacity, and will likely require improvements as travel demand and congestion is only expected to increase in the coming years. The existing connector is designed to carry a capacity of 1,500 vehicles per hour (veh/hr), but AM peak period volume through the connector exceeds that number at 1,792 veh/hr, and PM peak is approaching capacity at 1,374 veh/hr. If the No Build alternative is selected, volume is projected to approach 2,073 veh/hr during the AM peak, and 1,590 veh/hr during the PM peak in the year 2015. Year 2030 projections show AM peak volumes approaching 2,580 veh/hr and PM peak volumes approaching 1,979 veh/hr.

Existing Freeway Mainline – Level of Service (LOS) in the Project Area. Basic freeway segments within the study area have been analyzed using capacity and Level of Service (LOS) concepts from the Highway Capacity Manual (HCM) 2000, Chapter 23 – Basic Freeway Segments. The measure used to provide an estimate of level of service is density, where density is calculated from the average vehicle flow rate per lane and the average speed. Level of Service (LOS) thresholds for basic freeway segments are summarized in Figure 2.

Figure 3. Level of Service Thresholds for Freeways

LEVELS OF SERVICE
for Freeways

Level of Service	Flow Conditions	Operating Speed (mph)	Technical Descriptions
A		70	Highest quality of service. Traffic flows freely with little or no restrictions on speed or maneuverability. **No delays**
B		70	Traffic is stable and flows freely. The ability to maneuver in traffic is only slightly restricted. **No delays**
C		67	Few restrictions on speed. Freedom to maneuver is restricted. Drivers must be more careful making lane changes. **Minimal delays**
D		62	Speeds decline slightly and density increases. Freedom to maneuver is noticeably limited. **Minimal delays**
E		53	Vehicles are closely spaced, with little room to maneuver. Driver comfort is poor. **Significant delays**
F		<53	Very congested traffic with traffic jams, especially in areas where vehicles have to merge. **Considerable delays**

Source: Highway Capacity Manual (HCM) 2000, Chapter 23 – Basic Freeway Segments

Table 2. Level of Service and Density

LOS	Density Range (pc/mi/ln)
A	0-11
B	>11-18
C	>18-26
D	>26-35
E	>35-45
F	>45

Source: Highway Capacity Manual (HCM) 2000, Chapter 23 – Basic Freeway Segments
Pc/mi/ln = passenger cars per mile, per lane

Failure, breakdown, congestion, and LOS F occur when queues begin to form on the freeway. Density—expressed as pc/mi/ln, or passenger cars per mile, per lane—tends to increase sharply within the queue and may be considerably higher than the maximum density value listed above. The results of study area freeway mainline facilities are summarized in Tables, 3, 4, and 5.

Table 3. Southbound I-405 Mainline LOS and Density

Segment Description	Segment Type	Lanes	AM Peak		PM Peak	
			Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
North of Victory Blvd	Basic	5	32.3	D	31.0	D
From Victory to Burbank Blvd	Basic	5	35.1	E	33.4	D
Burbank Blvd Overcrossing	Basic	5	34.4	D	31.5	D
South of US-101 connector	Basic	4	55.7	F	51.0	F
Below US-101 facility	Basic	4	71.6	F	66.5	F

Note: Level of Service (LOS) based on HCM 2000 analysis methodology.
Pc/mi/ln = passenger cars per mile per lane

Table 4. Northbound US-101 Mainline LOS and Density

Segment Description	Segment Type	Lanes	AM Peak		PM Peak	
			Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
Van Nuys Blvd under-crossing	Basic	5	50.5	F	52.7	F
Van Nuys Blvd to Sepulveda Blvd	Basic	6	47.6	F	50.2	F
Sepulveda Blvd to NB-405 connector	Basic	5	57.2	F	60.3	F
Northbound US-101	Basic	4	74.9	F	79.0	F
NB-101 over I-405 freeway structure	Basic	6	56.3	F	59.4	F
Between Haskell Ave off-ramp and on-ramp	Basic	6	53.4	F	62.0	F
Haskell Ave to Hayvenhurst Ave	Basic	6	43.6	E	50.6	F
Hayvenhurst Ave to Balboa Blvd	Basic	5	47.9	F	57.3	F
Balboa Blvd under-crossing	Basic	5	47.9	F	57.3	F
North of Balboa Blvd	Basic	5	53.0	F	62.7	F

Note: Level of Service (LOS) based on HCM 2000 analysis methodology.
Pc/mi/ln = passenger cars per mile per lane

Table 5. Southbound US-101 Mainline LOS and Density

Segment Description	Segment Type	Lanes	AM Peak		PM Peak	
			Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
Balboa Blvd under-crossing	Basic	5	55.3	F	54.4	F
Balboa Blvd to Hayvenhurst Ave	Basic	5	64.4	F	63.0	F
Hayvenhurst Ave to Haskell Ave	Basic	6	51.1	F	50.9	F
Southbound US-101	Basic	6	51.1	F	50.9	F
SB-101 over I-405 freeway structure	Basic	4	54.6	F	60.9	F
SB-101 over Sepulveda Blvd	Basic	7	48.1	F	38.5	E
Auxiliary lane segment	Basic	7	43.3	E	36.1	E
Sepulveda Blvd to Van Nuys Blvd	Basic	6	50.5	F	42.1	E

Note: Level of Service (LOS) based on HCM 2000 analysis methodology.
Pc/mi/ln = passenger cars per mile per lane

For a more in-depth discussion of traffic data within the project study area, please reference Section 2.1.6, entitled "Traffic and Transportation/Pedestrian and Bicycle Facilities."

1.2.3 SOCIAL DEMANDS AND ECONOMIC DEVELOPMENT

Improvements in the transportation infrastructure at the I-405/ US-101 interchange will support continued economic vitality in the surrounding communities by improving conditions for the movement of people and goods. The project will also enhance public safety and security through the improvement of driving conditions with a complementary reduction in accidents, and will also enhance environmental conditions through an improvement of traffic flow (see Section 2.1.5) and a reduction of auto emissions (see Section 2.2.5). Overall, the project is anticipated to improve mobility and accessibility to one of the world's most congested interchanges, and serve as a benefit to the surrounding communities and future land use goals.

The Project Within the Context of the Transportation System, Existing Land Use Planning, and Regional Growth. The City of Los Angeles Department of City Planning has developed the Transportation Element of the general plan in conjunction with the 35 communities that make up the city planning area. The purpose of the transportation element is to present a guide for further development of a citywide transportation system which provides for the efficient movement of people and goods (City of Los Angeles 2007f). It also recognizes that primary emphasis must be placed on maximizing the efficiency of existing and proposed transportation infrastructure, in which the SB I-405 to US-101 Connector Improvement Project is completely consistent with.

Accommodation of future growth is also a high priority for the City of Los Angeles (growth projections are referenced later in the Growth section of this document). While accommodating future residential growth is a high priority, ensuring quality of life in vibrant and livable neighborhoods is just as important. Improving mainline flows at the I-405/US-101 interchange will surely assist in reducing the excessive amount of traffic spill onto city streets and districts, and aid in achieving city goals in improving circulation in the surrounding neighborhoods; creating safer, pedestrian-oriented environments; and accommodating new growth.

In California, transportation projects are rarely designed to encourage or facilitate growth, rather, most Caltrans capacity-increasing projects are proposed as a response to traffic congestion that is a result of growth that has already occurred or will soon occur. Because of the highly urbanized setting in the project location, and a predominantly built-out environment, this project does not have the potential to adversely induce growth beyond existing regional growth projections. For a more in-depth discussion of growth, please reference Section 2.1.2 of this document, entitled "Growth."

Projected Land Use Planning Changes in the Area. The project study area is primarily a built-out environment with limited possibilities in land use zoning changes and little room for geometrical improvements at or near the proposed connector improvement location. But, depending on which project alternative is selected, geometrical improvements may require the full and/or partial acquisition of property. For a more in depth discussion on land use planning within the project study area, please reference Section 2.1.1 of this document, entitled "Land Use and Planning."

1.2.4 IS THE PROPOSED PROJECT A COMPONENT OF A LARGER PROJECT?

No. The proposed project is a stand-alone project intended to improve the safety, operation, capacity, and flow of **southbound I-405** traffic through the interchange. This project is independent of other Caltrans projects on the I-405 and its Need and Purpose cannot be fulfilled by any other Caltrans project. Furthermore, the proposed project is in no way dependent on whether other Caltrans projects on the I-405 are implemented prior or subsequent to the implementation of this project. The proposed project begins on the southbound I-405 just north of Burbank Boulevard, and ends at the U.S.-101. This environmental document studies the entire project area, and is in no way dependent on the environmental document or mitigation proposals of any other project.

Other Caltrans Improvement Projects on Interstate-405

EA 19590 | Southbound Interstate 405 Carpool Lane
Mile Marker: 29.2/32.1
From I-10/I-405 Interchange to Waterford Street
Add auxiliary lane, add carpool lane
Construction: 4/2005-9/2008

EA 1667U | Southbound Interstate 405 Carpool Lane
Mile Marker: 31.9/39.7
From Waterford Street to I-405/US-101 Interchange
Construct southbound carpool lane
Construction completed

EA 19100 | Northbound Interstate 405 Auxiliary Lane
Mile Marker 37.0/39.0
Add auxiliary lane from Mulholland Drive
Construction completed

EA 20120 | Northbound Interstate 405 Gap Closure
Mile Marker : 38.7/39.4
Carpool gap closure with structure
Construction: 3/2005-8/2008

EA 19130 | Northbound Interstate 405 to Southbound US Route 101 Widening
Mile Marker: 39.0/39.4
Widen northbound I-405 to southbound US-101 connector
Construction completed

EA 19962 | Northbound Interstate 405 Carpool Lane
Mile Marker: 38.8/40.1
Construct carpool lane from Greenleaf to Burbank Boulevard
Construction completed

EA 12030 | Northbound Interstate 405 Carpool Lane
Mile Marker: 17.14
Construct carpool lane from National Boulevard to Greenleaf Street
Construction: 12/2008-4/2013

EA 1178U | Southbound & Northbound Interstate 405 Carpool Lane
Mile Marker: 25.9/29.5
Construct carpool lane from Route 90 to Interstate 10
Construction: 10/2004-3/2010

1.3 THE PROPOSED PROJECT: PROJECT DESCRIPTION

Within the limits of the proposed project, the SB I-405 freeway consists of one High-Occupancy Vehicle lane (HOV), four mixed-flow lanes (MFL), one auxiliary lane from Burbank Blvd to the US-101 connector and the Burbank Blvd on-ramp. There is approximately 1500 feet of weaving area between the Burbank Blvd. on-ramp and the US-101 connector to allow drivers to merge from SB I-405 to the US-101 connectors and from Burbank Blvd on-ramp to the SB I-405 mainline freeway. This is a major bottleneck as previously discussed. The purpose of the project is to upgrade the SB I-405 connector to the NB US-101 freeway to current design standards to improve safety and correct operational problems incurred as a result of the traffic queues formed by slow moving vehicles and a curve with an operational speed of 20 miles-per-hour.

As previously mentioned, the Department has considered nine (9) alternatives. Currently, five (4) alternatives remain under consideration, including the No-Build Alternative. The other five (5) alternatives have been rejected. This section will elaborate on that discussion.

1.3.1 THE CURRENT FOUR (4) ALTERNATIVES THAT REMAIN UNDER CONSIDERATION

This section describes the design alternatives that were developed by a multi-disciplinary team to achieve the project purpose and need while avoiding or minimizing environmental impacts. There are four viable alternatives proposed for this project consisting of the No-Build Alternative and Alternative 1 through 3. Also, listed in this section are five alternatives that were analyzed and rejected, Alternative A through E.

The three “Build” Alternatives (1, 2 & 3) that are under consideration will be discussed further in this section. They each share the following common features:

- Replacing the existing 20 mph single-lane connector from the SB I-405 to the NB U.S.-101 with a new 50 mph two-lane connector bridge that encroaches upon and spans over the spillway of the Sepulveda Dam
- Eliminating the existing erratic and conflicting traffic weaving patterns between the Burbank Blvd on-ramp and the SB I-405 mainline as well as the traffic weaving patterns with SB I-405 mainline traffic attempting to access the US-101 connectors
- Realignment and reconstruction of the Burbank Boulevard on-ramp to the SB I-405 and/or the US-101
- Realignment and reconstruction of the current U.S. Army Corps of Engineers service road (northwest side of the interchange) for the operation and maintenance of the Sepulveda Dam
- Each poses an adverse impact to the historic Sepulveda Dam, which is a Section 4(f) resource.

After the public circulation period, all comments will be considered, and the Department will select a preferred alternative and make the final determination of the project’s effect on the environment. In accordance with the California Environmental Quality Act, if no unmitigable significant adverse impacts are identified, the Department will prepare a Negative Declaration (ND) or Mitigated ND. Similarly, if the Department determines the action does not significantly impact the environment, the Department, as assigned by the Federal Highway Administration, will issue a Finding of No Significant Impact (FONSI) in accordance with the National Environmental Policy Act (NEPA).

THE "NO-BUILD" ALTERNATIVE

The "No Build" or "Do Nothing" alternative calls for the existing connector, from the SB I-405 to the NB U.S.-101, to remain as is. The No-Build alternative would do nothing to improve the present day, or projected congestion and congestion related problems, thereby leading to a progressive deterioration of the issues identified in the Need and Purpose of this project. Therefore, the Need and Purpose of this project would remain unaddressed and its objectives unrealized.

ALTERNATIVE 1

This alternative calls for a new, elevated, connector bridge structure that spans over the spillway of the Sepulveda Dam, from the SB I-405 to the NB U.S.-101. It will eliminate the sharp turn radius curve of the existing connector, thereby accomplishing the project's Need and Purpose.

However, the Burbank Boulevard on-ramp to the SB I-405 would need to be reconstructed to pass beneath the new connector structure. Furthermore, to implement this new Burbank Boulevard on-ramp structure, both of the existing connectors from the SB I-405 to the U.S.-101 would need to be removed, therefore, traffic from Burbank Boulevard would lose access to both directions of the U.S.-101.

Additionally, with both of the existing connectors from the SB I-405 to the U.S.-101 requiring removal, this alternative will also require the construction of a new connector from the SB I-405 to the SB U.S.-101, in order to maintain that particular access.

PROS/CONS Summary
These are the pros of Alternative 1:

- Of the "Build" alternatives, this proposal has the smallest impact footprint
- This alternative requires no residential right-of-way acquisition
- This alternative requires no encroachment onto the Sepulveda Basin Wildlife Refuge within the Sepulveda Flood Control Basin

These are the cons of Alternative 1:

- Loss of access from Burbank Boulevard to the U.S.-101
- Due to the said loss of access, this alternative increases the traffic congestion to the immediately adjacent City of Los Angeles streets and intersections
- For this reason, the City of Los Angeles Department of Transportation is opposed to this alternative

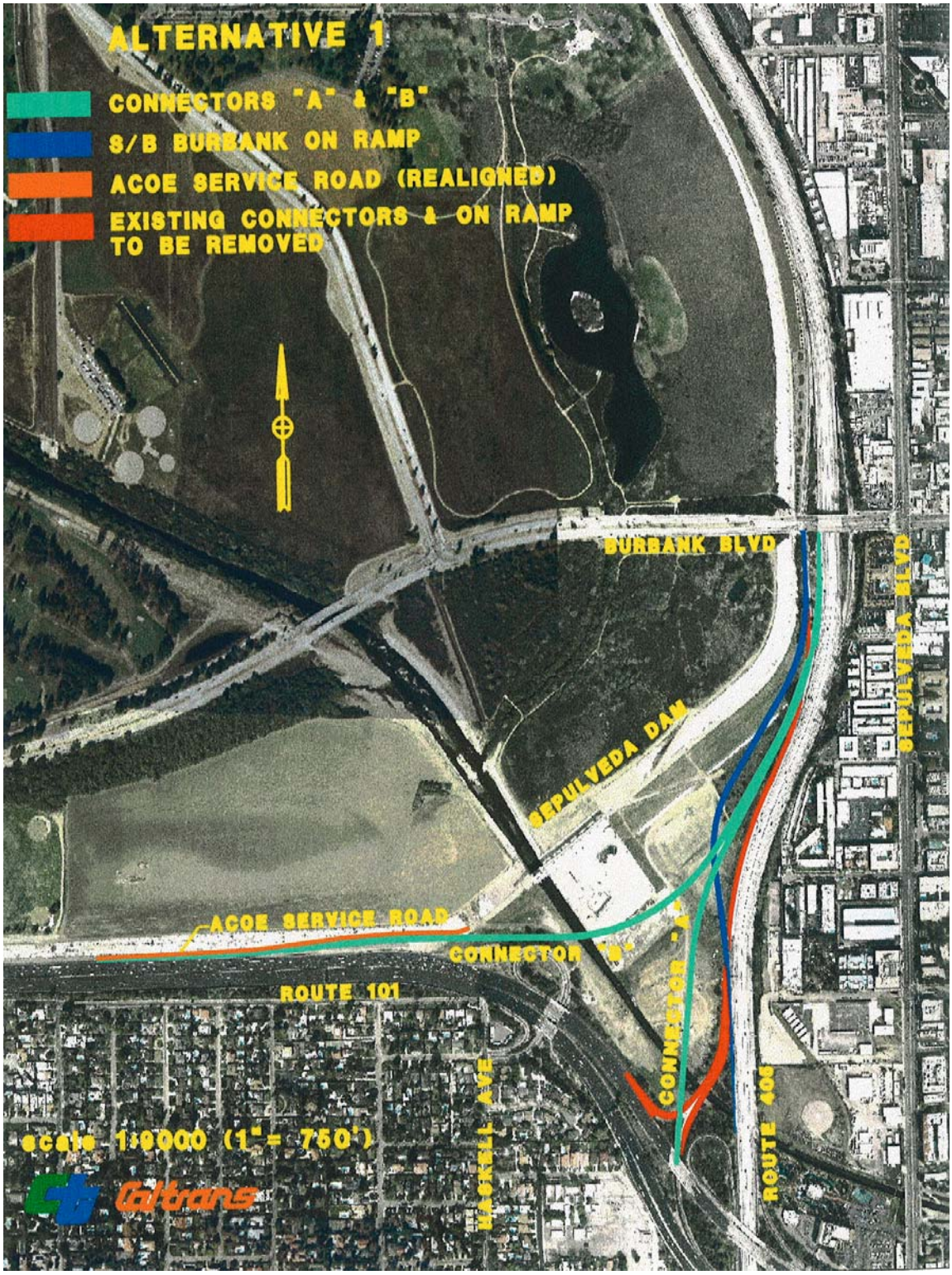
Project Alternative Cost Estimates:
These are the estimates for costs associated with this alternative only, which are subject to change and revision:

- Roadway Items: $34,900,000.
- Structure Items: $46,300,000.
- Right-of-Way Cost: $200,000.
- Mitigation Cost: $5,000,000.

Size and Location of Impact Area/Volume:
This alternative will occupy approximately 4.93 acres of the spillway outlet area, and 0.45 acres of permanent footing easement, in addition to approximately 1.07 acres of the upstream dam embankment, 0.59 acres of fill, and 49,014 ft^3 of the dam reservoir. The dam reservoir will be affected only on the south end of the Sepulveda Dam. The length and width of the structure on the dam will be 550 and 41 feet, respectively.

Delay Cost Analysis for the No-Build Condition (2015) versus Alternative 1:
A delay cost analysis has been performed by the Division of Operations for the No-Build Condition in the year 2015 and the selection and construction of Alternative 1. By 2015 and based on the foregoing discussion, the annual savings in travel delay cost associated with Alternative 1 over the No-Build Condition is anticipated to be approximately $38.3 million/year. It is obvious from this analysis that Alternative 1 provides the highest travel delay savings over the other alternatives.

Figure 4. Alternative 1 Aerial Map



ALTERNATIVE 2

Like Alternative 1, this alternative calls for a new, elevated, connector bridge structure that spans over the spillway of the Sepulveda Dam, from the SB I-405 to the NB U.S.-101.

However unlike Alternative 1, this alternative maintains access from Burbank Boulevard to the U.S.-101 via the construction of a constricted loop on-ramp, which encroaches onto the Sepulveda Basin Wildlife Refuge (within the flood control basin) located immediately north of Burbank Boulevard, immediately west of the I-405. Since the loop design is constricted to minimize the encroachment onto the Sepulveda Basin Wildlife Refuge, in order to properly implement the on-ramp loop, a reconstruction of the Burbank Boulevard/I-405 over-crossing bridge would be required. This would result in an additional increase in temporary construction-related traffic congestion.

Also unlike Alternative 1, since the new Burbank Boulevard loop onramp (which also provides access to the SB I-405) encroaches upon the Sepulveda Basin Wildlife Refuge rather than on the existing connectors, this alternative does not require the removal of the existing connector from the SB I-405 to the SB U.S.-101. In other words, unlike Alternative 1, this alternative does not carry the added burden of having to construct a new connector from the SB I-405 to the SB U.S.-101.

PROS/CONS Summary
These are the pros of Alternative 2:

- This alternative retains access from Burbank Boulevard to the U.S.-101
- This alternative requires no residential right-of-way acquisition
- Due to the constricted loop on-ramp, the encroachment onto the Sepulveda Basin Wildlife refuge is minimized to the maximum extent

These are the cons of Alternative 2:

- This alternative requires an encroachment onto the Sepulveda Basin Wildlife Refuge. For this reason, many environmental groups and the U.S. Army Corps of Engineers are opposed to this alternative
- Due to the constricted loop on-ramp, a reconstruction of the existing Burbank Boulevard/I-405 over-crossing bridge would be required, resulting in an increase in temporary construction related traffic congestion

Project Alternative Cost Estimates:
There are the estimates for costs associated with this alternative only, which are subject to change and revision:

- Roadway Items: $42,700,000.
- Structure Items: $69,100,000.
- Right-of-Way Cost: $200,000.
- Mitigation Cost: $5,000,000.

Size and Location of Impact Area/Volume:
This alternative will occupy approximately 0.28 Acres of the spillway outlet area, 1.07 acres of the upstream dam embankment, in addition, 0.79 acres of footing easement, 0.59 acres of fill, 0.16 acres of the downstream embankment into the basin north of Burbank Boulevard, and 76,950 ft^3 of the dam reservoir. The south end (49,014 ft^3) and northeast section (27,936 ft^3) of the Sepulveda Dam would be affected. Length and width of the structure on the dam will be 550 and 41 feet, respectively. 2.64 acres of the 225 total acreage (**1.17%**) of the Sepulveda Dam Wildlife Refuge will be encroached upon by new connector structures.

Delay Cost Analysis for the No-Build Condition (2015) versus Alternative 2:
A delay cost analysis has been performed by the Division of Operations for the No-Build Condition in the year 2015 and the selection and construction of Alternative 2. By 2015 and based on the foregoing discussion, the annual savings in travel delay cost associated with Alternative 2 over the No-Build Condition is anticipated to be approximately $29.4 million/year. While Alternative 1 provides the highest travel delay savings over all other alternatives, Alternative 2 would provide a better operational level for the freeway system in the vicinity of the project and would still lead to a substantial amount in travel delay savings.

Figure 5. Alternative 2 Aerial Map

ALTERNATIVE 3

Alternative 3 is identical to Alternative 2, except that this alternative seeks to eliminate the need for a reconstruction of the existing Burbank Boulevard/I-405 over-crossing. To accomplish this, a non-constricted on-ramp loop would need to be implemented, thereby encroaching an additional 15m (50ft) onto the Sepulveda Basin Wildlife Refuge (within the flood control basin).

PROS/CONS Summary
These are the pros of Alternative 3:

- This alternative retains access from Burbank Boulevard to the U.S.-101.
- This alternative requires no residential right-of-way acquisition.
- Unlike Alternative 2, this alternative does not require a reconstruction of the Burbank Boulevard/I-405 over-crossing.

These are the cons of Alternative 3:

- Unlike Alternative 2, this alternative requires an additional 50ft encroachment onto the Sepulveda Basin Wildlife Refuge. And like Alternative 2, many environmental groups and the U.S. Army Corps of Engineers are opposed to this alternative.

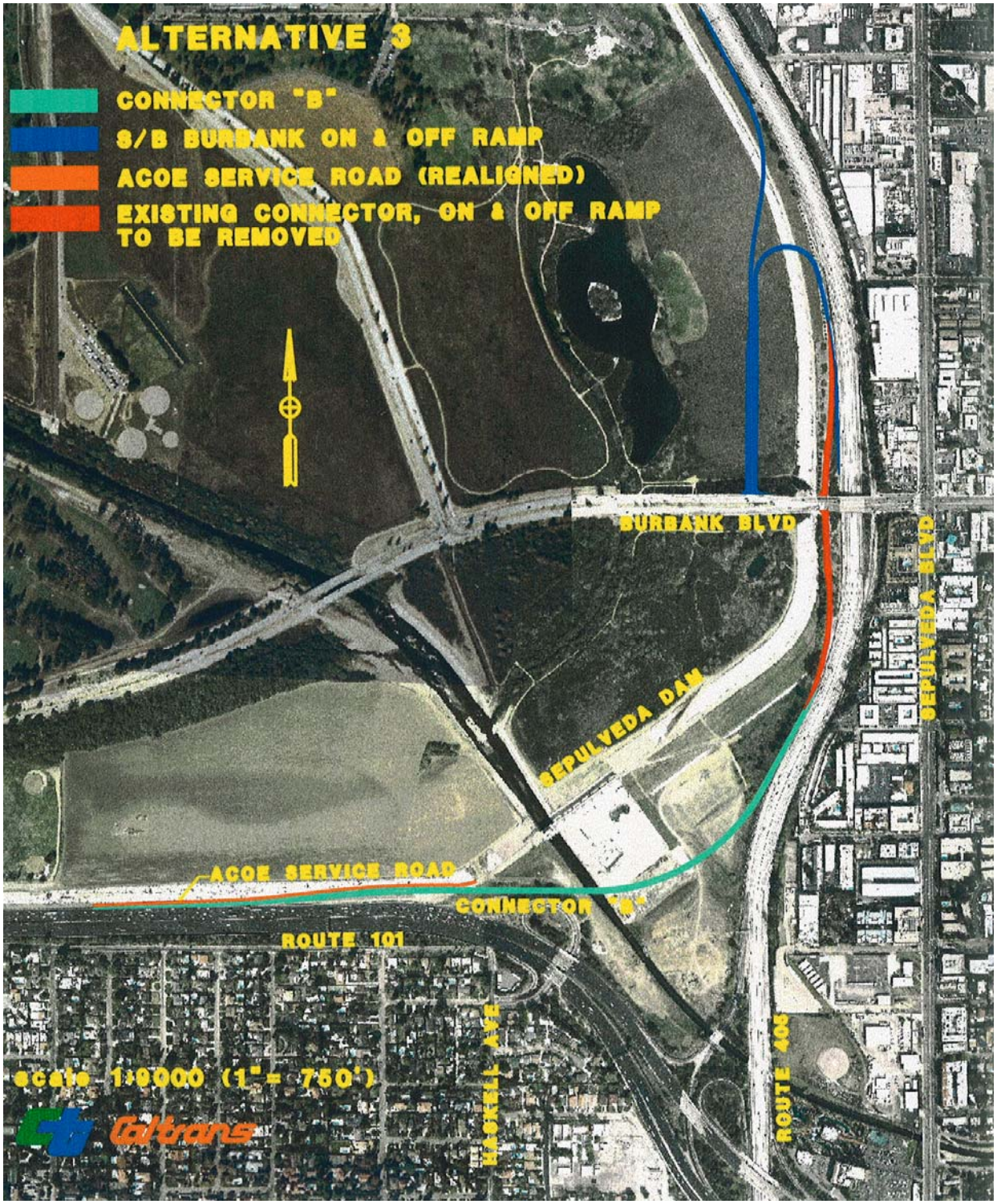
Project Alternative Cost Estimates:
These are the estimates for Right-of-Way costs associated with this alternative only, which are subject to change and revision:

- Roadway Items: $26,400,000.
- Structure Items: $57,300,000.
- Right-of-Way Cost: $100,000.
- Mitigation Cost: $5,000,000.

Size and Location of Impact Area/Volume:
This alternative will occupy approximately 0.25 acres of the spillway outlet area, and 1.07 acres of the upstream dam embankment, 76,950 ft^3 of the dam reservoir, in addition to 0.80 acres of footing easement, 0.59 acres of fill, and 1.90 acres of the downstream embankment into the basin north of Burbank Boulevard. The south end (49,014 ft^3) and northeast section (27,936 ft^3) of the Sepulveda Dam would be affected. The length and width of the structure on the dam will be 550 and 41 feet, respectively. 2.92 acres of the 225 total acreage (**1.30%**) of the Sepulveda Dam Wildlife Refuge would be encroached upon by new connector structures.

Delay Cost Analysis for the No-Build Condition (2015) versus Alternative 3:
A delay cost analysis has been performed by the Division of Operations for the No-Build Condition in the year 2015 and the selection and construction of Alternative 3. By 2015 and based on the foregoing discussion, the annual savings in travel delay cost associated with Alternative 3 over the No-Build Condition is anticipated to be approximately $28.4 million/year. While Alternative 1 provides the highest travel delay savings over all other alternatives, Alternative 3—which calls for the reconstruction of the Burbank Boulevard ramps with full standard features—would represent the best operational improvement to the interchange. Please reference section 2.1.6 for the supporting traffic data.

Figure 6. Alternative 3 Aerial Map



1.3.2 THE FIVE (5) PREVIOUSLY REJECTED ALTERNATIVES

ALTERNATIVE 4: RECENTLY REJECTED

This alternative was only recently rejected and is similar to Alternative 1, except it sought to completely **avoid** the impacts posed by Alternative 1, as well as, the impacts posed by Alternatives 2 and 3. Unlike Alternative 1, this alternative would have retained access from Burbank Boulevard to the U.S.-101 by allowing traffic to use a new on-ramp to the SB I-405 (as required by Alternative 1) to access the U.S.-101 via the existing connectors from the SB I-405 to the U.S.-101 (rather than removing these connectors as is required by Alternative 1). This would have been accomplished by constructing the said new Burbank Boulevard on-ramp to the SB I-405 so that it also connects with the existing connectors at its terminus (unlike Alternative 1).

Since this alternative would have retained access to the U.S.-101 from Burbank Boulevard, it would not require an encroachment upon the Sepulveda Basin Wildlife Refuge (as is required by Alternatives 2 and 3). **However**, the consequence of not closing and removing the existing connectors (as required by Alternative 1) is that this alternative would not only require the construction a new connector from the SB I-405 to the SB U.S.-101, but also face the added challenge/burden of having to "go around" the existing connectors, and therefore, would have to be more than five times as long as the same connector required per Alternative 1. Consequently, this would have required (3) full and (10) partial right-of-way acquisitions of residential property on the southeast side of the interchange.

PROS/CONS Summary
These are the pros of Alternative 4:

- This alternative retains access from Burbank Boulevard to the U.S.-101.
- This alternative does not require an encroachment upon the Sepulveda Basin Wildlife Refuge.
- Prior to its elimination, this alternative was highly favored because: a) Unlike Alternative 1, Alternative 4 would have maintained access to the U.S.-101 from Burbank Boulevard, and thereby would have avoided adverse impacts to the adjacent City streets, and b) Unlike Alternatives 2 and 3, Alternative 4 would have required the improvement of BOTH SB I-405 Connectors to the U.S.-101.

These are the cons of Alternative 4:

- Prior to its elimination, this alternative had the largest impact footprint of the four "Build" alternatives.
- This alternative would have posed a residential right-of-way impact to residents of the City of Los Angeles who reside on the southeast side of the interchange.
- The City of Los Angeles Department of Transportation is opposed to this alternative.
- This alternative would have provided the least amount of travel delay savings.

Project Alternative Cost Estimates:
These are the estimates for Right-of-Way costs associated with this alternative only, which are subject to change and revision:

- Roadway Items: $56,235,672.
- Structure Items: $83,834,200.
- Right-of-Way Cost: $5,747,200.
- Mitigation Cost: $5,000,000.

Size and Location of Impact Area/Volume:
This alternative will occupy approximately 5.04 acres of the spillway outlet area, 0.45 acres of permanent footing easement and 0.59 acres of fill, in addition to 0.98 acres of the upstream dam embankment, and 49,014 ft^3 of the dam reservoir. The dam reservoir will be affected only on the south end of the Sepulveda Dam. Length and width of the structure on the dam will be 550 and 41 feet, respectively.

Delay Cost Analysis for the No-Build Condition (2015) versus Alternative 4:
A delay cost analysis was performed by the Division of Operations for the No-Build Condition in the year 2015 and the selection and construction of Alternative 4. By 2015 and based on the foregoing discussion, the annual savings in travel delay cost associated with Alternative 4 over the No-Build Condition is anticipated to be approximately $20 million/year.

Basis for Rejection:
Alternative 4 was rejected on the basis of its incompatibility with the project's Need and Purpose, because it provided the least amount of travel delay savings, and because it had the largest impact footprint of the "Build" Alternatives.

Figure 7. Rejected Alternative

ALTERNATIVE A

Alternative A was considered during the Project Initiation Phase. This alternative, which is similar to Alternative 4, was withdrawn from further consideration due to the use of slip ramps, which would connect the new Burbank Boulevard on-ramp to the U.S.-101 via slip ramps connections to the new connectors (thereby retaining access unlike Alternative 1).

As previously discussed, slip ramps are not in conformity with Federal Highway Administration (FHWA) design standards. FHWA has already once denied Caltrans' request for a slip ramp design exemption.

FHWA states that: 1) Local connections within interchanges – especially on freeway-to-freeway ramps – violate driver expectancy and introduce additional decision points in an area where the information processing task is already complex. They also create a high potential for traffic queuing back onto the through freeway lanes (which defeats the Need and Purpose of this project). In addition, such ramps seldom provide for full directional services, thus creating the possibility of wrong-way movements by drivers who wish to return or continue in the same direction. 2) It is poor public policy as well as poor engineering practice to allow additional access to existing freeway ramps. 3) FHWA does not support any type of slip ramp.

Additionally, Section 502.3 of the Highway Design Manual (HDM) states that "local traffic service interchanges should not be located within freeway-to-freeway interchanges unless geometric standards and level of service will be substantially maintained."

Therefore, since Alternative A calls for slip ramps to connect to the NEW connectors, per FHWA, this will create a high potential for traffic queuing back onto the through freeway lanes. For this reason, Alternative A defeats the purpose of the project's "Need and Purpose". Hence, Alternative A was rejected on the basis of its incompatibility with the project's Need and Purpose.

Project Alternative Cost Estimates:
These are the estimates for Right-of-Way costs associated with this alternative only, which are subject to change and revision:

- Roadway Items: $44,169,213
- Structure Items: $48,279,800.
- Right-of-Way Cost: $68,008,337.
- Mitigation Cost: $5,000,000.

Figure 8. Rejected Alternative A Aerial Map

ALTERNATIVE B

This alternative was proposed by the City of Los Angeles during the Scoping phase of this project back in 2006. The City was seeking to achieve the objectives of Alternative 1 and 4, minus the impacts of each. Alternative B is essentially a hybrid between Alternative 1 and Alternative 4, minus the loss of access to the U.S.-101 from Burbank Boulevard, and minus the residential right-of-way acquisition impacts to the southeast side of the interchange.

Unfortunately, the proposal has been deemed fatally flawed. Like Alternative 4, Alternative B calls for the existing connectors to remain as is. However the City of Los Angeles overlooked that the consequence of not closing and removing the existing connectors (as required by Alternative 1) is that this alternative (like Alternative 4) would also require the construction of a new connector from the SB I-405 to the SB U.S.-101.

The new connector, however, would not be able to meet grade and vertical clearance standards. It is not feasible for the new connector "A" to pass over the Burbank Boulevard on-ramp to the NB US-101, and then under the NB US-101 mainline to tie in to the SB US-101 mainline.

Project Alternative Cost Estimates:
These are the estimates for Right-of-Way costs associated with this alternative only, which are subject to change and revision:

- Roadway Items: $41,960,752.
- Structure Items: $45,865,810.
- Right-of-Way Cost: $791,829,108.
- Mitigation Cost: $5,000,000.

Figure 9. Rejected Alternative B Aerial Map

ALTERNATIVE C

This alternative avoids ALL encroachment upon land owned and operated by the U.S. Army Corps of Engineers (i.e. Sepulveda Dam), as well as the floodplain and Section 4(f) resources on that land. Unlike Alternatives 1, 2, 3, 4, A, and B, this Alternative does NOT call for a new connector bridge from the SB I-405 to the NB U.S.-101 that encroaches upon and spans over the spillway of the Sepulveda Dam.

Instead, Alternative C calls for the complete relocation of the improved SB I-405/U.S.-101 connectors to the northeast, southeast, and southwest of the existing connectors, thereby completely avoiding any encroachment upon the northwest side of the interchange, where the U.S. Army Corps of Engineers land is located.

This non-conventional configuration requires that both new connectors “connect” to the U.S.-101 from the south side, and would consequently pose right-of-way acquisition impacts to the northeast, southeast, and southwest corners of the interchange. Right-of-way acquisitions for this alternative involve (329) total properties.

Compared to Alternatives 1, 2, 3, 4, A and B, Alternative C poses:

- The largest project impact footprint.
- The largest and most disproportionate right-of-way acquisition impact requirements.
- The most adverse temporary and permanent community disruption impacts.

When compared to Alternatives 1, 2, 3, 4, A and B, the undesirable geometrics and the impacts posed by Alternative C are of extraordinary magnitude, but yet avoidable by simply eliminating Alternative C from further consideration. Therefore, the Department has concluded that continuing to pursue Alternative C as a viable option is not reasonable, nor prudent.

Per the Council on Environmental Quality (CEQ), as part of its oversight of implementation of NEPA, CEQ Regulations 40 CFR Sec. 1502.14 requires that all reasonable alternatives be examined. In **determining the scope of alternatives to be considered**, the emphasis is on what is "reasonable". The Department has concluded that Alternative C is not a reasonable alternative, and therefore, not fit for further consideration.

Project Alternative Cost Estimates:
These are the estimates for Right-of-Way costs associated with this alternative only, which are subject to change and revision:

- Roadway Items: $128,881,234
- Structure Items: $214,895,731.
- Right-of-Way Cost: $791,829,108.
- Mitigation Cost: $5,000,000.

Figure 10. Rejected Alternative C Aerial Map

ALTERNATIVE D

This alternative also avoids ALL encroachment upon land owned and operated by the U.S. Army Corps of Engineers (i.e. Sepulveda Dam), as well as the floodplain and Section 4(f) resources on that land. Unlike Alternatives 1, 2, 3, 4, A, and B, this Alternative does NOT call for a new connector bridge from the SB I-405 to the NB U.S.-101 that encroaches upon and spans over the spillway of the Sepulveda Dam.

Instead, Alternative D calls for a complete relocation of the new SB I-405/NB U.S.-101 connector toward the far northwest, completely "going around and behind" U.S. Army Corps of Engineers land. This configuration requires no alteration of the existing SB I-405/NB U.S.-101 connector, and therefore, it would remain as is.

The new SB I-405/NB U.S.-101 connector would originate from the SB I-405, just south of Saticoy Street, and would connect to the NB U.S.-101 just east of Tampa Avenue, via a 5.2-mile long fly over connector bridge structure. Consequently, this alternative would require (2422) full right-of-way property acquisitions. The Sepulveda Basin Wildlife Refuge would not be impacted, nor any other part of the Sepulveda Flood Control Basin.

Compared to Alternatives 1, 2, 3, 4, A, B and C, Alternative D poses:

- By far, the largest project impact footprint of ALL alternatives.
- The largest and most disproportionate right-of-way acquisition impact requirements.
- The most adverse temporary and permanent community disruption impacts.

When compared to Alternatives 1, 2, 3, 4, A, B and C, the impacts posed by Alternative D are of extraordinary magnitude, but yet avoidable by simply eliminating Alternative D from further consideration. Therefore, the Department has concluded that continuing to pursue Alternative D as a viable option is not reasonable, nor prudent.

Per the Council on Environmental Quality (CEQ), as part of its oversight of implementation of NEPA, CEQ Regulations 40 CFR Sec. 1502.14 requires that all reasonable alternatives be examined. In **determining the scope of alternatives to be considered**, the emphasis is on what is "reasonable". The Department has concluded that Alternative D is not a reasonable alternative, and therefore, not fit for further consideration.

Per Section 4(f) of the Department of Transportation Act of 1966, the Department has deemed Alternative C as neither a feasible (due to its prohibitively high costs) nor a prudent (due to the severity of its community disruption impacts) alternative to the "Build" Alternatives 1, 2, 3, or 4, which require adverse impacts to Section 4(f) resources.

Right-of-Way Cost Estimates:
These are the estimates for Right-of-Way costs associated with this alternative only, which are subject to change and revision:

- Roadway Items: $67,314,401.
- Structure Items: $329,982,051.
- Right-of-Way Cost: $3,360,600,304.
- Mitigation Cost: $5,000,000.

Figure 11. Rejected Alternative D Aerial Map

1.4 TSM, TDM, AND MASS TRANSIT

Transportation System Management (TSM) and Transportation Demand Management (TDM) alternatives are usually only relevant in urban areas over 200,000 population. A Mass Transit Alternative is considered on all proposed major highway projects in urban areas over 200,000 population.

TSM strategies consist of actions that increase the efficiency of existing facilities; they are actions that increase the number of vehicle trips a facility can carry without increasing the number of through lanes. Examples of TSM strategies include: ramp metering, auxiliary lanes, turning lanes, reversible lanes and traffic signal coordination. TSM also encourages automobile, public and private transit, ridesharing programs, and bicycle and pedestrian improvements as elements of a unified urban transportation system.

Modal alternatives integrate multiple forms of transportation modes, such as pedestrian, bicycle, automobile, rail, and transit.

TDM focuses on regional strategies for reducing the number of vehicle trips and vehicle miles traveled as well as increasing vehicle occupancy. It facilitates higher vehicle occupancy or reduces traffic congestion by expanding the traveler's transportation choice in terms of travel method, travel time, travel route, travel costs, and the quality and convenience of the travel experience. Typical activity within this component is providing contract funds to regional agencies that are actively promoting ridesharing, maintaining rideshare databases and providing limited rideshare services to employers and individuals.

At first glance, TSM, TDM, and modal alternatives (including rail and transit) may seem like reasonable and attractive strategies/alternatives for such a congested interchange. However, such strategies are outside the scope of this particular project for the following reasons:

1) Those strategies do not meet the proposed project's Need and Purpose, specifically, the safety component. The Department seeks to remove the tight, non-standard radius of the existing connector from the SB I-405 to the NB U.S.-101. Currently, the accident rate at the project location exceeds the state average.
2) The proposed project size (just north of Burbank Boulevard to the U.S.-101) and focus is too small for any meaningful implementation and integration of TSM, TDM, and modal alternatives.
3) TSM, TDM, and modal alternatives would best serve as stand alone projects to be implemented not only at the interchange, but along both the entire I-405 and U.S.-101 corridors. The political will and funding must be adequate to allow Caltrans to successfully pursue and implement an endeavor of such a magnitude.

1.5 PERMITS AND APPROVALS NEEDED

The following approvals and permits would be required for project implementation:

Approvals
The Department and the Federal Highway Administration (FHWA) would require permission from U.S. Army Corps of Engineers (USACE) to encroach upon land related to the operation of the Sepulveda Dam and Flood Control Basin.

Anticipated/Potential Permitting Requirements

- Section 404 of the Clean Water Act: Nationwide or Individual Permit (depending on which alternative is selected) from the USACE
- Section 401 of the Clean Water Act: Water Quality Certification from the Regional Water Quality Control Board (RWQCB)
- Fish and Game Code 1602: Streambed Alteration Agreement from the California Department of Fish and Game (CDFG).
- California Endangered Species Act (CESA) mandates that State agencies should not approve project that would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. A current species list obtained from CDFG's California Natural Diversity Database (CNDDB) shows an occurrence of State listed least Bell's vireo (*Vireo bellii pusillus*) within the project area. For projects that affect both a state and federal listed species, compliance with the Federal Endangered Species Act (FESA) will satisfy CESA if the Department of Fish and Game (DFG) determines that the federal incidental take authorization is "consistent" with CESA under F&G Code Section 2080.1. For projects that will result in a take of a state only listed species, Caltrans must apply for a take permit under section 2081(b).
- U.S. Fish and Wildlife Service: Federal Endangered Species Act Consultation: Due to the presence of least Bell's vireo, a Federally endangered species, informal consultation with Fish and Wildlife Service will be required for this project. A request for a species list was sent to the Fish and Wildlife Service on January 4, 2008. This request effectively started this informal consultation process.

CHAPTER 2 | AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES

2.1 HUMAN ENVIRONMENT

The Interstate Route 405/US Highway 101 (I-405/US-101) interchange is largely considered as one of America's worst freeway bottlenecks, and is located in Caltrans District 7, quad 83, in Los Angeles County, and within the City of Los Angeles. There is substantial need for improvements to the connector from the southbound (SB) I-405 freeway to southbound (SB) and northbound (NB) US-101 freeway, as the existing structures were built in the 1950s and insufficient in accommodating current and future capacity. The purpose of this project would fulfill that need, and improve overall safety, operation, and traffic flow by replacing the existing 20 mile-per-hour, single-lane connector with a new 50 mile-per-hour, two lane connector.

The current design presents challenges to the human environment that manifest in circulation issues on the mainline, on-and-off ramps, and at signalized intersections surrounding the interchange, especially during peak travel times. Construction associated with the project would have a significant, yet temporary effect on surrounding communities, especially those adjacent to the interchange, but the end result of the project will likely alleviate extremely poor circulation issues that exist in the project area. Immediately affected areas would include the Sepulveda Basin Recreation Area (northwest of interchange) and the communities of Van Nuys (northeast), Sherman Oaks (southeast), and Encino (southwest).

The ensuing analysis of the human environment has been extracted from the Community Impact Assessment Report as prepared by Caltrans (Caltrans 2007d) or other technical reports as cited.

Considered Human Environment Issues with No Identifiable Adverse Impacts

As part of the scooping and environmental analysis conducted for the project, the following human environment issues were considered, but no adverse impacts were identified. Consequently, there is no further discussion regarding these particular issues in this document. Nevertheless, the regulatory setting and framework for each is provided below:

Coastal Zone

Regulatory Setting. The Coastal Zone Management Act of 1972 (CZMA) is the primary federal law enacted to preserve and protect coastal resources. The CZMA sets up a program under which coastal states are encouraged to develop coastal management programs. States with an approved coastal management plan are able to review federal permits and activities to determine if they are consistent with the state's management plan.

California has developed a coastal zone management plan and has enacted its own law, the California Coastal Act of 1976, to protect the coastline. The policies established by the California Coastal Act are similar to those for the CZMA; they include the protection and expansion of public access and recreation, the protection, enhancement and restoration of environmentally sensitive areas, protection of agricultural lands, the protection of scenic beauty, and the protection of property and life from coastal hazards. The California Coastal Commission is responsible for implementation and oversight under the California Coastal Act.

Wild and Scenic Rivers

Regulatory Setting. Projects affecting Wild and Scenic Rivers are subject to the National Wild and Scenic Rivers Act (16 USC 1271) and the California Wild and Scenic Rivers Act (Pub. Res. Code sec. 5093.50 et seq.).

There are three possible types of Wild and Scenic Designations:
1. Wild: undeveloped, with river access by trail only
2. Scenic: undeveloped, with occasional river access by road
3. Recreational: some development is allowed, with road access

Farmlands/Timberlands

Regulatory Setting. The National Environmental Policy Act (NEPA) and the Farmland Protection Policy Act (FPPA, 7 USC 4201-4209; and its regulations, 7 CFR Part 658) require federal agencies, such as FHWA, to coordinate with the Natural Resources Conservation Service (NRCS) if their activities may irreversibly convert farmland (directly or indirectly) to nonagricultural use. For purposes of the FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance.

The California Environmental Quality Act requires the review of projects that would convert Williamson Act contract land to non-agricultural uses. The main purposes of the Williamson Act are to preserve agricultural land and to encourage open space preservation and efficient urban growth. The Williamson Act provides incentives to landowners through reduced property taxes to deter the early conversion of agricultural and open space lands to other uses.

2.1.1 LAND USE AND PLANNING

Existing and Future Land Use

Sepulveda Basin. The Sepulveda Basin is located just northwest of the project area, and is utilized as a flood control basin with the Sepulveda Dam and its appurtenant facilities managed by the United States Army Corps of Engineers (ACOE). The dam was built in 1941 to control winter floodwaters along the Los Angeles River, and in March of 1981, the ACOE produced the Sepulveda Dam Master Plan (SDMP) that outlined the development of recreational uses for the Sepulveda Basin by the City of Los Angeles, Department of Recreation and Parks. Additionally, the Sepulveda Basin and its recreational facilities provide much needed visual and spatial relief in a surrounding environment that is highly urban, and predominantly built-out.

The SDMP includes a provision that recommends that it be updated every five years, or revised to suit changing needs and conditions, but the plan has not been overhauled since 1981. In July of 1995, the ACOE issued a supplement to the 1981 SDMP that highlighted land use changes primarily to the southeast portion of the recreation area, with proposals for wetlands and a wildlife refuge. Those proposals have since come to fruition, and in addition to wetlands and the wildlife refuge, the Sepulveda Basin has been developed to include several large recreation areas and parks, a water reclamation plant, an armory, sports facilities, gardens, and golf courses.

Community of Van Nuys. Van Nuys lays just northeast of the project area, bound by the I-405 freeway on the west and Magnolia Boulevard on the south. Primary land use within (1) mile of the project area is zoned “low and medium-density residential, with “community commercial” zoning at the intersections of Burbank and Sepulveda Boulevards, and at Magnolia and Sepulveda Boulevards. A portion of land south of Magnolia Boulevard (between I-405 and Sepulveda Boulevard) is dedicated to City of Los Angeles

public facilities, and a small swath of land between Oxnard Street and Burbank Boulevard (on Sepulveda Boulevard) is dedicated to commercial manufacturing uses.

Primary land use within (2) to (3) miles of the project area is zoned "low-density and medium-density residential, with the mixed-use Van Nuys Central Business District (CBD) in the vicinity. The Van Nuys CBD is bound by Vanowen and Calvert Streets on the north and south sides, Cedros and Vesper Avenues to the west, and Sylmar and Tyrone Avenues to the east.

The Van Nuys CBD Specific Plan aims to make the Van Nuys CBD the focus of community activity through the Van Nuys CBD Streetscape Plan. More specifically, it aims to create more pedestrian-friendly environments that enhance community identity through design considerations that include landscape architecture, street lighting schemes, public art installations, street furniture, and infrastructure and signage specifications (City of Los Angeles 2007a).

Efforts at promoting Transit Oriented Development (TOD) and compatible uses are evident around the intersection of Sepulveda Boulevard and Erwin Street, at the Metro Orange Line Transit Station. Plans recommend changing existing areas zoned as "industrial" to "commercial," and the creation of mixed-use zones that integrate single-family and multi-family residential development within the vicinity (City of Los Angeles 2007b). This particular area lies within about (1.5) miles of the project area, and is likely to experience some effects during construction.

Community of Sherman Oaks. Sherman Oaks is located just southeast of the project area and is bound by I-405 on the west, Van Nuys and the US-101 freeway on the north, and Fulton Avenue on the east. A designated regional commercial center (Sherman Oaks Galleria) is located adjacent to the I-405/ US-101 interchange, with Van Nuys and Sepulveda Boulevards serving as focal points for the community. Land use within (1) mile of the project area, and along the immediate Ventura Boulevard corridor between Sepulveda and Van Nuys Boulevards is zoned as "community commercial." Commercial development along this corridor and between major and secondary arterials is buffered by "low-medium" and "medium" density residential zoning. The majority of single family, "low density residential" zoning is located just beyond this buffer and south of Ventura Boulevard within the adjacent hillside areas.

The portion of the Ventura Boulevard corridor between I-405 and Fulton Avenue are part of the Ventura-Cahuenga Boulevard Corridor (VCBC) Specific Plan (a component of the Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass Community Plan). The VCBC Specific Plan seeks to achieve the following (pp. I-2, City of Los Angeles 2007c):

- Address the unique development problems associated with commercial and residential development within the area
- Assure an equilibrium between the transportation infrastructure and land use development
- Provide for an effective local circulation system
- Promote attractive and harmonious site design for multifamily and commercial development
- Provide compatible and harmonious relationships between commercial and residential areas when adjacent to each other
- Promote and encourage the development of pedestrian activity, while reducing traffic congestion
- Maintain district character

Serious traffic and circulation issues plague this portion of the Ventura Boulevard corridor, with development and growth exceeding the capacity of the existing transportation infrastructure. Traffic spill from the I-405 and US-101 freeways, in combination with intense existing and new commercial development, continues to stifle circulation along this corridor, and project construction at the I-405/ US-101 interchange will likely have a heavy effect on this area.

Community of Encino. The community of Encino exists just southwest of the project area, and is bound by the community of Winnetka and the Sepulveda Basin Recreation Area on the north, the I-405 freeway and the community of Sherman Oaks to the east, and Topanga State Park and the community of Tarzana

to the west. Land use specifications for the Ventura-Cahuenga Boulevard Corridor (VCBC) Specific Plan also apply to the portion of Ventura Boulevard that traverses the community of Encino east-west and in parallel to US-101.

The majority of land use on Ventura Boulevard is zoned commercial, with most areas south of the thoroughfare zoned as “single family residential.” North of the Ventura Boulevard commercial corridor, and on both sides of US-101 between Wilber and White Oak Avenues are zoned at a higher density and “multiple family residential.” A small swath of land on Oxnard Avenue, between Wilbur and Etiwanda Avenues is zoned as industrial. Oxnard Avenue is also a major corridor for the Metropolitan Transit Authority (MTA) Orange Line busway, which starts at the last MTA Red Line light rail station in North Hollywood (at Lankershim and Chandler Boulevards), and provides service to communities throughout the San Fernando Valley to Canoga Park.

The following summarizes the most significant future planning and development opportunities as identified in the Encino-Tarzana Community Plan (pp. I-5 to I-6, City of Los Angeles 2007d):

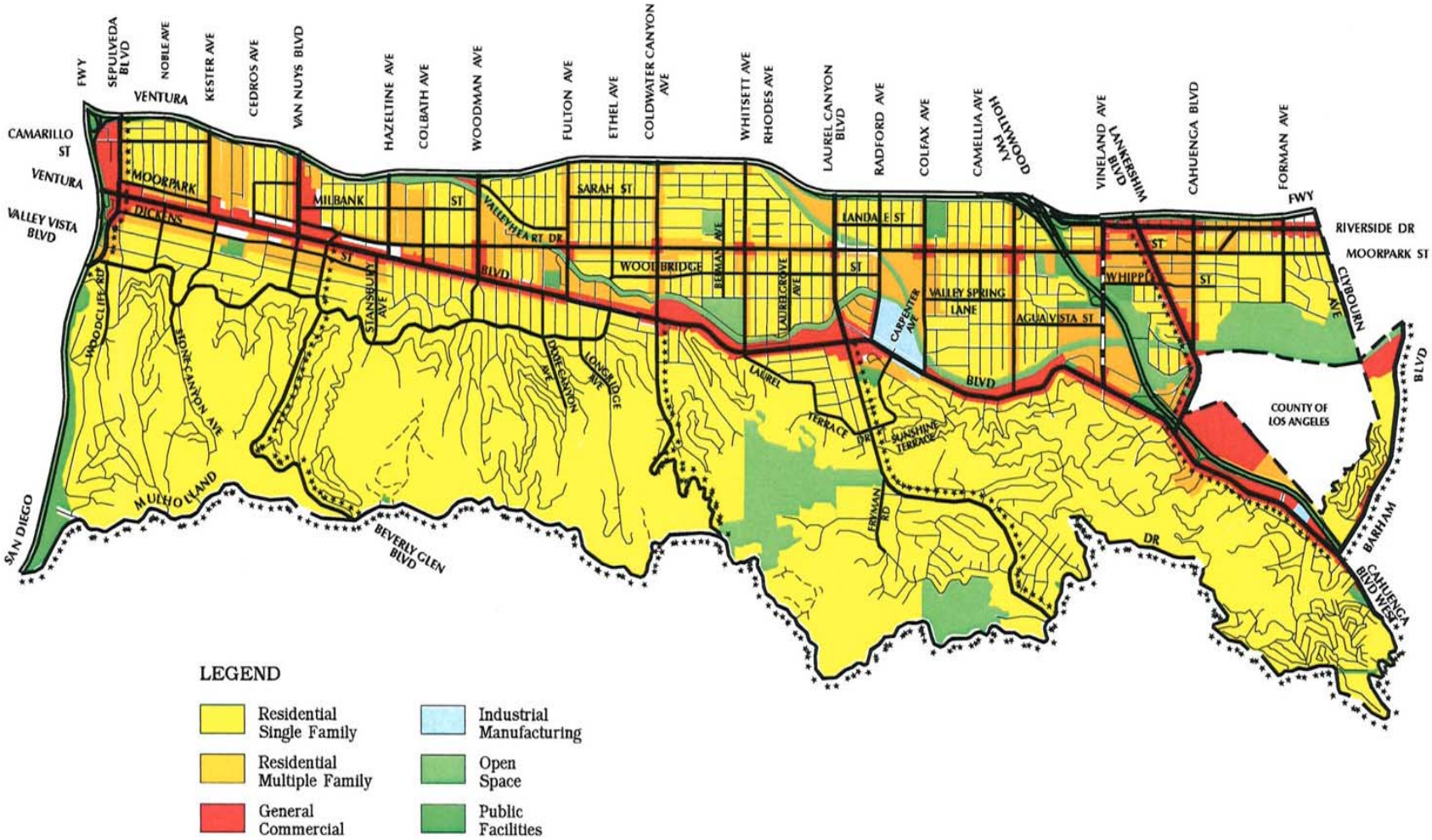
- Promote more residential and mixed-use development along commercial corridors to provide more access to employment
- Create pedestrian-friendly shopping areas by incorporating street trees, benches, convenient parking/access, and maintaining retail frontage at ground level
- Create more access to regional freeways and rail services in industrial zoned areas
- Increase intensity, density, and design of development in proximity to transit station stops
- Integrate the development of MTA right-of-way along Oxnard Avenue with adjacent properties

Existing and Planned Land Use in Vicinity – Maps/Projections

Figure 12. Generalized Land Use – Van Nuys-North Sherman Oaks

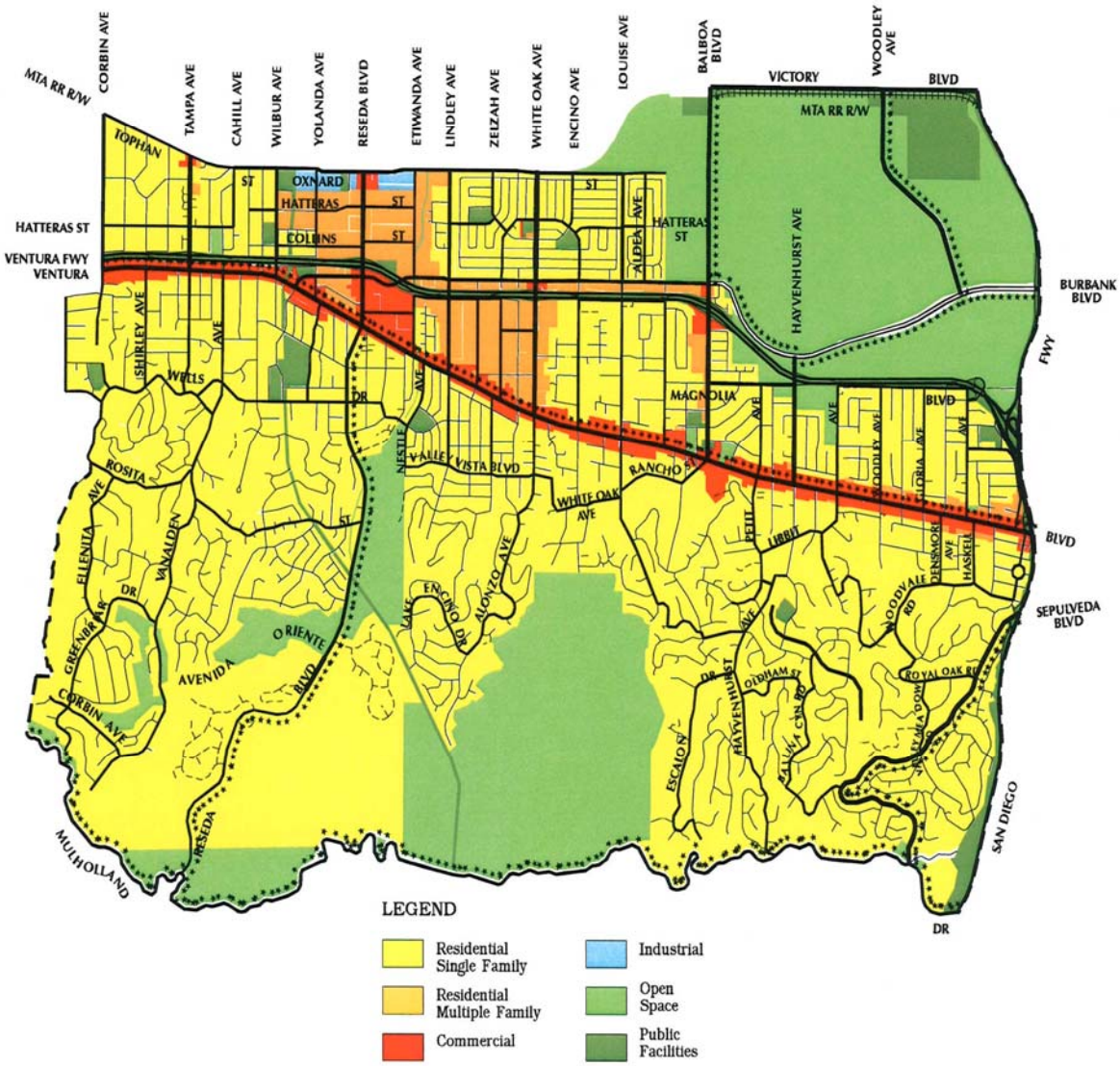
Source: City of Los Angeles General Plan, Van Nuys-North Sherman Oaks Community Plan. Accessed October 18, 2007, from the City of Los Angeles, Department of City Planning website at: http://cityplanning.lacity.org/complan/pdf/vnycptxt.pdf

Figure 13. Generalized Land Use – Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass



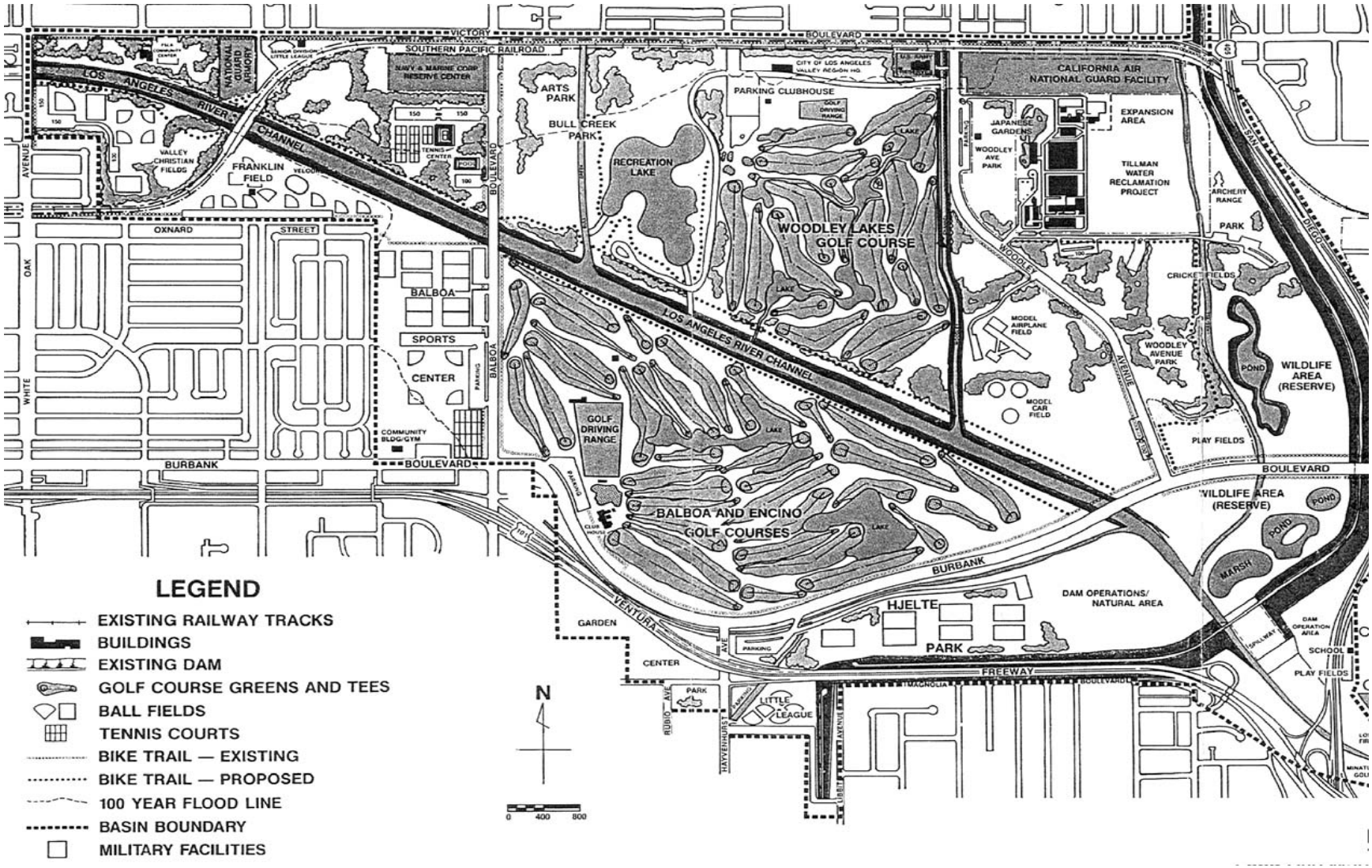
Source: City of Los Angeles General Plan, Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass Community Plan. Accessed October 18, 2007, from the City of Los Angeles, Department of City Planning website at: http://www.ci.la.ca.us/PLN/complan/valley/pdf/genlumap.shr.pdf

Figure 14. Generalized Land Use - Encino-Tarzana



Source: City of Los Angeles General Plan, Encino-Tarzana Community Plan. Accessed October 18, 2007, from the City of Los Angeles, Department of City Planning website at:
http://cityplanning.lacity.org/complan/pdf/enccptxt.pdf

Figure 15. Generalized Land Use – Sepulveda Basin Recreation Area



Source: City of Los Angeles, Department of Public Works, Sepulveda Wetlands Park – Draft Concept Design Report

Table 6. Development Trends in Project Vicinity

Community Plan Area	Name and/or Address	Jurisdiction	Proposed Use	Floor Area (sq. ft.)	Status
Encino	16350 W. Ventura Blvd	Los Angeles	New (131) unit apartment building with retail and subterranean parking	336,501	Permit ready to issue
Sherman Oaks	4500 N. Van Nuys Blvd.	Los Angeles	New retail store with attached parking garage	54,457	Permit ready to issue
Sherman Oaks	13946 W. Ventura Blvd.	Los Angeles	New two-story office building	3,951	Permit ready to issue
Van Nuys	6714 N. Balboa Blvd.	Los Angeles	New (4) unit apartment building	5,444	Permit ready to issue
Van Nuys	In-N-Out Burger 7220 N. Balboa Blvd.	Los Angeles	One-story fast food restaurant with drive-through	1,387	Permit ready to issue
Van Nuys	14116 W. Burbank Blvd.	Los Angeles	New three-story, (13) unit apartment building over basement garage	12,252	Permit ready to issue
Van Nuys	14242 W. Burbank Blvd.	Los Angeles	New three-story apartment building over basement garage	38,979	Permit ready to issue
Van Nuys	15206 W. Burbank Blvd.	Los Angeles	New (42) unit apartment building	59,737	Permit ready to issue
Van Nuys	14550 W. Burbank Blvd.	Los Angeles	New (6) unit apartment building over basement garage	6,626	Permit ready to issue
Van Nuys	14702 W. Magnolia Blvd.	Los Angeles	New three-story, (5) unit apartment building with subterranean garage	7,928	Permit ready to issue
Van Nuys	14212 W. Vanowen St.	Los Angeles	New two-story, (4) unit apartment building with (8) open, on-site parking spaces	3,844	Permit ready to issue
Van Nuys	5750 N Woodman Ave.	Los Angeles	New (6) unit apartment building over basement garage	10,228	Permit ready to issue
Van Nuys	5338 N. Woodman Ave.	Los Angeles	New auto body shop	5,492	Permit ready to issue

Source: City of Los Angeles - Department of Building and Safety; New Building Permits, January 2005-October 2007

Consistency with State, Regional, and Local Plans

State Transportation Plan Consistency. The State of California is faced with some urgent transportation challenges. With one of the largest economies in the world, economic health is highly dependent on a safe, efficient, and functional transportation infrastructure. In 2006, the California Department of Transportation (Caltrans) published the California Transportation Plan 2025, which was developed in coordination with the California Transportation Commission (CTC) and 45 regional transportation planning agencies, including the Southern California Association of Governments (SCAG), the metropolitan planning organization responsible for regional planning in the greater Los Angeles area. In consideration of general guidelines for sustainable development (encompassing economy, social equity, and environment), the following state transportation goals were developed in consultation with numerous public and private transportation providers and system users, and are outlined in the California Transportation Plan 2025 (pp. X, State of California 2007a):

- **Goal 1. Improve Mobility and Accessibility:** Expanding the system and enhancing modal choices and connectivity to meet the State's future transportation demands.
- **Goal 2. Preserve the Transportation System:** Maintaining and rehabilitating California's extensive transportation system to preserve it for future generations.
- **Goal 3. Support the Economy:** Ensuring the State's continued economic vitality by securing the resources needed to maintain, manage, and enhance the transportation system, while providing a well organized and managed goods movement system.
- **Goal 4. Enhance Public Safety and Security:** Ensuring the safety and security of people, goods, services, and information in all modes of transportation.
- **Goal 5. Reflect Community Values:** Finding transportation solutions that balance and integrate community values with transportation safety and performance, and encourage public involvement in transportation decisions.
- **Goal 6. Enhance the Environment:** Planning and providing transportation services while protecting our environment, wildlife, and historical and cultural assets.

Within this context, the I-405/US-101 interchange improvement project is very much consistent with state goals and plans, and highly reflective of the goals and values of the surrounding communities. Improvements in the transportation infrastructure at the I-405/ US-101 interchange will support continued economic vitality in the surrounding communities by improving conditions for the movement of people and goods. The project will also enhance public safety and security through the improvement of driving conditions with a complementary reduction in accidents, and will also enhance environmental conditions through an improvement of traffic flows and a reduction of auto emissions. Overall, the project is anticipated to improve mobility and accessibility to one of the nation's most congested interchanges, and serve as a benefit to the surrounding communities and future land use goals.

Regional Transportation Consistency. The Southern California Association of Governments (SCAG), the lead agency for this project, in cooperation with Caltrans and Congressman Brad Sherman's office, is advancing traffic improvement alternatives for the I-405/ US-101 interchange. Existing traffic circulation problems due to high peak hour and daily traffic volumes, coupled with SCAG's model projection of substation housing and population growth in Los Angeles and Ventura counties, make this undertaking a high priority. The interchange is frequently cited as the worst freeway bottleneck in the United States, and SCAG has been designated as the metropolitan planning organization responsible for developing the Regional Transportation Plan (RTP).

In 2004, SCAG published the Destination 2030 RTP, which laid out a plan to address the transportation challenges and issues arising from a region expected to experience unprecedented growth and demand from new residents, jobs, and an increase in the movement of goods. Regional growth estimates in the metropolitan area forecast a population increase of 38 percent (or 6.3 million people), and an employment growth increase of 36 percent (or 2.7 million jobs) by the year 2030 (p.13, SCAG 2007a). The region, as a whole, must find a way to accommodate this growth, and plan for transportation infrastructure accordingly. SCAG acknowledges the difficulty in adding lanes to a freeway or building new ones, and as

it becomes more difficult, maximizing the potential capacity of existing arterials becomes a viable solution to increasing overall system capacity, especially in built-out, urban areas. The I-405/US-101 interchange improvement project will assist in the attainment of these goals by maximizing mainline capacities at the interchange, improving conditions for the movement of goods, and provide a complementary increase in productivity hours lost to existing traffic congestion and circulation issues. The proposed project is included in the 2006 RTIP and referenced in the Plan. It is listed in Section II of Volume II of the 2006 RTIP, state highway section, Los Angeles County. The following project information is excerpted from the 2006 RTIP:

Lead Agency – Caltrans
Project ID # - LA0D77
Air Basin - SCAB
Model # - L393
Program Code – CAN40
Route – 405
Begin Post Mile – 39.4
End Post Mile – 40.5
Description – City of L.A. – At Route 405 and US 101 interchange. Construct freeway connector from southbound Route 405 to northbound and southbound US-101 and add auxiliary lane from Burbank Boulevard to northbound US 101 connector (EA #199610, PPNO 2787)

Local Plan Consistency. The City of Los Angeles Department of City Planning has developed the Transportation Element of the general plan in conjunction with the 35 communities that make up the city planning area. The purpose of the transportation element is to present a guide for further development of a citywide transportation system which provides for the efficient movement of people and goods (City of Los Angeles 2007f). It also recognizes that primary emphasis must be placed on maximizing the efficiency of existing and proposed transportation infrastructure, in which the Southbound I-405 to US-101 Connector Improvement Project is completely consistent with.

Accommodation of future growth is also a high priority for the City of Los Angeles (growth projections are referenced later in the Growth section of this document). While accommodating future residential growth is a high priority, ensuring quality of life in vibrant and livable neighborhoods is just as important. Improving mainline flows at the I-405/US-101 interchange will surely assist in reducing the excessive amount of traffic spill onto city streets and districts, and aid in achieving city goals in improving circulation in the surrounding neighborhoods; creating safer, pedestrian-oriented environments; and accommodating new growth.

Parks and Recreational Facilities

Sepulveda Basin Recreation Area. Located in the Sepulveda Basin, just northwest of the project area, the 2150-acre Sepulveda Basin Recreation Area serves as a regional recreational facility complete with two parks (Hjelte and Woodley Parks), an 80-acre sports field, an archery range, three 18-hole golf courses, Balboa Lake, Balboa Park and Sports Center, playgrounds, a velodrome, bike paths, hiking trails, tennis courts, a Japanese Garden, a dog park, and a designated a wildlife reserve. The wildlife reserve is a 225-acre joint project of the United States Army Corps of Engineers (ACOE) and the Los Angeles Department of Recreation and Parks, in partnership with community groups. It features a lake with a bird-refuge island, extensive native plant revegetation, and some of the best bird-watching opportunities in the Los Angeles Basin. Migratory birds gather here in the fall and winter, and are strongly attracted to water within the basin.

The Sepulveda Basin Wildlife Reserve is the only unpaved stretch of the Los Angeles River, which is also a source of reclaimed water for the area and the Donald C. Tillman Water Reclamation Plant. The Tillman Plant is located on a 90-acre site within the basin, leased to the City of Los Angeles by the ACOE. It is a project of the Los Angeles City Department of Public Works, funded by grants from the United

States Environmental Protection Agency and the State Water Resources Control Board, as well as by funds from the city's Sewer Construction and Maintenance Fund. The water reclamation process generates 65 million gallons of reclaimed water per day, and is distributed to Balboa Lake, the wildlife reserve, the Japanese Garden, Sepulveda Basin sprinkling system, the Department of Water and Power pumping station, and the Los Angeles River (City of Los Angeles 2007e).

Aside from water reclamation, the basin and its appurtenant facilities serve first and foremost, as a flood control mechanism. The Sepulveda Dam—located within the property—is also managed by the ACOE, for the purposes of collecting floodwater runoff from the uncontrolled drainage upstream, storing it temporarily, and releasing it at a rate that does not exceed the downstream channel capacity. The dam was determined eligible for listing in the National Register of Historic Places (NRHP) under criteria A (history of Los Angeles water systems) and C (distinctive type, period, and construction method), at the local level, with 1941-1949 as the period of significance. This is discussed in more detail in the Cultural Resources section of this document. Depending on which alternative is selected, the US-101/I-405 connector project may pose right-of-way impacts to (3) resources: Woodley Park, Sepulveda Dam, and the Sepulveda Basin Wildlife Refuge.

Section 4(f) Evaluation of Resources. Codified in federal law at 49 U.S.C. §303, Section 4(f) of the United States Department of Transportation Act of 1966 declares that "it is the policy of the United States government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites." Section 4(f) specifies that the Federal Highway Administration (FHWA) and other DOT agencies cannot approve the use of land from a significant publicly owned public park, recreation area, wildlife or waterfowl refuge, or any significant historic site unless there is no feasible and prudent alternative to the use of land; and the action includes all possible planning to minimize harm to the property resulting from use. A Section 4(f) evaluation has been prepared for the (3) aforementioned resources, pursuant to the FHWA regulations for Section 4(f) compliance codified at 23 CFR Section 771.135. Additional guidance has been obtained from the FHWA Technical Advisory T 6640.8A (1987), the FHWA Section 4(f) Policy Paper (2005), and the FHWA Western Resource center Section 4(f) Checklist (1997). The following is a brief discussion of the project alternatives and potential right-of-way impacts to Woodley Park, Sepulveda Dam, and the Sepulveda Basin Wildlife Refuge. For a more detailed discussion of the evaluation and impacts to Section 4(f) resources, please reference Appendix B, "Section 4(f) Evaluation."

Brief Discussion of Alternatives with Potential Impacts to Section 4(f) Resources. The Sepulveda Dam is a historic resource, and is therefore protected by Section 4(f) federal law. Proposed Alternative 1 for this project specifies an elevated structure over the Sepulveda Dam spillway, from the southbound I-405 freeway to the northbound US-101 freeway in order to eliminate the sharp radius curve on the existing connector. In addition, access to the US-101 freeway would be lost from Burbank Boulevard. This alternative poses right-of-way impacts and potential minimal impacts on capacity and volumes to the Sepulveda Dam, which are discussed in more detail later in this document, in the Physical Environment section; Hydrology and Floodplain study.

Wildlife and waterfowl refuges are also protected under Section 4(f) federal law, and proposed Alternative 2 poses potential impacts to the Sepulveda Basin Wildlife Refuge. In this alternative, the existing I-405 connector to the southbound US-101 freeway would remain as is, but a new loop onramp north of Burbank Boulevard and west of the I-405 freeway would be constructed. This onramp would encroach onto the Sepulveda Basin Wildlife Refuge, but a non-standard loop alignment design would minimize impacts.

Alternative 3 is nearly identical to Alternative 2, but with a standard design loop that would require an additional 15m (50ft) of penetration west into the wildlife refuge. Reference the Project Description and Projects Alternatives discussion earlier in this document for additional details, and highlights from additional alternatives considered, but deemed infeasible.

2.1.2 GROWTH

Regulatory Setting. The Council on Environmental Quality (CEQ) regulations, which implement the National Environmental Policy Act of 1969, require evaluation of the potential environmental consequences of all proposed federal activities and programs. This provision includes a requirement to examine indirect consequences, which may occur in areas beyond the immediate influence of a proposed action and at some time in the future. The CEQ regulations, 40 CFR 1508.8, refer to these consequences as secondary impacts. Secondary impacts may include changes in land use, economic vitality, and population density, which are all elements of growth.

The California Environmental Quality Act (CEQA) also requires the analysis of a project's potential to induce growth. CEQA guidelines, Section 15126.2(d), require that environmental documents "…discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment…"

Regional Growth Projections. The Southern California Association of Governments (SCAG) region encompasses Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. Los Angeles County consists of eight subregions; the Arroyo Verdugo Cities Subregion, Gateway Cities Council of Governments Subregion, Las Virgenes Malibu Council of Governments (LVMCOG) Subregion, City of Los Angeles Subregion, North Los Angeles County Subregion, San Gabriel Valley Council of Governments (SGVCOG) Subregion, South Bay Cities Council of Governments Subregion, and the Westside Cities Subregion. The communities surrounding the project area (Van Nuys, Sherman Oaks, and Encino) all fall within the City of Los Angeles Subregion, which has the largest population and most households in the region.

Based on the SCAG 2004 RTP Socioeconomic Forecast, the City of Los Angeles Subregion is expected to grow at a slower pace than other subregions in Los Angeles County, by adding 624,000 people to the county, and increasing population to 4.4 million by 2030 (pp. 26, SCAG 2007b). The same study also indicates that the number of households will increase customary to the Los Angeles County average (0.9 percent), with an average annual increase of 40,000 new jobs in the next 30 years (pp. 27, SCAG 2007b). Below is a snapshot of growth statistics for the communities surrounding the project area:

Table 7. Community Population and Household Growth Projections for 2010

Projection	Van Nuys/North Sherman Oaks	Sherman Oaks/Studio City/Toluca Lake	Encino	Citywide
Total Population	165,973	86,863	79,352	4,306,564
Growth Rate	10.6%	13.7%	9.8%	10.6%
Total Households	63,995	45,090	32,626	1,474,514
Growth Rate	8.6%	15.1%	9.4%	11.4%

Source: City of Los Angeles General Plan; Van Nuys/North Sherman Oaks, Sherman Oaks/Studio City/Toluca Lake, and Encino Community Plans

Project Related Growth Inducement. In California, projects are rarely designed to encourage or facilitate growth, rather, most Caltrans capacity-increasing projects are proposed as a response to traffic congestion that is a result of growth that has already occurred or will soon occur. Because of the highly urbanized setting in the project location, and a predominantly built-out environment, this project does not have the potential to adversely induce growth beyond existing regional growth projections as outlined above.

2.1.3 COMMUNITY IMPACTS

Community Characteristics and Cohesion

Regulatory Setting. The National Environmental Policy Act of 1969 as amended (NEPA), established that the federal government use all practicable means to ensure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings [42 U.S.C. 4331(b)(2)]. The Federal Highway Administration in its implementation of NEPA [23 U.S.C. 109(h)] directs that final decisions regarding projects are to be made in the best overall public interest. This requires taking into account adverse environmental impacts, such as, destruction or disruption of human-made resources, community cohesion and the availability of public facilities and services.

Under the California Environmental Quality Act (CEQA), an economic or social change by itself is not to be considered a significant effect on the environment. However, if a social or economic change is related to a physical change, then social or economic change may be considered in determining whether the physical change is significant. Since this project would result in physical change to the environment, it is appropriate to consider changes to community character and cohesion in assessing the significance of the project's effects.

Affected Environment

Community profiles and analysis was performed in the project study area as defined by all census tracts within (6) surrounding postal zip codes, and utilizing 2000 U.S. Census data. They are represented as follows:

91316 (Encino)	91403 (Sherman Oaks)	91423 (Van Nuys/North Sherman Oaks)
91401 (Van Nuys)	91411 (Van Nuys)	91436 (Encino)

Together, the population for the study area totals approximately 156,166 residents. There will be no community or demographic discussion of the Sepulveda Basin Recreation Area as it is primarily zoned recreational. A typical demographic study of the project study area would provide a generalized profile for the area as a whole, but because of diverse nature of each neighborhood surrounding the I-405/US-101 interchange, individual profiles are presented in the following subsections.

Zip Code 91316 – Community of Encino

Community Character and Cohesion. This particular community exists mostly southwest, but not immediate to the I-405/US-101 interchange. It is home to roughly 27,595 residents, which represent approximately 18 percent of the population in the project study area. In comparison to data for Los Angeles County, Census 200 data for all tracts within this zip code show a relatively lower percentage of the population under the age of 5 (5.1 % vs. 7.7%), and much higher percentages of the population within the ages of 18-56 (82.9% vs. 72.0%) and over the age of 65 (18.5% vs. 9.7%). This data creates a profile of a community that largely consists of working professionals with fewer children, and amenities that may be attractive and hospitable to the elderly. Racially, this community is rather homogeneous, with 83.1 percent of the population declaring race as "White," and minority populations well below county averages. The percentage of owner-occupied versus renter-occupied housing units is distributed fairly evenly (52.9% vs. 47.1%), and not too far off county averages. Median value of single-family, owner-occupied homes in this area are noticeably higher than the county average ($331,800 vs. $209,300). In consideration of all the aforementioned demographic characteristics and the following socioeconomic characteristics, community cohesion—or the perceived degree to which residents have a "sense of belonging" to their neighborhood, a level of commitment to the community, or a strong attachment to—is considered to be moderate-to-high.

Socioeconomic Characteristics. Census data for this community shows a population with relatively high levels of educational attainment. 88.6 percent of the population are high school graduates (as opposed to 69.9 percent in Los Angeles County), and 41.2 percent hold a bachelor's degree or higher (versus 24.9 percent for the county). This could explain a relatively high median household income of $49,131, and per capita income of $39,148, which are somewhat higher than the county average, and much higher than other communities within the project study area. The level of educational attainment in this community may also explain the lower-than-county percentage of families below poverty level at 7.5 percent (versus 14.4 percent for the county). As expected within this context, only a small portion of the population utilizes public transportation as a means to commute to work at 2 percent (versus 6.6 percent for the county), with a mean travel time to work of 31.1 minutes. Commuters will likely experience some project-related effects during the construction phases, however, the end result of this project will likely enhance circulation in the area.

Zip Code 91401 – Community of Van Nuys

Community Character and Cohesion. This particular community exists on the northeast side of the project area, but not immediately adjacent to the I-405 or US-101 freeways. It is home to 40,372 residents, which represent roughly 26 percent of the population in the study area. Census data for this community shows a slightly higher-than-county percentage of the population under the age of 5 (8.1% vs. 7.7%), but relatively average numbers in all other age demographics. In comparison to Los Angeles County, the community has a slightly higher percentage of the population declaring race as "White" (60.0% vs. 48.7%), a comparatively low percentage of the population declaring race as "Black or African-American" (5.2% vs. 9.8%), and an interestingly low percentage of the population declaring race as "Asian" (4.5% vs. 11.9% for the county).

An examination of housing characteristics in this particular community reveals that renters occupy the majority of the supply, at 63.4 percent. The high level of renter-occupied units relative to the percentage of owner-occupied units is often indicative of the degree of belonging or attachment residents hold toward the community in which they live. In these instances, the degree of community cohesion the residents hold may be significantly lower than a district with a majority of owner-occupied housing supply. On the whole, community cohesion in this area is considered to be low-to-moderate.

Socioeconomic Characteristics. According to 2000 U.S. Census data, 70.3 percent of the population in this community have graduated from high school, which is right in line with numbers for the county (69.9 percent). The percentage of those holding a Bachelor's degree or higher (25.7 percent) is somewhat consistent (if not slightly higher) with numbers for Los Angeles County at 24.9 percent. Median household income at $35,403, and per capita income at $19,610 are much lower than county averages ($42,189 and $20,683, respectively), which may explain the higher percentage of the population utilizing public transportation as a means to commute to work (7.7 percent versus 6.6 percent for the county). Higher public transportation ridership may also be attributed to the relatively high percentage of families living below poverty level (19.9 percent versus 14.4 percent for Los Angeles County). In fact, this particular community has the highest percentage of families living in poverty in the project study area.

The definition of "poverty," or "low income" populations in the project study area is based on the Department of Health and Human Services poverty guidelines. For census year 2000, this was $17,050 for a family of four.

Table 8. U.S. Department of Health and Human Services Poverty Guidelines

Size of Family Unit	2000	2007
1	$8,350	$10,210
2	$11,250	$13,690
3	$14,150	$17,170
4	$17,050	$20,650
5	$19,950	$24,130
6	$22,850	$27,610
7	$25,750	$31,090
8	$28,650	$34,570
For each additional person, add	$2,900	$3,480

Source: United States Department of Health and Human Services

Mean travel time to work for commuters in this area is roughly 31.4 minutes, in which a temporary increase will be seen during the construction phases of the proposed project. A permanent increase in mean travel time to work will likely occur in this community if Alternative 1 is selected, which includes the complete loss of access to the US-101 freeway from Burbank Boulevard.

Zip Code 91403 – Community of Sherman Oaks

Community Character and Cohesion. This particular community exists immediately southeast of the project area, and is bound by the US-101 freeway and the community of Van Nuys to the north, and the I-405 freeway and the community of Encino to the west. According to 2000 U.S. Census data, this district is home to 22,079 residents, which represent approximately 15 percent of the population within the study area.

In terms of age demographics, the data for this community shows a profile similar to zip code 91316—a lower-than-county percentage of the population under the age of 5, accompanied by a higher percentage of the population between the ages of 18-65, and a higher percentage of the population over the age of 65. As with that zip code, this data represents a community that likely consists of working professionals with fewer children, and amenities that are attractive and hospitable to the elderly. Racial distribution in this zip code is also homogeneous, with 81.9 percent of the population declaring race as "white." Data on housing characteristics show that distribution of owner and renter-occupied units is almost evenly split, but the median housing value in this district is more than double the average for Los Angeles County ($458,100 vs. $209,300). Community cohesion in this particular area is considered to be moderate-to-high.

Socioeconomic Characteristics. Educational attainment in this particular community is strikingly higher than numbers for the county and for other communities in the project study area. 93.4 percent of the population are high school graduates (versus 69.9 percent in Los Angeles County), and just over half of the population holds a Bachelor's degree or higher (versus 24.9 percent for the county). As expected, median household income ($53,596) and per capita income ($43,146) are also markedly higher than county and surrounding communities. The percentage of families below poverty level (5.6 percent) is minute in comparison to other communities in the project study area and the county as a whole (14.4 percent). Public transit ridership as a means of commuting to work is well below the county average (2.6 percent vs. 6.6 percent for the county, but slightly higher than in zip code 91316 (Encino). Mean travel time to work (31.2 minutes) is on par with other communities in the project study area, and only slightly

above the county average. Commuters will likely experience some project-related effects during the construction phases. However, the end result of this project will likely enhance circulation in the area.

Zip Code 91411 – Community of Van Nuys

Community Character and Cohesion. This particular community exists immediately northeast of the project area, adjacent to both the I-405 freeway and the easternmost side of the Sepulveda Basin Recreation Area. This community, in particular, will likely experience the most significant project related effects, especially if Alternative 1 is selected where access to the US-101 freeway from Burbank Boulevard is completely lost. This community is home to 23,641 residents, which represent approximately 15 percent of the population in the study area.

Age demographics show a community slightly younger than other communities in the project area, with a median age of 30.9 years. In comparison to Los Angeles County, there is also a higher percentage of the population under the age of 5 (8.8% vs. 7.7% for the county) and a noticeably lower percentage of the population over the age of 65 (7.8 % vs. 9.7% for Los Angeles County). Racially, there appears to be a higher-than-county percentage of those declaring race as "White" and "Hispanic or Latino." This community also appears to follow a trend that is consistent throughout other communities in the project study area with an "Asian" population that is nearly half the county average (5.4% vs. 11.9%), and a "Black or African-American" population that comprises only 5.4 percent of the community (versus 9.8 percent for Los Angeles County).

In terms of housing supply, renters occupy the majority at 72.2 percent, and the community's relatively low number of persons over the age of 65 only further supports the notion that residential sentiment in this community is decidedly transitional. This assessment appears to be acknowledged by the Van Nuys Community Plan in its guidelines for the Van Nuys Central Business District (CBD), which exists largely within this particular community. It outlines specifications and development goals aimed at improving community development, activities, and aesthetics. Community cohesion in this particular area is considered to be low-to-moderate.

Socioeconomic Characteristics. The socioeconomic characteristics in this community stand in sharp contrast to the profile presented in zip code 91403 (Sherman Oaks). Only 65.1 percent of the population in this community are high school graduates (versus 93.4 percent in Zip Code 91403, and 69.9 percent in Los Angeles County), and just 20.8 percent of the population hold a Bachelor's degree (versus 50.9 percent for Zip Code 91403, and 24.9 percent for the county). Median household income ($34,266) and per capita income ($17,415) are the lowest in the project study area, and well below county numbers at $42,189 and $20,683, respectively. 16.7 percent of families in this community are living in poverty, which is well above the county at 14.4 percent. As expected, public transit ridership as a means of commuting to work is highest within the project study area at 10.1%, and also higher than Los Angeles County at 6.6 percent. Interestingly, this particular community has the highest mean travel time to work in the project study area. A permanent increase in mean travel time to work will likely occur in this community if Alternative 1 is selected, which includes the complete loss of access to the US-101 freeway from Burbank Boulevard. This community is closest to the I-405/Burbank Boulevard interchange, and will likely experience the most project-related effects during construction.

Zip Code 91423 – Community of Van Nuys/North Sherman Oaks

Community Character and Cohesion. This community exists just east of the project area, but not adjacent to the I-405 freeway. It largely straddles the US-101 freeway between Van Nuys Boulevard and Coldwater Canyon Avenue, and is bound by the 91401 zip code on the north, and Sherman Oaks on the south. This community is home to 29,370 residents, which represent roughly 19% of the population in the study area.

Like zip code 91403 (Sherman Oaks) to the south, this community and environment are hospitable to working professionals and the elderly, with a median age of 38.2, and higher-than-county percentages of persons between the ages of 18-65, and 65 and older. Racially, those declaring race as "White" are the majority that constitute 82.5 percent of the community population. As with many of the other communities in the project area, "Hispanic or Latino" and "Asian" populations are well below county averages. A slightly higher-than-county percentage of renter-occupied units may reflect a mildly transitional sentiment within the community. It is worth noting that median property value of single-family, owner-occupied homes is approximately 54 percent higher than the county average ($388,500 versus $209,300 for Los Angeles County). Community cohesion is this area is considered to be moderate-to-high.

Socioeconomic Characteristics. Socioeconomic data for this community is not indifferent from Sherman Oaks zip code 91403, which is expected, because of its close proximity (just due south). 92.6 percent of the population are high school graduates, and 46.1 percent hold a Bachelor's degree or higher. Median income ($52,662) and per capita income ($40,797) are relatively high in comparison to other communities in the project study area and the county as a whole. As a result, the percentage of families living in poverty (5.7 percent) is not as extreme as in zip code 91401 (Van Nuys). Mean travel time to work (29.9 minutes) is on par with county numbers (29.4 minutes), but much lower than other communities in the vicinity, and only 1.9 percent of the population use public transportation to commute to work. Commuters will likely experience some project-related effects during the construction phases. However, the end result of this project will likely enhance circulation in the area.

Zip Code 91436 – Community of Encino

Community Character and Cohesion. This community lies just southwest of the project area, and adjacent to the I-405 and US-101 freeways and interchange. It is home to approximately 13,109 residents, which constitute nearly 8 percent of the population in the study area.

Median age in this community is slightly higher than other communities in the project area at 45.5 years, with 79.3 percent of the population between the ages of 18-65. At the same time, persons over the age of 65 make up 20.9 percent of the population. This community, in particular, is racially homogeneous with 89.9 percent of the population declaring race as "White." Owner-occupied housing, constitutes 85.9 percent of the housing supply in this community, with a relatively high percentage of the supply being single-family units. Median property values are more than double the county average at $583,400. Community cohesion in this area is considered to be moderate-to-high.

Socioeconomic Characteristics. 2000 U.S. Census data for this community show relatively high levels of educational attainment, with 94.5 percent of the population graduating from high school, and 56.8 percent holding a Bachelor's degree or higher. Median household income ($102,652) and per capita income ($61,336) are the highest in all communities within the project study area, and customarily, the percentage of families living in poverty (5.2 percent) is the lowest. As expected, this community also has the lowest percentage of individuals using public transportation to commute to work at 1.1 percent. Mean travel time to work is similar to other communities and the county at 29.9 minutes. Commuters in the northeast portion of this community should expect to experience some project-related effects during construction phases, especially as traffic is redistributed. In the end, the project will likely enhance circulation in this area, particularly along the busy Ventura Boulevard corridor.

Environmental Consequences

Potential Project-Related Traffic Impacts. Proposed Alternative 1 (outlined in more detail in Chapter 1, "Alternatives") is anticipated to compromise the efficacy of circulation and increase conflicts between residents, motorists, pedestrians, and transit users in this district. In this configuration, vehicles may no longer access the northbound or southbound US-101 from the Burbank Boulevard on-ramp to southbound I-405. Traffic that is forecast to utilize the Burbank Boulevard on-ramp to access the northbound US-101 connector is redistributed to the Balboa Boulevard on-ramp. Vehicles that would use

the Burbank Boulevard on-ramp to get to the southbound US-101 connector are expected to use the Sepulveda Boulevard and Van Nuys Boulevard on-ramps instead. These locations carry high volumes in the existing condition, and capacity issues are observed at the Hayvenhurst Avenue off-ramp. With ambient growth and the addition of redistributed traffic due to proposed Alternative 1, conditions are expected to worsen in the future. A federally mandated environmental justice analysis of potential Alternative 1 impacts to the community of Van Nuys is carried out in section 2.4.3, "Environmental Justice." More information on potential traffic impacts associated with Alternative 1 and all other proposed alternatives can be found later in this document in section 2.6, entitled, "Traffic and Transportation/Pedestrian and Bicycle Facilities.

Potential Right-Of-Way/Private Property Impacts. The (4) proposed alternatives have similarities, in that they all have the potential to encroach upon the spillway of the Sepulveda Dam, and require some additional Right-Of-Way. Alternatives 2 and 3 have the potential to encroach upon the Sepulveda Basin Wildlife and Recreation Areas, and will likely attract strong public resistance when traffic is redirected through the area. Rejected Alternative 4 would have required the partial or full acquisition of up to (12) residential properties on the southeast side of the interchange in the community of Sherman Oaks, between Sepulveda and Van Nuys Boulevards. A federally mandated analysis was also performed for this particular community, but there is no potential to impact any minority or low-income populations in that area. More details on this environmental justice analysis can be found in section 2.4.3, "Environmental Justice." More information in regard to relocations associated with rejected Alternative 4 acquisitions can be found in the following section 2.4.2, entitled, "Relocations." The following table has been prepared to highlight potential right-of-way impacts associated with the current proposed alternatives.

Table 9. Description of Alternatives and Potential Right-of-Way Impacts

	Description	Impact
Alternative 1	This alternative proposes realignment of the existing southbound I-405 to southbound US-101 connector, and realignment of the Burbank Boulevard on-ramp to accommodate such.	This alternative poses right-of-way impacts to the spillway of the Sepulveda Dam south of Burbank Boulevard.
Alternative 2	As with Alternative 1, this alternative proposes the realignment of the existing southbound I-405 to southbound US-101 connector, but the Burbank Boulevard on-and-off-ramps would be reconfigured into a non-standard loop alignment in order to minimize right-of-way impacts to the Sepulveda Dam and areas adjacent to the project area. This alternative would also require that the existing Burbank Boullevard/I-405 over-crossing be rebuilt to accommodate the Burbank Boulevard on-and-off-ramp realignment.	This alternative poses right-of-way impacts to the spillway of the Sepulveda Dam both north and south of Burbank Boulevard.
Alternative 3	This alternative is similar to Alternative 2, with the exception of a standard realignment for the proposed Burbank Blvd on-and-off-ramp loops, which would increase right-of-way impacts to the Sepulveda Dam and areas adjacent to the project area. It would also eliminate the need for reconstruction of the Burbank Boulevard/I-405 over-crossing.	This alternative would pose greater right-of-way impacts to the spillway of the Sepulveda Dam than Alternative 2.

Potential Impacts to Property Values or Local Tax Base. In general, the issue of whether or not the proposed project will create a significant impact to property values or the local tax base in the project study area is based on speculation. Property values, as well as the local tax base, can be affected by multiple external variables, which cannot necessarily be attributed to the proposed project. These external variables include, but are not limited to; the constantly changing local, regional, and national economic status, public policies, changing fuel and energy costs, community image and aesthetics, land

and housing availability, and location. Additionally, the type and number of surrounding businessesbasic city services, city planning, and the ever fluctuating real estate market also have an influence on property values and the local tax base. There would have been minimal potential for any impact to general property values and the local tax base if rejected Alternative 4 was selected, which would have included (10) partial and (2) full acquisitions of residential properties on the southeast side of the interchange in the community of Sherman Oaks. The impact to property values and the local tax base would be minimal in consideration of the scenario on a larger, regional scale. Where partial property acquisitions or easements are necessary, impacts to property values would be nominal, as those properties already exist immediately adjacent to the US-101 freeway. Owners of properties where full acquisition were required would be fully compensated for any loss as detailed in Section 2.4.2 of this document, entitled, "Relocations."

Potential Regional Economic Impacts. The I-405/US-101 interchange is largely considered as one of America's worst freeway bottlenecks, and there is a substantial need for improvements as the existing structures were built in the 1950s and insufficient in accommodating both current and future capacity. As it is, the region—the San Fernando Valley—continues to suffer from economic and cumulative impacts that are a direct result of the extreme traffic congestion and circulation issues at this important regional freeway interchange. From an economic standpoint, the extreme traffic congestion and circulation issues at the I-405/US-101 interchange create regional impacts in terms of the cost of moving goods and lost productivity hours. Productivity is typically a system efficiency measure, and reflects the degree to which the transportation system performs during peak demand conditions. The efficiency of any transportation system is directly related to the cost of the movement of not just goods, but people as well. During construction, some businesses may experience minor economic effects that are a result of temporary circulation and/or access issues related to traffic redistribution, but the overall economic benefit of the improved conditions post-construction will be significant. Current conditions already make it difficult for citizens in the surrounding communities to access neighborhood amenities and services, so any improvement to circulation or access would create more positive, rather than negative, regional economic impacts.

Potential Impacts to Local Businesses. None of the proposed project alternatives pose any right-of-way impacts to local business. As discussed in the previous section, local businesses surrounding the project area may experience minor effects that are a result of temporary circulation and/or access issues related to traffic redistribution, but there is no potential for acquisition or relocation of local businesses per a Relocation Impact Report prepared by Caltrans (Caltrans 2006a). This report also indicates that there is no potential for impacts to businesses that are minority owned. Government can often be classified as a type of business, and in this instance, there is potential for the United States Army Corps of Engineers (USACE) and the City of Los Angeles to be impacted, as all alternatives will impact the Sepulveda Dam spillway, and Alternatives 2 and 3 will pose impacts to the Sepulveda Basin Wildlife Reserve. The Sepulveda Basin Recreation Area and the two aforementioned facilities are owned by the USACE and managed by the City of Los Angeles Department of Recreation and Parks.

Table 10. Estimated Nonresidential Displacement Units by Alternative/Alignment

	Alternative 1	Alternative 2	Alternative 3
NONRESDIENTIAL			
Commercial Business	0	0	0
Industrial/Manufacturing Businesses	0	0	0
Nonprofit Organizations	0	0	0
Agricultural/Farms	0	0	0
TOTAL NONRESDIENTIAL UNITS	0	0	0
TOTAL UNITS	0	0	0

Source: State of California-Department of Transportation, Relocation Impact Report, 2/23/2006

Potential Impacts on Economic Vitality and Established Business Districts. During the construction phases, established business districts immediate to the interchange, and along Sepulveda and Ventura Boulevards may experience minimal economic effects that are a result of temporary circulation and/or access issues related to traffic redistribution, but the overall economic benefit of the improved conditions post-construction will be significant. Existing conditions already make it difficult for citizens in the surrounding communities to access neighborhood amenities and services, so any improvement to circulation or access would create more positive, rather than negative, end results.

Improvements to traffic, flow and capacity on the freeway mainline and connectors will also translate to signalized intersections throughout communities surrounding the project area. Serious traffic and circulation issues plague both the Van Nuys Central Business District and the Ventura/Cahuenga Boulevard Corridor with development and growth exceeding the capacity of the existing transportation infrastructure. Any improvements in traffic flow and circulation will aid in the revitalization of these business districts that the City of Los Angeles is currently focused on. The project is not anticipated to adversely affect employment in these areas, and none of the proposed project alternatives include the displacement of any businesses or the acquisition of any nonresidential or business properties.

Potential Visual/Aesthetic Impacts. A Visual Impact Assessment (VIA) has been prepared by the California Department of Transportation (Caltrans), Division of Landscape Architecture according to guidelines set forth by the Federal Highway Administration (FHWA). While the project does not have the potential to affect any officially designated scenic highways, a VIA was performed, nevertheless, and is detailed in Section 2.7 of this document, entitled, “Visual/Aesthetics.”

Potential Air Quality Impacts. An Air Quality Assessment has been prepared by Mestre Greves Associates (2008) to assess the potential of air quality impacts in the project study area, and in the Southern California Association of Governments (SCAG) region. A comprehensive analysis of potential air pollutants has concluded that the proposed project alternatives to no pose any significant operational impact on the ambient air quality in the project vicinity. A more detailed discussion and analysis is presented in Section 2.2.6 of this document, entitled, “Air Quality.”

Avoidance, Minimization, and/or Compensation Measures

Measures to Minimize/Compensate for Potential Project-Related Traffic Impacts. A Traffic Analysis Report has been performed by the IBI Group (2007) that examines traffic operations for the existing condition, future No Build condition, and the four project alternatives within the project area. It also presents proposals to minimize or compensate for any project-related traffic impacts not just on the freeway mainlines and on-and-off-ramps, but also to signalized intersections within communities in the project study area. A more detailed discussion and analysis of traffic is presented in Section 2.6 of this document, entitled “Traffic and Transportation/Pedestrian and Bicycle Facilities.”

Measures to Minimize/Compensate for Potential Right-Of-Way/Private Property Acquisition Impacts. Project funds for relocations are adequately budgeted to cover expenses associated with any right-of-way or property acquisitions, and an agent are assigned to handle all relocations within an estimated time frame, normally 6-9 months. More information and relocations can be found in Section 2.4.3 of this document, entitled, "Relocations."

Measures to Minimize/Compensate for Potential Visual/Aesthetic Impacts. Caltrans and the FHWA mandate that a qualitative/aesthetic approach should be taken to minimize any impacts to visual quality in the project area, which include, but are not limited to; implementation of architectural enhancements and landscaping with ornamental vegetation to minimize and/or compensate for any loss in visual quality. More details are highlighted in Section 2.7 of this document, entitled, "Visual/Aesthetics."

Relocations

Regulatory Setting. The Department's Relocation Assistance Program (RAP) is based on the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (as amended) and Title 49 Code of Federal Regulations (CFR) Part 24. The purpose of RAP is to ensure that persons displaced as a result of a transportation project are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole. All relocation services and benefits are administered without regard to race, color, national origin, or sex in compliance with Title VI of the Civil Rights Act (42 U.S.C. 2000d, et seq.).

Right-Of-Way Impacts and Relocations Associated with Rejected Alternative 4. Rejected Alternative 4 proposed a widening of the existing US-101 freeway and a new southbound US-101 connector that traverses the I-405/US-101 interchange, and joins southbound US-101 just west of Van Nuys Boulevard. Relocations would have been necessary if this alternative was selected, with (2) of (12) potentially impacted residences requiring full acquisition. Impacts to the remaining (10) would have involved either partial right-of-way acquisition or easements from private property. After a demographic analysis of the potentially affected census tracts, it was determined that there are no minority or low-income populations of concern that would trigger environmental justice protections. For a more detailed analysis, please reference the Caltrans Relocation Impact Report (Caltrans 2006a) which is available for public review.

Figure 16. Location of Potential Property Right-Of-Way Impacts - Sherman Oaks (Rejected Alternative 4)

Source: California Department of Transportation, Digital Highway Inventory Photography Program. Map created by Anthony Baquiran/Division of Environmental Planning, November 19, 2007

Table 11. Estimated Residential Displacement Units by Alternative/Alignment

	Alternative 1	Alternative 2	Alternative 3
Owner Occupants of Single Family Residences	0	0	0
Tenant Occupants of Single Family Residences	0	0	0
Tenant Occupants of Multiple Family Residences	0	0	0
Owner Occupants of Mobile Homes	0	0	0
Tenant Occupants of Mobile Homes	0	0	0
TOTAL RESIDENTIAL UNITS	0	0	0
TOTAL PERSONS	0	0	0
*Based on 2000 US Census demographic profile for displacement area - "average family size of occupied housing units" = 1.98			

Source: State of California-Department of Transportation, Relocation Impact Report, 2/23/2006

Project-Related Relocation Expenses. It is Caltrans' policy to earmark project funds for relocations and to adequately budget to cover all associated costs and compensation. Agents are assigned to handle all relocations within an estimated time frame, normally 6-9 months. Depending on the number of displacees, a determination is typically made in regard to the feasibility of relocations within the community. If necessary, the availability of safe and sanitary replacement housing in the area is more than sufficient, and comparable in terms of amenities, public utilities, and accessibility to public services, transportation, and shopping. Market availability is expected to remain adequate and there are no other pending Caltrans or public projects in the area that would affect or compete with available housing. None of the Build Alternatives pose any relocation impacts to private property, and Alternative 4—which would have affected private residential properties on the southeast side of the interchange—has recently been rejected.

For more information regarding the State's relocation program, please reference Appendix D of this document, entitled, "Summary of Relocation Benefits."

Environmental Justice

Regulatory Setting. All projects involving a federal action (funding, permit, or land) must comply with Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, signed by President Clinton on February 11, 1994. This Executive Order directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. Low income is defined based on the Department of Health and Human Services poverty guidelines. For census year 2000, this was $17,050 for a family of four.

All considerations under Title VI of the Civil Rights Act of 1964 and related statutes have also been included in this project. The Department's commitment to upholding the mandates of Title VI is evidenced by its Title VI Policy Statement, signed by the Director.

As discussed in the previous Community/Neighborhood Impacts section, rejected Alternative 4 had the potential to adversely impact residents in zip code 91403 in the community of Sherman Oaks through partial and full acquisition of private residential property that includes (2) residential relocations, but there are no significant minority or low-income populations in that area. Of the six community zip codes analyzed in this community impact assessment, two emerged as communities of concern because of disproportionately high percentages of minority and low-income populations in comparison to numbers for Los Angeles County and the project area, in general. This project involves federal actions, which require that Caltrans take appropriate measures to identify and address project effects on communities like these. As discussed in the previous section, 19.9 percent of families in zip code 91401 are living below poverty level, which is a much higher proportion in comparison to Los Angeles County at 14.4 percent. In the

same zip code, 22.4 percent of individuals are living below poverty levels, which exceed county numbers at 17.9 percent. In zip code 91411 (also in Van Nuys), 16.7 percent of families and 20.7 percent of individuals are living below poverty level. Additionally, this zip code has relatively high numbers of those declaring race as minority—particularly "Hispanic or Latino," "Some other race," and "Two or more races"—in comparison to Los Angeles County. This is presented in the following table:

Table 12. Racial Characteristics for Zip Code 91411

Racial Characteristics	Number	Percent	L.A. County (number)	L.A. County (percent)
One race	22,285	94.3%	9,049,557	95.1%
White	13,097	55.4%	4,637,062	48.7%
Black or African American	1,273	5.4%	930,957	9.8%
American Indian and Alaska Native	150	0.6%	76,988	0.8%
Asian	1,286	5.4%	1,137,500	11.9%
Native Hawaiian and Other Pacific Islander	38	0.2%	27,053	0.3%
Some other race	6,441	27.2%	2,239,997	23.5%
Two or more races	1,356	5.7%	469,751	4.9%
Hispanic or Latino (of any race)	12,414	52.5%	4,242,213	44.6%

Source: U.S. Census 2000

Determination of Disproportionate Effects to Minority and Low-Income Populations

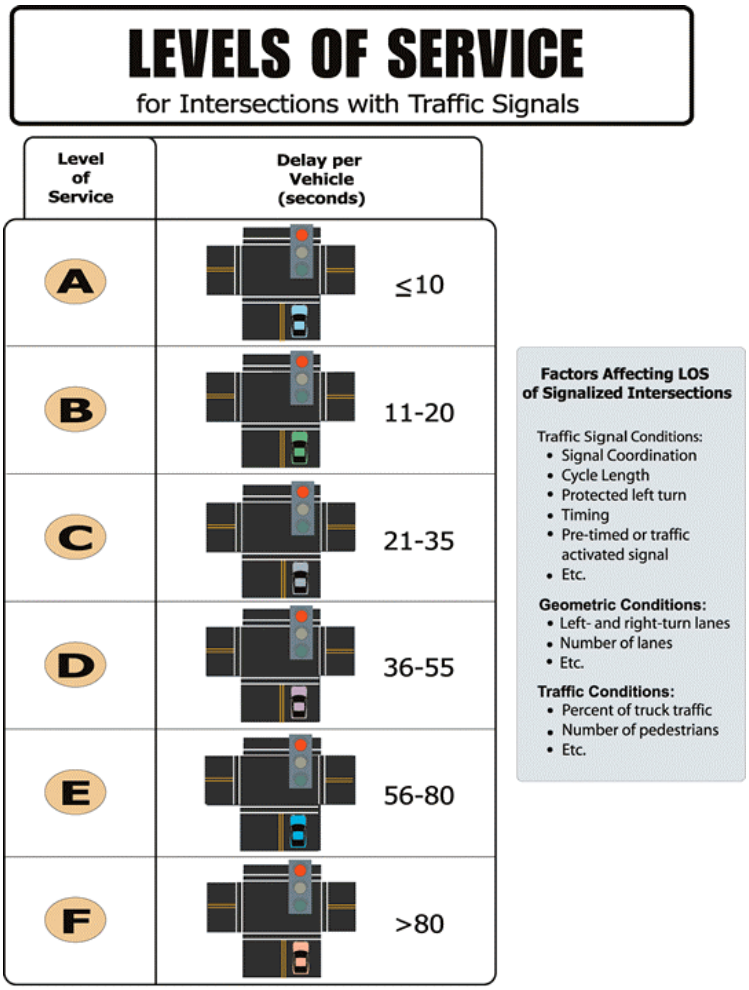
A number of potential discussion points have been considered within the context of environmental justice such as:

- History of other projects or actions that may have disproportionately impacted the local residents
- A permanent reduction of access to various services or cultural destinations
- Reduction in access to transit services
- Project-related property acquisitions and relocations

There is no potential for adverse impacts concerning the aforementioned points, but a need has emerged to study all alternatives for any adverse effects related to an increase in traffic in zip codes 91401 and 91411 as access to the US-101 freeway from Burbank Boulevard would be eliminated. Commuters would then be forced to find other points of access to the US-101 freeway utilizing the surrounding roadway network, which currently is operating at or above peak levels and specifications.

The roadway network surrounding the I-405/US-101 interchange carries very high volumes of traffic throughout the day, and there is little room for geometrical improvements. Some of the existing traffic, circulation, and access issues can be attributed to traffic spill off the I-405 and US-101 freeway mainlines because of extreme congestion and commuters who are forced to exit the mainline and navigate to their destinations using surface streets. A Traffic Analysis Report was prepared for this project (IBI Group 2007) that studied the potential effects of all proposed alternatives through the horizon years of 2015 and 2030, measuring traffic at a total of (22) intersections in the project study area. Traffic operations were analyzed using the capacity Level of Service (LOS) analysis methodology published in the 2000 Highway Capacity Manual (HCM) for signalized intersections. The following graphic illustrates this analysis methodology:

Figure 17. Levels of Service (LOS) for Intersections with Traffic Signals



Source: 2000 HCM, Exhibit 16-2, Level of Service Criteria for Signalized Intersections

Of the (22) intersections measured and analyzed in the IBI Group Traffic Analysis Report, the following intersections were selected for environmental justice analysis as they fall within the 91401 and 91411 postal zip codes:

- Burbank Boulevard & Sepulveda Boulevard
- Burbank Boulevard & Van Nuys Boulevard
- Magnolia Boulevard & Sepulveda Boulevard
- Magnolia Boulevard & Van Nuys Boulevard

In an examination of traffic volume studies and forecasts for year 2015 and 2030, any decreases in LOS at these intersections were identified through all proposed project alternatives. While these assessments alone do not constitute violations of environmental justice protections, they may aid in the selection of an appropriate alternative within this context nevertheless. The results by year and alternative are presented in the following tables with any decreases in level of service highlighted in yellow:

Table 13. Year 2015 AM Peak Level of Service (LOS)

Intersection	Level of Service (LOS) No build	ALT 1	ALT 2	ALT 3
Burbank Boulevard & Sepulveda Boulevard	F	F	F	F
Burbank Boulevard & Van Nuys Boulevard	F	F	F	F
Magnolia Boulevard & Sepulveda Boulevard	E	E	E	E
Magnolia Boulevard & Van Nuys Boulevard	D	E	D	D

Source: IBI Group Traffic Analysis Report for the SB I-405-US-101 Connector Improvement Project

Table 14. Year 2015 PM Peak Level of Service (LOS)

Intersection	Level of Service (LOS) No build	ALT 1	ALT 2	ALT 3
Burbank Boulevard & Sepulveda Boulevard	F	F	F	F
Burbank Boulevard & Van Nuys Boulevard	E	E	E	E
Magnolia Boulevard & Sepulveda Boulevard	F	F	F	F
Magnolia Boulevard & Van Nuys Boulevard	F	F	F	F

Source: IBI Group Traffic Analysis Report for the SB I-405-US-101 Connector Improvement Project

Table 15. Year 2030 AM Peak Level of Service (LOS)

	Level of Service (LOS) No build	ALT 1	ALT 2	ALT 3
Burbank Boulevard & Sepulveda Boulevard	F	F	F	F
Burbank Boulevard & Van Nuys Boulevard	E	F	F	F
Magnolia Boulevard & Sepulveda Boulevard	F	F	F	F
Magnolia Boulevard & Van Nuys Boulevard	F	F	F	F

Source: IBI Group Traffic Analysis Report for the SB I-405-US-101 Connector Improvement Project

Table 16. Year 2030 PM Peak Level of Service (LOS)

	Level of Service (LOS) No build	ALT 1	ALT 2	ALT 3
Burbank Boulevard & Sepulveda Boulevard	F	F	F	F
Burbank Boulevard & Van Nuys Boulevard	F	F	F	F
Magnolia Boulevard & Sepulveda Boulevard	F	F	F	F
Magnolia Boulevard & Van Nuys Boulevard	F	F	F	F

Source: IBI Group Traffic Analysis Report for the SB I-405-US-101 Connector Improvement Project

Based on the aforementioned findings in the IBI Group Traffic Analysis Report for this project, it has been determined that there will be no adverse effects on zip codes 91401 and 91411 related to an increase in traffic. Alternative 1 shows a decrease in LOS at Magnolia and Van Nuys Boulevard in the year 2015, and all alternatives show a decrease in LOS at Burbank and Van Nuys Boulevards in the year 2030, but existing operating conditions are already at low levels, so the presented increases in traffic delay are not considered to be adverse in relation. For a more detailed discussion of traffic on freeway mainlines, access ramps, and intersections, please reference Section 2.6 of this document, entitled, “Traffic and Transportation/Pedestrian and Bicycle Facilities.”

2.1.4 UTILITIES, COMMUNITY FACILITIES AND EMERGENCY SERVICES

Utilities

Alternatives 1, 2, 3, and 4 will impact utilities and utilities right-of-way. All four of the build alternatives will require utility easements and utility agreements. The no-build alternative will impact neither utilities nor utilities right-of-way nor require utility easements and utility agreements. The estimated utilities relocation costs for Alternative 1 are $50,000 and could escalate to $99,614. These costs include the drilling of 4 potholes to determine the location of a 22-inch diameter Southern California Edison Natural Gas Line in a 26-inch diameter pipe casing under Interstate 405 and 2 overhead electrical poles crossing over Interstate 405. For Alternative 2, the estimated utilities relocation costs are also $50,000 and could escalate to $99,614 to pay for the same activities that affect utilities. Alternative 3 has much lower estimated relocation costs of $3,000 that could escalate to $5,979. This is a significant lower cost for the same activities listed for Alternatives 1 and 2. Rejected Alternative 4 had estimated utilities relocation costs of $7,000 and would have escalated to $13,952. These costs include the drilling of 4 potholes to determine the location of a 22-inch diameter Southern California Edison Natural Gas Line in a 26-inch diameter pipe casing under Interstate 405 and 2 overhead electrical poles crossing over Interstate 405 included in Alternatives 1, 2, and 3. In addition, 4 potholes will be drilled to determine the location of a 30-inch diameter Southern California Edison Natural Gas Line in a 36-inch diameter pipe casing under US Highway 101. Also, another 4 potholes will be drilled to determine the location of a Los Angeles Department of Water and Power water line in diameter pipe casing under US Highway 101.

Community Facilities and Emergency Services

Community facilities and services include the schools, police stations, fire stations, and parks and recreational facilities in the area. There will be no discussion of parks and recreation in this section as a more detailed discussion on this topic occurs earlier in the document in its own section entitled, “Parks and Recreation.” The Los Angeles Unified School District (LAUSD) provides primary and secondary public education services, along with a host of private institutions throughout Van Nuys, Sherman Oaks, Encino, and the neighboring communities. Protection and law enforcement is provided by the Los Angeles Police Department (LAPD) through (2) police stations serving the communities in the project area. Further protection is provided by (7) Los Angeles Fire Department (LAFD) neighborhood stations through fire protection and firefighting, emergency medical care, hazardous materials and disaster response, and community service. The California Highway Patrol (CHP) has jurisdiction over the I-405 and US-101 freeways for matters involving both traffic and emergency services. Parks and recreational facilities are planned, developed, and managed by the City of Los Angeles Department of Recreation and Parks.

Schools. The proposed project alternatives to not pose any relocation or adverse impacts to any schools in the project area, but facilities immediate to the project area may experience temporary effects during construction in terms of associated accessibility and/or noise issues. During the construction phases of the project, noise from construction activities will temporarily and intermittently dominate the noise environment in the immediate area of construction. Construction noise is regulated by Caltrans Standard Specifications, Section 7-1.011, “Sound Control Requirements.” These requirements state that noise levels generated during construction shall comply with applicable local, state, and federal regulations that all equipment shall be fitted with adequate mufflers according to the manufacturers’ specifications. A list of schools within (4) miles of the project area is provided below, complete with their approximate distance from the project area (as determined by distance from the intersection of Burbank and Sepulveda Boulevards).

Table 17. Community Schools Within Four Miles of Project Area

Name	Address	Community	Zip Code	Miles from Project Area
PRE-K / KINDERGARTEN				
Kindergarten Learning Academy	6555 Sylmar Avenue	Van Nuys	91401	2.35
Child S World School	6100 Lindley Avenue	Encino	91316	4.81
Encino Presbyterian Children's Center	4963 Balboa Boulevard	Encino	91316	3.38
ELEMENTARY/MIDDLE SCHOOLS				
Bethel Lutheran Elementary	17500 Burbank Boulevard	Encino	91316	3.98
C.E. Merdinian Armenian Evangelical	13330 Riverside Drive	Sherman Oaks	91423	3.87
Chandler Elementary	14030 Weddington Street	Van Nuys	91401	1.97
Children's Community School	14702 Sylvan Street	Van Nuys	91411	1.90
Dixie Canyon Elementary	4220 Dixie Canyon Avenue	Sherman Oaks	91423	4.18
Emelita Elementary	17931 Hatteras Street	Encino	91316	4.25
Emek Hebrew Academy	15365 Magnolia Boulevard	Sherman Oaks	91403	0.59
Encino Elementary	16941 Addison Street	Encino	91316	3.39
Erwin Elementary	13400 Erwin Street	Van Nuys	91401	3.13
Hester Oaks School	15530 Hesby Street	Encino	91436	1.49
Holy Martyrs Elementary	5300 White Oak Avenue	Encino	91316	4.01
Ivy Bound Academy	15355 Morrison Street	Sherman Oaks	91403	0.89
Kester Elementary	5353 Kester Avenue	Van Nuys	91411	0.81
Kittridge Elementary	13619 Kittridge Street	Van Nuys	91401	3.36
Lanai Elementary	4241 Lanai Road	Encino	91436	2.88
Los Encinos School	17114 Ventura Boulevard	Encino	91316	3.03
Millikan Middle School	5041 Sunnyslope Avenue	Sherman Oaks	91423	4.00
Our Lady of Grace School	17720 Ventura Boulevard	Encino	91316	4.34
Riverside Elementary	13061 Riverside Drive	Sherman Oaks	91423	4.58
Sherman Oaks Elementary	14755 Greenleaf Street	Sherman Oaks	91403	2.13
St. Cyril of Jerusalem School	4548 Haskell Avenue	Encino	91436	2.32
St. Francis De Sales School	13368 Valleyheart Drive	Sherman Oaks	91423	4.03
Sylvan Park Elementary	6238 Noble Avenue	Van Nuys	91411	1.06
Valley Beth Shalom Day School	15739 Ventura Boulevard	Encino	91436	1.82
Van Nuys Elementary	6464 Sylmar Avenue	Van Nuys	91401	2.22
Van Nuys Middle School	5435 Vesper Avenue	Van Nuys	91411	1.08
Village Glen School	13130 Burbank Boulevard	Sherman Oaks	91401	2.71
Westmark School	5461 Louise Avenue	Encino	91316	2.84
HIGH SCHOOL				
Buckley School	3900 Stansbury Avenue	Sherman Oaks	91423	3.65
Crespi Carmelite High School	5031 Alonzo Avenue	Encino	91316	4.50
Grant Senior High	13000 Oxnard Street	Van Nuys	91401	3.38
Ferrahian High School	5300 White Oak Avenue	Encino	91316	4.01
Laurence School	13639 Victory Blvd.	Van Nuys	91401	3.09
London High School	1224 Oxnard Street	Van Nuys	91401	3.48
Notre Dame High School	13645 Riverside Drive	Sherman Oaks	91423	3.48
Rogers High School	14711 Gilmore Street	Van Nuys	91411	1.82
Van Nuys Senior High School	6535 Cedros Avenue	Van Nuys	91411	1.95

Emergency Services. No long-term impacts are anticipated for fire, police, and emergency response services as a result of the proposed project. While project construction may create temporary, yet minimal impacts in regard to emergency response times, the end result will improve traffic and circulation issues on both freeway mainlines and on surface streets, which could possibly yield quicker response times for fire, police, and emergency services. Depending on which alternative is selected, appropriate detours will be implemented, as well as plans for proper fire, police, and emergency access during construction. Funds have been allocated in order to provide a Traffic Management Plan (TMP), which is developed and incorporated as part of the project design prior to the onset of construction and to minimize disruption to the existing traffic flow conditions. More information on the TMP can be found in Section 2.6 of this document, entitled, "Traffic and Transportation/Pedestrian and Bicycle Facilities."

Table 18. Police and Fire Stations Serving Communities in the Project Area

Station	Address	Community	Zip Code	Distance from Project Area
COMMUNITY POLICE STATIONS				
Van Nuys Community Police Station	6240 Sylmar Avenue	Van Nuys	91401	2.03
West Valley Community Police Station	19020 Vanowen Street	Reseda	91335	6.77
NEIGHBORHOOD FIRE STATIONS				
Fire Station 39	14415 Sylvan Street	Van Nuys	91401	1.98
Fire Station 83	4960 Balboa Boulevard	Encino	91316	3.39
Fire Station 88	5101 Sepulveda Boulevard	Sherman Oaks	91403	0.69
Fire Station 90	7921 Woodley Avenue	Van Nuys	91406	4.66
Fire Station 100	6751 Louise Avenue	Van Nuys	91406	3.80
Fire Station 102	13200 Burbank Boulevard	Van Nuys	91401	2.61
Fire Station 109	16500 Mulholland Drive	Encino	90049	5.39

2.1.5 TRAFFIC AND TRANSPORTATION/PEDESTRIAN AND BICYCLE FACILITIES

Traffic

The purpose of this project is to improve safety, operation, capacity, and traffic flow through the interchange by replacing the existing 20 mile-per-hour, single-lane connector, with a new 50 mile-per-hour, two-lane connector. The I-405/US-101 interchange is largely considered as one of America's worst freeway bottlenecks, and there is substantial need for improvements as the existing structures were built in the 1950s and insufficient in accommodating both current and future demand.

These infrastructure deficiencies result in the formation of a queue that backs up onto the I-405 mainline. There are also many weaving areas along the connector route, which contribute to relatively high accident rates (discussed in this section, and in more detail in Chapter 1 of this document). In general, analysis indicates that proposed Alternatives 1, 2 and 3 will provide a significant and reasonable improvement over the No Build condition. Although volumes on certain ramps and adjacent intersections may increase as a result of the different build alternatives due to traffic redistribution, the overall benefits of the improved condition will be significant.

The IBI Group has prepared a Traffic Analysis Report (IBI Group 2007) that examines the traffic operations for the existing condition, future No Build condition, and the four project alternatives within the project area. This analysis serves as a supporting document to the Environmental Assessment/Initial Study (EA/IS) for the I-405/US-101 Connector Improvement Project, in which this Community Impact

Assessment (CIA) is a component of. The following subsections present information extracted from the Traffic Analysis Report, and other contributing studies related to traffic impacts.

Affected Environment

The I-405 freeway carries an average of 115,000 to 160,000 vehicles per day in the vicinity of the Sepulveda Basin, and the US-101 carries an average of 160,000 to 165,000 vehicles per day in this area. The connector between the southbound I-405 freeway and the US-101 carries over 50,000 vehicles per day, with just over half of those vehicles heading to the northbound US-101 freeway and the rest heading to southbound US-101. The existing connector is a non-standard, single-lane structure wit an operational speed of 20 miles-per-hour, and the facility is not sufficient to handle the traffic demand. As mentioned earlier, vehicles form a queue at this location that frequently backs up onto the I-405 mainline, with many weaving areas along the connector route, which contribute to high accident rates. At each of the weaving segments from the southbound I-405 onto the northbound US-101, the accident rates range from 33 percent to 197 percent higher than the state average. On the connector from the southbound I-405 to the southbound US-101, the accident rate is 13 percent higher than the average for facilities of that type.

Delay Cost Analysis for the No-Build Condition (2015) versus Build Alternatives. By 2015 and based, a delay cost analysis performed by the Caltrans Division of Operations, and on the foregoing discussion, the annual savings in travel delay cost associated with the build alternatives over the No-Build Alternative are anticipated to be approximately:

Alternative 1: $38.3 million/year
Alternative 2: $29.4 million/year
Alternative 3: $28.4 million/year

It is obvious from the above analysis that Alternative 1 provides the highest travel delay savings over all other alternatives. If Alternative 1 is selected, access to the US-101 freeway from Burbank Boulevard would be lost, which would divert and redistribute traffic to other ramps. A full analysis of these ramps for possible mitigation to alleviate the expected increase in demand would be required. Alternatives 2 and 3 would provide a better operational level for the freeway system in the vicinity of the project, and would still lead to a substantial amount in travel delay savings. Alternative 3—which calls for the reconstruction of the Burbank Boulevard on-and-off-ramps—would represent the best operational improvement to the interchange. This option would still provide considerable savings in travel time and would prevent unnecessary redistribution of traffic to other ramps.

Peak Period Performance. Peak period performance shows modeled top speeds during the period(s) of highest demands. A slower speed during the peak period typically constitutes a strong indicator of need. Three segments were selected to monitor top speed during both AM and PM peak periods – I-405 southbound at Burbank Boulevard to the I-405/US-101 interchange main line, I-405 southbound at Burbank Boulevard to the US-101 northbound connector, and I-405 southbound at Burbank Boulevard to US-101 southbound connector. Findings are presented in the following tables.

Table 19a. Top Speed, I-405 SB/Burbank Boulevard to Interchange Main Line

SCENARIO	SPEED	
	AM Peak (mph)	PM Peak (mph)
Existing Conditions	15	18
No Build - Year 2015	10	12
Alternative 1	12	14
Alternative 2	11	13
Alternative 3	11	13

In this segment on I-405 from Burbank Boulevard to the I-405/US-101 interchange mainline, commuters are already experiencing poor AM and PM peak period performance with speeds that do not exceed 20 miles per hour, which demonstrates the urgent need for this project and improvements to the interchange. If the No Build alternative is selected, peak period performance can be expected to continue to decline.

Table 19b. Top Speed, I-405 SB/Burbank Boulevard to US-101 NB Connector

SCENARIO	SPEED	
	AM Peak (mph)	PM Peak (mph)
Existing Conditions	17	17
No Build - Year 2015	16	13
Alternative 1	45	43
Alternative 2	44	43
Alternative 3	40	36

The need for improvements at the I-405/US-101 interchange is best demonstrated along this particular segment. With existing conditions, speeds during the AM and PM peak periods do not exceed 20 miles per hour.

Table 19c. Top Speed, I-405 SB/Burbank Boulevard to US-101 SB Connector

SCENARIO	SPEED	
	AM Peak (mph)	PM Peak (mph)
Existing Conditions	23	20
No Build - Year 2015	22	23
Alternative 1	42	23
Alternative 2	20	39
Alternative 3	20	39

This particular segment experiences the same issues in AM and PM peak period performance, but with minimal decreases in the No Build scenario.

Volume/Capacity and Level of Service. Basic freeway segments have uniform traffic conditions and roadway characteristics, such as the number of lanes, shoulder clearance, and grade. Basic freeway segments within the study are were analyzed using capacity and Level of Service (LOS) concepts from the Highway Capacity Manual (HCM2000). The figure below illustrates the concept of LOS and the associated conditions and technical descriptions, and the tables that follow present data for the southbound I-405 mainline, and the northbound and southbound US-101 freeway segments in the project area vicinity.

Figure 18. Level of Service Thresholds for Freeways

LEVELS OF SERVICE
for Freeways

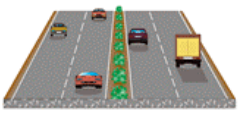
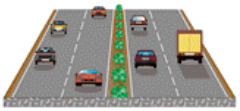
Level of Service	Flow Conditions	Operating Speed (mph)	Technical Descriptions
A		70	Highest quality of service. Traffic flows freely with little or no restrictions on speed or maneuverability. **No delays**
B		70	Traffic is stable and flows freely. The ability to maneuver in traffic is only slightly restricted. **No delays**
C		67	Few restrictions on speed. Freedom to maneuver is restricted. Drivers must be more careful making lane changes. **Minimal delays**
D		62	Speeds decline slightly and density increases. Freedom to maneuver is noticeably limited. **Minimal delays**
E		53	Vehicles are closely spaced, with little room to maneuver. Driver comfort is poor. **Significant delays**
F		<53	Very congested traffic with traffic jams, especially in areas where vehicles have to merge. **Considerable delays**

Table 20. Southbound I-405 Mainline V/C and Level of Service (LOS)

Segment Description	Segment Type	Lanes	AM Peak		PM Peak	
			Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
North of Victory Blvd	Basic	5	32.3	D	31.0	D
From Victory to Burbank Blvd	Basic	5	35.1	E	33.4	D
Burbank Blvd Overcrossing	Basic	5	34.4	D	31.5	D
South of US-101 connector	Basic	4	55.7	F	51.0	F
Below US-101 facility	Basic	4	71.6	F	66.5	F

Note: Level of Service (LOS) based on HCM 2000 analysis methodology.
Pc/mi/ln = passenger cars per mile per lane

Table 21. Northbound US-101 Mainline V/C and Level of Service (LOS)

Segment Description	Segment Type	Lanes	AM Peak		PM Peak	
			Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
Van Nuys Blvd under-crossing	Basic	5	50.5	F	52.7	F
Van Nuys Blvd to Sepulveda Blvd	Basic	6	47.6	F	50.2	F
Sepulveda Blvd to NB-405 connector	Basic	5	57.2	F	60.3	F
Northbound US-101	Basic	4	74.9	F	79.0	F
NB-101 over I-405 freeway structure	Basic	6	56.3	F	59.4	F
Between Haskell Ave off-ramp and on-ramp	Basic	6	53.4	F	62.0	F
Haskell Ave to Hayvenhurst Ave	Basic	6	43.6	E	50.6	F
Hayvenhurst Ave to Balboa Blvd	Basic	5	47.9	F	57.3	F
Balboa Blvd under-crossing	Basic	5	47.9	F	57.3	F
North of Balboa Blvd	Basic	5	53.0	F	62.7	F

Note: Level of Service (LOS) based on HCM 2000 analysis methodology.
Pc/mi/ln = passenger cars per mile per lane

Table 22. Southbound US-101 Mainline V/C and Level of Service (LOS)

Segment Description	Segment Type	Lanes	AM Peak		PM Peak	
			Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
Balboa Blvd under-crossing	Basic	5	55.3	F	54.4	F
Balboa Blvd to Hayvenhurst Ave	Basic	5	64.4	F	63.0	F
Hayvenhurst Ave to Haskell Ave	Basic	6	51.1	F	50.9	F
Southbound US-101	Basic	6	51.1	F	50.9	F
SB-101 over I-405 freeway structure	Basic	4	54.6	F	60.9	F
SB-101 over Sepulveda Blvd	Basic	7	48.1	F	38.5	E
Auxiliary lane segment	Basic	7	43.3	E	36.1	E
Sepulveda Blvd to Van Nuys Blvd	Basic	6	50.5	F	42.1	E

Note: Level of Service (LOS) based on HCM 2000 analysis methodology.
Pc/mi/ln = passenger cars per mile per lane

Access and Freeway Connector Volumes. A summary of the existing ramp and connector lanes and volumes is presented in Table 23. The southbound I-405 connector ramp to the northbound US-101 freeway currently operates at capacity, and contains a mark in the "Flag" column of the table. All other rams within the study area have sufficient capacity to satisfy existing demand, though improvements will need to be made in the future to meet projected volume/capacity increases.

Table 23. Access and Freeway Connector Volumes – Existing Condition (Year 2004)

Post Mile	Ramp Description	Type	Lanes	Capacity (veh/hr)	AM Volume (veh/hr)	PM Volume (veh/hr)	AADT	Flag
Southbound I-405								
39.8	SB 405 to 101 connector	Connector	3	4,500	3,362	2,722	49,200	
39.4	SB 405 to NB 101 connector	Connector	1	1,500	1,792	1,374	25,600	X
39.4	SB 405 to SB 101 connector	Connector	2, 1	3,000	1,570	1,348	23,600	
40.1	SB 405 on from Burbank Blvd	On-ramp	2, 1	3,000	745	485	8,900	
40.5	SB 405 off to Burbank Blvd	Off-ramp	1, 3	1,500	856	807	13,200	
41.3	SB 405 on from Victory Blvd	On-ramp	1	1,500	451	396	4,600	
Northbound US-101								
16.1	NB 101 on from Van Nuys Blvd	On-ramp	2, 1	3,000	1,067	1,211	17,200	
16.7	NB 101 off to Sepulveda Blvd	Off-ramp	1, 2	1,500	838	572	10,600	
17.1	NB 101 on from NB 405	Connector	2	3,000	2,520	2,761	48,700	
17.5	NB 101 off to Haskell Ave	Off-ramp	1	1,500	790	420	6,400	
17.6	NB 101 on from Haskell Ave	On-ramp	1	1,500	260	548	3,400	
18.5	NB 101 off to Hayvenhurst Ave	Off-ramp	1, 2	1,500	723	560	7,700	
19	NB 101 off to Balboa Ave	Off-ramp	1, 3	1,500	620	680	8,600	
19.4	NB 101 on from Balboa Ave	On-ramp	2, 1	3,000	843	887	10,000	
Southbound US-101								
16	SB 101 on from Van Nuys Blvd	On-ramp	2, 1	3,000	809	662	12,400	
16.8	SB 101 on from Sepulveda Blvd	On-ramp	2, 1	3,000	574	781	8,300	
17	SB 101 on from NB 405	Connector	2	3,000	2,069	2,018	32,700	
18.5	SB 101 on from Hayvenhurst Ave	On-ramp	2, 1	3,000	660	830	9,500	
19	SB 101 on from Balboa Ave	On-ramp	2, 1	3,000	648	592	9,600	

veh/hr = vehicles per hour
AADT = Average Annual Daily Traffic

Arterial/Intersection Impacts

Alternative 1. The ramp modifications associated with Alternative 1 do not result in any changes to study intersection geometry. Access to US-101 is no longer provided from the Burbank Boulevard on-ramp in this alternative, and vehicles traveling from southbound I-405 to northbound US-101 via the new connector can no longer exit at Haskell Avenue, which results in traffic redistribution through certain project study intersections compared to the No Build alternative.

Alternative 2. The ramp modifications associated with Alternative 2 do not result in any changes to study intersection geometry. The connector improvements do not generate additional trips, and do not change the total number of trips through the system. However, the new connector from southbound I-405 to northbound US-101 does preclude access to the Haskell Avenue off-ramp, which results in traffic redistribution through certain project study intersections compared to the No Build alternative.

Alternative 3. This alternative is similar to Alternative 2, and as with that alternative, the associated ramp modifications do not result in any changes to study intersection geometry. Vehicles traveling from southbound I-405 to northbound US-101 via the new connector can no longer exit at Haskell Avenue, which results in traffic redistribution through certain project study intersections compared to the No Build alternative.

Environmental Consequences

The traffic analysis performed for this project focused on three key components of the roadway network that impact freeway performance. They are the freeway segments, access and connector ramps, and signalized intersections.

Freeways. In general, all of the proposed build alternatives result in operational improvements and enhanced conditions on the freeway mainline. The existing single-lane connector from southbound I-405 to northbound US-101 has a sharp, nonstandard curve with a design speed of 20 miles per hour. Replacing the existing connector with a two-lane, 50 mile per hour ramp is expected to improve flow through the area and reduce the spillback from the ramp queue onto the I-405 mainline. This connector improvement is included in all of the proposed alternatives.

In Alternative 1, the new southbound I-405 on-ramp from Burbank Boulevard bypasses the US-101 connector and joins the I-405 just north of the northbound US-101 overpass. The new configuration eliminates the weaving segment between the existing Burbank Boulevard on-ramp and the US-101 connector diverge, and provides improved speed and level of service along the southbound I-405 in this area.

The existing connector from southbound I-405 to northbound US-101 is removed in Alternative 1, which also eliminates the weaving area on the northbound US-101 between the connector and the Haskell Avenue off-ramp. Speed and level of service on the northbound US-101 is also improved with this configuration. The Alternative 1 modifications do not include any changes to the southbound US-101, and operations remain the same as in the No Build condition.

In Alternative 2, the new southbound I-405 on-ramp from Burbank Boulevard provides access the US-101 freeways, and eliminates the weaving areas on the southbound I-405 and northbound US-101. There are no anticipated negative impacts to freeway mainline service as a result of the Alternative 2 improvements. No changes are made to the southbound US-101, and the level of service remains the same as in the No Build condition.

In terms of mainline performance, Alternative 3 is the same as Alternative 2. The removal of weaving areas on the southbound I-405 and northbound US-101 results in operational improvements on those lines. In the Alternative 3 configuration, operations on the southbound US-101 are the same as in the No Build condition.

Access Ramps. In the existing condition, most of the freeway access and connector ramps have adequate capacity to handle typical service volumes. One location where ramp volumes exceed 1,500 vehicles per hour per lane is the southbound I-405 connector to northbound US-101. The single-lane connector has a nonstandard, sharp curve with an effective speed of 20 miles per hour. This location is a bottleneck, and queues commonly form that spill back onto the southbound I-405 freeway mainline. The objective of this project is to upgrade the southbound I-405 connector to US-101 to a two-lane, 50 mile per hour structure with standard design features. A summary of the changes to ramp access, configuration, and volumes for each of the project alternatives is included in this section.

Alternative 1 includes new southbound I-405 connector ramps to northbound and southbound US-101, and a new Burbank Boulevard on-ramp to southbound I-405 that bypasses the US-101 connectors. With this configuration, vehicles can no longer access the US-101 freeway from the Burbank Boulevard on-ramp. These vehicles are expected to enter the northbound US-101 facility from the Balboa Boulevard or

Van Nuys Boulevard on-ramps instead, and to enter the southbound US-101 from the Sepulveda Boulevard or Van Nuys Boulevard on-ramps. Otherwise, the vehicles can enter the southbound I-405 from the Victory Boulevard on-ramp and use the new connector ramps. Another access change with Alternative 1 is that vehicles traveling southbound on the I-405 can no longer merge onto the northbound US-101 to exit at Haskell Avenue. These travelers are expected to use the Burbank Boulevard off-ramp from the I-405 or the Hayvenhurst Avenue off-ramp from the US-101 instead, with lower volumes on the Haskell Avenue off-ramp.

Alternatives 2 and 3 include a new southbound I-405 connector ramp to northbound US-101, and a new nonstandard Burbank Boulevard on-ramp to southbound I-405 that provides access to southbound I-405, northbound US-101, and southbound US-101. With this configuration, vehicles traveling southbound on the I-405 can no longer merge onto the northbound US-101 to exit at Haskell Avenue. These travelers are expected to use the Burbank Boulevard off-ramp from the I-405 or the Hayvenhurst Avenue off-ramp from the US-101 instead, with lower volumes on the Haskell Avenue off-ramp. The Alternative 3 configuration is the same as the Alternative 2 condition, except that the Burbank Boulevard on-ramp has full standard design and possibly higher ramp design speed. With respect to ramp operations, Alternative 3 has the same analysis conditions and results as Alternative 2.

In each of the build alternatives, the new connector from southbound I-405 to northbound US-101 bypasses the Haskell Avenue off-ramps, which would cause southbound I-405 traffic that currently exits at Haskell Avenue to be redistributed to the Burbank Boulevard off-ramp from the I-405 or the Hayvenhurst Avenue off-ramp from the US-101. The Hayvenhurst Avenue off-ramp is projected to carry high volumes in the future forecast years, particularly with the addition of the redistributed traffic from the new connector. The Hayvenhurst Avenue off-ramp should be reconfigured before the year of project completion.

Intersections. The project study area is a built environment, with little room for geometrical improvements. In the existing condition, eleven of the twenty-two study intersections operate at LOS F during one or both peak periods. By the year 2030, all twenty-two intersections are forecast to operate at LOS F due to ambient growth alone.

This project does not generate trips, but ramp access modifications associated with each project alternative may result in redistribution of traffic through local intersections. If the traffic redistribution results in lower volumes through an intersection, or adds volume to a movement that has available capacity, the average delay at that intersection may decrease. Locations that are forecast to carry higher volumes may experience an increase in delay. In general, the redistributed traffic is not expected to cause significant impacts in the project study area. The greatest volume change occurs at the intersection of Burbank and Sepulveda Boulevard, and the intersections created by the US-101 on-ramps and off-ramps at Hayvenhurst Avenue.

For Alternative 1, there are 15 intersections with volume changes due to ramp modifications. Six of these locations experience a reduction in average delay per vehicle, and nine locations experience increased delay. For forecast year 2015 conditions, five intersections that operate at LOS F in the No Build condition will have increased average delays ranging from 1.7 seconds to 63.0 seconds per vehicle. For year 2030, ten intersections that operate at LOS F in the No Build condition will have increased average delays ranging from 0.5 seconds to 82.8 seconds per vehicle.

For Alternatives 2 and 3, there are 7 intersections with volume changes due to ramp modifications. Three of these locations experience a reduction in average delay per vehicle, and four locations experience increased delay. For forecast year 2015 conditions, two intersections that operate at LOS F in the No Build condition will have increased average delays ranging from 18.1 seconds to 62.7 seconds per vehicle. For year 2030, six intersections that operate at LOS F in the No Build condition will have increased average delays ranging from 0.5 seconds to 82.8 seconds per vehicle.

Conclusions About Environmental Consequences. Travel demand and traffic congestion are expected to continue to increase in the future on the I-405/US-101 interchange. In general, analysis

indicates that the build Alternatives 1, 2, and 3 will provide a significant and reasonable improvement over the No Build scenario. Improvements include reduced congestion, smoother operations, a decrease in weaving, and improved safety over the no-build. Although volumes on certain ramps and adjacent intersections will increase as a result of the different build alternatives due to traffic redistribution, the overall benefits of the improved condition will be significant.

ADA (Americans with Disabilities Act) Compliance. Caltrans has the responsibility to ensure that all projects that receive federal financial assistance from the US Department of Transportation, fully comply with 49 CFR (Code of Federal Regulations), Part 27 entitled, *Nondiscrimination on the Basis of Disability in Programs and Activities receiving or Benefiting from Federal Financial Assistance*. 49 CFR, Part 27 applies to each recipient of federal assistance from the US Department of Transportation, and to each program or activity that receives or benefits from such assistance.

Specifically, Caltrans' role is to ensure that all new and existing altered facilities such as, but not limited to highway rest area facilities, sidewalks, pedestrian cross walks, pedestrian over-passes, under-passes, and ramps shall be made accessible to disabled persons in accordance with federal and state (the state should provide equal or greater accessibility) standards on all federal-aid projects meeting the criteria for the ADA compliance. This project is not anticipated to impact any existing facilities in terms of ADA compliance, and any design changes that would have to potential to, are subject to review to ensure compliance with all federal and state standards.

Traffic Impacts Related to Construction Activities. It is expected that detailed construction staging plans will be completed for the project, and that a detailed analysis of how traffic will be impacted during the construction phase of the various build alternatives will be provided by Caltrans once these plans are available. The purpose of this section is to provide an overview or discussion of the expected traffic impacts related to construction activities. Similar projects have been constructed along Interstate 405 and other freeways within the Los Angeles metropolitan area in the recent past, and it is believed that this project will have similar impacts.

Construction of the planned improvements will probably require the narrowing of traffic lanes and a loss of shoulder areas for a prolonged period, thereby reducing the effective capacity of the freeway segments and/or ramps where construction is taking place. This can result in overall traffic delay increases by as much as 10 percent or more during peak traffic periods. The impact on traffic delays is particularly significant when construction starts, due to spectator slowing and the need for the average driver to adjust to changes in the roadway. However, within one-to-two weeks after construction starts, regular commuters usually become accustomed to driving through a construction zone and the amount of traffic delays caused by construction decreases accordingly. The following table details preliminary lane closure plans during construction by alternative.

Table 24. Preliminary Lane Closures by Alternative

Alternative/Stage	Duration	Segment	Lane Number	Work Description
Alternative 1				
Stage 1	One weekend	Northbound US-101	6	Tie-in southbound I-405 connector to Northbound US-101.
Stage 2A	3-4 months	Southbound I-405	4	Tie-in southbound I-405 to US-101 northbound/southbound connectors.
Stage 2B	1-2 months	Southbound I-405 on-ramp at Burbank Boulevard	On-ramp	Full on-ramp closure to tie-in southbound I-405 to US-101 connector and tie-in with the re-aligned on-ramp.

Alternative/Stage	Duration	Segment	Lane Number	Work Description
Alternative 1 (continued)				
Stage 2C	One Weekend	Southbound I-405 to US-101 Connector	Connector	Tie-in southbound I-405 connector to existing southbound US-101 connector.
Stage 3A	1-2 months	Southbound I-405 on-ramp at Burbank Boulevard	On-ramp	Full on-ramp closure - tie-in to southbound I-405.
Stage 3B	One weekend	Southbound I-405	3	Southbound I-405 onramp tie-in to southbound I-405.
Alternative 2				
Stage 1A	One weekend	Northbound US-101	6	Tie-in southbound I-405 connector to northbound US-101.
Stage 1B	One weekend	Southbound I-405	4	Tie-in southbound I-405 on-ramp at Burbank Boulevard to southbound I-405.
Stage 2	Six months	Southbound & Northbound I-405 HOV lanes	HOV	Closure of southbound I-405 HOV and northbound I-405 HOV lanes to reconstruct bridge columns (eastbound part of the elevated structure).
Stage 3	3-4 months	Northbound I-405 off-ramp at Burbank Boulevard	Off-ramp	Reconstruct off-ramp for re-grading of Burbank Boulevard between Sepulveda Boulevard and Burbank Boulevard overcrossing/bridge.
Stage 4	Six months	Southbound & Northbound I-405 HOV lanes	HOV	Closure of southbound I-405 HOV and northbound I-405 HOV lanes to reconstruct bridge columns (eastbound part of the elevated structure).
Stage 5	3-4 months	Northbound I-405 on-ramp at Burbank Boulevard	On-ramp	Reconstruct on-ramp for re-grading of Burbank Boulevard between Sepulveda Boulevard and Burbank Boulevard overcrossing/bridge.
Stage 6	Two weekends	Southbound I-405	4	Widen southbound I-405 to accommodate the re-aligned southbound I-405 on-ramp at Burbank Boulevard.
Stage 7	Two weekends	Southbound I-405	4	Tie-in southbound I-405 to northbound/southbound US-101 connectors.
Alternative 3				
Stage 1A	One weekend	Northbound US-101	6	Tie-in southbound I-405 connector to northbound US-101.
Stage 1B	One weekend	Southbound I-405	4	Tie-in southbound I-405 off-ramp at Burbank Boulevard to southbound I-405.
Stage 2	Two weekends	Southbound I-405	4	Tie-in southbound I-405 on-ramp at Burbank Boulevard to southbound I-405.
Stage 3	One weekend	Southbound I-405	4	Tie-in southbound I-405 to northbound/southbound US-101 connectors.

Avoidance, Minimization, and/or Mitigation Measures

Measures to Lessen Impacts on the Freeway Mainline

No mitigation measures related to freeway mainline operations are required as each of the proposed alternatives result in comparable or improved operations in comparison to the No Build Alternative.

Measures to Lessen Impacts on Access Ramps and Connectors

By the year 2030, the southbound I-405 connector to southbound US-101 and the northbound I-405 connector to northbound US-101 are forecast to have demand volumes that exceed capacity due to ambient growth alone. Without the project improvements, deficient conditions on the southbound I-405 connector to northbound US-101 will continue to deteriorate. Each of the build alternatives provides increase capacity on the southbound I-405 connector segments to US-101 and to northbound US-101, which would provide sufficient capacity on these ramps through forecast year 2030.

Alternative 1. In this configuration, vehicles may no longer access the northbound or southbound US-101 from the Burbank Boulevard on-ramp to southbound I-405. Traffic that is forecast to utilize the Burbank Boulevard on-ramp to access the northbound US-101 connector is redistributed to the Balboa Boulevard on-ramp. Vehicles that would use the Burbank Boulevard on-ramp to get to the southbound US-101 connector are expected to use the Sepulveda Boulevard and Van Nuys Boulevard on-ramps instead. The new connector to northbound US-101 will bypass the Haskell Avenue off-ramp, so vehicles that would travel from southbound I-405 to northbound US-101 and exit at Haskell Avenue are expected to use the Burbank Boulevard off-ramp from southbound I-405 and the Hayvenhurst Avenue exit from the northbound US-101 instead. These locations carry high volumes in the existing condition, and capacity issues are observed at the Hayvenhurst Avenue off-ramp. With ambient growth and the addition of redistributed traffic due to Alternative 1, conditions are expected to worsen in the future. The Hayvenhurst Avenue off-ramp should be reconfigured to alleviate the existing deficiency before the year of project completion.

Alternatives 2 and 3. In the Alternative 2 and 3 configurations, the new connector to northbound US-101 will bypass the Haskell Avenue off-ramp. Vehicles that would travel from southbound I-405 to northbound US-101 and exit at Haskell Avenue are expected to use the Burbank Boulevard off-ramp from southbound I-405 and the Hayvenhurst Avenue exit from northbound US-101 instead. Capacity issues have been observed at the Hayvenhurst Avenue off-ramp. With ambient growth and the addition of redistributed traffic due to these alternatives, conditions are expected to worsen in the future. The Hayvenhurst Avenue off-ramp should be reconfigured to alleviate the existing deficiency before the year of project completion.

Proposed Measures to Lessen Impacts on Intersections

The existing study area network carries high volumes through intersections with limited capacity. By the year 2030, all (22) intersections in the study area are forecast to operate at a Level Of Service (LOS) F during one or both peak periods in the No Build condition due to ambient growth alone. The southbound I-405 to US-101 connector improvement project is not a trip generator, and is not expected to increase the total number of trips through the study area. However, even a small number of redistributed peak hour trips through an intersection with LOS F can cause an increase in the average delay per vehicle.

Potential mitigation measures are provided for intersections that are forecast to operate at LOS F in the with-project condition, if the redistribution of traffic related to the project alternative results in an increase of four of more seconds to the average delay per vehicle. The measures described in this section would mitigate the project impacts only, and provide an average delay per vehicle for the intersection that is comparable to or lower than the No Build Condition. There may be other possible improvements that

would provide an even lower average delay per vehicle, but these mitigation measures focus on adding capacity where trips redistributed by the project would travel.

The project study area is primarily a built-out environment. Geometrical improvements may require acquisition of property and incur purchase, relocation, and other compensation costs. In some cases, the cost of an improvement may far exceed the benefit received, to the detriment of businesses and property owners adjacent to the intersection. A cost-benefit analysis of each of these improvements should be performed before any of these mitigation measures are recommended or implemented.

Proposed Alternative 1 Mitigation Measures for Year 2015. There are five intersections in the project study area that are forecast to operate at LOS F in the year 2015 with the Alternative 1 configuration, where the project would increase the average delay per vehicle by four seconds or more. These intersections are listed in the following Table 25a, along with geometrical improvements that would provide additional capacity to serve the redistributed traffic created by Alternative 1 in the year 2015. The highest forecast peak hour (either AM or PM) delay at each intersection for the No Build condition, the unmitigated Alternative 1 condition, and the mitigated Alternative 1 condition are listed in Table 25b. The proposed mitigation measures in Table 25a would provide an improved condition (lower average delay per vehicle) compared to the No Build Scenario.

Table 25a. Proposed Alternative 1 Mitigation Measures – Year 2015

Intersection	Mitigation Measures to Produce Conditions comparable to No Build
Burbank Boulevard & Hayvenhurst Avenue	Add a 3rd westbound through lane
Burbank Boulevard & Sepulveda Boulevard	Add an eastbound right turn lane
NB US-101 Off-ramp & Hayvenhurst Avenue	Add a 2nd westbound left turn lane
SB US-101 Off-ramp & Van Nuys Boulevard	Add a 2nd southbound left turn lane
Burbank Boulevard & Woodley Avenue	Add a westbound right turn lane

Table 25b. Alternative 1 Mitigated Change in Delay Compared to No Build – Year 2015

Intersection	No Build Delay	Unmitigated ALT 1 Delay (sec/veh)	Mitigated ALT 1 Delay (sec/veh)	Mitigated Change in Delay From No Build (sec/veh)
Burbank Boulevard & Hayvenhurst Avenue	98.6	104.2	75.5	-23.1
Burbank Boulevard & Sepulveda Boulevard	181.4	197.9	150.6	-30.8
NB US-101 Off Ramp & Hayvenhurst Avenue	79.1	127.8	49.9	-29.2
SB US-101 On-ramp & Hayvenhurst Avenue	81.7	144.7	57.9	-23.8
SB US-101 Off-ramp and Van Nuys Boulevard	149.6	155.0	110.4	-39.2
Burbank Boulevard & Woodley Avenue	209.3	223.1	144.2	-65.1

Delays listed in this table are the worst-case peak hour values (either AM or PM peak)

Proposed Alternative 1 Mitigation Measures for Year 2030. There are ten intersections that are forecast to operate at a Level Of Service (LOS) F in the year 2030 with the Alternative 1 configuration, where the project would increase the average delay per vehicle by four seconds or more. These intersections are listed in Table 26a, along with geometrical improvements that would provide additional capacity to serve the redistributed traffic created by Alternative 1 in the year 2030. The highest forecast peak hour (either AM or PM) delay at each intersection for the No Build condition, the unmitigated Alternative 1 condition, and the mitigated Alternative 1 condition are listed in Table 26b. The proposed

mitigation measures in Table 26a would provide an improved condition (lower average delay per vehicle) compared to the No Build scenario.

Table 26a. Proposed Alternative 1 Mitigation Measures – Year 2030

Intersection	Mitigation Measures to produce Conditions Comparable to the No Build
Burbank Boulevard & Hayvenhurst Avenue	Add a 3rd westbound through lane
NB US-101 Off-ramp & Sepulveda Boulevard	Add a 2nd westbound left turn lane
Burbank Boulevard & Sepulveda Boulevard	Add an eastbound right turn lane
NB US-101Off-ramp & Hayvenhurst Avenue	Add a 2nd westbound left turn lane
NB US-101 On/Off-ramps & Balboa Boulevard	Add dual southbound right turn lane
Magnolia Boulevard & Sepulveda Boulevard	Add a 4th southbound through lane
Ventura Boulevard & Hayvenhurst Boulevard	Add a 3rd southbound left turn lane
SB US-101 Off-ramp & Van Nuys Boulevard	Add a 2nd southbound left turn lane
Magnolia Boulevard & Van Nuys Boulevard	Add a southbound right turn lane
Burbank Boulevard & Woodley	Add a westbound right turn lane

Table 26b. Alternative 1 Mitigated Change in Delay Compared to No Build – Year 2030

Intersection	No Build Delay	Unmitigated ALT 1 Delay (sec/veh)	Mitigated ALT 1 Delay (sec/veh)	Mitigated Change in Delay From No Build (sec/veh)
Burbank Boulevard & Hayvenhurst Avenue	208.3	217.4	168.0	-40.3
NB US-101 Off-ramp & Sepulveda Boulevard	90.8	122.8	34.2	-56.6
Burbank Boulevard & Sepulveda Boulevard	315.1	336.1	276.1	-39.0
NB US-101 Off-ramp & Hayvenhurst Avenue	145.9	228.7	100.8	-45.1
SB US-101 On-ramp & Hayvenhurst Avenue	182.1	253.4	153.5	-28.6
NB US-101 ON/Off-ramps & Balboa Boulevard	196.0	206.7	154.8	-41.2
Magnolia Boulevard & Sepulveda Boulevard	259.1	250.9	250.3	-8.8
Ventura Boulevard & Hayvenhurst Avenue	211.7	237.8	193.3	-18.4
SB US-101 Off-ramp & Van Nuys Boulevard	266.9	274.6	222.7	-44.2
Magnolia Boulevard & Van Nuys Boulevard	283.9	285.2	276.6	-7.3
Burbank Boulevard & Woodley Avenue	327.6	348.7	246.5	-81.1

Delays listed in this table are the worst-case peak hour values (either AM or PM peak)

Alternatives 2 and 3. The design of the new southbound I-405 connector to northbound US-101 is similar in Alternatives 2 and 3, and will bypass the Haskell Avenue off-ramp from northbound US-101. Vehicles that travel southbound on I-405 and wish to exit at Haskell Avenue would be redistributed to the Burbank Boulevard off-ramp from southbound I-405 or the Hayvenhurst Avenue exit from northbound US-101. Although the ramp configurations are different in Alternatives 2 and 3, each alternative provides access to southbound I-405, northbound US-101, and southbound US-101 from the Burbank Boulevard on-ramp to southbound I-405. For these alternatives, there is no need to redistribute traffic from the Burbank Boulevard on-ramp to alternative US-101 on-ramps. Less redistribution of traffic corresponds to less intersection impact and less mitigation for these alternatives than for Alternative 1. However, the access provided by Alternatives 2 and 3 are comparable, and therefore the redistribution of traffic through the project study intersections is assumed to be the same for these alternatives. The intersection traffic

impacts and mitigation measures are also the same. Potential mitigation measures for Alternatives 2 and 3 are presented in this section.

Alternatives 2 and 3 Mitigation Measures for the Year 2015. There are two intersections that are forecast to operate at LOS F in the year 2015 with Alternatives 2 and 3, where the project would increase the average delay per vehicle by four seconds or more. These intersections are listed in Table 27a, along with geometrical improvements that would provide additional capacity to serve the redistributed traffic created by the project in the year 2015. The highest forecast peak hour (either AM or PM) delay at each intersection for the No Build condition, the unmitigated Alternative 2 and 3 condition, and the mitigated Alternative 2 and 3 condition are listed in Table 27b. The proposed mitigation measures in Table 27a would provide an improved condition (lower average delay per vehicle) compared to the No Build scenario.

Table 27a. Alternatives 2and 3 – Proposed Mitigation Measures for the Year 2015

Intersection	Mitigation Measures to Produce Conditions Comparable to No Build
Burbank Boulevard & Sepulveda Boulevard	Add an eastbound right turn lane
NB 101 Off-ramp & Hayvenhurst Avenue	Add a 2nd westbound left turn lane
SB 101 On-ramp & Hayvenhurst Avenue	Intersection 8a improvements also mitigate 8b

Table 27b. Alternatives 2 and 3 Mitigated Change in Delay Compared to No Build for the Year 2015

Intersection	No Build Delay	Unmitigated ALT 2,3 or 4 Delay (sec/veh)	Mitigated ALT 2, 3 or 4 Delay (sec/veh)	Mitigated Change in Delay From No Build (sec/veh)
Burbank Boulevard & Sepulveda Boulevard	181.4	189.8	143.7	-37.7
NB US-101 Off-ramp & Hayvenhurst Avenue	79.1	127.4	49.7	-29.4
SB US-101 On-ramp & Hayvenhurst Avenue	81.7	144.4	57.8	-23.9

Delays listed in this table are the worst-case peak hour values (either AM or PM peak)

Alternatives 2 and 3– Proposed Mitigation Measures for the Year 2030. There are five intersections that are forecast to operate at LOS F in the year 2030 with Alternatives 2 and 3, where the project would increase the average delay per vehicle by four seconds or more. These intersections are listed in Table 28a, along with geometrical improvements that would provide additional capacity to serve the redistributed traffic created by the project in the year 2030. The highest forecast peak hour (either AM or PM) delay at each intersection for the No Build condition, the unmitigated Alternative 2 and 3 condition, and the mitigated Alternative 2 and 3 condition are listed in Table 28b. The mitigation measures in Table 28a provide an improved condition (lower average delay per vehicle) compared to the No Build scenario.

Table 28a. Alternatives 2 and 3 – Proposed Mitigation Measures for the Year 2030

Intersection	Mitigation Measures to produce Conditions Comparable to the No Build
NB US-101 Off-ramp & Sepulveda Boulevard	Add a 2nd westbound left turn lane
Burbank Boulevard & Sepulveda Boulevard	Add an eastbound right turn lane
NB US-101 Off-ramp & Hayvenhurst Avenue	Add a 2nd westbound right turn lane
SB US-101 On-ramp & Hayvenhurst Avenue	Previously mentioned mitigation for NB US-101 Off-ramp & Hayvenhurst Avenue also mitigate this particular intersection
Ventura Boulevard & Hayvenhurst Avenue	Add a 3rd southbound left turn lane

Table 28b. Alternatives 2 and 3 Mitigated Change in Delay Compared to No Build for the Year 2030

Intersection	No Build Delay	Unmitigated ALT 2,3 or 4 Delay (sec/veh)	Mitigated ALT 2, 3 or 4 Delay (sec/veh)	Mitigated Change in Delay From No Build (sec/veh)
NB US-101 Off-ramp & Sepulveda Boulevard	90.8	113.0	29.4	-61.4
Burbank Boulevard & Sepulveda Boulevard	315.1	326.5	267.3	-47.8
NB US-101 Off-ramp & Hayvenhurst Avenue	145.9	228.7	100.8	-45.1
SB US-101 On-ramp & Hayvenhurst Avenue	182.1	253.4	153.5	-28.6
Magnolia Boulevard & Sepulveda Boulevard	259.1	253.9	253.8	-5.3
Ventura Boulevard & Hayvenhurst Avenue	211.7	237.8	193.3	-18.4

Delays listed in this table are the worst-case peak hour values (either AM or PM peak)

Proposed Mitigation Measures Devised in Coordination with Los Angeles Department of Transportation (LADOT)

The California Department of Transportation (Caltrans), in coordination with the Los Angeles Department of Transportation (LADOT) continue to work closely together to devise mitigation proposals to minimize any project-related impacts. While LADOT has been present and active in all coordination efforts concerning all project alternatives, the following mitigation measures have been proposed for Alternatives 2 and 3 only, as LADOT does not support Alternatives 1.

1) Provide a traffic signal at the new intersection of the new connector, the southbound I-405 off-ramp, and Burbank Boulevard.
2) Modify the Burbank Boulevard roadway at the above location to provide adequate right-turn and left turn storage to the new connector.
3) For Alternative 2, widen the Burbank Boulevard overcrossing to accommodate a bicycle lane that would provide access to the bicycle path around the Sepulveda Dam, Recreation Area, and Basin.
4) Provide adequate ramp and street improvements at Hayvenhurst Avenue to accommodate additional traffic volume.
5) Provide three lanes on the re-configured southbound I-405 off-ramp to Burbank Boulevard.
6) Construct a new northbound on-ramp and a new southbound off-ramp for the US-101 freeway at Hayvenhurst Avenue.
7) Relocate the northbound I-405 freeway ramps at Burbank Boulevard to Oxnard Street.

Transportation/Pedestrian and Bicycle Facilities

Regulatory Setting. The Department, as assigned by FHWA, directs that full consideration should be given to the safe accommodation of pedestrians and bicyclists during the development of federal-aid highway projects (see 23 CFR 652). It further directs that the special needs of the elderly and the disabled must be considered in all federal-aid projects that include pedestrian facilities. When current or anticipated pedestrian and/or bicycle traffic presents a potential conflict with motor vehicle traffic, every effort must be made to minimize detrimental effects on all highway users who share the facility.

The Department is committed to carrying out the 1990 Americans with Disabilities Act (ADA) by building transportation facilities that provide equal access for all persons. The same degree of convenience, accessibility, and safety available to the general public will be provided to persons with disabilities.

The accommodation of pedestrians and bicyclists, and full compliance with ADA standards will be an integral part in the development of the project and the Transportation Management Plan (TMP), which will outline specific design guidelines to ensure proper facilities and access during and after project

construction. It is Caltrans' and the Contractor's responsibility to provide for the safety of traffic and the public during construction.

2.1.6 VISUAL/AESTHETICS

Regulatory Setting. The National Environmental Policy Act of 1969 as amended (NEPA) establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and *aesthetically* and culturally pleasing surroundings [42 U.S.C. 4331(b)(2)]. To further emphasize this point, the Federal Highway administration in its implementation of NEPA [23 U.S.C. 109(h)] directs that final decisions regarding projects are to be made in the best overall public interest taking into account adverse environmental impacts, including among others, the destruction or disruption of aesthetic values.

Likewise, the California Environmental Quality Act (CEQA) establishes that it is the policy of the state to take all action necessary to provide the people of the state "with…enjoyment of aesthetic, natural, scenic and historic environmental qualities." [CA Public Resources Code Section 21001(b)]

Visual Impact Assessment (VIA). A VIA has been prepared by the California Department of Transportation (Caltrans), Division of Landscape Architecture according to guidelines set forth by the Federal Highway Administration (FHWA). While the project does not have the potential to affect any officially designated scenic highways, a VIA was performed, nevertheless, that aims to:

- Define the project setting and viewshed
- Identify key views for visual assessment
- Analyze existing visual resources and viewer response
- Analyze attributes such as line, form, color, texture, dominance, scale, diversity, and continuity
- Analyze visual quality as measured by vividness, intactness, and unity
- Depict the visual appearance of project alternatives
- Assess the visual impacts of project alternatives
- Propose methods to avoid, minimize, and/or mitigate adverse visual impacts through enhanced plantings, texture, color coating for structures, and contour grading, for example

Affected Environment

The following information in this section was derived from the Caltrans VIA prepared in November of 2007 (Caltrans 2007b). The regional landscape establishes the general visual environment in the project area, but the specific visual environment upon which the assessment is focused was determined by defining landscape units and the project viewsheds. Most of the land adjacent to the project area is highly developed and mostly residential, commercial, or open space. The I-405 freeway traverses the Sepulveda Pass in the Santa Monica Mountains, which are in clear view from the project area. The freeway landscape within this corridor consists of tall pines, Mexican fan palms, Eucalyptus, and other evergreen trees.

Sepulveda Basin Wildlife Reserve Landscape Unit. A landscape unit is a portion of the regional landscape that can be thought of as an outdoor room with a distinct visual character. It will often correspond to place or district that is commonly known among local viewers. The Sepulveda Basin Wildlife Reserve Landscape Unit is located west of the I-405 freeway and north of Burbank Boulevard. The Los Angeles Department of Recreation and Parks maintains the area, encompassing 225 acres, on Army Corps of Engineers property. Existing visual resources include established and newly planted willow, cottonwood, and sycamore trees, and various shrubs, nesting, and foraging areas for migratory waterfowl and shorebirds.

The viewshed in this landscape unit consists of the surrounding mountains and a wildlife reserve, complete with lush vegetation, a manmade lake, and the Sepulveda Dam rock wall. The adjacent Target

store parking lot and one tall office building complete the picture. The wildlife reserve portion of the study area is used for recreational purposes, and by bird-watchers, walkers, and general park users.

Sepulveda Dam Landscape Unit. This unit exists within the Sepulveda Basin, but lies largely between Burbank Boulevard and the US-101 freeway, and west of the I-405 freeway. The structure was designed in the Art Moderne style, constructed in 1941 and is eligible for the National Register of Historic Places. The most significant visual resources in this unit are the Sepulveda Dam itself, a bare area of dry grasses, and the white concrete spillway. The Santa Monica Mountains are the dominant view to the south of this landscape unit.

The viewshed in this particular landscape unit consists of the Sepulveda Dam, the dam spillway, the Los Angeles River channel, the I-405/US-101 freeway interchange, the US-101/Haskell Avenue on-and-off-ramps, and the mountains to the east and west. The Sepulveda Dam itself is frequently used for filming and photography shoots, and northbound US-101 users are able to view the structure and spill gates for approximately 0.1 miles.

Residential Area Landscape Unit. Special attention was focused on the residential area southeast of the interchange in the community of Sherman Oaks. The area consists primarily of one-story, single-family residential homes, with the exception of a few two-story structures. Dominant visual resources in this landscape unit include the homes and yards themselves, streets and sidewalks, and the freeway landscaping that screens the soundwall for the US-101 freeway. The viewshed within the residential landscape unit is rather limited, with views of mass plantings (trees and shrubs) and chain link fence.

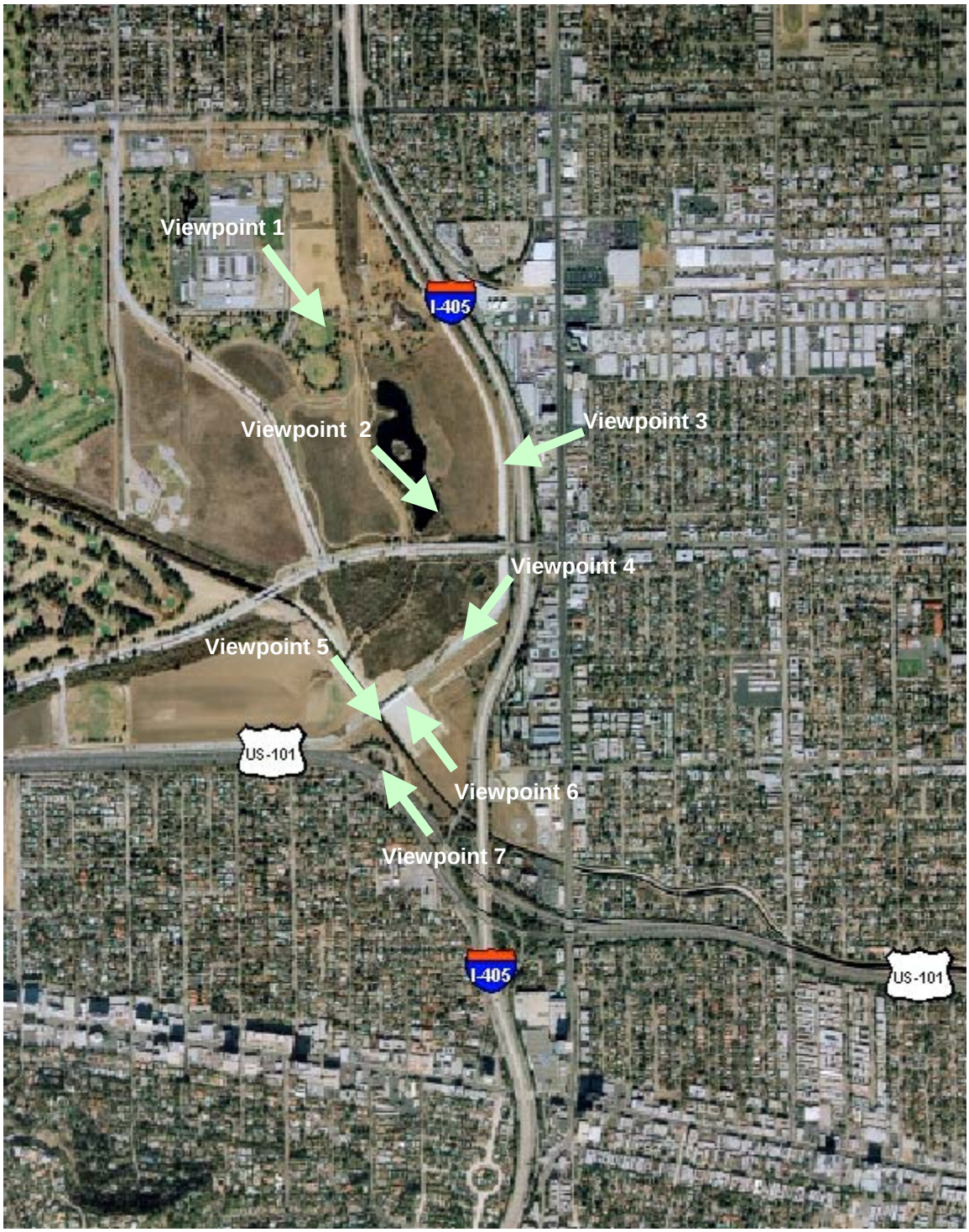
Viewer Response. Viewer Response is comprised of two elements: viewer sensitivity and viewer exposure. These elements combine to form a method of predicting how the public might react to visual changes brought about by the I-405/US-101 interchange improvement project. Viewer sensitivity is defined as the viewers' concern for scenic quality and response to change in visual resources that make up a view. Viewer exposure is typically assessed by measuring the number of viewers exposed to the resource change, type of viewer activity, duration of their view, speed at which the viewer moves, and the position of the viewer.

The Visual Impact Assessment identifies the resident viewer group as most sensitive to any impacts or disturbance to existing visual resources. The resident viewer group includes people who may have views of the project area from their homes or place of business/employment. Residents have a high level of exposure to the visual environment and high visual awareness. The group tends to be stationary and have more time to take in the surrounding views. In addition, they become more familiar with the local environment than other groups and typically take more ownership in it. This group is considered to be highly sensitive to visual changes, particularly if important visual resources are lost as a result of relocation or acquisition of property in the project area.

Environmental Consequences

Because it is not feasible to analyze all the views in which the proposed project would be seen, the Visual Impact Assessment (VIA) focuses on a select number of key viewpoints where potential for impacts to the existing visual environment is most clear. The following area map shows seven (7) selected viewpoints of study, followed by representations of the existing visual environments. Selected simulations of potential impacts to these viewpoints are provided as well.

Figure 19. Selected Viewpoints of Study



Source: California Department of Transportation, DHHP Aerial Photo Copyright 2003. Map created by Joel Bonilla/Division of Environmental Planning

VIEWPOINT 1

Figure 20. Existing Viewpoint 1 - Facing Southeast from Woodley Park

Source: Caltrans Visual Impact Assessment, Reconstruct SB 405 Connector Ramp to N&S Bound 101. Division of Landscape Architecture, November 19, 2007.

Figure 21. Viewpoint 1 – Facing Southeast from Woodley Park with Post-Construction Visual Simulation

Source: Caltrans Visual Impact Assessment, Reconstruct SB 405 Connector Ramp to N&S Bound 101. Division of Landscape Architecture, November 19, 2007.

In this simulation, the new ramp/viaduct structures have been added to the existing key viewpoint (facing southeast from Woodley Park). While the distant mountain views will remain unobstructed, the new ramp/viaduct structures would be the dominant landscape feature until new vegetation plantings mature. Users of Woodley Park would be most sensitive to these changes in the landscape and view. Additionally, landscape views from high-rise buildings across and adjacent to the I-405 freeway may be sensitive to these changes as well. Special mitigation may be necessary in the reduction of visual effects to the aforementioned viewer groups, which are discussed in more detail later, under the Avoidance, Minimization, and/or Mitigation subsection.

VIEWPOINTS 2 & 3

Figure 22. Existing Viewpoint 2 - Facing Southeast from Sepulveda Basin Wildlife Reserve

Source: Caltrans Visual Impact Assessment, Reconstruct SB 405 Connector Ramp to N&S Bound 101. Division of Landscape Architecture, November 19, 2007.

Figure 23. Viewpoint 2 – Facing Southeast from Sepulveda Basin Wildlife Reserve with Post-Construction Visual Simulation

Source: Caltrans Visual Impact Assessment, Reconstruct SB 405 Connector Ramp to N&S Bound 101. Division of Landscape Architecture, November 19, 2007.

In this simulation, the new ramp/viaduct structures as proposed in Alternatives 2 and 3 have been added to the existing key viewpoint (facing southeast from the Sepulveda Basin Wildlife Reserve). While the distant mountain views will remain unobstructed, the new ramp/viaduct structures would be the dominant landscape feature until new vegetation plantings mature. Users of the Sepulveda Basin Recreation Area and Wildlife Reserve would be most sensitive to these changes in the landscape and view. Additionally, landscape views from high-rise buildings across and adjacent to the I-405 freeway may be sensitive to these changes as well. Special mitigation may be necessary in the reduction of visual effects to the aforementioned viewer groups, which are discussed in more detail later, under the Avoidance, Minimization, and/or Mitigation subsection.

Figure 24. Viewpoint 3 – Existing View Facing Southwest from West Side of I-405, Adjacent to Sepulveda Basin Wildlife Reserve

Source: Caltrans Visual Impact Assessment, Reconstruct SB 405 Connector Ramp to N&S Bound 101. Division of Landscape Architecture, November 19, 2007.

VIEWPOINTS 4, 5, 6, AND 7

Figure 25. Viewpoint 4 – Existing View Facing Southwest from Sepulveda Basin Recreation Area (Toward Sepulveda Dam)

Source: Caltrans Visual Impact Assessment, Reconstruct SB 405 Connector Ramp to N&S Bound 101. Division of Landscape Architecture, November 19, 2007.

Figure 26. Viewpoint 5 – Existing View Facing Southeast From Sepulveda Dam

Source: Caltrans Visual Impact Assessment, Reconstruct SB 405 Connector Ramp to N&S Bound 101. Division of Landscape Architecture, November 19, 2007.

Figure 27. Viewpoint 5 – Facing Northwest from Sepulveda Dam with Post-Construction Visual Simulation (all alternatives, except "no-build")

Source: Caltrans Visual Impact Assessment, Reconstruct SB 405 Connector Ramp to N&S Bound 101. Division of Landscape Architecture, November 19, 2007.

All proposed alternatives require the construction of new bridge structures that will infringe upon the Sepulveda Dam spillway. The new structures would create some visual distraction, especially to motorists using the southbound I-405 and northbound US-101 freeways. Mountain views in the distance would remain intact, but the new, man-made structures would obstruct some views of existing, mature vegetation. Sensitivity to motorists utilizing the southbound I-405 and northbound US-101 freeway is expected to be high because due to the loss of views of the Sepulveda Dam. The duration of views from the aforementioned freeways is short compared to the filming industry viewer group, in which sensitivity is expected to be low as the Sepulveda Dam is typically shot at a closer range view.

Figure 28. Viewpoint 6 – Existing View Facing Northwest from Sepulveda Dam Spillway

Source: Caltrans Visual Impact Assessment, Reconstruct SB 405 Connector Ramp to N&S Bound 101. Division of Landscape Architecture, November 19, 2007.

Figure 29. Viewpoint 7 – Existing View Facing Northwest on US-101 at Sepulveda Dam

Source: Caltrans Visual Impact Assessment, Reconstruct SB 405 Connector Ramp to N&S Bound 101. Division of Landscape Architecture, November 19, 2007.

Avoidance, Minimization, and/or Mitigation Measures

Visual mitigation for adverse project impacts addressed in the visual assessments and summarized in the VIA will consist of adherence to the following design requirements in cooperation with the District Landscape Architect. All visual mitigation will be designed and implemented with the concurrence of the District Landscape Architect. Caltrans and the FHWA mandate that a qualitative/aesthetic approach should be taken to mitigate for visual quality loss in the project area. The following measures have been specified to minimize impacts:

- Retaining walls will be visually compatible with the surrounding community (i.e. architectural detail and style of the Sepulveda Dam)
- Architectural detailing will be specified appropriately; pilasters, wall caps, interesting block patterns, color, and materials to match existing color palette of surrounding area
- Visual interest will be created to reduce the apparent height of walls
- Slope pavement at undercrossings will be enhanced with texture to deter graffiti
- Where needed, vine plantings will be used on walls to deter graffiti to enhance visual quality
- Where slope pavement is not possible, vegetation will be planted at undercrossings as appropriate
- Native vegetation will be planted in disturbed areas and wildlife areas where space allows
- Ornamental vegetation will be utilized as necessary

2.1.7 CULTURAL RESOURCES

Regulatory Setting. "Cultural Resources," as used in this document, refers to all historical and archaeological resources, regardless of significance. Laws and regulations dealing with cultural resources include:

The National Historic Preservation Act of 1966, as amended, (NHPA) sets forth national policy and procedures regarding historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for the National Register of Historic Places. Section 106 of NHPA requires federal agencies to take into account the effects of their undertakings on such properties and to allow the Advisory Council on Historic Preservation the opportunity to comment on those undertakings, following regulations issued by the Advisory Council on Historic Preservation (36 CFR 800). On January 1, 2004, a Section 106 Programmatic Agreement (PA) between the Advisory Council, FHWA, State Historic Preservation Officer (SHPO), and the Department went into effect for Department projects, both state and local, with FHWA involvement. The PA implements the Advisory Council's regulations, 36 CFR 800, streamlining the Section 106 process and delegating certain responsibilities to the Department. The FHWA's responsibilities under the PA have been assigned to the Department as part of the Surface Transportation Project Delivery Pilot Program (23 CFR 773) (July 1, 2007).

The Archaeological Resources Protection Act (ARPA) applies when a project may involve archaeological resources located on federal or tribal land. ARPA requires that a permit be obtained before excavation of an archaeological resource on such land can take place.

Historic properties may also be covered under Section 4(f) of the U.S. Department of Transportation Act, which regulates the "use" of land from historic properties. See Appendix B for specific information regarding Section 4(f).

Historical resources are considered under the California Environmental Quality Act (CEQA), as well as California Public Resources Code (PRC) Section 5024.1, which established the California Register of Historical Resources. PRC Section 5024 requires state agencies to identify and protect state-owned resources that meet National Register of Historic Places listing criteria. It further specifically requires the Department to inventory state-owned structures in its rights-of-way. 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer (SHPO) before altering, transferring, relocating, or demolishing state-owned historical resources that are listed on or are

eligible for inclusion in the National Register or are registered or eligible for registration as California Historical Landmarks.

Affected Environment

Area of Potential Effects (APE). The Area of Potential Effects (APE) for the project includes parcels that could be affected by right of way acquisition, audible effects, or visual effects resulting from implementation of the proposed project. The limits of the APE run roughly from Victory Boulevard in the northeast quadrant of the Sepulveda Dam/Recreation area, south along southbound I-405 to Burbank Boulevard. Turning west it then partially follows Burbank Boulevard to Balboa Boulevard. The APE then runs south to southbound US-101 and extends to approximately Van Nuys Boulevard.

The results of an extensive records search of Caltrans District 7 files, the South Central Coastal Information Center at California State University, Fullerton, and other reference sources has revealed that there are no recorded archaeological resources within the Area of Potential Effect (APE). A field inspection was conducted to confirm the aforementioned. Based on this, no archaeological impacts are anticipated, and no further archaeological investigations are warranted at this time. An archaeological survey was completed on January 12, 2006 that confirms this.

Historic Properties. A Historic Property Survey Report (HPSR) for the I-405/US-101 Connector Improvement Project was completed in January 2007. On March 14, 2007, the State Historic Preservation Officer (SHPO) concurred with the findings in the HPSR. The only historic property that was identified within the Area of Potential Effects is the Sepulveda Flood Control Dam (Sepulveda Dam), which was found eligible for the National Register of Historic Places (NRHP) at the local level of significance under Criteria A (history of the Los Angeles water systems) and Criteria C (distinctive type, period, and method of construction). Contributing elements include the outlet works structure, the spillway, the earthen embankment and the reservoir.

Finding of Effect. A Finding of Effect Report (FOE) for the Southbound Interstate 405 to US 101 Connector Improvement Project was submitted to the SHPO on February 28, 2008. On March 31, 2008, the SHPO concurred with the findings in the FOE. To improve traffic movements from southbound I-405 to US-101 freeway, the project proposes three build alternatives: The three proposed alternatives will encroach into the Sepulveda Dam by constructing elevated structures that cross the dam spillway outlet area to connect to northbound and southbound US-101. A portion of the earthen embankment of the dam adjacent to northbound US-101 will be modified to accommodate the change. A retaining wall would be erected to minimize the volume loss of the reservoir as a result of realigning the Army Corps of Engineers (USACE) service road. Additionally, alternatives 2 and 3 propose a new structural on-ramp and off-ramp north of Burbank Boulevard that will cross the dam maintenance access road at grade on the earthen embankment. All three build alternatives will result in an adverse effect on the Sepulveda Dam under Adverse Effect Criteria 2(i), 2(ii), 2(iv), and 2(v).

The No Build alternative would result in the connectors between the freeways remaining as they are. The Sepulveda Dam would remain intact without further encroachments on the spillway, earthen embankment and reservoir. This alternative would result in no effect on Historic Properties although the project's purpose and need would remain unfulfilled and the project's objectives unrealized.

Caltrans, as assigned by the Federal Highway Administration (FHWA) pursuant to 23 U.S.C. 327, has determined that the undertaking will have an adverse effect on a historic property pursuant to Section 106 PA Stipulation X. C, and is consulting SHPO regarding the resolution of adverse effects, pursuant to Section 106 PA Stipulation XI, 36 CFR 800.6(a), and 800.6(b)(1).

Environmental Consequences

Alternative 1: Construct new US-101 connector ramps from southbound I-405. Construct Burbank Boulevard to southbound I-405 on ramp. Remove existing ramps.

This alternative would remove the existing connector ramps from the southbound I-405 to northbound and southbound US-101, along with the existing southbound I-405/US-101 on-ramp from Burbank Boulevard. New two-lane US-101 connector ramps (structures) would be constructed over the Sepulveda Dam spillway connecting southbound I-405 with northbound (connector B) and southbound (connector A) US-101, and Burbank Boulevard with southbound I-405. The elevated connectors that pass through the dam spillway will be approximately fifty (50) feet high, the same approximate height as the Sepulveda Dam gates. The USACE service road adjacent to northbound 101 will be realigned to accommodate the new connector, which would drop down on top of the earthen embankment as it merges with northbound 101. The proposed encroachment on the embankment is approximately 550 feet long and 39 feet wide. A retaining wall will be built along the earthen embankment (northbound US-101) to mitigate for a loss of volume in the reservoir due to the realigned service road.

This alternative would constitute an Adverse Effect on the Sepulveda Dam under Adverse Effect Criterion 2(i) as the dam embankment along northbound US-101 will be excavated for footings for the descending ramp structure, the retaining wall and the realigned USACE access road (1.07 acres). This alternative would constitute an additional Adverse Effect on the Sepulveda Dam under Adverse Effect Criterion 2(i) because it would entail the physical destruction of or damage to all or part of the property. Additionally, this alternative would constitute an Adverse Effect on the Sepulveda Dam under Adverse Effect Criterion 2(ii) as the elevated structures to be built through the dam spillway (4.93 acres) and upon the earthen embankment, as well as the proposed retaining wall, are alterations of the property that are not consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines. Moreover, this alternative would constitute an Adverse Effect on the Sepulveda Dam under Adverse Effect Criterion 2(iv) as the addition of elevated freeway connector ramps through the dam spillway, and the utilization of the earthen embankment for the descending freeway connector ramp, change the character of the Sepulveda Dam's use (flood control) and physical features within the dam setting that contribute to its historic significance. The earthen embankment, spillway and reservoir are character-defining features of the Sepulveda Dam. Lastly, this alternative would constitute an Adverse Effect on the Sepulveda Dam under Adverse Effect Criterion 2(v) by introducing a visual element (elevated connector ramps) into the spillway area and on top of the embankment that diminishes the integrity of the property's significant historic features. The Dam is eligible because it was designed in a straightforward engineering approach prevalent in Southern California at the time. The earth fill dam was constructed during a time when accelerated changes in construction equipment allowed for larger and faster excavations. The work also involved a massive pile driving operation, reportedly one of the largest undertaken in the region at the time. The dam is also notable for the PWA Moderne design of the outlet works and spillway.

Alternative 2: Construct new northbound US-101 connector ramp from I-405 southbound. Remove existing southbound I-405 on and off ramps from Burbank Boulevard and replace with new structures north of Burbank Boulevard.

This alternative would constitute an Adverse Effect on the Sepulveda Dam under the same Adverse Effect Criteria as were listed for Alternative 1. Under this alternative only Connector B (S/B I-405 to N/B US-101) would be constructed through the dam spillway. Under Alternative 2 there would be additional adverse effects as a result of the construction of new structures that connect to Burbank Boulevard approximately 120 yards west of the current ramp intersection. The new on ramp would extend north from Burbank Boulevard, and loop around to join the I-405 southbound just after the Burbank Boulevard Overcrossing. This alternative will require 22,000 cubic feet of the dam reservoir and 0.79 acres of footing easement in the Wildlife Refuge for the ramp structure. Both the on and off ramps would cross over and sit on top of the earthen embankment of the dam north of Burbank Boulevard requiring 0.15 acres of

embankment. The earthen embankment, spillway and the reservoir are character-defining features of the Sepulveda Dam.

Alternative 3: Construct new northbound US-101 connector ramp from I-405 southbound. Remove existing southbound I-405 on and off ramps from Burbank Boulevard and replace with new structures north of Burbank Boulevard. Burbank Boulevard loop ramp would be of a standard design.

This alternative would constitute an Adverse Effect on the Sepulveda Dam under the same Adverse Effect Criteria as were listed for Alternatives 1 and 2. This alternative has the same general alignment as Alternative 2, except that the Burbank Boulevard loop on ramp would be of a standard design requiring an additional 50 feet of encroachment onto the reservoir Wildlife Refuge. The earthen embankment and the reservoir are character-defining features of the Sepulveda Dam.

Avoidance, Minimization and/or Mitigation Measures

Currently all three build alternatives will result in an Adverse Effect to the National Register eligible Sepulveda Dam. In order to mitigate adverse effects the following measures will be implemented in the design phase of the project:

- The bents or piers of the elevated structures that cross through the spillway should be similar in shape to the Streamline Modern gates of the dam.
- The elevated structures/connectors should have as low a profile as current safety/design guidelines will allow in order to reduce the visual impacts and views of the dam.
- All new concrete should match in color and texture that of the dam outlet structure.

As with any project that results in adverse effects to historic properties a Memorandum of Agreement (MOA) will be prepared. The following list is a preliminary proposal of the types of mitigation commonly agreed to:

- HABS/HAER documentation—Historic American Building Survey photographic documentation and Historic American Engineering Record documentation as directed by the National Park Service.
- Production of a documentary (video or movie) of broadcast quality, 30 minutes or more in length.
- Dissemination of reports to various repositories and websites.

This is only a preliminary proposal for mitigation. Further discussion and consideration is necessary as well as consultation with the State Historic Preservation Officer.

2.2 PHYSICAL ENVIRONMENT

2.2.1 HYDROLOGY AND FLOODPLAIN

Regulatory Setting. Executive Order 11988 (Floodplain Management) directs all federal agencies to refrain from conducting, supporting, or allowing actions in floodplains unless it is the only practicable alternative. The Federal Highway Administration requirements for compliance are outlined in 23 CFR 650 Subpart A.

In order to comply, the following must be analyzed:

- The practicability of alternatives to any longitudinal encroachments
- Risks of the action
- Impacts on natural and beneficial floodplain values
- Support of incompatible floodplain development
- Measures to minimize floodplain impacts and to preserve/restore any beneficial floodplain values impacted by the project.

The base floodplain is defined as "the area subject to flooding by the flood or tide having a one percent chance of being exceeded in any given year." An encroachment is defined as "an action within the limits of the base floodplain."

Hydraulic information for a project is provided in the Location Hydraulic Study, Summary Floodplain Encroachment Report and/or a Floodplain Evaluation Report. A Location Hydraulic Study (LHS) is prepared by a registered engineer, who has hydraulics expertise. If, based on the results of the LHS, either: 1) a significant encroachment on a floodplain, 2) an inconsistency with existing watershed and floodplain management programs or 3) uncertainty exists as to what impacts will occur, then a Floodplain Evaluation Report must be prepared. If no encroachment or impacts to the floodplain will occur, then a Summary Floodplain Encroachment Report will be prepared. For this project, a Floodplain Evaluation Report was prepared since all of the four (4) proposed project build-alternatives require construction of a connector structure over the spillway of the Sepulveda Dam (i.e. Alternatives 1, 2, 3, and 4). Alternatives 2 and 3 call for an encroachment upon the Sepulveda Basin Wildlife Refuge, within the Sepulveda Basin. The proposed project's Floodplain Evaluation Report was completed on February 14, 2007.

Affected Environment

The Los Angeles River drains the vast watershed of the San Fernando Valley and surrounding mountains--finally emptying into the Pacific Ocean at Long Beach. In years of heavy rainfall, this normally tame watercourse becomes a mighty force--as was the case in 1938 when torrential rains caused the river to flood adjacent farms and homes. Consequently, the U.S. Army Corps of Engineers (USACE)) channelized the river and built the Sepulveda Dam in 1941 to capture and hold floodwaters for later gradual release down the river. Except for infrequent but dramatic flood episodes, this otherwise dry-land flood control basin, most of which is leased from the USACE by the City of Los Angeles Department of Recreation & Parks, plays host to diverse uses today including: athletic fields, agriculture, golf courses, a fishing lake, parklands, Japanese gardens, a model-airplane field, a sewage treatment facility, an armory, and a growing wildlife reserve – all behind the dam, in the south-central portion of the San Fernando Valley, just northwest of the junction of Interstate-405 and the U.S.-101.

The Sepulveda Dam consists of an earth-filled embankment with a reinforced concrete spillway and outlet works. The components of the Sepulveda Dam and Reservoir include: dam, outlet works, control house, and spillway. Reservoir lands are used as flood control/storage behind the Sepulveda Dam, and consist of 2,097 acres, extending from Interstate-405 on the east and the U.S.-101 on the south, to Victory Boulevard on the north, and to approximately 0.2 miles beyond Balboa Boulevard on the west, with a strip

of flood control land about 0.4 miles wide extending westward on either side of the Los Angeles River to White Oak Avenue.

The Los Angeles River is regulated by the outlet works, which consist of 4 gated outlets and 4 ungated outlets, and can allow a maximum discharge of 16,500 cfs at a reservoir water surface elevation of 710 feet, 1927 NGVD - the height of the spillway crest with spillway gates raised.

The spillway is a reinforced concrete ogee (a cornice-like architectural element with an S-shaped profile) section of the overflow gravity type, which has seven submersible drum gates operating as function of water surface elevation. For reservoir surface elevations between 710 and 712, the discharge over the top of the crest gates increases very slowly. At elevations between 712 and 715 feet, however, the rate of discharge increases very rapidly with elevation, as the crest gates lower from 710 to 700 feet. Water spilling over the raised crest gates would cascade down across the ogee onto the spillway apron. This apron is a large concrete slab with a gentle downward slope, extending 694 feet downstream of the ogee.

Environmental Consequences

Impacts to the Sepulveda Dam. An increase in the base floodplain elevation (BFE) is not a proposed component of this project. Furthermore, a "Significant encroachment" as defined at 23 CFR 650.105 is a highway encroachment and any direct support of likely base floodplain development that would involve one or more of the following construction or flood related impacts:

- a significant potential for interruption or termination of a transportation facility that is needed for emergency vehicles or provides a community's only evacuation route
- a significant risk (to life or property), or
- a significant adverse impact on natural and beneficial floodplain values

The purpose of this EA/IS, as well as its component Floodplain Evaluation Report and Hydraulic Studies, is to identify the associated risks introduced by the proposed project, as well as their level of significance.

All four (4) of the proposed project build alternatives call for construction of a new connector bridge from the southbound I-405 to the northbound and southbound U.S.-101, crossing over the spillway outlet area of the Sepulveda Dam. Alternatives 1 and 4 would encroach into northeast corner of the spillway outlet area approximately 4.93 acres and 5.04 acres, respectively, whereas Alternatives 2 and 3 would encroach 0.26 acres and 0.28 acres, respectively. **These encroachments would not substantially affect the dam's operations since these areas not designated as the reservoir and are not graded to drain toward the Los Angeles River on the southeast corner.**

Furthermore, in order to merge with the northbound U.S.-101, all four (4) of the build alternatives would have to encroach on the dam reservoir at the upstream slope of the dam embankment. To minimize reservoir volume loss, the ACOE service road would be realigned and a retaining wall would be constructed. The proposals would require approximately 1.07 acres of upstream basin embankment. In addition, Alternatives 2 and 3 would require an extra 0.15 acres and 1.9 acres, respectively, of the downstream basin embankment north of Burbank Boulevard, for the proposed new Burbank on and off-ramps, which would encroach upon the Sepulveda Basin Wildlife Refuge, inside the flood control basin.

Since Alternatives 2 and 3 would cross the Dam Maintenance Access Road at grade, encroaching upon the Sepulveda Basin Wildlife Refuge, inside the flood control basin, these alternatives would further reduce the flood volume storage capacity of the Sepulveda Dam, thereby posing an additional adverse impact to the dam.

Therefore, to recap and address the bottom-line, all four (4) of the proposed project design alternatives call for a direct encroachment on portions of the dam structure itself, and therefore, may potentially/theoretically pose an adverse impact to its structural integrity and a reduction to its flood volume storage capacity. However, the vast majority of the proposed new connectors would be

constructed on structure (bridge), over the spillway of the dam, rather than on the dam structure itself or within the flood control basin itself. The specifics will be discussed later in this section, as well as the various mitigation proposals. Prior to that, these impacts will be discussed in more detail. Please refer to the following discussion.

Discussion of specific impacts as related to each alternative. As mentioned, all four (4) proposed build alternatives call for the construction of connector bridges to cross the spillway outlet area of the Sepulveda Dam in order to connect to the US-101. A portion of the earthfill embankment of the dam adjacent to northbound US-101 will be modified to accommodate the change. A retaining wall would be erected to minimize the volume loss of the reservoir. As previously mentioned, Alternatives 2 and 3 propose new structural on-ramp and off-ramp north of Burbank Boulevard that will cross the Dam Maintenance Access Road at grade, encroaching upon the Sepulveda Basin Wildlife Refuge, inside the Sepulveda Flood Control Basin behind the dam.

Alternative 1 calls for a new Burbank Boulevard on-ramp and 2 new connectors from the southbound I-405 to the northbound and southbound U.S.-101. This alternative would occupy approximately 4.93 acres of the spillway outlet area, and 0.45 acres of permanent footing easement, in addition to approximately 1.07 acres of the upstream dam embankment, 0.59 acres of fill, and 49,014 ft^3 of the dam reservoir. The dam reservoir will be affected only on the south end of the Sepulveda Dam. Length and width of the structure on the dam will be 550 and 39 feet, respectively.

Alternative 2 calls for new Burbank Boulevard on-ramp and off-ramp, a new connector from the southbound I-405 to the northbound US-101, and a widening of the existing southbound I-405 to the southbound U.S.-101 connector. This alternative would occupy approximately 0.26 acres of the spillway outlet area, 1.07 acres of the upstream dam embankment, in addition to 0.79 acres of footing easement, 0.59 acres of fill, 0.15 acres of the downstream embankment into the basin north of Burbank Boulevard, and 76,950 ft^3 of the dam reservoir. The south end (49,014 ft^3) and northeast section (28,936 ft^3) of the Sepulveda Dam would be affected. Length and width of the structure on the dam will be 550 and 39 feet, respectively, and 1.56 acres of the 48 total acreage (3.3%) of the Sepulveda Dam Wildlife Refuge would be covered by the new Interstate 405/U.S. 101 connector structures.

Alternative 3 calls for a new Burbank Boulevard on-ramp and off-ramp, new connector from the southbound I-405 to the northbound U.S.-101, and widening of the existing southbound I-405 to the southbound US-101 connector. This alternative would occupy approximately 0.28 acres of the spillway outlet area, and 1.07 acres of the upstream dam embankment, 76,950 ft^3 of the dam reservoir, in addition to 0.80 acres of footing easement, 0.59 acres of fill, and 1.90 acres of the downstream embankment into the basin north of Burbank Boulevard. The south end (49,014 ft^3) and northeast section (28,936 ft^3) of the Sepulveda Dam would be affected. Length and width of the structure on the dam will be 550 and 39 feet, respectively. 3.32 acres of the 48 total acreage (7%) of the Sepulveda Dam Wildlife Refuge would be covered by the new I-405/U.S.-101 connector structures.

Other impacts. In addition, Alternatives 2 and 3 of the proposed project do carry the potential to adversely impact beneficial floodplain values such as the Sepulveda Basin Wildlife Refuge. Please refer to the biological impact and mitigation section of this EA/IS for a thorough discussion of that impact, as well as, mitigation proposals.

Coordination regarding impacts to the Sepulveda Dam. Environmental Coordination with the U.S. Army Corps of Engineers has been ongoing since 2003, and the Department submitted to the Corps the project Natural Environment Study Report (biological study) and the Floodplain Evaluation Report (including the 5 mitigation proposals) on June 19, 2007 for their input, review, and comment. As of the date of this Draft EA/IS, the Corps is still reviewing those materials.

Coordination, consultation, and presentation of the aforementioned Floodplain Evaluation Report will be presented to the Federal Emergency Management Agency during circulation of the Draft EA/IS as sometimes an encroachment on a regulatory floodway, or an increase in the base flood elevation, or any subsequent actions may necessitate the need for a floodplain map revision.

Lastly, Executive Order 11988 requires that when a floodplain risk assessment is prepared, the public must be given the opportunity for early review and comment. It also requires that the risk assessment be filed with the State Clearinghouse. A reference to encroachments on the base floodplain must be included in public notices and any encroachments must be identified at public hearings. The Department will execute this procedure jointly in the public notices and public hearings for this draft NEPA/CEQA/Section 4(f) document.

Avoidance, Minimization and/or Mitigation Measures

The Department has made five (5) mitigation proposals with the goal of eliminating the aforementioned risks:

- To life or property as a result of dam structural failure due to implementation of the proposed project.
- To life or property as a result to flood waters overtopping the dam due to implementation of the proposed project.
-

Impacts to the Sepulveda Dam Maintenance Access Road shall be mitigated by realignment and reconstruction of the road. To avoid any potential risks associated with this action, the Department would ensure that the new service road is constructed before the current service road is impacted/removed. This would be done in full coordination with the U.S. Army Corps of Engineers.

Mitigation Proposals. The sole purpose of Sepulveda Dam is flood control and its operating criteria were based strictly upon reservoir water surface elevation criteria, irrespective of downstream channel conditions. Also, no water is impounded by the dam for the purpose of recreation.

In order to compensate for the volume loss by the proposed projects, the following alternatives are proposed:

1. The project proposes realignment ACOE service road by constructing a retaining wall that will allow excavating the upstream embankment to restore storage volume removed by realignment ACOE service road.

2. Widening the existing dirt canal inside the basin between Route 405 and Woodley Avenue (Haskell Channel). This proposal will fulfill requirements to increase storage volume inside the basin and no water impounded.

3. Extension of existing Burbank Boulevard Bridge: Burbank Boulevard is closed during major storm events due to raising water in the basin (the lowest elevation is at Los Angeles River). The space under the bridge will compensate for the volume loss of the basin due to the project. This proposal will avoid closure of Burbank Boulevard during major storm events, however, it is not cost effective, and also requires study and cooperation with the City of Los Angeles.

4. Acquire residential private properties: acquiring some properties at risk, at the southeast corner of the basin, McLellan Avenue and Burbank Boulevard, where the front yards are still lower than the Probable Maximum Flood water surface elevation (712 feet).

5. Dredging of silt from basin to restore the volume of storage removed by additional roadway embankment.

Conclusion. The purpose of this discussion is to highlight the Sepulveda Dam operations and propose alternatives for mitigation of the dam storage volume removed by additional roadway embankment. The project is under Project Report (PR) phase, no preferred alternative has been selected, and the project data presented in this report are just preliminary estimates. The project has been conceptual approved

by the U.S. Army Corps of Engineers (Los Angeles District) which has regulatory responsibility for the Dam, and the reservoir lands. It is possible that other solutions could be provided by the USACE as the final alternative is selected.

2.2.2 WATER QUALITY AND STORM WATER RUNOFF

Regulatory Setting. Section 401 of the Federal Clean Water Act (CWA) requires water quality certification from the State Water Resources Control Board (SWRCB) or from a Regional Water Quality Control Board (RWQCB) when the project requires a CWA Section 404 permit. Section 404 of the CWA requires a permit from the U.S. Army Corps of Engineers (Corps) to discharge dredged or fill material into waters of the United States.

Along with CWA Section 401, CWA Section 402 establishes the National Pollutant Discharge Elimination System (NPDES) permit for the discharge of any pollutant into waters of the United States. The federal Environmental Protection Agency has delegated administration of the NPDES program to the SWRCB and nine RWQCBs. The SWRCB and RWQCB also regulate other waste discharges to land within California through the issuance of waste discharge requirements under authority of the Porter-Cologne Water Quality Act.

The SWRCB has developed and issued a statewide NPDES permit to regulate storm water discharges from all Department activities on its highways and facilities. Department construction projects are regulated under the Statewide permit, and projects performed by other entities on Department right-of-way (encroachments) are regulated by the SWRCB's Statewide General Construction Permit. All construction projects over 1 acre require a Storm Water Pollution Prevention Plan (SWPPP) to be prepared and implemented during construction. Department activities less than 1 acre require a Water Pollution Control Program (WPCP).

Affected Environment

The proposed project is located within the Los Angeles River watershed, adjacent to and within the Sepulveda Basin. According to the L.A. River Project, the Los Angeles River is the heart of an 871-square mile watershed. The watershed encompasses the Santa Susanna Mountains to the west, the San Gabriel Mountains to the north and east, and the Santa Monica Mountains and Los Angeles coastal plain to the south.

The Los Angeles River Watershed has diverse patterns of land use. Forest or open space covers the upper half of the watershed, while the remaining watershed is highly urbanized with commercial, industrial, or residential uses. At the Sepulveda Basin, however, more than three miles of the river are all but undisturbed, allowing the growth of willows, reeds and other vegetation and giving us a glimpse of the natural river. The Sepulveda Basin is a dry reservoir, a 2.25-square mile emergency flood-control feature behind the 57-foot earthen Sepulveda Dam. Although much of this basin is used for recreation, with soccer, baseball, and playing fields, where the soft bottom channel of the river flows, mulefat, sagebrush, willow, and reeds cover the banks. Tributaries joining the river in the Basin are Bull Creek, Hayvenhurst Creek and Haskell Creek. Along Haskell Creek is a 225-acre Wildlife Reserve that serves as protected habitat for hundreds of species. From the Sepulveda Basin, the river flows as a concrete box channel east through the San Fernando Valley.

Environmental Consequences

The proposed project calls for an encroachment onto the spillway of the Sepulveda Dam (Alternatives 1, 2, and 3), as well as, an encroachment into the Sepulveda Flood Control Basin itself (Alternative 2 and 3). Therefore, the receiving water is the Sepulveda Basin Reservoir, a component of the Los Angeles River

Watershed. The proposed project's disturbed soil area is larger than 1 acre, and therefore, will require a SWPPP pursuant to the Clean Water Act (Section 402).

Pursuant to the Clean Water Act (Sections 401 and 404), and potentially at the State level pursuant to Fish and Game Code 1602, Caltrans may need to obtain a Water Quality Certification from the Regional Water Quality Control Board, an Individual or Nationwide Permit from the U.S. Army Corps of Engineers, and a Streambed Alteration Agreement from the California Department of Fish and Game, respectively. This is all done at the next phase of the project: the Project Specifications and Estimates (PS&E) phase.

The reason for this is that prior to application for the above-mentioned permits, the NEPA/CEQA document (this document) must first be completed, approved, signed, and included as an attachment to those permit applications.

Avoidance, Minimization, and/or Mitigation Measures

Pursuant to the Clean Water Act (Section 402), Caltrans has obtained from the SWRCB a NPDES permit that regulates storm water discharges from Caltrans facilities. This project must comply with NPDES Construction General Permit No. CAS000003 if disturbed soil is greater than (1) acre, in which the project fulfils. The permit requires Caltrans to maintain and implement an effective Storm Water Management Plan (SWMP) that identifies and describes the Best Management Practices (BMPs) used to reduce or eliminate the storm water runoff discharge of pollutants to waters of drainage conveyances and waterways. The SWMP is the framework for developing and implementing guidance to meet permit requirements for Caltrans' storm water discharges.

Total Maximum Daily Load (TMDL) Requirements. A TMDL or Total Maximum Daily Load is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. Water quality standards are set by the California Regional Water Quality Control Board. They identify the uses for each waterbody, for example, drinking water supply, contact recreation (swimming), and aquatic life support (fishing), and the scientific criteria to support that use. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. The calculation must include a margin of safety to ensure that the waterbody can be used for the purposes the State has designated. The calculation must also account for seasonal variation in water quality. The Clean Water Act, section 303, establishes the water quality standards and TMDL programs.

The project lies within the Los Angeles River Watershed and Nitrogen Compounds and Related Effects TMDL became effective March 23, 2004. The TMDL requires the Storm Water NPDES Permittees to submit a Monitoring Work Plan by March 23, 2005 to estimate nitrogen loadings associated with runoff from the storm drain systems. The County of Los Angeles has submitted the Monitoring Work Plan as required on behalf of Caltrans and other Storm Water NPDES Co-Permittees in the watershed. Targeted pollutants are Total ammonia as nitrogen (NH3-N), Nitrate-nitrogen (NO3-N), nitrite-nitrogen (NO2-N), and Nitrate nitrogen plus nitrite-nitrogen (NO3-N + NO2-N). The Department's monitoring data depicts Caltrans discharges to be below the TMDL limits, thus no additional measures are needed to be considered for meeting the conditions of the Nitrogen TMDL. Project Engineers shall consider treatment controls for the project and consult with the District NPDES Storm Water Coordinator.

Best Management Practices (BMPs). With respect to storm water quality, avoidance and minimization are accomplished by implementation of approved BMPs, which are generally broken down into four categories: Pollution Prevention, Treatment, Construction, and Maintenance BMPs. Certain projects may require installation and maintenance of permanent controls to treat storm water. Selection and design of permanent project BMPs is primarily refined in the next phase of the project: the Project Specifications and Estimates (PS&E) phase.

During construction activities, Caltrans has a comprehensive program for preventing water pollution via the preparation and implementation of the aforementioned SWPPP and WPCP. Caltrans has also developed and obtained the SWRCB approval of numerous BMPs for preventing water pollution during construction. Caltrans construction BMPs, SWPPP, and WPCP also incorporate the requirements of the SWRCB NPDES permit. This is all implemented jointly by both Caltrans, and the contractor hired to construct the project, prior to construction.

The following BMPs have been considered for use on this project, but are subject to change and revision:

Treatment BMPs

- Biofiltration Strips and Swales B-5
- Infiltration Devices B-11
- Detention Devices B-29
- Gross Solids Removal Devices
- Media Filters B-53
- Multi-Chamber Treatment Train (MCTT) B-65
- Wet Basin B-71

Construction Site BMPs

Soil Stabilization BMPs C-5

- Geotextiles, Mats/Plastic Covers and Erosion Control Blankets (SS-7) C-12

Sediment Control Practices C-18

- Silt Fence (SC-1) C-18
- Fiber Rolls (SC-5) C-19
- Gravel Bag Berm (SC-6) C-20
- Street Sweeping and Vacuuming (SC-7) C-20
- Sand Bag Barrier (SC-8) C-20
- Storm Drain Inlet Protection (SC-10) C-21

Tracking Control Practices C-21

- Stabilized Construction Entrance (TC-1) C-21
- Stabilized Construction Roadway (TC-2) C-21

Waste Management and Materials Pollution Control C-25

- Stockpile Management (WM-3) C-26
- Concrete Waste Management (WM-8) C-27

Conclusion

The purpose of this discussion is to address regulatory compliance for water quality and storm water runoff discharge from Caltrans facilities. The proposed project calls for an encroachment onto the Sepulveda Basin. The receiving water is the Sepulveda Basin Reservoir, a component of the Los Angeles River Watershed. Pursuant to the Clean Water Act, Caltrans has a comprehensive program for preventing water pollution during construction activities via the preparation and implementation of the Storm Water Pollution Prevention Plan.

2.2.3 GEOLOGY / SOILS / SEISMIC / TOPOGRAPHY

Regulatory Setting. For geologic and topographic features, the key federal law is the Historic Sites Act of 1935, which establishes a national registry of natural landmarks and protects "outstanding examples of major geological features." Topographic and geologic features are also protected under the California Environmental Quality Act.

This section also discusses geology, soils, and seismic concerns as they relate to public safety and project design. Earthquakes are prime considerations in the design and retrofit of structures. The Department's Office of Earthquake Engineering is responsible for assessing the seismic hazard for Department projects. The current policy is to use the anticipated Maximum Credible Earthquake (MCE), from young faults in and near California. The MCE is defined as the largest earthquake that can be expected to occur on a fault over a particular period of time.

A Preliminary Geotechnical Report (PGR) has been prepared by Caltrans for the four proposed alternatives, which includes information in regard to site reconnaissance, a literature search, and a review of the Log of Test Boring (LOTB), based on typical cross-sections and preliminary layouts as provided by the district. The following information has been extracted from the PGR completed February 15, 2006.

Affected Environment

Geology. Based on the Geologic Map of California, Division of Mines and Geology (State of California 1997), the proposed site is mainly underlain by quaternary alluvial sediment and terrace deposits, unconsolidated and semi-consolidated, mostly non-marine deposits. The deposits consist of medium to dense, gravelly clayey sand, and soft to stiff sandy and clayey silt.

According to the previous LOTB performed in the past fifty years, ground water fluctuates between the approximate elevations of 558 feet and 659 feet, which is approximately 20-23 feet deep below the ground surface. The high water level of the Los Angeles River was recorded at approximately 663 feet in September of 1955. During a drill operation in May of 2000 for retaining walls along the connector between northbound I-405 and southbound US-101, groundwater was recorded at the approximate elevation of 667 feet. No surface water was observed in the area, but some perched water may be exist temporarily due to frequent surface run-off.

Topography. As previously stated, the project area formed by alluvial sediment and terrace deposits, and is generally flat. According to our latest topographic layout plan, ground surface elevation varies from approximately 686 feet in the northern area of Burbank Boulevard, to approximately 673 and 653 feet in the southern and southeastern areas, respectively.

Seismicity. Maximum Credible Earthquake (MCE) is typically defined as the maximum earthquake predicted to affect a given location based on the known lengths of the active faults in the vicinity. Based on several memos prepared by Caltrans Geotechnical Services, and the Department's 1966 Seismic Hazard Map, the Maximum Credible Earthquake (MCE) is 7.5.

Peak Bedrock Acceleration (PBA) is another measure of seismic intensity that incorporates a number of uncertainties such as the strength of soil and rock materials at each point of the slip surface, and errors due to simplifying mechanical assumptions. The mean PBA in the project area is estimated at 0.5 g.

Liquefaction. Due to seasonal fluctuation in ground water levels, perched water near the Los Angeles River and the existence of medium-to-dense sands, liquefaction potential in this area is considered to be low-to-moderate.

Environmental Consequences

Potential for Impacts Related to project's susceptibility to erosion and geologic hazards such as earthquakes and liquefaction. Based on the Department's 1966 Seismic Hazard Map, the Maximum Credible Earthquake (MCE) is 7.5. The mean Peak Bedrock Acceleration (PBA) is estimated as 0.5g at this site. The soil profile may be taken as type D for Seismic Design Criteria. Therefore, an ARS curve was developed and recommended for seismic design.

Potential for Exposure of Workers to Hazards During Construction. There are currently no special considerations of provisions recommended as a result of this project and the geologic conditions in the area, although, workers are subject to implementation and practice of general safety practices within constructions zones.

Potential for Impacts to Natural Geologic Landmarks and Landforms. As part of the scoping and environmental analysis conducted for the project, potential impacts to natural geologic landmarks and landforms were considered, but no adverse impacts were identified. Consequently, there is no further discussion regarding these issues in this section.

Avoidance, Minimization and/or Mitigation Measures

Bridge Foundation Recommendations. After a review of geotechnical data and information regarding all four proposed alternatives, the Caltrans Office of Geotechnical Design has made the following recommendations for bridge foundations:

- **Pre-cast Concrete Piles.** These are most favorable due to the presence of groundwater and soil condition that is not hard enough for driving piles. However, gravel with a maximum size of 3 inches may be encountered, and some difficulties in driving piles should be anticipated. This option would also minimize soil disturbance of environmental concern.
- **Steel Pipe Piles.** While still a practical application in these conditions, steel pipe piles can be especially useful with dense, gravelly, and clayey sand, provided that soils are not corrosive. H-Piles may also be used, however, corrosion is also a concern with this less favorable option.

Proposed Foundation Investigations. Subsurface investigation is required for the final. Geotechnical Design Report. Investigations with a minimum of one bored hole are recommended for each bent of the proposed bridges to verify the site conditions, and to evaluate the required design soil parameters for the project. Each hold should be at least 98 feet deep, and additionally, (4) Cone Penetration Tests (CPT) for each connector are recommended, with both dry auger and rotary wash borings for the drilling program.

Conclusion

The scope of this discussion is twofold, with a discussion regarding regulatory compliance with federal law and public safety and project design concerns. Under the Federal Historic Sites Act of 1935, the department has reviewed the project's seismic design and has made recommendations based upon potential for impacts related to the project's susceptibility to erosion and geologic hazards. No adverse or potential impacts to natural geologic landmarks and landforms were identified in the scoping and environmental analysis conducted for the project.

2.2.4 PALEONTOLOGY

Regulatory Setting. Paleontology is the study of life in past geologic time based on fossil plants and animals. A number of federal statutes specifically address paleontological resources, their treatment, and funding for mitigation as a part of federally authorized or funded projects. (e.g., Antiquities Act of 1906 [16 USC 431-433], Federal-Aid Highway Act of 1935 [20 USC 78]). Under California law, paleontological resources are protected by the California Environmental Quality Act, the California Administrative Code, Title 14, Section 4306 et seq., and Public Resources Code Section 5097.5.

Affected Environment

The Caltrans Division of Environmental Analysis, Office of Environmental Engineering, performed an investigation, utilizing geologic maps for the project area, and the Caltrans Preliminary Geotechnical Design Report (2005), and found that undifferentiated fill, and Quarternary Alluvium (alluvial fan and alluvial basin deposits) occur at the surface within the project area. These are underlain by the Modelo Formation (Monterey Formation and Unnamed Shale). These formations occur at the surface south of the project area in the Santa Monica Mountains, dip to the north and extend under the project area.

The fill and alluvium are unlikely to be of concern, however, the Monterey Formation is very fossiliferous. Some general information about the Monterey Formation is provided below:

- **From the UC Museum of Paleontology at University of California, Berkeley website.** The Monterey formation is a vast area of marine deposits rich in fossils. It covers both a large area of California and an extended period of time. Particularly exciting are the fossil whales and dolphins, as well as the large numbers of finely preserved crabs. The singlemost important find, however, is the collection of kelps and other large soft-bodied seaweeds, which are seldom found as fossils elsewhere.
- **From the "Paleontological Assessment Report for the Viejo Substation and the Transmission Line Project, Orange County, California," as prepared by SWCA Environmental Consultants (2003).** The Monterey Formation has been assigned to a high paleontological sensitivity level due to the numerous invertebrate, fish and marine mammal fossils that have been recovered in Orange County (Cooper and Eisentraut, 2000). Limestone deposits in Aliso Viejo, the Pecten Reef and other Orange County localities have produced a wide array of fossils including coprolites, algae, plant fragments, pollen (pine, primrose, dune grass, willow), for aminiferans, diatoms, sponges, bryozoan colonies, serpulid worms, pectens, oysters, clams, marine snails, ostracods, barnacles, sand dollars, sharks, bat rays, fish, turtles, crocodiles, dolphins, baleen whales, sea lions, manatees, desmostylians, horses, primitive squirrels, primitive dogs, primitive deer and birds (Raschke, 1984).

Environmental Consequences

The Monterey Formation has high paleontological sensitivity at least in some areas. Based upon evaluation and study of logs of test borings (ranging from more than 50 feet to 70 feet) in the project area dating from 1954 through 1969, there is no indication that the Monterey Formation was encountered in any of the borings. There are shale fragments in some of the borings which may have been derived from the Monterey Formation, but even if this is true, they were eroded out from the Santa Monica Mountains and redeposited, which eliminates potential paleontological significance. In evaluation of this data, it has been concluded that the Monterey Formation is deeper than 50 to 70 feet in this area. The piles for this project are approximately 24 feet below the surface, and when comparing this information to the available boring logs, it is highly unlikely that the Monterey Formation will be encountered during construction.

Avoidance, Mitigation, and/or Minimization Measures

If paleontological resources are discovered during construction, the paleontologist (or paleontological monitor) will recover them. Construction work in these areas will be halted or diverted to allow recovery of fossil remains in a timely manner. Fossil remains collected during the monitoring and salvage portion of the mitigation program will be cleaned, repaired, sorted, and cataloged. Prepared fossils, along with copies of all pertinent field notes, photos, and maps, will then be deposited in a scientific institution with paleontological collections.

2.2.5 HAZARDOUS WASTE/MATERIALS

Regulatory Setting

Hazardous materials and hazardous wastes are regulated by many state and federal laws. These include not only specific statutes governing hazardous waste, but also a variety of laws regulating air and water quality, human health and land use.

The primary federal laws regulating hazardous wastes/materials are the Resource Conservation and Recovery Act of 1976 (RCRA) and the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). The purpose of CERCLA, often referred to as Superfund, is to clean up contaminated sites so that public health and welfare are not compromised. RCRA provides for “cradle to grave” regulation of hazardous wastes. Other federal laws include:

- Community Environmental Response Facilitation Act (CERFA) of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety and Health Act (OSHA)
- Atomic Energy Act
- Toxic Substances Control Act (TSCA)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

In addition to the acts listed above, Executive Order 12088, Federal Compliance with Pollution Control, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

Hazardous waste in California is regulated primarily under the authority of the federal Resource Conservation and Recovery Act of 1976, and the California Health and Safety Code. Other California laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup and emergency planning.

Worker health and safety and public safety are key issues when dealing with hazardous materials that may affect human health and the environment. Proper disposal of hazardous material is vital if it is disturbed during project construction.

Affected Environment

An Initial Site Assessment (ISA) was conducted by Ninyo & Moore Geotechnical and Environmental Services (2005) for all build alternatives to identify, to the extent practical, contaminated, and potentially contaminated areas and hazardous waste problems within and adjacent to the Department right of way and proposed project area. Sources of hazardous waste include the presence of active gas stations or

old stations, automotive repair businesses, dry cleaning businesses, any industrial activity, car recyclers, landfills (permitted or unpermitted), and naturally occurring asbestos, which can be found in certain types of geologic formations. The ISA included a field reconnaissance of the subject area and adjoining properties, and a review of historical records, maps, telephone directories, aerial photographs, and regulatory databases.

Ninyo & Moore performed an environmental records search for properties located within the project study area (a search radius of ¼ mile on either side of the project site) which included the following federal and state databases:

Federal Databases

CERCLIS/NFRAP Database (Comprehensive Environmental Response, Compensation and Liability Act/No Further Remedial Action Planned) – database that is a compilation of facilities which the United States Environmental Protection Agency (USEPA) has investigated or is currently investigating for a release or threatened release of hazardous substances pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980. NFRAP refers to facilities that have been removed and archived from its inventory of CERCLA sites.

ENRS Database (Emergency Response Notification System) – Records and stores information on reported releases of oil and hazardous substances.

NPL Database (National Priorities List) – United States Environmental Protection Agency's database of uncontrolled or abandoned hazardous waste facilities that have been listed for priority remedial actions under the Superfund Program. This database is updated quarterly.

RCRA Generators Database (Resource Conservation and the Recovery Act) – Maintained by the USEPA, lists facilities that generate hazardous waste as part of their normal business practices.

RCRA CORRACTS/TSD Database (Resource Conservation and the Recovery Act, Corrective Action Sites/Treatment, Storage and Disposal) – The USEPA maintains a database of RCRA facilities associated with TSD of hazardous materials that are undergoing "corrective action." A "Corrective action" order is issued when there has been a release of hazardous waste or constituents into the environment from a RCRA facility.

RCRA Non-CORRACTS/TSD Database (Resource Conservation and the Recovery Act, Non-Corrective Action Sites/Treatment, Storage and Disposal) – A compilation by the USEPA of facilities that report storage, transportation, treatment, or disposal of hazardous waste. This database does not include RCRA facilities where corrective action is required.

State Databases

Cal Sites Database – Maintained by the State of California Environmental Protection Agency, Department of Toxic Substances Control (DTSC), this database contains information on Annual Workplan Properties (AWP), and both known and potentially contaminated properties. Two-thirds of these properties have been classified, based on available information, as needed No Further Action by the DTSC. The remaining properties are in various stages of review and remediation to determine if a problem exists.

LUST Database (Leaking Underground Storage Tank) – Database of reported leaking underground storage tank facilities as maintained by the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Board (RWQCB).

Spills-1990 Report – The California RWQCB report of sites that have records of spills, leaks, investigation, and cleanups.

SWLFs Database (Solid Waste Landfill) – This database consists of open and closed solid waste disposal facilities and transfer stations. The data comes from the Integrated Waste Management Board's SWIS (Solid Waste Information System) database.

UST Database (Underground Storage Tank) – The UST Information System is maintained by the SWRCB (State Water Resources Control Board), which may include the owner and location of the USTs. This database may also include registered ASTs (Aboveground Storage Tanks).

Delineation of Study Area

The ISA also addressed the right-of-way located along US-101 from White Oak Avenue to Woodman Avenue, along I-405 from Victory Boulevard to Ventura Boulevard, as well as (15) properties associated with the connector improvement project. The ISA report divides the I-405 and US-101 project area into five segments discussed below:

Segment A extends from Woodman Avenue on the east to Sepulveda Boulevard on the west. Land uses surrounding this segment consist mostly of residential but there are non-residential as well. Non-residential properties include commercial and office buildings, gasoline stations, and medical office buildings. The eastern section of the Department R/W (near Woodman Avenue) includes unpaved areas. The remainder of the R/W also contains unpaved areas, but these areas are behind sound walls on both the east and westbound US-101. The area behind the sound walls includes unpaved areas, the Los Angeles River, or residential areas.

Segment B extends east to west from Sepulveda Boulevard to Balboa Boulevard. Like Segment A, this segment is comprised mostly of residential uses. There are, however, non-residential properties including gasoline stations, office and medical buildings, and retail uses. The Department R/W consisted primarily of paved areas extending to a sound wall on both east and westbound US-101. The areas behind the sound walls included of unpaved areas, the LA River, or residential areas.

Segment C also runs east to west and goes from Balboa Boulevard to White Oak Avenue. This segment is characterized by residential uses, both single and multi-family. Non-residential properties include gasoline stations, commercial and office properties, and medical buildings. The Department R/W consisted primarily of paved areas with a soundwall and unpaved areas beyond the walls on both the east and westbound US-101. The Department R/W near White Oak is unpaved. The area behind the sound wall consisted of unpaved areas, the LA River, or residential areas.

Segment D extends north to south from Victory Boulevard to Burbank Boulevard. Properties surrounding this segment on the west include the Sepulveda Recreational Area, a National Guard Training Facility, and the Tillman Water Reclamation Plant. Land uses to the east include residential, commercial, offices, and retail shops. A light industrial facility (Chevron-Texaco Van Nuys Terminal) and gasoline stations lie east of the site. The Department right of way consists of unpaved areas on both northbound and southbound I-405.

Segment E also runs north to south and goes from Burbank Boulevard to Ventura Boulevard. In general, residential areas consisting of single-family residences and apartment complexes, and the Sepulveda Dam and a golf course adjoin this segment to the west. To the east are additional residential areas, office and commercial properties, and the Sherman Oaks Galleria. The Department R/W consisted of paved areas with sound wall on both the north and southbound I-405. The areas behind the sound wall included unpaved areas (north of US-101), residences, or commercial areas.

15 Additional Parcels of Study. Fifteen additional parcels were studied, which are located along US-101 freeway between Balboa Boulevard and the I-405 freeway, and along the I-405 freeway between Victory Boulevard and the US-101 freeway. The following table lists and provides details regarding the parcels.

Table 29. Description of 15 Parcels of Study

Parcel	Address	Description
A	16936 Burbank Boulevard	Multi-family residences
B	16900 Burbank Boulevard	Commercial building that is currently occupied by Amber's Donut Shop, Hobby People, Assist U Sell, and offices
C	No address	Vacant land
D	5545 McLennan Avenue	Single-family residence
E	5546 McLennan Avenue	Single-family residence
F	No address	Vacant land
G	No address	Vacant land
H	No address	Vacant land associated with the Sepulveda Dam Recreational Area
I	No address	Portion of a golf course and vacant land associated with the Sepulveda Dam Recreational Area
J	No address	Vacant land associated with the Sepulveda Dam Recreational Area
K	No address	Vacant land associated with the Sepulveda Dam Recreational Area
L	No address	Vacant land associated with the Sepulveda Dam Recreational Area
M	No address	Vacant land associated with the Sepulveda Dam Recreational Area
N	No address	Vacant land associated with the Sepulveda Dam Recreational Area
O	No address	Vacant land associated with the Sepulveda Dam Recreational Area

No evidence of releases or environmental concerns were noted on the (15) parcels. The site reconnaissance revealed that Parcels H, I, J, K, M, N, and O were observed to be vacant/recreational use land associated with the Sepulveda Dam Recreation Area. The Encino Golf Course was observed on the southern portion of Parcel I. A commercial/office building, which included a donut shop, a retail shop, and a real estate office was observed on Parcel B. Apartment complexes were observed on Parcel A, and single-family residences were observed on Parcels D and E. Parcels C, F, G, and L were observed to be vacant land.

Groundwater Sampling. Groundwater sampling and testing in the Sepulveda Dam area will be performed during the Planning, Specifications, and Estimates (PS&E) Phase to determine the level of contaminants. If the water meets the surface water standards, it could be discharged into the Los Angeles River per National pollutant Discharge Elimination System (NPDES) permit from the Regional Water Quality Control Board. If the water is contaminated, it will require treatment before disposal.

Environmental Consequences

Aerially Deposited Lead (ADL). ADL may exist at the project location in unpaved areas within Caltrans right-of-way. The top (2) feet of soil in unpaved areas (up to 25 feet from edge of pavement) requiring excavation can be considered contaminated and may require disposal at a Class I facility. A Site Investigation (SI) will be required for this project during the Plans, Specifications, and Estimates (PS&E)

phase to determine the levels and extent of contamination and provisions will be made for handling and disposal of the contaminated soils. The areas of primary concern are soils along routes with historically high vehicle emissions due to large traffic volumes, congestion, or stop and go situations. Most ADL due to vehicle emissions was deposited prior to 1986 when nearly all lead was removed from gasoline in California.

Asbestos Containing Materials (ACM) and Lead Based Paint (LBP). ACM and LBP may be present at on-site buildings and single-family residences. Prior to demolition of any on-site buildings/single-family residences (that might be acquired), ACM and LBP surveys will be required. If ACMs and/or LBP are/is detected, these materials must be removed and disposed of at an appropriate disposal facility by a licensed contractor prior to demolition.

Asbestos Containing Materials (ACM) in Structures that Require Modification. There is also a concern that ACM may be present in the structure that requires modification, relocation, or any work that impact existing structures. It is recommended that testing be done during construction to determine the presence of ACM. Testing of expansion joints at every approach and departure slabs being replaced is recommended. If the presence of ACM be determined by testing, the material will be disposed of at an appropriate disposal facility.

Thermoplastic/Paint Striping Containing Lead and Chromium. There is concern that yellow thermoplastic/pain striping that needs to be removed may contain lead and chromium at concentrations that are considered hazardous. If yellow thermoplastic/paint striping removed by itself, the residue must be disposed of at a Class I facility. In areas where the yellow traffic stripes are being removed along with asphalt or concrete, the lead concentration may be diluted in the project so that disposal at a Class I facility may not be necessary. We will be able to estimate the lead and chromium levels when data (length of yellow stripes and volume of asphalt to be removed) becomes available to determine whether the waste can be relinquished to the contractor for possible recycling or need to be disposed of at a Class I facility.

Potential for Detrimental Impacts During Construction Activities. The purpose of the ISA is to identify, to the extent feasible, hazardous and potential hazardous waste problems within and next to the right-of-way, and proposed project area. Based on the results of historical research, review of environmental databases, regulatory agency inquiries, and site reconnaissance, properties were evaluated and classified as High, Moderate, or Low with regard to the potential for detrimental impacts during construction activities for this project.

> **High** – Property with known or probable contamination within the area of the project. An example of a property in this category would be a leaking underground storage tank (UST) site where remediation had not been started or was not yet finished.
>
> **Moderate** – Property with potential or suspected contamination within the area of the project. Examples of properties in this category would be leaking UST sites in final stages of remediation or in post-remediation monitoring. A second example would be a property with known use and storage of hazardous materials which had received violation notices from an inspecting agency or where visual evidence of inadequate chemical and storage practices (such as significant staining) were observed but where no environmental assessments had occurred.
>
> **Low** – Property which uses or store hazardous materials but with no significant violations, known releases, or evidence of inadequate chemical handling practices. Example properties would be UST or dry cleaning facilities with no documented releases or where remediation or previous releases had been completed.

Of the parcels/properties that were evaluated, the following (5) properties of High or Moderate risk emerged, as presented in the following table.

Table 30. Identified Properties of Concern

Property Name/Address	Description of Site Operations/Primary Reasons for Risk Classification	Data Source	Risk Classification
Segment A (US-101)			
Fashion Square Car Wash/ 4625 Woodman Avenue (approximately 0.10 mile SE of the US-101 freeway	Car Wash, with underground storage tanks - release to groundwater; status of "remedial action"	Reconnaissance, Database	Moderate
Segment D (I-405)			
Chevron-Texaco Van Nuys Terminal/15359 Oxnard Street/approximately 0.10 mile NE of the I-405 freeway	Petroleum bulk station, this facility was listed on the Leaking Underground Storage Tank (LUST), Resource Conservation Databases, as well as the Recovery Act Generator (RCRAGN) database maintained by the United State Environmental Protection Agency and the SPILLS database, maintained by the California Regional Water Quality Control Board	Reconnaissance, Database, and Historical Documentation	High
Chevron/5600 Sepulveda Boulevard/approximately 0.10 mile NE of I-405 freeway	Gasoline station that has experienced an unauthorized release of gasoline to the soil only, this facility is listed on the LUST database	Reconnaissance, Database	Moderate
Shell Service Station/5556 Sepulveda Boulevard/approximately 0.10 mile southeast from the I-405	Gasoline station that has experienced an unauthorized release of gasoline to the soil only, this facility is listed on the LUST database	Reconnaissance, Database	Moderate
Segment E (I-405)			
Unocal 76 Station/15410 Ventura Boulevard/approximately 0.10 mile NW from the I-405	Gasoline station that has experienced an unauthorized release of gasoline and is currently listed on the LUST database as undergoing "remedial action"	Reconnaissance, Database	Moderate

While the ISA indicated the aforementioned (5) properties as high and moderate risk properties, these properties are not within the footprint of the project, do not pose any potential for detrimental impacts during construction activities, and will not be acquired for Caltrans right-of-way.

Avoidance, Minimization, and/or Mitigation Measures

Upon project approval and selection of a build alternative, a more focused and in-depth approach to assessing the potential for detrimental impacts during construction activities will be performed. Further evaluation of these types of risks could include subsurface exploration, sampling, and/or other forms of testing.

Limitations. The information presented in the ISA is based on the project scope of work, and relies on information provided by others in the description of historical conditions and a review of regulatory databases and files. Ninyo & Moore observed properties adjoining the I-405 and US-101 freeways from public rights-of-way only, and did not conduct interviews with individual/property representatives.

No ISA can completely eliminate uncertainty regarding the potential for hazardous materials conditions in connection with a property. Performance of this ISA is intended to reduce, but not eliminate, uncertainty regarding the presence of hazardous materials conditions. The available data do not provide definitive information relative to past uses, operations, or incidents at the site or adjacent properties. The existence

of site contamination that was not identified during this ISA is possible and cannot be adequately assessed without additional research beyond the stated scope of work. When a preferred alternative is selected, and the project advances to the next phase, further evaluation of these types of risks could include subsurface exploration, sampling, and/or other forms of testing. The complete Ninyo & Moore ISA is available for public review by request.

2.2.6 AIR QUALITY

Regulatory Setting. The Clean Air Act as amended in 1990 is the federal law that governs air quality. Its counterpart in California is the California Clean Air Act of 1988. These laws set standards for the quantity of pollutants that can be in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). Standards have been established for six criteria pollutants that have been linked to potential health concerns; the criteria pollutants are: carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM), lead (Pb), and sulfur dioxide (SO_2).

Under the 1990 Clean Air Act Amendments, the U.S. Department of Transportation cannot fund, authorize, or approve Federal actions to support programs or projects that are not first found to conform to State Implementation Plan for achieving the goals of the Clean Air Act requirements. Conformity with the Clean Air Act takes place on two levels—first, at the regional level and second, at the project level. The proposed project must conform at both levels to be approved.
Regional level conformity in California is concerned with how well the region is meeting the standards set for carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), and particulate matter (PM). California is in attainment for the other criteria pollutants. At the regional level, Regional Transportation Plans (RTP) are developed that include all of the transportation projects planned for a region over a period of years, usually at least 20. Based on the projects included in the RTP, an air quality model is run to determine whether or not the implementation of those projects would conform to emission budgets or other tests showing that attainment requirements of the Clean Air Act are met. If the conformity analysis is successful, the regional planning organization, such as the Southern California Association of Governments (SCAG), and the appropriate federal agencies, such as the Federal Highway Administration, make the determination that the RTP is in conformity with the State Implementation Plan for achieving the goals of the Clean Air Act. Otherwise, the projects in the RTP must be modified until conformity is attained. If the design and scope of the proposed transportation project are the same as described in the RTP, then the proposed project is deemed to meet regional conformity requirements for purposes of project-level analysis.

Conformity at the project-level also requires “hot spot” analysis if an area is “non-attainment” or “maintenance” for carbon monoxide (CO) and/or particulate matter. A region is a “non-attainment” area if one or more monitoring stations in the region fail to attain the relevant standard. Areas that were previously designated as non-attainment areas but have recently met the standard are called “maintenance” areas. “Hot spot” analysis is essentially the same, for technical purposes, as CO or particulate matter analysis performed for NEPA and CEQA purposes. Conformity does include some specific standards for projects that require a hot spot analysis. In general, projects must not cause the CO standard to be violated, and in “non-attainment” areas the project must not cause any increase in the number and severity of violations. If a known CO or particulate matter violation is located in the project vicinity, the project must include measures to reduce or eliminate the existing violation(s) as well.

Affected Environment

The ensuing discussion is from the project Air Quality Assessment dated January 15, 2008.

Local Regulatory Setting. The proposed project is located in the South Coast Air Basin (SCAB). The SCAB is comprised of parts of Los Angeles, Riverside and San Bernardino counties and all of Orange County. The basin is bounded on the west by the Pacific Ocean and surrounded on the other sides by mountains. To the north lie the San Gabriel Mountains, to the north and east the San Bernardino Mountains, to the southeast the San Jacinto Mountains and to the south the Santa Ana Mountains. The basin forms a low plain and the mountains channel and confine airflow which trap air pollutants.

The primary agencies responsible for regulations to improve air quality in the SCAB are the South Coast Air Quality Management District (SCAQMD) and the California Air Resources Board (CARB). The Southern California Association of Governments (SCAG) is an important partner to the SCAQMD, as it is the designated metropolitan planning authority for the area and produces estimates of anticipated future growth and vehicular travel in the basin which are used for air quality planning. The SCAQMD sets and enforces regulations for non-vehicular sources of air pollution in the basin and works with SCAG to develop and implement Transportation Control Measures (TCM). TCM measures are intended to reduce and improve vehicular travel and associated pollutant emissions.

CARB was established in 1967 by the California Legislature to attain and maintain healthy air quality, conduct research into the causes and solutions to air pollution, and systematically attack the serious problem caused by motor vehicles, which are the major causes of air pollution in the State. CARB sets and enforces emission standards for motor vehicles, fuels, and consumer products. It sets the health based California Ambient Air Quality Standards (CAAQS) and monitors air quality levels throughout the state. The board identifies and sets control measures for toxic air contaminants. The board also performs air quality related research, provides compliance assistance for businesses, and produces education and outreach programs and materials. CARB provides assistance for local air quality districts, such as SCAQMD.

The U.S. Environmental Protection Agency (U.S. EPA) is the primary federal agency for regulating air quality. The EPA implements the provisions of the Federal Clean Air Act (FCAA). This Act establishes national ambient air quality standards (NAAQS) that are applicable nationwide. The EPA designates areas with pollutant concentrations that do not meet the NAAQS as non-attainment areas for each criteria pollutant. States are required by the FCAA to prepare State Implementation Plans (SIP) for designated non-attainment areas. The SIP is required to demonstrate how the areas will attain the NAAQS by the prescribed deadlines and what measures will be required to attain the standards. The EPA also oversees implementation of the prescribed measures. Areas that achieve the NAAQS after a non-attainment designation are redesignated as maintenance areas and must have approved Maintenance Plans to ensure continued attainment of the NAAQS.

The CCAA required all air pollution control districts in the state to prepare a plan prior to December 31, 1994 to reduce pollutant concentrations exceeding the CAAQS and ultimately achieve the CAAQS. The districts are required to review and revise these plans every three years. The SCAQMD satisfies this requirement through the publication of an Air Quality Management Plan (AQMP). The AQMP is developed by SCAQMD and SCAG in coordination with local governments and the private sector. The AQMP is incorporated into the SIP by CARB to satisfy the FCAA requirements discussed above. The AQMP is discussed further in Section. Table 30 lists the current attainment designations for the SCAB. For the Federal standards, the required attainment date is also shown. The Unclassified designation indicates that the air quality data for the area does not support a designation of attainment or non-attainment.

Table 31. Designations of Criteria Pollutants for the SCAB

Pollutant	Federal	State
Ozone (O_3)	Severe-17 Non-attainment (2021)	Non-attainment
Respirable Particulate Matter (PM_{10})	Serious Non-attainment (2006)	Non-attainment
Fine Particulate Matter ($PM_{2.5}$)	Non-attainment (2015)	Non-attainment
Carbon Monoxide (CO)	Attainment/Maintenance (2000)	Attainment
Nitrogen Dioxide (NO_2)	Attainment/Maintenance (1995)	Attainment
Sulfur Dioxide (SO_2)	Attainment	Attainment
Lead	Attainment	Attainment
Visibility Reducing Particles	n/a	Unclassified
Sulfates	n/a	Unclassified
Hydrogen Sulfide	n/a	Attainment
Vinyl Chloride	n/a	Attainment

Notes:
1. The Federal 1-hour Ozone (O_3) standard was rescinded effective June 15, 2005 with the implementation of the 8-hour standard. Prior to this the SCAB was designated Extreme Non-Attainment for the 1-hour O3 standard with attainment date of 2010.
2. EPA changed the PM2.5 24-hour standard from 65 to 35 µg/m3 with an effective date of December 2006. Until new area designations become effective in early 2010 based on the new standard, project-level conformity determinations must still consider the 1997 PM2.5 standards because these are the standards upon which the current PM2.5 non-attainment designations are based.

Table 30 shows that the U.S. EPA has designated SCAB as Severe-17 non-attainment for ozone, serious non-attainment for PM_{10}, non-attainment for $PM_{2.5}$, and attainment/maintenance for CO and NO_2. The basin has been designated by the state as non-attainment for ozone, PM_{10}, and $PM_{2.5}$. The federal designations of Severe-17 and Serious affect the required attainment dates as the federal regulations have different requirements for areas that exceed the standards by greater amounts at the time of attainment/non-attainment designation.

The SCAB is designated as in attainment of the State and Federal SO_2 and lead as well as the state CO, NO_2, SO_2, lead, hydrogen sulfide, and vinyl chloride. In July 1997, U.S. EPA issued a new ozone NAAQS of 0.08 ppm using an 8-hour averaging time. Implementation of this standard was delayed by several lawsuits. Attainment/non-attainment designations for the new 8-hour ozone standard were issued on April 15, 2004 and became effective on June 15, 2005. The SCAB was designated severe-17 non-attainment, which requires attainment of the Federal Standard by June 15, 2021. As a part of the designation, the EPA announced that the 1-hour ozone standard would be revoked in June of 2005. Thus, the 8-hour ozone standard attainment deadline of 2021 supersedes and replaces the previous 1-hour ozone standard attainment deadline of 2010.

The SCAQMD is requesting that U.S. EPA change the non-attainment status of the 8 hour ozone standard to extreme. This will allow the use of undefined reductions (i.e. “black box”) based on the anticipated development of new control technologies or improvement of existing technologies in the attainment plan. Further, the extreme classification could extend the attainment date by three years to 2024.

On April 28, 2005 CARB adopted an 8-hour ozone standard of 0.070 ppm. The California Office of Administrative Law approved the rulemaking and filed it with the Secretary of State on April 17, 2006. The standard became effective on May 17, 2006. California has retained the 1-hour concentration standard of 0.09 ppm. To be redesignated as attainment by the state the basin will need to achieve both the 1-hour and 8-hour ozone standards.

The SCAB was designated as moderate non-attainment of the PM_{10} standards when the designations were initially made in 1990 with a required attainment date of 1994. In 1993, the basin was redesignated as serious non-attainment with a required attainment date of 2006 because it was apparent that the basin could not meet the PM_{10} standard by the 1994 deadline. At this time Basin has met the PM_{10} standards at all monitoring stations except the western Riverside where the annual PM_{10} standard has not been met. However, on September 21, 2006, the U.S. EPA announced that it was revoking the annual PM_{10} standard as research had indicated that there were no considerable health effects associated with long-term exposure to PM_{10}. With this change the basin is technically in attainment of the federal PM_{10} standards although the redesignation process has not yet begun.

In July 1997, U.S. EPA issued NAAQS for fine particulate matter ($PM_{2.5}$). The $PM_{2.5}$ standards include an annual standard set at 15 micrograms per cubic meter ($\mu g/m^3$), based on the three-year average of annual mean $PM_{2.5}$ concentrations and a 24-hour standard of 35 $\mu g/m^3$, based on the three-year average of the 98th percentile of 24-hour concentrations. Implementation of these standards was delayed by several lawsuits. On January 5, 2005, EPA took final action to designate attainment and non-attainment areas under the NAAQS for $PM_{2.5}$ effective April 5, 2005. The SCAB was designated as non-attainment with an attainment required as soon as possible but no later than 2010. EPA may grant attainment date extensions of up to five years in areas with more severe $PM_{2.5}$ problems and where emissions control measures are not available or feasible. It is likely that the SCAB will need this additional time to attain the standard

Note that, although there is now a $PM_{2.5}$ standard, adequate tools are not currently available to perform a detailed assessment of $PM_{2.5}$ emissions and impacts at the project level. Analysis of $PM_{2.5}$ impacts is complex because it is both directly emitted from sources, like CO, and formed in the atmosphere from reactions of other pollutants, like ozone. Further, there are no good sources for the significance thresholds for $PM_{2.5}$ emissions at this time. Until tools and methodologies are developed to assess the impacts of projects on $PM_{2.5}$ concentrations, the analysis of PM_{10} will need to be used as an indicator of potential $PM_{2.5}$ impacts.

On September 21, 2006, the U.S. EPA announced that the 24-hour $PM_{2.5}$ standard was lowered to 35 $\mu g/m^3$. Attainment/non-attainment designations for the revised $PM_{2.5}$ standard will be made by December of 2009 with an attainment date of April 2015 although an extension of up to five years could be granted by the U.S. EPA.

The SCAB has not had any violations of the federal CO standards since 2003. Therefore, the SCAB has met the criteria for CO attainment. The SCAQMD formally requested the U.S. EPA to redesignate the Basin as attainment for CO. The U.S. EPA designated the basin as an attainment/maintenance area for CO on June 11, 2007.

The federal annual NO_2 standard was met for the first time in 1992 and has not been exceeded since. The SCAB was redesignated as attainment for NO_2 in 1998. The basin will remain a maintenance/attainment area until 2018, assuming the NO_2 standard is not exceeded.

0 shows that SCAB is designated as in attainment of the SO_2 and lead NAAQS as well as the state CO, NO_2, SO_2, lead, hydrogen sulfide, and vinyl chloride CAAQS. Generally, these pollutants are not considered a concern in the SCAB.

Criteria Pollutants. Since the passage of the Federal Clean Air Act of 1970 (FCAA) and subsequent amendments, the US EPA has established and revised the National Ambient Air Quality Standards (NAAQS). The NAAQS was established for six major pollutants or criteria pollutants. The NAAQS are two tiered: primary, to protect public health, and secondary, to prevent degradation to the environment (i.e., impairment of visibility, damage to vegetation and property). The six criteria pollutants are ozone (O_3), carbon monoxide (CO), particulate matter (PM_{10} and $PM_{2.5}$), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead (Pb). Table 31 presents the state and national ambient air quality standards. A brief explanation of each pollutant is presented follows the table.

Ozone (O_3). Ozone is a toxic gas that irritates the lungs and damages materials and vegetation. Ozone is a secondary pollutant; it is not directly emitted. Ozone is the result of chemical reactions between other pollutants, most importantly hydrocarbons and NO_2, which occur only in the presence of bright sunlight. Pollutants emitted from areas cities react during transport downwind to produce the oxidant concentrations experienced in the area.

Particulate Matter (PM_{10} & $PM_{2.5}$). Particulate matter includes both aerosols and solid particles of a wide range of size and composition. Of particular concern are those particles between 10 and 2.5 microns in size (PM_{10}) and smaller than or equal to 2.5 microns ($PM_{2.5}$). The size of the particulate matter is referenced to the aerodynamic diameter of the particulate. The PM_{10} criteria is aimed primary at what the U.S. EPA refers to as "course particles." Course particles are often found near roadways, dusty industries, construction sites, and fires. The $PM_{2.5}$ criteria, which are directed at particles less than 2.5 microns in size, are referred to as "fine particles." These particles can also be directly emitted and they can also form when gases emitted from power plants, industries and automobiles react in the air. The principal health effect of airborne particulate matter is on the respiratory system. Studies have linked particulate pollution with irritation of the airways, coughing, aggravated asthma, irregular heartbeat, and premature death in people with heart or lung disease.

Carbon Monoxide (CO). Carbon monoxide is a colorless and odorless gas, which, in the urban environment, is associated primarily with the incomplete combustion of fossil fuels in motor vehicles. Carbon monoxide combines with hemoglobin in the bloodstream and reduces the amount of oxygen that can be circulated through the body. High carbon monoxide concentrations can lead to headaches, aggravation of cardiovascular disease, and impairment of central nervous system functions. Carbon monoxide concentrations can vary greatly over comparatively short distances. Relatively high concentrations are typically found near crowded intersections, along heavily used roadways carrying slow-moving traffic, and at or near ground level. Even under the most severe meteorological and traffic conditions, high concentrations of carbon monoxide are limited to locations within a relatively short distance (300 to 600 feet [90 to 185 meters]) of heavily traveled roadways. Overall carbon monoxide emissions are decreasing as a result of the Federal Motor Vehicle Control Program, which has mandated increasingly lower emission levels for vehicles manufactured since 1973.

Nitrogen Oxides (NO_X). Nitrogen oxides from automotive sources are some of the precursors in the formation of ozone and secondary particulate matter. Ozone and particulate matter are formed through a series of photochemical reactions in the atmosphere. Because the reactions are slow and occur as the pollutants are diffusing downwind, elevated ozone levels are often found many miles from the source of precursor emission. The effects of nitrogen oxides emission are examined on a regional basis.

Lead (Pb). Lead is a stable compound, which persists and accumulates both in the environment and in animals. In humans, it affects the blood-forming or hematopoletic, the nervous, and the renal systems. In addition, lead has been shown to affect the normal functions of the reproductive, endocrine, hepatic, cardiovascular, immunological, and gastrointestinal systems, although there is significant individual variability in response to lead exposure. Since 1975, lead emissions have been in decline due in part to the introduction of catalyst-equipped vehicles, and decline in production of leaded gasoline. In general, an analysis of lead is limited to projects that emit significant quantities of the pollutant (i.e. lead smelters) and are not applied to transportation projects.

Sulfur Oxides (SO_x). Sulfur oxides constitute a class of compounds of which sulfur dioxide (SO_2) and sulfur trioxide (SO_3) are of greatest importance. The oxides are formed during combustion of the sulfur components in motor fuels. Relatively few sulfur oxides are emitted from motor vehicles since motor fuels are now de-sulfured. The health effects of sulfur oxides include respiratory illness, damage to the respiratory tract, and bronchia-constriction.

Table 32. Ambient Air Quality Standards

Pollutant	Averaging Time	State Standards[1,3]	Federal Standards[2] Primary[3,5]	Federal Standards[2] Secondary[3,6]
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m^3)	--	--
	8 Hour	0.070 ppm (137 µg/m^3)	0.08 ppm (157 µg/m^3)	Same as Primary
Respirable Particulate Matter (PM_{10})[8]	24 Hour	50 µg/m^3	150 µg/m^3	Same as Primary
	AAM[6]	20 µg/m^3	--	Same as Primary
Fine Particulate Matter ($PM_{2.5}$)[8]	24 Hour	--	35 µg/m^3	Same as Primary
	AAM[6]	12 µg/m^3	15 µg/m^3	Same as Primary
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	None
	8 Hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	None
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)	--	--
Nitrogen Dioxide (NO_2)	AAM[6]	0.030 ppm (56 µg/m^3)	0.053 ppm (100 µg/m^3)	Same as Primary
	1 Hour	0.18 ppm (338 µg/m^3)	--	--
Sulfur Dioxide (SO_2)	AAM[6]	--	0.030 ppm (80 µg/m^3)	--
	24 Hour	0.04 ppm (105 µg/m^3)	0.14 ppm (365 µg/m^3)	--
	3 Hour	--	--	0.5 ppm (1,300 µg/m^3)
	1 Hour	0.25 ppm (655 µg/m^3)	--	--
Lead[7]	30 day Avg.	1.5 µg/m^3	--	--
	Calendar Quarter	--	1.5 µg/m^3	Same as Primary
Visibility Reducing Particles	8 hour	Extinction coefficient of 0.23 per km – visibility ≥ 10 miles (0.07 per km -- ≥30 miles for Lake Tahoe)	**No Federal Standards**	
Sulfates	24 Hour	25 µg/m^3		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)		
Vinyl Chloride[7]	24 Hour	0.01 ppm (26 µg/m^3)		

1. California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, PM_{10}, $PM_{2.5}$, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded.
2. National standards (other than ozone, PM_{10}, $PM_{2.5}$,, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current federal policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25˚ C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25˚ C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
5. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
6. Annual Arithmetic Mean
7. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
8. On September 21, 2006 EPA published a final rule revoking the annual 50 µg/m^3 PM_{10} standard and lowering the 24-hour $PM_{2.5}$ standard from 65 µg/m^3. Attainment designations are to be issued in December, 2009 with attainment plans due April, 2010.

-- No Standard

Affected Environment/Environmental Conditions

Climate. The climate in and around the project area, as with all of Southern California, is controlled largely by the strength and position of the subtropical high pressure cell over the Pacific Ocean. It maintains moderate temperatures and comfortable humidity, and limits precipitation to a few storms during the winter "wet" season. Temperatures are normally mild, excepting the summer months, which commonly bring substantially higher temperatures. In all portions of the basin, temperatures well above 100 degrees F. have been recorded in recent years. The annual average temperature in the basin is approximately 62 degrees Fahrenheit.

Winds in the project area are usually driven by the dominant land/sea breeze circulation system. Regional wind patterns are dominated by daytime onshore sea breezes. At night the wind generally slows and reverses direction traveling towards the sea. Wind direction will be altered by local canyons, with wind tending to flow parallel to the canyons. During the transition period from one wind pattern to the other, the dominant wind direction rotates into the south and causes a minor wind direction maximum from the south. The frequency of calm winds (less than 2 miles per hour) is less than 10 percent. Therefore, there is little stagnation in the project vicinity, especially during busy daytime traffic hours.

Southern California frequently has temperature inversions which inhibit the dispersion of pollutants. Inversions may be either ground based or elevated. Ground based inversions, sometimes referred to as radiation inversions, are most severe during clear, cold, early winter mornings. Under conditions of a ground-based inversion, very little mixing or turbulence occurs, and high concentrations of primary pollutants may occur local to major roadways. Elevated inversions can be generated by a variety of meteorological phenomena. Elevated inversions act as a lid or upper boundary and restrict vertical mixing. Below the elevated inversion, dispersion is not restricted. Mixing heights for elevated inversions are lower in the summer and more persistent. This low summer inversion puts a lid over the South Coast Air Basin (SCAB) and is responsible for the high levels of ozone observed during summer months in the air basin.

Monitored Air Quality. Air quality at any site is dependent on the regional air quality and local pollutant sources. Regional air quality is determined by the release of pollutants throughout the air basin. Estimates for the SCAB have been made for existing emissions ("2003 Air Quality Management Plan", August 1, 2003). The data indicate that mobile sources are the major source of regional emissions. Motor vehicles (i.e., on-road mobile sources) account for approximately 45 percent of volatile organic compounds (VOC), 63 percent of nitrogen oxide (NOx) emissions, and approximately 76 percent of carbon monoxide (CO) emissions.

The SCAQMD has divided the SCAB into 38 air-monitoring areas with a designated ambient air monitoring station representative of each area. The project area is represented by measurements made at the Reseda monitoring station. The Reseda station is located approximately 5 miles northwest of the I-405 and I-101 interchange. The pollutants measured at the Reseda station include ozone, CO, $PM_{2.5}$ and nitrogen dioxide (NO_2). The next nearest is the Burbank station located approximately 8.4 miles to the east. PM_{10} and sulfur dioxide (SO_2) monitoring data are measured at this station. The air quality data monitored from 2004 to 2006 are presented in Table 32.

The monitoring data presented in Table 32 were obtained from the CARB air quality data website (www.arb.ca.gov/adam/). Federal and State air quality standards are also presented in the table.

Table 33. Air Quality Levels Measured at the Reseda/Burbank Monitoring Stations

Pollutant	California Standard	National Standard	Year	% Meas.[1]	Max. Level	Days State Standard Exceeded[2]	Days National Standard Exceeded[2]
Ozone	0.09 ppm	None	2006	100	0.158	34	6
	for 1 hr.		2005	97	0.138	30	2
			2004	98	0.131	54	2
Ozone	0.070 ppm[3]	0.08 ppm	2005	100	0.109	--	17
	for 8 hr.	For 8 hr.	2005	97	0.113	--	12
			2004	98	0.115	--	30
CO	20 ppm	35 ppm	2006	98	4.8	0	0
	For 1 hour	For 1 hour	2005	98	5.1	0	0
			2004	97	5.0	0	0
CO	9 ppm	9 ppm	2006	98	3.5	0	0
	For 8 hour	For 8 hour	2005	98	3.5	0	0
			2004	97	3.5	0	0
NO_2	0.18 ppm	None	2006	99	0.073	0	n/a
(1-Hour)	For 1 hour		2005	96	0.086	0	n/a
			2004	99	0.083	0	n/a
NO_2	0.03 ppm	0.053 ppm	2006	99	0.018	n/a	No
(Annual)	AAM[4]	AAM[4]	2005	96	0.020	n/a	No
			2004	99	0.021	n/a	No
Particulates	None	35 µg/m^3	2006	--	44.0	n/a	0
PM2.5		For 24 hr.	2005	--	39.5	n/a	0
(24 Hour)			2004	--	56.2	n/a	0
Particulates	12 µg/m^3	15 µg/m^3	2006	--	--	--	--
PM2.5	AAM[4]	AAM[4]	2005	--	--	--	--
(Annual)			2004	--	15.7	No	Yes
Particulates	50 µg/m^3	150 µg/m^3	2006	88	71	10/--	0
PM10	For 24 hr.	For 24 hr.	2005	100	92	5/30	0
(24 Hour)			2004	97	74	6/38	0
Particulates	20 µg/m^3	None	2006	88	--	Yes	n/a
PM10	AAM[4]		2005	100	33	Yes	n/a
(Annual)			2004	97	37	Yes	n/a
SO_2	0.04 ppm	0.14 ppm	2006	96	0.004	0	0
(24 Hour)	For 24 Hr.	For 24 hr.	2005	97	0.006	0	0
			2004	89	0.009	0	0
SO_2	None	0.03 ppm	2006	96	0.001	n/a	No
(Annual)		AAM[4]	2005	97	0.002	n/a	No
			2004	89	0.003	n/a	No

1. Percent of year where high pollutant levels were expected that measurements were made
2. For annual averaging times a yes or no response is given if the annual average concentration exceeded the applicable standard. n/a indicates that there is no applicable standard. For the PM10 24 hour standard, daily monitoring is not performed. The first number shown in Days State Standard Exceeded column is the actual number of days measured that State standard was exceeded. The second number shows the number of days the standard would be expected to be exceeded if measurements were taken every day.
3. This concentration standard was approved by the ARB on April 28, 2005 and is expected to become effective in early 2006.
4. Annual Arithmetic Mean
-- Data Not Reported or insufficient data available to determine the value.

Source: CARB Air Quality Data Statistics web site www.arb.ca.gov/adam/ accessed 05/16/07

The monitoring data presented in Table 32 show that ozone and particulate matter (PM_{10} and $PM_{2.5}$) are the air pollutants of primary concern in the project area.

The State 1-hour ozone standard was exceeded between 30 and 54 days each year between 2004 and 2006 at the Reseda station. The Federal 1-hour ozone standard was exceeded between 2 days in 2004 and 2005, and 6 days in 2006. The Federal 8-hour ozone standard was exceeded between 12 and 30 days each year. The recently adopted State 8-hour Ozone standard has also been exceeded but the CARB website is not currently reporting the total number of days. There does not appear to be a noticeable trend in either maximum ozone concentrations or days of exceedances in the area.

Ozone is a secondary pollutant; it is not directly emitted. Ozone is the result of chemical reactions between other pollutants, most importantly hydrocarbons and NO_2, which occur only in the presence of bright sunlight. Pollutants emitted from upwind cities react during transport downwind to produce the oxidant concentrations experienced in the area. Many areas of the SCAQMD contribute to the ozone levels experienced at the monitoring station, with the more significant areas being those directly upwind.

The Federal 24 hour standard for $PM_{2.5}$ was not exceeded between 2004 and 2006 at the Reseda monitoring station. The annual average $PM_{2.5}$ concentration has exceeded the Federal standards in 2004, but not the State standards. ($PM_{2.5}$ data for 2005 and 2006 are not available).

The State 24-hour concentration standards for PM_{10} have been exceeded between 30 and 38 days each year between 2003 and 2005 at the Burbank monitoring station. PM_{10} has also exceeded the State standards in 2006, but the number of days of exceedance is not known. The Federal standards for PM_{10} were not exceeded. The State annual average standard has been exceeded for the past three years. There does not appear to be a noticeable trend in either maximum particulate concentrations or days of exceedances in the area. Particulate levels in the area are due to natural sources, grading operations, and motor vehicles.

According to the EPA, some people are much more sensitive than others to breathing fine particles (PM_{10} and $PM_{2.5}$). People with influenza, chronic respiratory and cardiovascular diseases, and the elderly may suffer worsening illness and premature death due to breathing these fine particles. People with bronchitis can expect aggravated symptoms from breathing in fine particles. Children may experience decline in lung function due to breathing in PM_{10} and $PM_{2.5}$. Other groups considered sensitive are smokers and people who cannot breathe well through their noses. Exercising athletes are also considered sensitive, because many breathe through their mouths.

CO is another important pollutant that is due mainly to motor vehicles. Currently, CO levels in the project region are in compliance with the State and Federal 1-hour and 8-hour standards.

The monitored data shown in Table 32 show that other than ozone, PM_{10} and $PM_{2.5}$ exceedances as mentioned above, no State or Federal standards were exceeded for the remaining criteria pollutants.

Sensitive Receptors. Generally, sensitive receptors are facilities or land uses that include members of the population sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Residential land uses in the vicinity of the project are located along both sides of I-101 and mostly on the west side of I-405 from I-101 extending south pass Ventura Boulevard. The Encino Hospital, other health care facilities, as well as a number of churches are located within a mile of the I-405/I-101 interchange. There are a number of schools located in the vicinity of Sepulveda Boulevard and Ventura Boulevard; some are located less than a quarter of the mile from the I-405/I-101 interchange.

Environmental Consequences as a Result of Proposed Project Implementation

Summary. Compliance with the Transportation Conformity requirements of the Federal Clean Air Act (FCAA) is demonstrated. A regional air quality analysis is performed to demonstrate that the project will not adversely impact regional air quality. A local air quality analysis is performed to demonstrate that the

project will not adversely impact local air quality in the immediate vicinity of the project. The report also discusses potential impacts from Diesel Particulate Matter which has been listed by CARB as a toxic substance and presents measures to reduce PM_{10} emissions during construction. The potential for release of Naturally Occurring Asbestos (NOA) during construction is also discussed.

The project is located in the South Coast Air Basin (SCAB). The South Coast Air Quality Management District (SCAQMD) and the California Air Resources Board (CARB) are responsible for regulating air pollutant sources in the Basin. The SCAQMD prepares the Air Quality Management Plan (AQMP) which specifies measures to meet the state and national ambient air quality standards (SAAQS and NAAQS). To show that the project will not adversely impact the region's air quality it must be shown that the project will not result in the transportation system exceeding the air pollutant budgets in the AQMP.

The 2004 Regional Transportation Plan (RTP) and 2006 Regional Transportation Improvement Program (RTIP) prepared by the Southern California Association of Governments (SCAG) are regional plans for future improvements in the areas transportation system. These plans must demonstrate that the air pollutant emissions associated with the transportation plan do not exceed the emissions budgets in the approved AQMP. The proposed project is a part of the 2004 RTP and 2006 RTIP. Therefore, the project will not result in an exceedance of the transportation air pollutant emissions budgets and will not adversely impact regional air quality.

Local impacts, also known as "hot spots" are assessed for CO, PM_{10}, and $PM_{2.5}$. The CO impacts are assessed using the "Transportation Project-Level Carbon Monoxide Protocol" (Protocol) developed by the Institute of Transportation Studies at the University of California Davis for Caltrans. The protocol contains a series of flow charts with criteria to determine that the project will result in local CO concentrations that exceed the state and national AAQS. The flow chart questions and responses are presented in Section 4.2. The analysis shows that CO concentrations in the area affected by the project would not worsen air quality, and would be expected to comply with the CO NAAQS. Therefore, the project will not result in an adverse local CO impact.

A $PM_{2.5}$ and PM_{10} hot-spot analysis is not required for projects that are <u>not</u> a project of air quality concern (POAQC). In the South Coast Air Basin, it is the Southern California Association of Governments (SCAG) Transportation Conformity Working Group (TCWG) that makes the determination whether the project is or is not a POAQC. The required "PM Conformity Hot Spot Analysis – Project Summary for Interagency Consultation" was submitted to the TCWG for consideration at their May 22, 2007 meeting. The project was determined not to be a project of air quality concern because the facility is not projected to have a significant number of diesel vehicles (i.e. less than 10,000 per day), and because project would not result in any increase in the number of diesel trucks that would utilize the facility. The redistribution of traffic is minor and would occur primarily near residential areas that have very little truck traffic and little effect on truck movements. Therefore, the project will not result in an adverse local $PM_{2.5}$ or a PM_{10} impact.

Impacts from Mobile Source Air Toxics MSAT are also examined. The analysis shows that the estimated VMT under each of the alternatives are nearly the same, varying by less than 2.2 percent, it is expected there would be no appreciable difference in overall MSAT emissions among the various alternatives. Also, regardless of the alternative chosen, emissions will be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce MSAT emissions by 57 to 87 percent between 2000 and 2020.

Regional Air Quality Analysis

Rules and Implementation. The authority requiring projects to undergo a regional emissions analysis originates from section 176 (c) of the Clean Air Act Amendments of 1990. The law is codified as title 23 of the United States Code (23 U.S.C) and is known as the Federal Transit Act. The regulations cited to implement 23 U.S.C is contained in title 40 of the Code of Federal Regulation parts 51 and 93 (40 CFR 51 and 40 CFR 93). Parts 51 and 93 are commonly recognized as the Transportation Conformity Rule. On August 15, 1997 the Federal Register, published a public notice in which the US EPA requested to

streamline the 40 CFR 51 & 93. The final rule issued by the US EPA modified 40 CFR 51 and 93, and classified the Transportation Conformity Rule as 40 CFR 51.390 and 40 CFR 93.100 – 93.128.

The Transportation Conformity Rule requires a regional emissions analysis to be performed by the MPO for projects within its jurisdiction. For the Basin, the MPO is the Southern California Association of Governments (SCAG). The regional emissions analysis includes all projects listed in the Regional Transportation Plan (Plan or RTP) and the Regional Transportation Improvement Program (TIP or RTIP). The RTP is a planning document spanning a 25-year period and the TIP implements the Plan on a 6-year increment. Both the Plan and TIP must support an affirmative conformity finding to obtain FHWA approval. Projects that are included in the regional analysis are listed in the TIP and referenced in the Plan. Projects in a Plan and TIP that have been approved by the Federal Highway Administration (FHWA) are considered to have met the conformity requirement for regional emissions analysis.

The currently approved RTP and TIP is the 2004 RTP and the 2006 RTIP. The 2004 RTP was adopted by SCAG on April 1, 2004 as Resolution #04-451-2. FHWA approved the 2004 Plan on June 7, 2004. The RTP was amended on July 27, 2004. A Draft 2006 RTIP was released in June 2006 and was formally approved by the SCAG on July 27, 2006. The 2006 RTIP was approved by the federal agencies on October 2, 2006.

In order to obtain FHWA approval of the Plan and TIP as conforming, the following tests, demonstrating affirmative findings with respect to the Transportation Conformity Rule, were applied to the 2004 RTP.

- Regional Emissions Analysis (Sections 93.109, 93.110, 93.118, and 93.119)
- Timely Implementation of TCMs Analysis (Section 93.113)
- Financial Constraint Analysis (Section 93.108)
- Interagency Consultation and Public Involvement Analysis (Sections 93.105 and 93.112)

Likewise, the approval of the 2006 RTIP is contingent upon satisfying all relevant CFR sections applicable:

- Consistency with SCAG's 2004 RTP (Section 450.324 of the US DOT-Metropolitan Planning Regulations)
- Regional Emissions Analysis (Sections 93.109, 93.118, and 93.119)
- Timely Implementation of TCMs Analysis (Section 93.113)
- Financial Constraint Analysis (Section 93.108)
- Interagency Consultation and Public Involvement Analysis (Sections 93.105 and 93.112)

Project Inclusion in Approved RTP & RTIP. The proposed project is included in the 2006 RTIP and referenced in the Plan. It is listed in Section II of Volume II of the 2006 RTIP, state highway section, Los Angeles County. The following project information is excerpted from the 2006 RTIP:

- Lead Agency – Caltrans
- Project ID # - LA0D77
- Air Basin - SCAB
- Model # - L393
- Program Code – CAN40
- Route – 405
- Begin Post Mile – 39.4
- End Post Mile – 40.5
- Description – City of L.A. – At Route 405 and US 101 interchange. Construct freeway connector from southbound Route 405 to northbound and southbound US-101 and add auxiliary lane from Burbank Boulevard to northbound US 101 connector (EA #199610, PPNO 2787)

As previously mentioned, the MPO performs the regional analysis as part of the submitted Plan and TIP. The regional analysis requirement is deemed satisfied and conforming to the Transportation Conformity

Rule upon FHWA approval of the Plan and TIP. Projects in the approved TIP and Plan meet the regional analysis criterion by reference to the two documents.

Construction-Related Emissions. Construction activities associated with the proposed project would be temporary and would last the duration of Project construction. The discussion below has concluded that Project construction would not create adverse pollutant emissions for any of the alternatives under consideration. Short-term impacts to air quality would occur during minor grading/trenching, new pavement construction and the re-striping phase. Additional sources of construction related emissions include:

- Exhaust emissions and potential odors from construction equipment used on the construction site as well as the vehicles used to transport materials to and from the site; and
- Exhaust emissions from the motor vehicles of the construction crew.

Project construction would result in temporary emissions CO, NO_x, ROG, and PM_{10}. Stationary or mobile powered on-site construction equipment includes trucks, tractors, signal boards, excavators, backhoes, concrete saws, crushing and/or processing equipment, graders, trenchers, pavers and other paving equipment. The amount of worker trips to the site is unknown at this time. However, given the high volume of traffic in this area, the addition of worker trips will be inconsequential. Based on the insignificant relative amount of daily work trips required for Project construction, construction worker trips are not anticipated to significantly contribute to or affect traffic flow on local roadways and are therefore not considered significant. During the demolition phase some asphalt concrete (AC) pavement and curbs and gutters would have to be removed.

In order to further minimize construction-related emissions, all construction vehicles and construction equipment would be required to be equipped with the state-mandated emission control devices pursuant to state emission regulations and standard construction practices. After construction of the Project is complete, all construction-related impacts would cease, thus resulting in a less than significant impact. Short-term construction PM_{10} emissions would be further reduced with the implementation of required dust suppression measures outlined within SCAQMD Rule 403. Note that Caltrans Standard Specifications for construction (Section 10 and 18 [Dust Control] and Section 39-3.06 [Asphalt Concrete Plants]) must also be adhered to. Therefore, Project construction is not anticipated to violate State or Federal air quality standards or contribute to the existing air quality violation in the air basin.

Section 93.122(d)(2) of the EPA Transportation Conformity Rule requires that in PM_{10} non-attainment and maintenance areas (for which the SIPs identify construction-related fugitive dust as a contributor to the area problem), the RTIP should conduct the construction-related fugitive PM_{10} emission analysis. The 2003 PM_{10} SIP/AQMP emissions budgets for SCAB include the construction and unpaved-road emissions. The 2006 RTIP PM_{10} regional emissions analysis includes the construction and unpaved road emissions for conformity finding.

Mitigation of PM_{10} During Construction

The approved 2003 Particulate Matter SIP contains provisions calling for mitigation of PM_{10} emissions during construction. Pursuant § 93.117, the Department, the project sponsor, is required to stipulate to include, in its final plans, specification, and estimates, control measures that will limit the emission of PM_{10} during construction. Such control plans must be contained in an applicable SIP.

The PM_{10} emissions is a composite of geologic and aerosol variety. The prime concern during construction is to mitigate geologic PM_{10} that occurs from earth movement such as grading. The agency who sponsored the PM_{10} SIP is SCAQMD with concurrence from the California Air Resource Board. SCAQMD has established Rule 403 that addresses the mitigation PM_{10} by reducing the ambient entrainment of fugitive dust and Rule 402 which requires that air pollutant emissions not be a nuisance off-site. Fugitive dust consists of solid particulate matters that becomes airborne due to human activity (i.e. construction) and is a subset of total suspended particulates. Likewise, PM_{10} is a subset of total

suspended particulates. The Handbook states that 50% of total particulate matter suspended comprise of PM_{10}. Hence, in mitigating for fugitive dust, emissions of geologic PM_{10} are reduced.

During construction of the proposed project, the property owner/development and its contractors shall be required to comply with regional rules, which shall assist in reducing short-term air pollutant emissions. SCAQMD Rule 402 requires that air pollutant emissions not be a nuisance off-site. SCAQMD Rule 403 requires that fugitive dust be controlled with the best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source . Two options are presented in Rule 403: monitoring of particulate concentrations or active control. Monitoring involves a sampling network around the project with no additional control measures unless specified concentrations are exceeded. The active control option does not require any monitoring, but requires that a list of measures be implemented starting with the first day of construction. This project will be in full compliance with both Rule 402 and Rule 403.

Local Air Quality Analysis

Overview of Local Analysis. The local analysis is commonly referred to as project level air quality or "hot spot" analysis. The primary focus is the operational impact on air quality created by the proposed improvement. Unlike a regional analysis, a local analysis is constrained in scope and is limited to a particular project. The criteria pollutants analyzed do not consist of all pollutants in non-attainment. The analysis is restricted to carbon monoxide, PM_{10}, and $PM_{2.5}$. The analysis years consist of the year opening to traffic and the ultimate horizon year referenced in the approved Plan rather than a series of present and future years. The approach to the local analysis is tiered and is dependent on the status of the carbon monoxide SIP: the CO analysis can be qualitative, quantitative, or computational. The PM_{10} and $PM_{2.5}$ analysis is qualitative in scope.

Similar to the regional analysis, the Transportation Conformity Rule also applies to the local analysis. Sections of pertinence are 40 CFR 93.115 to 93.117, 93.123,and 93.126 to 93.128. In California, the procedures of the local analysis for carbon monoxide are modified pursuant §93.123(a)(1). Sub-paragraph (a)(1) states the following:

***CO hot-spot analysis*. (1)** The demonstrations required by §93.116 ("Localized CO and PM_{10} violations") must be based on a quantitative analysis using the applicable air quality models, data bases, and other requirements specified in 40 CFR part 51, Appendix W (Guideline on Air Quality Models). These procedures shall be used in the following cases, unless different procedures developed through the interagency consultation process required in §93.105 and approved by the EPA Regional Administrator are used:

The sub-paragraph allows for an alternative. In California, the procedure for performing a CO analysis is detailed in the Transportation Project-Level Carbon Monoxide Protocol (Protocol) developed by the Institute of Transportation Studies at the University of California, Davis. David P. Howekamp, Director of Air Division of the US EPA Region IX, in October of 1997, approved the Protocol. The US EPA deemed the Protocol as an acceptable option to the mandated quantitative analysis. The Protocol incorporates §93.115 – 93.117, §93.126 – 93.128 into its rules and procedures.

§93.123(b)(1) requires that the PM_{10}, and $PM_{2.5}$ analysis be quantitative. However, §93.123(b)(4) waives such analysis until the EPA releases modeling guidance and announces such guidance in the Federal Register. Since no modeling guidance has been released to date, §93.123(b)(4) offsets the implementation of §93.123(b)(1) and only a qualitative analysis is required.

In March 2006, the EPA released guidance on PM_{10}, and $PM_{2.5}$ analyses, titled Transportation Conformity Guidance for Qualitative Hot-spot Analysis in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas. This guidance supercedes previous FHWA and Caltrans PM_{10} guidance. The analysis for PM_{10} and $PM_{2.5}$ hotspots was performed under the March 2006 EPA Guidance.

The scope required for local analysis is summarized in Section 3, Determination of Project Requirements, and Section 4, Local Analysis, of the Protocol. Section 3 incorporates §93.115 and the procedure to determine project requirements begins with the Figure 1: Requirements for New Projects. The sections cited is followed by a response, which will determine the next applicable section of the flowchart for the proposed project.

The project will not worsen air quality. The project is simply a connector ramp improvement project, and by its very nature, will not significantly increase the percentage of vehicles operating in cold starts. The traffic study indicates that the project increase traffic volumes. The annual average daily traffic (AADT) for the NB Connector is forecasted (2030) at 36,864 for the No Build, Alternative 2 and rejected Alternative 4. For Alternatives 1 and 4 the northbound connector is projected to decrease slightly to 31,586 AADT. For the southbound connector, the No Build, Alternatives 2 and 3 are all projected to be 33,984 AADT, and slightly less for Alternatives 1 and 4 at 32,062 AADT. The project will not worsen flow of traffic but in fact will slightly improve flow of traffic on the mainline. However, the No Build and all of the build alternatives will result in a LOS of F for the RTP horizon year of 2030. Based on the above findings, the project is satisfactory and no further analysis is needed.

Local Analysis: $PM_{2.5}$ and PM_{10} Operational Impacts

Clean Air Act section 176(c)(1)(B) is the statutory criterion that must be met by all projects in nonattainment and maintenance areas that are subject to transportation conformity. Section 176(c)(1)(B) states that federally-supported transportation projects must not "cause or contribute to any new violation of any standard in any area; increase the frequency or severity of any existing violation of any standard in any area; or delay timely attainment of any standard or any required interim emission reductions or other milestones in any area." To meet statutory requirements, the March 10, 2006 final rule requires $PM_{2.5}$ and PM_{10} hot-spot analyses to be performed for projects of air quality concern. Qualitative hot-spot analyses would be done for these projects before appropriate methods and modeling guidance are available and quantitative $PM_{2.5}$ and PM_{10} hot-spot analyses are required under 40 CFR 93.123(b)(4). In addition, through the final rule, EPA determined that projects not identified in 40 CFR 93.123(b)(1) as projects of air quality concern (POAQC) have also met statutory requirements without any further hot-spot analyses (40 CFR 93.116(a)).

A $PM_{2.5}$ and PM_{10} hot-spot analysis is not required for projects that are not a POAQC. In the South Coast Air Basin, it is the Southern California Association of Governments (SCAG) Transportation Conformity Working Group (TCWG) that makes the determination whether the project is or is not a POAQC. The TCWG is a forum to support interagency coordination to help improve air quality and maintain transportation conformity in Southern California. The group meets on a monthly basis to facilitate an inclusive air quality planning process and to fulfill the interagency consultation requirements of the Federal Transportation Conformity Rule. Membership of the Southern California TCWG includes federal (US EPA, US EPA Region 9, FHWA, FTA), state (CA Air Resources Board, Caltrans), regional (Air Quality Management Districts, SCAG, etc.), and sub-regional (County Transportation Commissions) agencies and other stakeholders.

The required "PM Conformity Hot Spot Analysis – Project Summary for Interagency Consultation" was submitted to the TCWG for consideration at their May 22, 2007 meeting. The notice posted on the TCWG website that this project (#LA0D77) is not a POAQC. Both the Hot Spot Analysis form and the TCWG determination are included in the Appendix.

The project was determined not to be a project of air quality concern because the facility is not projected to have a significant number of diesel vehicles (i.e. less than 10,000 per day), and because project would not result in any increase in the number of diesel trucks that would utilize the facility. The redistribution of traffic is minor and would occur primarily near residential areas that have very little truck traffic and little effect on truck movements. The "Transportation Conformity Guidance for Qualitative Hot-Spot Analyses in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas," (U.S. EPA & FHWA, March 2006) provides examples of projects that are not an air quality concern. The first example is consistent with this proposed project, and the example is described as "Any new or expanded highway project that primarily services gasoline vehicle traffic (i.e., does not involve a significant number or increase in the number of diesel vehicles), including such projects involving congested intersections operating at Level-of-Service D, E, or F…" The project is not projected to increase the number of diesel vehicles on I-405, the connector ramps, or intersections within the project area, and accordingly, the TWCG determined that this project is not a project of air quality concern.

Additional Air Quality Topics

Mobile Source Air Toxics. In addition to the criteria air pollutants for which there are National Ambient Air Quality Standards (NAAQS), EPA also regulates air toxics. Most air toxics originate from human-made sources, including on-road mobile sources, non-road mobile sources (e.g., airplanes), area sources (e.g., dry cleaners) and stationary sources (e.g., factories or refineries).

Mobile Source Air Toxics (MSATs) are a subset of the 188 air toxics defined by the Clean Air Act. The MSATs are compounds emitted from highway vehicles and non-road equipment. Some toxic compounds are present in fuel and are emitted to the air when the fuel evaporates or passes through the engine

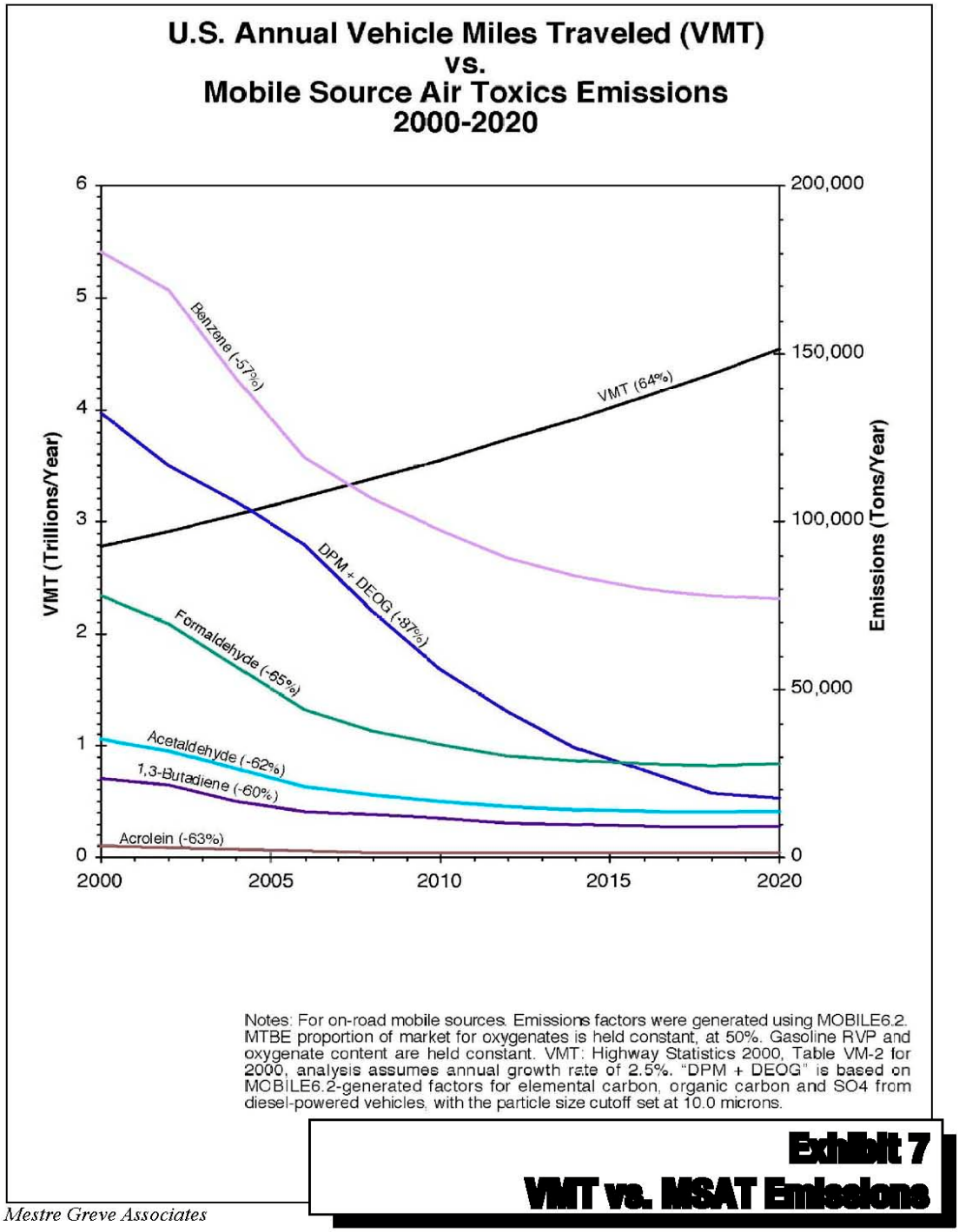
unburned. Other toxics are emitted from the incomplete combustion of fuels or as secondary combustion products. Metal air toxics also result from engine wear or from impurities in oil or gasoline.

The EPA is the lead Federal Agency for administering the Clean Air Act and has certain responsibilities regarding the health effects of MSATs. The EPA issued a Final Rule on Controlling Emissions of Hazardous Air Pollutants from Mobile Sources. 66 FR 17229 (March 29, 2001). This rule was issued under the authority in Section 202 of the Clean Air Act. In its rule, EPA examined the impacts of existing and newly promulgated mobile source control programs, including its reformulated gasoline (RFG) program, its national low emission vehicle (NLEV) standards, its Tier 2 motor vehicle emissions standards and gasoline sulfur control requirements, and its proposed heavy duty engine and vehicle standards and on-highway diesel fuel sulfur control requirements. Between 2000 and 2020, FHWA projects that even with a 64 percent increase in VMT, these programs will reduce on-highway emissions of benzene, formaldehyde, 1,3-butadiene, and acetaldehyde by 57 percent to 65 percent, and will reduce on-highway diesel PM emissions by 87 percent, as shown in Figure 30 (Federal Highway Administration, Memorandum: Interim Guidance on Air Toxics Analysis in NEPA Documents, February 3, 2006).

As a result, EPA concluded that no further motor vehicle emissions standards or fuel standards were necessary to further control MSATs. The agency is preparing another rule under authority of CAA Section 202(l) that will address these issues and could make adjustments to the full 21 and the primary six MSATs.

California's vehicle emission control and fuel standards are more stringent than Federal standards, and are effective sooner, so the effect on air toxics of combined State and Federal regulations is expected to result in greater emission reductions, more quickly, than the FHWA analysis shows. The FHWA analysis, with modifications related to use of the California-specific EMFAC model rather than the MOBILE model, would be conservative.

Figure 30. VMT vs. MSAT Emissions



Source: **Air Quality Assessment: SOUTHBOUND I-405 TO US-101 CONNECTOR IMPROVEMENT PROJECT,** page 49, January 15, 2008.

Additional efforts are being undertaken by the CARB to control diesel particulate matter (PM). The CARB has found that diesel PM contributes over 70 percent of the known risk from air toxics and poses the greatest cancer risks among all identified air toxics. Diesel trucks contribute more that half of the total diesel combustion sources. However, the CARB has adopted a Diesel Risk Reduction Plan (DRRP) with control measures that would reduce the overall diesel PM emissions by about 85% from 2000 to 2020. In addition, total toxic risk from diesel exhaust may only be exposed for a much shorter duration. Further, diesel PM is only one of many environmental toxics and those of other toxics and other pollutants in various environmental media may over shadow its cancer risks. Thus, while diesel exhaust may pose potential cancer risks to receptors spending time on or near high risk diesel PM facilities, most receptors' short-term exposure would only cause minimal harm, and these risks would also greatly diminish in the future operating years of the project due to planned emission control regulations.

From 2000 to 2010, CARB staff predicts diesel PM emissions and risk would decrease by only about 20 percent if the recommended measures are not implemented. This reduction would result from the implementation of existing federal and state regulations and the attrition of older diesel-fueled passenger cars and light-duty trucks from the on-road fleet. The EPA has proposed new, lower emission standards for heavy-duty trucks for 2007 and lower sulfur limits for diesel fuel (on-road vehicles only) in 2006. The benefits of these proposed rules are not included as existing measures because they have not yet been adopted.

The recommended measures can be grouped as follows: measures addressing on-road vehicles, measures addressing off-road equipment and vehicles, and measures addressing stationary and portable engines. These measures include the EPA's 2007 new heavy-duty truck standards and the 2006 low-sulfur fuel limits. Figure 31 illustrates the impact of each of these groups of measures on projected diesel PM emission levels for 2010 and 2020. As shown, off-road recommended measures have the largest impact. Of the off-road recommended measures, the retrofit measures result in over 90 percent of the diesel PM reductions associated with all of the off-road measures.

Figure 31. Projected Percent Reduction in Diesel PM Cancer Risk from Year 2000 Levels With and Without CARB Risk Reduction Plan (RRP) Implemented

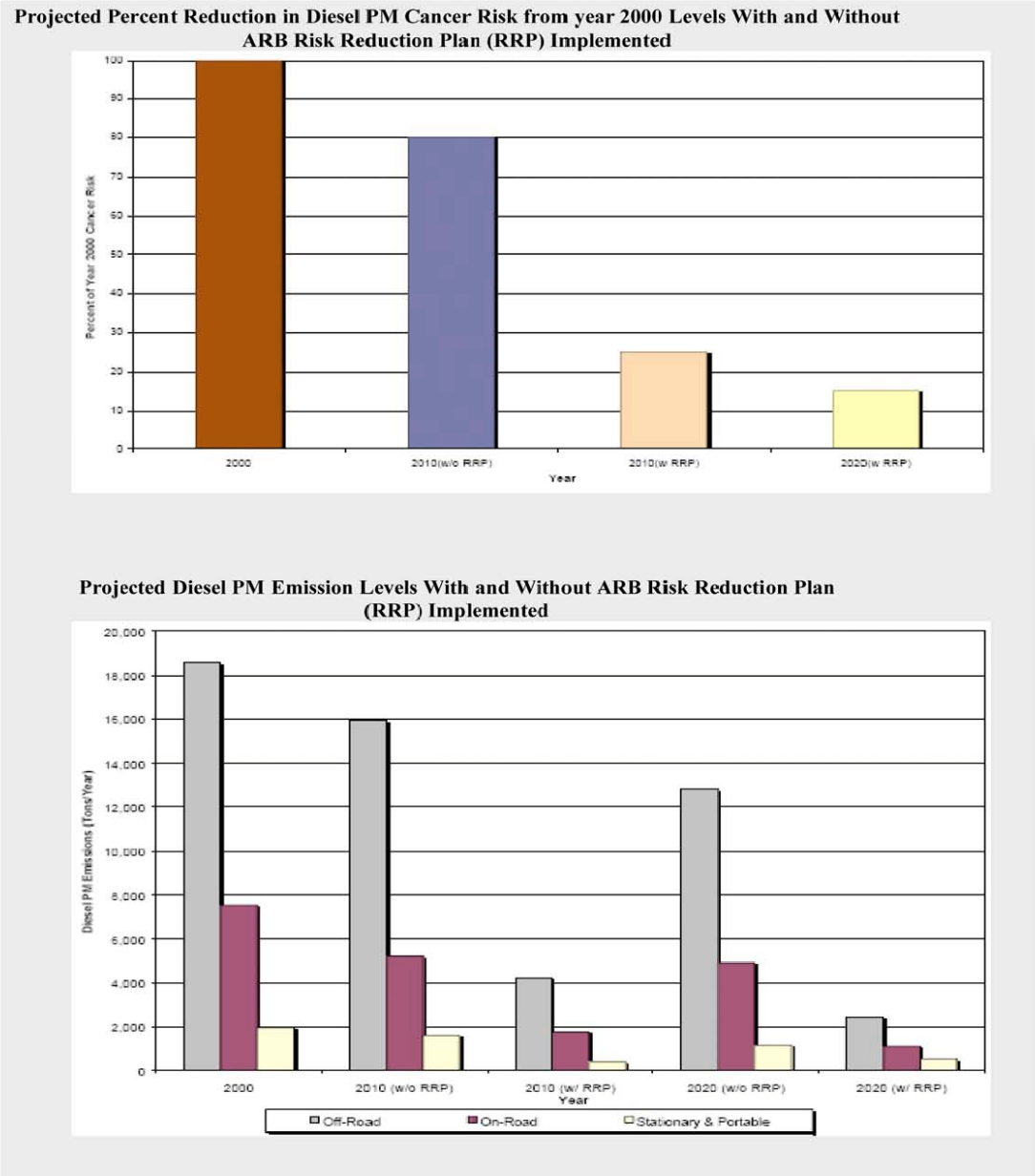


Exhibit 8
Diesel Emissions With and Without RRP

Mestre Greve Associates

Source: **Air Quality Assessment: SOUTHBOUND I-405 TO US-101 CONNECTOR IMPROVEMENT PROJECT,** page 51, January 15, 2008.

Unavailable Information for Project Specific MSAT Impact Analysis

This study includes a basic analysis of the likely MSAT emission impacts of this project per FHWA guidance (Federal Highway Administration, Memorandum: Interim Guidance on Air Toxics Analysis in NEPA Documents, February 3, 2006). However, available technical tools do not enable us to predict the project-specific health impacts of the emission changes associated with the project. Due to these limitations, the following discussion is included in accordance with CEQ regulations (40 CFR 1502.22(b)) regarding incomplete or unavailable information:

Information that is Unavailable or Incomplete. Evaluating the environmental and health impacts from MSATs on a proposed highway project would involve several key elements, including emissions modeling, dispersion modeling in order to estimate ambient concentrations resulting from the estimated emissions, exposure modeling in order to estimate human exposure to the estimated concentrations, and then final determination of health impacts based on the estimated exposure. Each of these steps is encumbered by technical shortcomings or uncertain science that prevents a more complete determination of the MSAT health impacts of this project.

Emissions. The EPA and California tools to estimate MSAT emissions from motor vehicles are not sensitive to key variables determining emissions of MSATs in the context of highway projects. MOBILE 6.2 has been developed by the EPA to predict on-road vehicular emissions. EMFAC (either EMFAC2002 or the recently released EMFAC2007 version) has been developed by the California Air Resources Board to predict vehicular emissions in California. While both MOBILE 6.2 and EMFAC are used to predict emissions at a regional level, they have limitations when applied at the project level. Both are trip-based models--emission factors are projected based on a typical trip length of around 7.5 miles, and on average speeds for this typical trip. This means that neither model has the ability to predict emission factors for a specific vehicle operating condition at a specific location at a specific time. Because of this limitation, both models can only approximate emissions from the operating speeds and levels of congestion likely to be present on the largest-scale projects, and cannot adequately capture emissions effects of smaller projects. For particulate matter (PM), the MOBILE6.2 model results are not sensitive to average trip speed; however, PM emissions from the EMFAC model are sensitive to trip speed, so for California conditions, diesel PM emissions are treated the same as other emissions. Unlike MOBILE 6.2, the EMFAC model does not provide MSAT emission factors; off-model speciation of EMFAC's Total Organic Compounds output must be used to generate MSAT emissions. The emission rates used on Both MOBILE 6.2 and EMFAC are based on a limited number of vehicle tests. These deficiencies compromise the capability of both MOBILE 6.2 and EMFAC2002/2007 to estimate MSAT emissions. Both are adequate tools for projecting emissions trends, and performing relative analyses between alternatives for very large projects, but neither is sensitive enough to capture the effects of travel changes caused by smaller projects or to predict emissions near specific roadside locations.

Dispersion. The tools to predict how MSATs disperse are also limited. The EPA's current regulatory models, CALINE3 and CAL3QHC, were developed and validated more than a decade ago for the purpose of predicting episodic concentrations of carbon monoxide (CO) to determine compliance with the NAAQS. The CALINE4 model used in California is an improvement on the CALINE3 based EPA models, but like them, it was built primarily for CO analysis. CALINE4 has not been specifically validated for use with other materials such as MSATs and is difficult to use for averaging periods of more than 8 hours or so (health risk data for MSATs are typically based on 24-hour, annual, and long term (30 to 70 yeas) exposure). Dispersion models are appropriate for predicting maximum concentrations that can occur at some time at some location within a geographic area but cannot accurately predict exposure patterns at specific times at specific locations across an urban area to assess potential health risk. The NCHRP is conducting research on best practices in applying models and other technical methods in the analysis of MSATs. This work also will focus on identifying appropriate methods of documenting and communicating MSAT impacts in the NEPA process and to the general public. Along with these general limitations of dispersion models, FHWA is also faced with a lack of adequate monitoring data in most areas for use in establishing project-specific MSAT background concentrations.

Exposure Levels and Health Effects. Finally, even if emission levels and concentrations of MSATs could be accurately predicted, shortcomings in current techniques for exposure assessment and risk analysis preclude us from reaching meaningful conclusions about project-specific health impacts. Exposure assessments are difficult because it is difficult to accurately calculate annual concentrations of MSATs near roadways, and to determine the portion of a year that people are actually exposed to those concentrations at a specific location. These difficulties are magnified for 70-year cancer assessments, particularly because unsupportable assumptions would have to be made regarding changes in travel patterns and vehicle technology (which affects emissions rates) over a 70-year period. There are also considerable uncertainties associated with the existing estimates of toxicity of the various MSATs, because of factors such as low-dose extrapolation and translation of occupational exposure data to the general population. Because of these shortcomings, any calculated difference in health impacts between alternatives is likely to be much smaller than the uncertainties associated with calculating the impacts. Consequently, the results of such assessments would not be useful to decision makers, who would need to weigh this information against other project impacts that are better suited for quantitative analysis.

Summary of Existing Credible Scientific Evidence Relevant to Evaluating the Impacts of MSATs. Research into the health impacts of MSATs is ongoing. For different emission types, there are a variety of studies that show that some either are statistically associated with adverse health outcomes through epidemiological studies (frequently based on emissions levels found in occupational settings) or that animals demonstrate adverse health outcomes when exposed to large doses.

Exposure to toxics has been a focus of a number of EPA efforts. Most notably, the agency conducted the National Air Toxics Assessment (NATA) in 1996 to evaluate modeled estimates of human exposure applicable to the county level. While not intended for use as a measure of or benchmark for local exposure, the modeled estimates in the NATA database best illustrate the levels of various toxics when aggregated to a national or State level.

The EPA is in the process of assessing the risks of various kinds of exposures to these pollutants. The EPA Integrated Risk Information System (IRIS) is a database of human health effects that may result from exposure to various substances found in the environment. The IRIS database is located at http://www.epa.gov/iris. The following toxicity information for the six prioritized MSATs was taken from the IRIS database *Weight of Evidence Characterization* summaries. This information is taken verbatim from EPA's IRIS database and represents the Agency's most current evaluations of the potential hazards and toxicology of these chemicals or mixtures. The five organic-based MSATs listed below are also listed as toxic air contaminants by the California Air Resources Board.

Benzene is characterized as a known human carcinogen.

The potential carcinogenicity of **acrolein** cannot be determined because the existing data are inadequate for an assessment of human carcinogenic potential for either the oral or inhalation route of exposure.

Formaldehyde is a probable human carcinogen, based on limited evidence in humans, and sufficient evidence in animals.

1,3-butadiene is characterized as carcinogenic to humans by inhalation.

Acetaldehyde is a probable human carcinogen based on increased incidence of nasal tumors in male and female rats and laryngeal tumors in male and female hamsters after inhalation exposure.

Diesel exhaust (DE) is likely to be carcinogenic to humans by inhalation from environmental exposures. Diesel exhaust as reviewed in this document is the combination of diesel particulate matter and diesel exhaust organic gases. The particulate matter fraction of diesel exhaust (Diesel PM) has been identified by the CARB as a toxic air contaminant due to long-term cancer risk.

Diesel exhaust is also connected with chronic respiratory effects, possibly the primary noncancer hazard from MSATs. Prolonged exposures may impair pulmonary function and could produce symptoms, such

as cough, phlegm, and chronic bronchitis. Exposure relationships have not been developed from these studies.

There have been other studies that address MSAT health impacts in proximity to roadways. The Health Effects Institute, a non-profit organization funded by EPA, FHWA, and industry, has undertaken a major series of studies to research near-roadway MSAT hot spots, the health implications of the entire mix of mobile source pollutants, and other topics. The final summary of the series is not expected for several years.

Some recent studies have reported that proximity to roadways is related to adverse health outcomes -- particularly respiratory problems. Much of this research is not specific to MSATs, instead surveying the full spectrum of both criteria and other pollutants. The FHWA cannot evaluate the validity of these studies, but more importantly, they do not provide information that would be useful to alleviate the uncertainties listed above and enable us to perform a more comprehensive evaluation of the health impacts specific to this project.

Relevance of Unavailable or Incomplete Information to Evaluating Reasonably Foreseeable Significant Adverse Impacts on the Environment, and Evaluation of impacts based upon theoretical approaches or research methods generally accepted in the scientific community. Because of the uncertainties outlined above, a reliable quantitative assessment of the effects of air toxic emissions impacts on human health cannot be made at the project level. While available tools do allow us to reasonably predict relative emissions changes between alternatives for larger projects, the amount of MSAT emissions from each of the project alternatives and MSAT concentrations or exposures created by each of the project alternatives cannot be predicted with enough accuracy to be useful in estimating health impacts. (As noted above, the current emissions model is not capable of serving as a meaningful emissions analysis tool for smaller projects.) Therefore, the relevance of the unavailable or incomplete information is that it is not possible to make a determination of whether any of the alternatives would have "significant adverse impacts on the human environment."

Below, a quantitative analysis of MSAT emissions in the project area is provided. This analysis acknowledges that the project may result in slightly increased exposure to MSAT emissions in certain locations compared to no project conditions. However, the analysis shows that exposure to MSAT emissions in the future will be less than current conditions. The concentrations and duration of exposures are uncertain, and because of this uncertainty, the health effects from these emissions cannot be estimated.

MSAT Emissions in the Project Area. As discussed above, technical shortcomings of emissions and dispersion models and uncertain science with respect to health effects prevent meaningful or reliable estimates of MSAT emissions and effects of this project. However, even though reliable methods do not exist to accurately estimate the health impacts of MSATs at the project level, it is possible to qualitatively assess the levels of future MSAT emissions under the project. Although a qualitative analysis cannot identify and measure health impacts from MSATs, it can give a basis for identifying and comparing the potential differences among MSAT emissions-if any-from the various alternatives. Based on the FHWA MSAT analysis guidance (Federal Highway Administration, Memorandum: Interim Guidance on Air Toxics Analysis in NEPA Documents, February 3, 2006) the project would be considered as having a low potential for MSAT effects in that it is intended to improve operations of the I-405/SR-101 interchange without adding substantial new capacity or without creating a facility that is likely to meaningfully increase emissions. The analysis presented below shows that the project would not be expected to substantially change VMT over no build conditions and therefore, not substantially alter MSAT emissions in the project area.

For each alternative, the amount of MSATs emitted would be proportional to the vehicle miles traveled, or VMT, assuming that other variables such as fleet mix are the same for each alternative. VMT in the project area for traffic on the mainline I-405 and I-101 and the ramps for each project alternative were calculated using the annual average daily traffic volumes (AADT) from the traffic study prepared for the project and the length of each road segment. The specific traffic volumes and lengths used to calculate

the VMT's presented below are shown in the appendix. 0 presents the VMT for the No Build conditions and all 12 build alternatives for the year 2015. The absolute and percentage change in VMT over existing conditions and 2015 No Build conditions are presented in the table as well. The VMT for existing conditions was calculated to be 1,534,005 miles

Table 34. Year 2015 Vehicle Miles Traveled

		Change Over Existing		Change Over No Build	
Alternative	VMT	VMT	Percent	VMT	Percent
No Build	1,773,529	239,524	15.6%	--	--
1	1,774,437	240,432	15.7%	908	0.1%
1a	1,773,419	239,414	15.6%	-110	0.0%
1b	1,772,199	238,194	15.5%	-1,330	-0.1%
2	1,791,361	257,356	16.8%	17,832	1.0%
2a	1,790,343	256,338	16.7%	16,814	0.9%
2b	1,789,123	255,118	16.6%	15,594	0.9%
3	1,792,427	258,422	16.8%	18,898	1.1%
3a	1,791,409	257,404	16.8%	17,880	1.0%
3b	1,790,190	256,185	16.7%	16,660	0.9%
4	1,810,439	276,434	18.0%	36,909	2.1%
4a	1,809,420	275,415	18.0%	35,891	2.0%
4b	1,808,201	274,196	17.9%	34,672	2.0%

VMT for Existing Conditions is 1,534,005
shows the same data as 0 except for the year 2030.

Table 35. Year 2030 Vehicle Miles Traveled

		Change Over Existing		Change Over No Build	
Alternative	VMT	VMT	Percent	VMT	Percent
No Build	2,207,308	673,303	43.9%	--	--
1	2,214,759	680,754	44.4%	7,451	0.3%
1a	2,213,492	679,487	44.3%	6,184	0.3%
1b	2,211,974	677,969	44.2%	4,666	0.2%
2	2,227,518	693,513	45.2%	20,210	0.9%
2a	2,226,251	692,246	45.1%	18,942	0.9%
2b	2,224,733	690,728	45.0%	17,425	0.8%
3	2,241,809	707,804	46.1%	34,500	1.6%
3a	2,229,561	695,556	45.3%	22,253	1.0%
3b	2,228,044	694,039	45.2%	20,735	0.9%
4	2,253,246	719,241	46.9%	45,938	2.1%
4a	2,251,979	717,974	46.8%	44,671	2.0%
4b	2,250,461	716,456	46.7%	43,153	2.0%

VMT for Existing Conditions is 1,534,005

Table 36 and 37 show that, except for Alternatives 1a and 1b in 2015, the VMT estimated for each of the Build Alternatives is slightly higher than that for the No Build Alternative. This is primarily due to increased lengths of ramps with the project. This increase in VMT would lead to higher MSAT emissions for the action alternative along the highway corridor. The emissions increase is offset somewhat by lower MSAT emission rates due to increased speeds; according to CARB's EMFAC2007 emissions model, emissions of all of the priority MSATs except for diesel particulate matter decrease as speed increases. The extent to which these speed-related emissions decreases will offset VMT-related emissions increases cannot be reliably projected due to the inherent deficiencies of technical models.

Because the estimated VMT under each of the Alternatives are nearly the same, varying by less than 2.2 percent, it is expected there would be no appreciable difference in overall MSAT emissions among the various alternatives. Also, regardless of the alternative chosen, emissions will likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce MSAT emissions by 57 to 87 percent between 2000 and 2020. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control

measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases.

Naturally Occurring Asbestos (NOA). Asbestos is a term used for several types of naturally occurring fibrous minerals that are a human health hazard when airborne. The most common type of asbestos is chrysotile, but other types such as tremolite and actinolite are also found in California. Asbestos is classified as a known human carcinogen by state, federal, and international agencies and was identified as a toxic air contaminant by the California Air Resources Board (CARB) in 1986. All types of asbestos are hazardous and may cause lung disease and cancer.

Asbestos can be released from serpentinite and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects and other improvement projects in some localities. Asbestos may be released to the atmosphere due to vehicular traffic on unpaved roads, during grading for development projects, and at quarry operations. All of these activities may have the effect of releasing potentially harmful asbestos into the air. Natural weathering and erosion processes can act on asbestos bearing rock and make it easier for asbestos fibers to become airborne if such rock is disturbed.

Serpentinite may contain chrysotile asbestos, especially near fault zones. Ultramafic rock, a rock closely related to serpentinite, may also contain asbestos minerals. Asbestos can also be associated with other rock types in California, though much less frequently than serpentinite and/or ultramafic rock. Serpentinite and/or ultramafic rock are known to be present in 44 of California's 58 counties. These rocks are particularly abundant in the counties of the Sierra Nevada foothills, the Klamath Mountains, and Coast Ranges. The California Department of Conservation, Division of Mines and Geology has developed a map of the state showing the general location of ultramafic rock in the state. This map indicates that over half of Los Angeles County has ultramafic rock occurrences. It is not clear from the map if there are occurrences of ultramafic rock in the vicinity of the project .

While unlikely, if naturally occurring asbestos, serpentine, or ultramific rock is discovered during grading operations Section 93105, Title 17 of the California Code of Regulations requires notification of the AQMD by the next business day and implementation of the following measures within 24-hours:

- Unpaved areas subject to vehicle traffic must be stabilized by being kept adequately wetted, treated with a chemical dust suppressant, or covered with material that contains less than 0.25 percent asbestos
- The speed of any vehicles and equipment traveling across unpaved areas must be no more than fifteen (15) miles per hour unless the road surface and surrounding area is sufficiently stabilized to prevent vehicles and equipment traveling more than 15 miles per hour from emitting dust that is visible crossing the project boundaries
- Storage piles and disturbed areas not subject to vehicular traffic must be stabilized by being kept adequately wetted, treated with a chemical dust suppressant, or covered with material that contains less than 0.25 percent asbestos; and
- Activities must be conducted so that no track-out from any road construction project is visible on any paved roadway open to the public.
- Equipment and operations must not cause the emission of any dust that is visible crossing the project boundaries.

Conclusion

This project-level Air Quality report addresses all pertinent aspects of conformity and adheres to the Transportation Conformity Rule and currently the proposed project is listed in the FHWA approved 2004 RTP and 2006 RTIP. In any event, an in-depth discussion of project conformity to the FHWA approved 2004 RTP and 2006 RTIP is provided. The design, concept, and scope of the project have not changed significantly and the project will not interfere with the timely implementation of transportation control measures from the SIP. The essential role of SIP in regional analysis is documented in this report. A comprehensive analysis of potential air pollutants has concluded that the proposed project alternatives do not pose any significant operational impact on the ambient air quality in the project vicinity. The analysis shows that it is unlikely that the project will cause CO concentrations greater than those modeled in the SCAB CO Attainment Plan and therefore will not result in an exceedance of the CO NAAQS. Based on the most recent 3-years of PM_{10} data at the Reseda air monitoring station, it is unlikely that the proposed project will cause the ambient PM_{10} to exceed NAAQS. SCAG's Transportation Conformity Working Group determined that the proposed project alternatives are not a "project of air quality concern," and that $PM_{2.5}$ and PM_{10} local impacts will not occur. A discussion of fugitive dust control measures is provided, and it is recommended that the measure be included as project commitments prior to construction. The analysis shows that the project would not be expected to cause any new violations, worsen existing violations, or delay timely attainment of the NAAQS. The analysis shows MSAT emissions in the project area will decrease in future years and that the project would not result in an increase in MSAT emissions compared to no project conditions. Control measures have been identified for naturally occurring asbestos should rock containing asbestos be uncovered.

The proposed project is fully funded and is in the Southern California Association of Governments 2004 Regional Transportation Plan, which was found to conform by the Southern California Association of Governments (SCAG) on April 1, 2004 and FHWA and FTA adopted the air quality conformity finding on June 7, 2004. The SCAG 2004 RTP was amended with Amendment 1 on July 27, 2004. The project is also included in the SCAG's financially constrained 2006 Regional Transportation Improvement Program, page 4. The Southern California Association of Governments 2006 Regional Transportation Improvement Program was found to conform by FHWA and FTA on October 2, 2006. The design concept and scope of the proposed project is consistent with the project description in the 2004 RTP, the 2006 RTIP and the assumptions in the SCAG'S regional emissions analysis.

2.2.7 NOISE

Regulatory Setting . The National Environmental Policy Act (NEPA) of 1969 and the California Environmental Quality Act (CEQA) provide the broad basis for analyzing and abating highway traffic noise effects. The intent of these laws is to promote the general welfare and to foster a healthy environment. The requirements for noise analysis and consideration of noise abatement and/or mitigation, however, differ between NEPA and CEQA.

California Environmental Quality Act

CEQA requires a strictly baseline versus build analysis to assess whether a proposed project will have a noise impact. If a proposed project is determined to have a significant noise impact under CEQA, then CEQA dictates that mitigation measures must be incorporated into the project unless such measures are not feasible. The rest of this section will focus on the NEPA-23 CFR 772 noise analysis.

National Environmental Policy Act and 23 CFR 772

For highway transportation projects with FHWA (and the Department, as assigned) involvement, the federal-Aid Highway Act of 1970 and the associated implementing regulations (23 CFR 772) govern the

analysis and abatement of traffic noise impacts. The regulations require that potential noise impacts in areas of frequent human use be identified during the planning and design of a highway project. The regulations contain noise abatement criteria (NAC) that are used to determine when a noise impact would occur. The NAC differ depending on the type of land use under analysis. For example, the NAC for residences (67 dBA) is lower than the NAC for commercial areas (72 dBA). The following table lists the noise abatement criteria for use in the NEPA-23 CFR 772 analysis.

Table 36. Noise Abatement Criteria for Use in the NEPA-23 CFR 772 Analysis

Activity Category	NAC, Hourly A-Weighted Noise Level, dBA $L_{eq}(h)$	Description of Activities
A	57 Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose
B	67 Exterior	Picnic areas, recreation areas, playgrounds, active sport areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.
C	72 Exterior	Developed lands, properties, or activities not included in Categories A or B above
D	--	Undeveloped lands.
E	52 Interior	Residence, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums

The following table lists the noise levels of common activities to enable readers to compare the actual and predicted highway noise-levels discussed in this section with common activities.

Table 37. Noise Levels of Common Activities

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	Rock Band
Jet Fly-over at 300m (1000 ft)		
	100	
Gas Lawn Mower at 1 m (3 ft)		
	90	
Diesel Truck at 15 m (50 ft), at 80 km (50 mph)		Food Blender at 1 m (3 ft)
	80	Garbage Disposal at 1 m (3 ft)
Noisy Urban Area, Daytime		
Gas Lawn Mower, 30 m (100 ft)	70	Vacuum Cleaner at 3 m (10 ft)
Commercial Area		Normal Speech at 1 m (3 ft)
Heavy Traffic at 90 m (300 ft)	60	
		Large Business Office
Quiet Urban Daytime	50	Dishwasher Next Room
Quiet Urban Nighttime	40	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime		
		Library
Quiet Rural Nighttime	30	Bedroom at Night,
		Concert Hall (Background)
	20	Broadcast/Recording Studio
	10	
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

In accordance with the Department's *Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects, August 2006*, a noise impact occurs when the future noise level with the project results in a substantial increase in noise level (defined as a 12 dBA or more increase) or when the future noise level with the project approaches or exceeds the NAC. Approaching the NAC is defined as coming within 1 dBA of the NAC.

If it is determined that the project will have noise impacts, then potential abatement measures must be considered. Noise abatement measures that are determined to be reasonable and feasible at the time of final design are incorporated into the project plans and specifications. This document discusses noise abatement measures that would likely be incorporated in the project.

The Department's *Traffic Noise Analysis Protocol* sets forth the criteria for determining when an abatement measure is reasonable and feasible. Feasibility of noise abatement is basically an engineering concern. A minimum 5 dBA reduction in the future noise level must be achieved for an abatement measure to be considered feasible. Other considerations include topography, access

requirements, other noise sources and safety considerations. The reasonableness determination is basically a cost-benefit analysis. Factors used in determining whether a proposed noise abatement measure is reasonable include: residents acceptance, the absolute noise level, build versus existing noise, environmental impacts of abatement, public and local agencies input, newly constructed development versus development pre-dating 1978 and the cost per benefited residence.

Study Methods and Procedures

Selection of Receivers and Measurement Sites. Noise sensitive receivers in the project area that are subject to traffic noise impacts from freeway-generated noise were identified. Noise sensitive areas typically include residences, schools, libraries, churches and temples, hospitals, recreation and sport areas, playgrounds, hotels, motels and parks.

For this project, Caltrans Noise and Vibration Investigation Branch personnel performed a field survey of the entire area within the limits of the project. The survey included visiting the project sites in order to identify land uses within the project limits and to select the noise measurement sites. The entire area within the project limits was acoustically represented by 65 noise measurement site locations.
The noise measurement sites were selected taking into consideration the following general site requirements:

1) Sites were acoustically representative of areas and conditions of interest. They were located at areas of human use.
2) Sites were clear of major obstructions between source and receiver. Microphone positions were more than 3 meters away from reflecting surfaces.
3) Sites were free of noise contamination by sources other than those of interest. Sites were not located near barking dogs, lawn mowers, pool pumps, air conditioners, etc.
4) Sites were not exposed to prevailing meteorological conditions that are beyond the constraints discussed in the Technical Noise Supplement.

Measurement of Existing Noise Levels. The existing noise environment in the project area was determined by performing short-term (10-minute) and long-term (24-hour) noise monitoring. 24-hour readings were taken at locations representative of residential area within an interchange in order to determine the nosiest hour. Sound level meters were placed at four representative sites (See Figures A through I) and were left to run continuously monitoring and recording noise levels for a 24-hour period. The short-term noise levels were recorded within each 24-hour noise monitoring for that particular area. The noise level data collected was then analyzed and adjusted using the 24-hour noise readings to determine the noisiest hour.

Additionally, three community background noise readings were taken within the project limits. Background noise is the total of all noise generated within the community and is measured away from the freeway where freeway traffic noise does not contribute to the total noise level. Background noise levels are typically measured to determine the feasibility (noise reducibility of 5 dBA) of noise abatement and to insure that noise reduction goals can be achieved. Noise abatement cannot reduce noise levels below background noise levels.

Short-term noise readings were taken from 12/15/04 to 01/20/05 between the hours of 9:50 a.m. and 2:00 p.m. using Metrosonics Model db-3080 sound level meters (serial numbers 3120, 3126, 3127, 3193 and 3194) placed 1.5 meters (5 feet) above the ground on a tripod. Measurements were typically taken for periods of 10 minutes at each location. The short-term monitoring locations are shown in Layouts L-1 through L-16 and Figures A through I for Alternative 1, Alternatives 1 with Mitigation 1 & 2, and Alternative 2/3. The same instrumentation was used for 24-hour noise readings.

During the short-term measurement, Caltrans staff attended the sound-level meter. All readings were recorded only if no sound level contamination from sources other than the freeway traffic were present.

The noise levels measured during the measurement period were logged in the sound level meter's memory and later downloaded to a personal computer and printed.

The calibration of the meters was checked before and after the field measurements using the Metrosonics CL 304 calibrators (CL304-7456, CL304-7457, CL304-7458 and CL304-7459). It was determined that no adjustment in calibration was necessary. Wind speed was observed using a Kestrel 1000 anemometer during the short-term noise monitoring sessions. No noise readings were recorded when the wind speed exceeded a sustained 16 km/h (10 mph). The temperature varied from approximately 18° - 35° Celsius (65° - 95° Fahrenheit), and winds were light, having little effect on sound propagation over moderate distances. Traffic on Route 405 and Route 101 near the respective noise-monitoring site was counted simultaneously when short-term noise measurements were being recorded. Caltrans staff performed traffic counts and vehicle classifications manually. Vehicles were classified as automobiles, medium-duty trucks, and heavy-duty trucks. An automobile is defined as a vehicle with two axles and four tires and primarily designed to carry passengers. Small vans and light trucks are in this category as well. Medium trucks include all cargo vehicles with two axles and six tires. Heavy trucks include all vehicles with three or more axles.

Traffic speeds on I-405 and U.S.-101 were determined by traveling with the flow of traffic and observing the vehicle speed on the speedometer. The posted speed limit on the mainline I-405 and U.S.-101 in the project area is 105 km/h (65mph).

FHWA Traffic Noise Model 2.5. The Federal Highway Administration's Traffic Noise Model (FHWA TNM) Version 2.5 is FHWA's computer program for highway traffic noise prediction and analysis. For the traffic noise analysis presented in this report, FHWA TNM v. 2.5 computer program was used. In order to develop the analytical model, all relevant topographic features, including roadway lanes, receiver locations, existing sound barriers and existing terrain in the area of potential impact, were digitized into a three-dimensional, scaled reference coordinate system for both existing and future conditions.

Calibration of Noise Model. Using the measured existing noise level data and corresponding traffic counts, the FHWA TNM Version 2.5 was calibrated as necessary in order to correctly predict noise levels at analysis locations. Traffic noise model calibration factors are listed on Table 3 for Alternative 1, Alternative 1 with Mitigation 1 & 2, and Alternative 2/3.

Future Noise Level Prediction. Analysis based on the traffic volumes and speeds, stated in the 1997 Highway Capacity Manual (6), indicates that maximum noise occurs at Level of Services (LOS) D-E at 85% of capacity and 100% of free flow speed. Using this information, it was determined that a traffic volume of 1950 vehicles/hour/lane would be the worst noise hour traffic volume under design-year (2034) conditions. The traffic noise model was analyzed for the above-mentioned traffic volume to predict worst hour noise levels for design-year conditions. The Traffic Noise Analysis Protocol requires that noise level be predicted using traffic characteristics that will yield the worst hourly traffic noise impact on a regular basis for future conditions.

Identification of Traffic Noise Impacts and Noise Abatement Considerations. Results from computer analysis for future-worst-hour noise levels were used to determine if traffic noise impacts would occur. Traffic noise impacts occur when it is determined that the proposed project causes a substantial noise increase or predicted traffic noise levels approach or exceed Noise Abatement Criteria. A noise increase is substantial when the predicted noise levels after project completion exceed existing noise levels by 12 dBA - L_{eq}(h). A traffic noise impact also occurs when predicted noise levels after project completion approach within 1 dBA - L_{eq}(h), or exceed Noise Abatement Criteria (Table 1). Soundwall insertion losses were calculated using the calibrated traffic noise models developed for each analysis site. According to the protocol, a minimum of 5 dBA noise reduction (insertion loss) must be achievable at impacted receivers in order for the proposed abatement to be considered acoustically feasible. Based on the analysis results, preliminary noise abatement was recommended at locations where traffic noise impacts were identified and the abatement measure was found to be feasible. The reasonableness cost allowance for the acoustically feasible noise barriers was calculated following the procedure defined in TNAP. The reasonable cost allowance is based on a base allowance of $26,000 per benefited residence (i.e.

residences that receive at least 5 dBA noise reduction for the soundwall) and additional dollars for the following factors: absolute noise levels, change in noise levels, achievable noise reduction and the date the residences were constructed.

Affected Environment

Land Use and Sensitive Areas. The existing land use within the project limits is comprised of residential, school, commercial, church, park, motel, golf course, baseball fields, hospital, and undeveloped land. There are two schools located within the project limits. The first school is presently abandoned and situated along U.S.-101 between Morrison Street and Addison Street. The second school is the Emek Hebrew Academy (The Teichman Family Torah Center), located on Magnolia Boulevard along I-405 with grades ranging from pre-school to 8th grade. The school consists of a soccer playground and a playpen facing I-405. Adjacent to the school is a miniature golf course, the Sherman Oaks Castle Palace, located on the northeast quadrant of I-405 and U.S.-101 with frequent exterior human activity. In addition, there are three parks (The Encino Golf Course, three baseball fields, and a recreational park adjacent to the baseball fields) and a nursery located within the project limits: Encino Golf Course – located along northbound U.S.-101 between Balboa Ave and the Los Angeles River, the baseball fields adjacent to a recreational park – located along the southbound U.S.-101 between Hayvenhurst Ave and Libbet Ave, a nursery – the Sepulveda Garden Center is located along the southbound U.S.-101 between Forbes Ave and Hayvenhurst Ave.

There are several commercial developments within the project limits. There is the Western Motel and a Denny's Restaurant, both situated adjacent to each other at the northwest corner of Burbank Blvd and Sepulveda Blvd. The motel consist of an outdoor swimming pool that is shielded by 2-story motel building, and the Denny's Restaurant does not have any outside eating area. There is a hospital located at the southeast corner of Balboa Ave and U.S.-101, with no frequent exterior human activity. In addition, there is an undeveloped land belonging to the Army Corps of Engineers that is classified as flood zone along the southbound I-405 between U.S.-101 and Burbank Blvd and immediately north of the Los Angeles River along the northbound I-405.

Existing Traffic Noise. The noise environment in the project area is dominated by traffic traveling the I-405 and U.S.-101. There are three existing soundwalls along the southbound U.S.-101: a 3.05m (10 feet) high soundwall from Balboa Ave to Hayvenhurst Ave., a 3.05m (10 feet) high soundwall from Hayvenhurst Ave to Haskell Ave, and a 4.27m (14 feet) high soundwall from Haskell Ave to Sepulveda Ave. In addition, there are four proposed soundwalls along the N/B I-405 from 0.75km south of Ventura Boulevard to 0.2km south of Burbank Boulevard as part of a separate project. For the purposes of this study, the said proposed soundwalls have been analyzed as existing soundwalls wherever applicable when modeling the traffic noise for this report.

The following Traffic Noise Measurements and Modeling Table summarizes short-term sound level measurements taken in the project area and the noise modeling results for existing conditions. The measurement and modeling results indicate that existing traffic noise levels for the residential area typically range between 52 and 71 dBA-L_{eq}(h). The 24-hour readings were taken at Sites #S-1^, #S-5^, #S-7^, and #N-1^. For Site #S-1^, which represents the area between Morrison St. and Haskell Ave along the southbound U.S.-101, the noisiest hour occurred between 5:18 a.m. and 6:18 a.m. For Site #S-5^, which represents the area between Haskell Ave and Libbit Ave along the southbound U.S.-101, the noisiest hour occurred between 11:37 a.m. and 12:37 p.m. For Site #S-7^, which represents the area between Libbit Ave and Balboa Blvd along the southbound Route 101, the noisiest hour occurred between 10:29 a.m. and 11:29 a.m. For Sites #N-1^, which represents the area between U.S.-101 and Burbank Blvd along the northbound I-405, the noisiest hour occurred between 6:52 a.m. and 7:52 a.m. Background noise levels were measured at two locations and ranged from 52dBA-.L_{eq}(h) to 57dBA-.L_{eq}(h).

Table 38. Traffic Noise Measurements and Modeling Results

Table 3. Traffic Noise Measurements & Modeling Results

Receiver	Location	Type of Development # of units represented	Noise Abatement Category dBA - Leq[h]		Field-Measured Noise Level dBA - Leq[h]	Adjusted to Existing Worst-Hour Noise Level dBA-Leq[h]	Modeled Noise Level dBA - Leq[h]	Traffic Noise Model Calibration Factor dBA - Leq[h]	Existing Wall or Earth Berm: Private Property (m)	Existing Wall or Earth Berm: State Property (m)	Future Worst-Noise-Hour Noise Level dBA - Leq[H] Alternative 1	Noise Increase dBA Leq[h] Alt 1	Future Worst-Noise-Hour Noise Level dBA - Leq[H] Alternative 1 Mitigation 2 & 3	Noise Increase dBA Leq[h] Alt 1 MTG 2 & 3	Future Worst-Noise-Hour Noise Level dBA - Leq[H] Alternative 2	Noise Increase dBA Leq[h] Alt 2	Impact Type A=Approaches E=Exceeds N=No Impact
Site #S-1^	15446 Morrison St.	residential	B	(67 dBA)	62	62	67	-5	-	4.27	64.3	2.3	N/A	-	64.3	2.3	N
Site #S-2	Abandon School	school	B	(67 dBA)	-	-	55	-6	-	4.27	58	0	N/A	-	58	0	N
Site #S-3	Caltrans Maintenance	commercial	C	(72 dBA)	62	63	64	-2	-	-	65	2	N/A	-	65	2	N
Site #S-4	15710 Magnolia Blvd.	residential	B	(67 dBA)	61	65	63	-2	-	3.05	65	0	N/A	-	65	0	A
Site #S-5	5188 Gaviota Ave	residential	B	(67 dBA)	59	63	59	0	-	3.05	64	1	N/A	-	64	1	N
Site #S-5^	5188 Gaviota Ave	residential	B	(67 dBA)	63	63	63	0	-	3.05	63	0	N/A	-	63	0	N
Site #S-6	5194 Brian Lane	residential	B	(67 dBA)	65	67	64	1	-	3.05	67.5	0.5	N/A	-	67.5	0.5	E
Site #S-7	5340 Forbes Ave	residential	B	(67 dBA)	60	60	63	-3	-	3.05	-	-	61.5	1.5	-	-	N
Site #S-7^	5340 Forbes Ave	residential	B	(67 dBA)	60	63	63	-3	-	3.05	-	-	64.5	1.5	-	-	N
Site #S-7A	16810 Clark St.	residential	B	(67 dBA)	-	-	60	-3	-	-	-	-	N/A	-	62	-	N
Site #S-7B	16810 Margate St.	residential	B	(67 dBA)	-	-	58	-3	-	-	-	-	N/A	-	59.4	-	N
Site #S-7C	Vacant Land	commercial	C	(72 dBA)	-	-	66	-3	-	-	-	-	67.1	-	-	-	N
Site #S-8	Baseball Fields	park	B	(67 dBA)	59	60	62	-3	-	3.05	60.1	0.1	60.1	0.1	60.1	0.1	N
Site #S-9	5440 Forbes Ave	residential	B	(67 dBA)	61	62	65	-4	-	-	62.7	0.7	62.7	0.7	62.7	0.7	N
Site #S-9A	16936 Burbank Blvd	residential	B	(67 dBA)	-	-	62	-4	-	-	64.1	2.1	64.1	2.1	64.1	N	N
Site #S-9B	16946 Burbank Blvd	residential	B	(67 dBA)	-	-	62	-4	-	-	63.9	-	63.9	-	63.9	-	N
Site #S-10	Medical Plaza 5400 Balboa Blvd	hospital	B	(67 dBA)	63	63	65	-2	-	-	64.9	1.9	64.9	1.9	64.9	1.9	N
Site #S-11	Sepulveda Garden Center	commercial	C	(72 dBA)	65	67	69	-4	-	-	67.9	0.9	67.9	0.9	67.9	0.9	N
Site #S-11A	16630 McCormick St.	residential	B	(67 dBA)	-	-	62	-4	-	-	-	-	65	-	-	N	N
Site #N-1	Emek Hebrew Academy 15365 Magnolia Blvd	school	B	(67 dBA)	70	72	71, 65.3**	-1	3.66*	-	67.2***	1.9	N/A	-	67.3***	2	E
Site #N-1^	Emek Hebrew Academy 15365 Magnolia Blvd	school	B	(67 dBA)	72	73	73, 67.3**	-1	3.66*	-	69.2***	1.9	N/A	-	69.2	2	E
Site #N-1A	Emek Hebrew Academy 15365 Magnolia Blvd	school	B	(67 dBA)	-	-	64, 60.9**	-1	-	3.66*	62.5***	1.6	N/A	-	62.7***	1.8	N
Site #N-2	Sherman Oaks Castle Palace 4989 Sepulveda Blvd	park	B	(67 dBA)	69	70	68,-***	1	-	-	69.8	0.2	N/A	-	69.8	0.2	E
Site #N-3	5345 Sepulveda Blvd	residential	B	(67 dBA)	67	70	69, 63.6**	-2	-	3.66*	65.5***	1.9	N/A	-	65.4***	1.8	N
Site #N-3A	5425 Sepulveda Blvd	residential	B	(67 dBA)	-	-	67,61.3**	-2	-	3.66	63.2***	1.9	N/A	-	63.4***	2.1	N
Site #N-4	Channel	Contour Reading	-	-	68	70	71,-***	-3	-	-	72.1	2.1	N/A	-	73.4	3.4	N
Site #N-5	15328 Albers St.	residential	B	(67 dBA)	68	70	67, 66**	1	-	3.05*	67.6***	1.6	N/A	-	67.7***	1.7	E
Site #N-5A		motel	B	(67 dBA)	-	-	65,64.2**	1	-	-	65.2***	1	N/A	-	66***	1.8	A
Site #N-6	15352 Weddington St.	residential	B	(67 dBA)	70	73	71, 62.7**	-1	-	3.66*	65.0***	2.3	N/A	-	65***	2.3	N
Site #N-6A	15353 Weddington St.	residential	B	(67 dBA)	-	-	70,64.7**	-2	-	3.66*	66.7***	2	N/A	-	66.6***	1.9	E
Site #N-6B	15353 Weddington St.	residential	B	(67 dBA)	-	-	64,60.9**	-1	-	3.66*	62.7***	1.8	N/A	-	62.6***	1.7	N

* Proposed Soundwall under Project EA
** Modeled Noise Level w/Proposed Soundwall under Project EA 199620
*** Future Worst Noise-Hour Level w/Proposed Soundwall under Project EA 199620
^ 24 hour noise reading site

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Environmental Consequences

Future Noise Environment. Future noise levels were predicted using traffic characteristics that would yield the worst hourly traffic noise impact on a regular basis. As previously described, vehicles per hour per lane at 105 km/h (65 mph) were used as the future traffic. The percentages of cars, medium trucks, and heavy trucks use for modeling the present were assume the same for the future modeling.
The predicted noise levels for design-year conditions are shown on Table 3. Predicted increases in traffic noise under design-year conditions relative to existing conditions typically are in the range of 1 - 2dBA. These increases are attributed to the reconstruction of a new alignment of the southbound I-405 to northbound US-101 Connector (Connector B), a partial realignment of the southbound I-405 to southbound U.S.-101 Connector (Connector A), realignment of the on-ramp from Burbank Boulevard to southbound I-405, a new on-ramp at Hayvenhurst Ave approaching northbound U.S.-101, and widening the Balboa on-ramp from one lane to two lane approaching the northbound U.S.-101.

Traffic Noise Impacts. The previous Traffic Noise Measurements and Modeling Table shows the locations where predicted traffic noise levels approach/exceed the Noise Abatement Criteria of 67 dBA-L_{eq}(h) for Activity Category B. The Activity Category B land uses within the project limits under consideration include residential properties, a motel, a hotel, a school, a hospital, church, and three parks. The Activity Category C land uses within the project limits include a restaurant, and a nursery that have exterior frequent human use, and therefore, they were considered for potential freeway traffic noise impacts.

It was predicted that the future reconstruction on a new alignment of the southbound I-405 to the northbound U.S.-101 Connector (Connector B) and a partial realignment of the southbound I-405 to southbound US-101 Connector (Connector A) would impact all the residential areas, school, amusement park, and church adjacent to northbound I-405 within the project limits.

The Sherman Oaks Castle Park located on the northeastern quadrant of I-405 and U.S.-101 Interchange is an area with frequent exterior human use. The predicted worst-hour noise level at this location exceeds the NAC of 67 dBA-Leq(h) for Activity Category B, and therefore, it was determined to have traffic noise impact. The Emek Hebrew Academy is located adjacent to Sherman Oaks Castle Park on Magnolia Blvd, with a playground facing the freeway. In addition to the soundwall recommended for implementation under a separate Caltrans project, the school was evaluated and remained impacted by the traffic noise due to this proposed project (Alternatives 1 & 2/3). All residential properties and church along the northbound I-405 between Magnolia Blvd and Burbank Blvd have been evaluated and determined to have traffic noise impacts.

The Activity Category C land uses within the limits under consideration include commercial properties. There are several commercial developments within the project limits however, the Sepulveda Garden Center has outside areas with frequent human activity and therefore, it was analyzed for determining noise impacts. The predicted worst-hour traffic noise level at the nursery was 68 dBA-L_{eq}(h), which does not approach or exceed the NAC and therefore is not impacted. The Denny's Restaurant is another commercial development that was not analyzed for traffic noise impacts because it did not have any outside eating area.

Abatement

Preliminary Noise Abatement Analysis. FHWA regulations (23CFR772) state that noise abatement will usually be necessary where noise impacts are predicted and only where frequent human use occurs, and where a lowered noise level would be of benefit. As a matter of practice, abatement is considered for places where people are exposed to highway noise for at least 1 hour on a regular basis. Potential noise abatement measures include:

- Avoiding the project impact by using design alternatives, such as altering the horizontal and vertical alignment of the project.
- Constructing noise barriers
- Acquiring property to serve as a buffer zone
- Using traffic management measures to regulate types of vehicles and speeds
- Acoustically insulating public use or nonprofit institutional structures

Considering the topography, land use, right-of-way, existing traffic; it has been determined that construction of soundwalls would be the appropriate form of noise abatement measure for this area. Soundwalls have been considered and /or recommended at the following locations for various activity categories within the project limits.

Residential Areas. The impacted residential areas have been considered for noise abatement. They are represented by Site #S4 and #S6 along the southbound U.S.-101, and Site #N5, along the northbound I-405. Site #S4 is considered impacted because the predicted traffic noise levels approach the NAC of 67 dBA-L_{eq}(h). Site #S6 and #N5 are also impacted because the predicted traffic noise levels exceed the NAC of 67 dBA-L_{eq}(h). However, it was determined that increasing the soundwall height to maximum of 4.9m would not provide additional 5 dBA noise reduction for each sites. All impacted residential areas considered for abatement are listed in the previous Traffic Noise Measurements and Modeling Table.

Hotels/Motels. The Western Motel is represented by Site #N5 within the project limits. Noise impacts were identified at this location. However, proposing a soundwall or increasing the height of the recommended soundwall under a separate Caltrans project (four proposed soundwalls along the N/B I-405 from 0.75km south of Ventura Boulevard to 0.2km south of Burbank Boulevard) did not provide additional 5 dBA noise reduction. In addition, a Modeled Noise Level Site #N-5A located at the pool (an area of frequent human use) in the motel's property did not indicate any noise impact from predicted noise levels.

Schools. There is an abandoned school and a private school within the project limits. Site #S2 represents the abandoned school, located behind an existing 4.27m soundwall, along southbound U.S.-101 between Morrison Street and Allison Street. No traffic noise impact has been identified at this location. The Emek Hebrew Academy is a private school located on Magnolia Blvd along northbound I-405, and is represented by Site #N1. With the recommended soundwall under a separate Caltrans project (four proposed soundwalls along the N/B I-405 from 0.75km south of Ventura Boulevard to 0.2km south of Burbank Boulevard), this school has been evaluated and remain to have traffic noise impacts. The predicted worst noise levels exceed NAC of 67 dBA-L_{eq}(h) under this project. However, it was determined that increasing the existing soundwall height to maximum of 4.9m would not provide additional 5 dBA noise reduction for both sites.

Parks. There are four parks located within the project limits: The Sherman Oaks Castle Palace, the Encino Golf Course, the three baseball fields, and the recreational park adjacent to the baseball fields. The only park determined to have freeway traffic noise impacts is the Sherman Oaks Castle Palace. Traffic noise impact [future predicted noise level of 70dBA] has been predicted at this location, as a result, a 4.27m (14ft.) high soundwall along the edge of pavement on the northbound I-405 has been considered and recommended.

Commercial and Industrial Developments. There is one commercial development within the project limits that has exterior area of frequent human use. It is a nursery located along southbound U.S.-101

between Forbes Ave and Hayvenhurst Avenue. However, no freeway traffic noise impacts have been predicted to occur at this commercial site.

Noise Abatement Feasibility and Reasonable Cost Allowances. The recommended soundwall considered for noise attenuation has been analyzed for feasibility based on the achievable noise reduction. The insertion loss for the considered soundwall is 6 decibels (dBA) and therefore acoustically feasible. The soundwall was further evaluated to estimate the reasonable cost-allowance required to determine the overall reasonableness.

For any soundwalls to be considered reasonable from a cost perspective, the total estimated cost of the soundwall must be equal to or below the total cost-allowance calculated for that wall. The cost calculations of the soundwall should include all items appropriate and necessary for the construction of the soundwall, such as traffic control, drainage modification, and retaining walls.

Preliminary information on the physical characteristics of potential abatement measures (e.g., physical location, length, and height of soundwalls) has been assessed. The final design must meet the requirements of Chapter 1100 of the Highway Design Manual (4). In particular, the minimum and maximum height requirements must be in accordance with Section 1102.3 of the manual.

Based on the studies performed so far, Caltrans intends to incorporate noise abatement measures in the form of soundwall with respective lengths and average heights of 4.27 m (14 ft). The following is a discussion on recommended noise abatement.

Northbound U.S.-101

Since no traffic noise impact has been identified, noise abatement has not been considered. Therefore, no soundwall has been recommended along the Northbound.

Southbound U.S.-101

The area represented by Site #S4 and #S6 were evaluated and determined to have traffic noise impact under Alternatives 1 & 2/3. However, increasing the existing soundwall height to maximum of 4.9 would not achieve a minimum noise reduction of 5 dBA in order for the proposed noise abatement measure to be considered feasible. Therefore, no soundwall was recommended.

Northbound I-405

Proposed soundwall SW1 (h=4.27m) was determined to provide 6 dBA noise attenuation for the areas represented by sites #N2 (Sherman Oaks Castle Palace – a miniature golf course). This proposed soundwall was previously recommended under a separate Caltrans project (four proposed soundwalls along the N/B I-405 from 0.75km south of Ventura Boulevard to 0.2km south of Burbank Boulevard), however, due to a lack of funding the recommended soundwall was excluded from the project. The proposed soundwall SW1 would block the view from freeway of Sherman Oaks Castle Palace (Miniature golf course) located on the northeastern quadrant of I-405 and U.S.-101 Interchange. Therefore, the park owner's opinion and views (represented by Site #N2) must be considered before making a final noise abatement decision.

Southbound I-405

Since no traffic noise impact has been identified, noise abatement has not been considered. Therefore, no soundwall has been recommended.

However, calculations based on preliminary design data indicate that a noise barrier would reduce noise levels by 6 dBA for the Sherman Oaks Castle Palace at a total reasonable cost allowance of $252,000. The final decision for construction of noise barriers will be made upon completion of the project design and the public involvement processes.

Construction Noise. During the construction phases of the project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Construction noise is regulated by Caltrans standard specifications, Section 7-1.01I, Sound Control Requirements (7). These requirements state that noise levels generated during construction shall comply with applicable local, state, and federal regulations and that all equipment shall be fitted with adequate mufflers according to the manufacturers' specifications.

The table below summarizes typical noise levels produced by construction equipment commonly used on roadway construction projects. As indicated, equipment involved in construction is expected to generate noise levels ranging from 70 to 90 dBA at a distance of 15 meters (50 feet). Noise produced by construction equipment would be reduced over distance at a rate of about 6 dBA per doubling of distance. No adverse noise impacts from construction are anticipated because construction would be conducted in accordance with Caltrans standard specifications and would be short-term, intermittent, and dominated by local traffic noise. Implementing the following measures would minimize temporary construction noise impacts:

- All equipment shall have sound-control devices no less effective than those provided on the original equipment. No equipment shall have an unmuffled exhaust.
- As directed by the Engineer, the contractor shall implement appropriate additional noise mitigation measures including, but not limited to, changing the location of stationary construction equipment, turning off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, or installing acoustic barriers around stationary construction noise sources.

Table 39. Construction Equipment Noise

Equipment	Maximum Noise Level, 15 m (50 ft) distance
Scrapers	89 dBA
Bulldozers	85 dBA
Heavy trucks	88 dBA
Backhoes	80 dBA
Pneumatic tools	85 dBA
Concrete pump	82 dBA

Source: Federal Transit Administration, 1995

Conclusions

Existing noise levels were recorded at 20 locations within the project limits. The existing ambient noise levels recorded were between 52 and 71 decibels (dBA). The future predicted worst hour noise levels for these locations were calculated using The Federal Highway Administration's Traffic Noise Model (FHWA TNM) Version 2.5.

The future noise levels after the completion of the project are expected to increase by 2 dBA. Several areas of land use categories B have been identified as being impacted by freeway noise. Noise attenuation measures in the form of soundwalls have been recommended for the impacted areas. A soundwall has been proposed with a height of 4.27m to provide noise reduction of 6 dBA to an amusement park (The Sherman Oak Castle Palace). The overall length of recommended soundwalls is approximately 185 m (606 ft).

2.3 BIOLOGICAL ENVIRONMENT

The Biological Environment section of the IS/EA is broken into the following subsections:

- Natural Communities
- Wetlands and Other Waters
- Plant Species
- Animal Species
- Threatened and Endangered Species
- Invasive Species

General Description of the Existing Biological and Physical Conditions

Study Area. The study area is surrounded by U.S.-101 on the south and west sides, I-405 on the east side, and the Sepulveda Dam on the north side. The Los Angeles River intersects the project area in the western portion and is completely concrete lined. North of the Sepulveda Dam is the Sepulveda Basin Wildlife Reserve, to the northwest is agricultural land, and heavy urbanization borders the east and south sides.

Current land use within the Sepulveda Basin include recreational activities, designation of wildlife habitat, agriculture as well as utility and military facilities. Recreational activities include golf courses, ball fields, tennis courts, model airplane fields, cricket fields and walking and bike paths. These activities are used by an estimated 365,000 people per year. Additionally, 225 acres have been set aside and dedicated for a wildlife area. This wildlife reserve provides wildlife habitat and recreational opportunities to residents along a network of paths within riparian, shrub, and herbaceous plant communities.

Biological Conditions in the Biological Study Area (BSA). The surveyed BSA for this project is made up of several natural community habitats as well as open space and disturbed areas. Habitats found directly within the project area include a riparian/wetland area that runs along the southeastern edge of the project, an oak woodland community located at the north side of Burbank Blvd., and an open, hilly area at the southern point of the project made up of primarily ruderal vegetation. At the northeastern portion of the project, the area is highly disturbed with non-native and ruderal vegetation being the primary vegetation type. The plant species that were identified in the project area are listed later in this chapter.

Due to this area being designated as a wildlife refuge, there is a high level of diversity of birds found within the project area as well as adjacent to it.

Biological Study. The basis for this biological discussion is the project Natural Environment Study Report (NESR), dated June 2007.

2.3.1 NATURAL COMMUNITIES

This section of the document discusses natural communities of concern. The focus of this section is on biological communities, not individual plant or animal species. This section also includes information on wildlife corridors and habitat fragmentation. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Habitat fragmentation involves the potential for dividing sensitive habitat and thereby lessening its biological value.

A list of many of the birds occurring in the Sepulveda Basin Preserve was obtained from the San Fernando Valley Audubon Society and is listed later in this chapter. Many of these birds are found year round, while the remainder of the species use the Preserve as an important migratory corridor. Among the birds sighted is the state and federally listed least Bell's Vireo (Vireo bellii pusillus) and burrowing owl (Athene cunicularia), a state species of special concern. Species frequently seen in the project site are the redtail hawk (Buteo jamaicensis), great egret (Ardea alba), Canada goose (Branta canadensis), and a variety of smaller finches, warblers and sparrows.

Habitat areas that have been designated as critical habitat under the Federal Endangered Species Act are discussed in the Threatened and Endangered Species section 2.3.5. Wetlands and other waters are also discussed in section 2.3.2.

Affected Environment

Natural Communities of Special Concern. Components of a natural community of special concern listed in the California Natural Diversity Database, Coast Live Oak Riparian Forest, was observed within the project area.

Southern California Coast Live Oak Riparian Forest is a native plant community of concern that is listed in the Natural Diversity Database search for the project area. This plant community generally exists within the canyon bottoms in the area and throughout the Santa Monica Mountains. Loss of this habitat can be attributed to development pressures along this urban mountain range.

During several surveys of the area, 73 Coast live oak trees were found along the northern border of Burbank Blvd and within the project footprint. A larger community of coastal live oaks were noted on the southern side of Burbank Blvd. between Burbank and the Sepulveda Dam.

Environmental Consequences

Project Impacts. Impacts to coast live oak riparian forests, as a result of this project, would be limited to the area north of Burbank Blvd. Of the 73 trees located in that area, approximately 25 to 30 will be directly impacted by Alternatives 2 and 3 and would effectively cause the fragmentation of this small riparian forest.

Cumulative Impacts. Impacts from Alternatives 2 and 3 to the coast live oak forest community will be limited to the area north of Burbank Blvd. These impacts can be fully mitigated as to not contribute to any cumulative impacts to the overall coast live oak community.

Avoidance, Minimization, and/or Mitigation Measures

Avoidance and Minimization Efforts. The removal of coast live oak trees will be avoided to the greatest extent possible. However, should it be necessary to remove oak trees for the construction of the project, the number of trees removed will be minimized to the least amount necessary.

Compensatory Mitigation. Should the removal of oak trees be necessary due to the 405/101 Interchange Project the loss will be mitigated through replacement. Based on the total amount of oak trees impacted and available on-site locations, favorable areas within the right of way will be selected by the District Biologist and Landscape Architect. Any required replacement beyond the space available in the right of way will be planted off-site, in coordination with an agency or organization that has yet to be determined.

2.3.2 WETLANDS AND OTHER WATERS

General Regulatory Setting. Wetlands and other waters are protected under a number of laws and regulations. At the federal level, the Clean Water Act (33 U.S.C. 1344) is the primary law regulating wetlands and waters. The Clean Water Act regulates the discharge of dredged or fill material into waters of the United States, including wetlands. Waters of the United States include navigable waters, interstate waters, territorial seas and other waters that may be used in interstate or foreign commerce. To classify wetlands for the purposes of the Clean Water Act, a three-parameter approach is used that includes the presence of hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils subject to saturation/inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the Clean Water Act.

Section 404 of the Clean Water Act establishes a regulatory program that provides that no discharge of dredged or fill material can be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. The Section 404 permit program is run by the U.S. Army Corps of Engineers (ACOE) with oversight by the Environmental Protection Agency (EPA).

The Executive Order for the Protection of Wetlands (E.O. 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, this executive order states that a federal agency, such as the Federal Highway Administration, cannot undertake or provide assistance for new construction located in wetlands unless the head of the agency finds: 1) that there is no practicable alternative to the construction and 2) the proposed project includes all practicable measures to minimize harm.

At the state level, wetlands and waters are regulated primarily by the Department of Fish and Game (CDFG) and the Regional Water Quality Control Boards (RWQCB). In certain circumstances, the Coastal Commission (or Bay Conservation and Development Commission) may also be involved. Sections 1600-1607 of the Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFG before beginning construction. If DFG determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. CDFG jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider. Wetlands under jurisdiction of the ACOE may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the CDFG.

The Regional Water Quality Control Boards were established under the Porter-Cologne Water Quality Control Act to oversee water quality. The RWQCB also issues water quality certifications in compliance with Section 401 of the Clean Water Act. Please see the Water Quality section for additional details.

Project-Specific Regulatory Requirements

The Federal Clean Water Act and California Fish and Game Code 1602. A Section 401 of the Clean Water Act Water Quality Certification from the California Regional Water Quality Control Board (RWQCB) may be required since proposed construction activities include two new bridges over the Los Angeles River. A Section 404 of the Clean Water Act permit from the US Army Corps of Engineers (ACOE) will likely be needed since proposed construction activities are anticipated to result in the discharge of dredged or fill material into waters of the United States. A 1602 Streambed Alteration Agreement from the CDFG may be necessary since proposed construction activities are anticipated to divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake.

The proposed project is not located within the coastal zone, therefore, coordination with the California Coastal Commission will not be required.

Federal Endangered Species Act Consultation Summary. Due to the presence of least Bell's vireo, a Federally endangered species, informal consultation with Fish and Wildlife Service will be required for this project. A request for a species list was received from the Fish and Wildlife Service on May 11, 2006. This request effectively started the informal consultation process.

California Endangered Species Act Consultation Summary. Due to the presence of least Bell's vireo, a State and Federally listed endangered species; coordination with the U.S. Fish and Wildlife Service will be required under the Federal Endangered Species Act (FESA). Compliance with FESA will satisfy the California Endangered Species Act (CESA) under Fish&Game Code Section 2080.1.

Wetlands and Other Waters Coordination Summary. Because the potential impacts of the proposed Alternatives fall within an area designated as a retention basin, and because those impacts are estimated to be greater than 0.5 acres, the Department believes that this project will fall within the jurisdiction of the Army Corps of Engineers and would require a Section 404 Permit and a Section 401 Water Quality Certification. Coordination with the Department of Fish and Game is also anticipated per Fish and Game Code 1600.

Wetlands Delineation and Field Review. Caltrans is required to delineate wetlands, identify impacts and evaluate avoidance alternatives in the environmental phase of project development, which is to be performed upon selection of a preferred alternative and by the time the final environmental document is circulated. Executive Order 11990, "Protection of Wetlands," May 24, 1977, requires federal agencies to make a wetlands finding which determines whether or not there is a practicable alternative to construction located in wetlands, whether all practicable measures to minimize harm to the wetlands have been included in the federal action, taking into account all economic, environmental, and other pertinent factors that have a bearing on practicability. Caltrans is required to obtain a 404 permit prior to advertisement for construction. This law and Section 404 permit program of the Clean Water Act of 1977 play an important part in the preliminary engineering phase. Timing of the field review should be arranged usually in late winter, spring, or early summer to identify wetlands plant species.

Agency Coordination. The Department met with the U.S. Army Corps of Engineers on June 19, 2007 to provide a project status update and presentation. The discussion ranged from the various project alternatives to the project's various design and environmental constraints. The Department also provided the Corps with the following project technical studies for their review and comment:

- Floodplain Study and Mitigation Proposals
- Natural Environment Study Report
- Bioacoustics Study
- Historic Preservation Study Report
- A few days later, Caltrans submitted to the Corps the project's Traffic Noise Investigation Study.
- The Department received a letter from the U.S. Army Corps of Engineers dated October 9, 2007.

- The Department replied to the U.S. Army Corps of Engineers' October 9, 2007 letter with a letter dated December 27, 2007.
- The Department was contacted by the U.S. Army Corps of Engineers on January 9, 2008. The Corps indicated that they had misplaced the Floodplain Study and Mitigation Proposals presented to them on June 19, 2007 and proceeded to request an electronic copy via email. The Department provided the Corps with the requested electronic copy via email, same day.

2.3.3 PLANT SPECIES

Regulatory Setting. The U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG) share regulatory responsibility for the protection of special-status plant species. "Special-status" species are selected for protection because they are rare and/or subject to population and habitat declines. Special status is a general term for species that are afforded varying levels of regulatory protection. The highest level of protection is given to threatened and endangered species; these are species that are formally listed or proposed for listing as endangered or threatened under the Federal Endangered Species Act (FESA) and/or the California Endangered Species Act (CESA). Also, please refer to the Threatened and Endangered Species section in this document for additional information regarding these species.

This section of the document discusses all the other special-status plant species, including CDFG fully protected species and species of special concern, USFWS candidate species, and non-listed California Native Plant Society (CNPS) rare and endangered plants.

The regulatory requirements for FESA can be found at United States Code 16 (USC), Section 1531, et. seq. See also 50 CFR Part 402. The regulatory requirements for CESA can be found at California Fish and Game Code, Section 2050, et. seq. Department projects are also subject to the Native Plant Protection Act, found at Fish and Game Code, Section 1900-1913, and the California Environmental Quality Act, Public Resources Code, Sections 2100-21177.

Affected Environment

Special Status Plant Species. Special status plant species that were listed in the CNDDB, or in the U.S. Fish and Wildlife Service species list, including Nevin's barberry (*Berberis nevinii*) and the San Fernando Valley spine flower (*Chorizanthe parryi var. fernandina*), which are both associated with coastal scrub habitat, were studied and are discussed below. The proposed project is currently not expected to affect, or impact, these special status plant species.

Discussion of Nevin's Barberry. Nevin' barberry (*Berberis nevinii*) is a state and federally endangered herbaceous shrub of the Berberidacea family. This species is historically found in chaparral, cismontane woodland, coastal scrub and riparian scrub habitats. As a result of the presence of coastal scrub habitat near the project location, one of the species habitat associations, Nevin's barberry was studied in greater detail.

A record search of the CNDDB did not list occurrences of this species in the project area and existing records were found to be located further north of the project. Additionally, general surveys of the area did not result in the observation of this species in the project footprint.

Discussion of San Fernando Valley Spine Flower. The San Fernando Valley spineflower (*Chorizanthe parryi var. fernandina*) is a state endangered and federal listing candidate species and is considered rare, threatened, or endangered in California and elsewhere by the California Native Plant Society (CNPS). This species is an annual herb from the buckwheat family associated with sandy or gravelly soils in coastal sage and alluvial fan sage scrub communities.

A record search of the CNDDB did not list occurrences of this species in the project area and existing records were found to be located further north of the project . Additionally, general surveys of the area did not result in the observation of this species in the project footprint.

Environmental Consequences

Project Impacts (*Nevin's Barberry*). Although coastal scrub habitat is present, the proposed project is not expected to affect this plant, due to its anticipated absence from the project area.

Cumulative Effects (*Nevin's Barberry*). Cumulative effects resulting from the proposed project area not anticipated for this species because the proposed project will not affect this species.

Projects Impacts (*San Fernando Valley Spine Flower*). Although coastal scrub habitat is present, the proposed project is not expected to affect this plant, due to its anticipated absence from the project area.

Cumulative Effects (*San Fernando Valley Spine Flower*). Cumulative effects resulting from the proposed project area not anticipated for this species because the proposed project will not affect this species.

Avoidance, Minimization, and/or Mitigation Measures

Avoidance and Minimization Efforts (*Nevin's Barberry*). Avoidance and minimization efforts are not proposed at this time due to the anticipated absence of this species from the project impact area. Future re-evaluation of the project should consider any new occurrence information that may be available for this species.

Compensatory Mitigation (*Nevin's Barberry*). Compensatory mitigation is not proposed for this species because the proposed project will not affect this species.

Avoidance and Minimization Efforts (*San Fernando Valley Spine Flower*). Avoidance and minimization efforts are not proposed at this time due to the anticipated absence of this species from the project impact area. Future re-evaluation of the project should consider any new occurrence information that may be available for this species.

Compensatory Mitigation (*San Fernando Valley Spine Flower*). Compensatory mitigation is not proposed for this species because the proposed project will not affect this species.

2.3.4 ANIMAL SPECIES

Regulatory Setting. Many state and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration (NOAA) Fisheries and the California Department of Fish and Game (CDFG) are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with wildlife not listed or proposed for listing under the state or federal Endangered Species Act. Species listed or proposed for listing as threatened or endangered are discussed later in this chapter. All other special-status animal species are discussed here, including CDFG fully protected species and species of special concern, and USFWS or NOAA Fisheries candidate species.

Federal laws and regulations pertaining to wildlife include the following:

- National Environmental Policy Act
- Migratory Bird Treaty Act

- Fish and Wildlife Coordination Act

State laws and regulations pertaining to wildlife include the following:

- California Environmental Quality Act
- Sections 1600-1603 of the Fish and Game Code
- Section 4150 and 4152 of the Fish and Game Code

Affected Environment

During several surveys of the project area, signs of several species of mammals were found. These signs included scat, fur, tracks, remains and actual sightings. The following table identifies those species that were observed during these surveys. Also included in the table is a list of bird species obtained from the San Fernando Audubon Society. Many of these species are rarely in the area or are only present seasonally during migration and as such, this bird list is only intended to show the high diversity of species potentially found within the Preserve. Although there may be temporary disruptions or impacts during the construction phase, there are not anticipated to be any permanent direct or indirect impacts to these species resulting from this project.

Table 40. Wildlife Species Identified in the Biological Study Area

Common Name	Scientific Name	Common Name	Scientific Name
Mammal Species	**Mammilia**	**Bird Species**	***Aves***
Virgina Opossum (remains)	*Didelphis virginiana*	Common Merganser	*Mergus merganser*
Coyote (scat)	*Canis latrans*	Red Breasted Merganser	*Mergus serrator*
Rabbit (remains)	*Silviagus sp*	Ruddy Duck	*Oxyura jamaicensis*
Ground Squirrel (observation)	*Spermophilus beecheyi*	Turkey Vulture	*Cathartes aura*
		Osprey	*Pandion haliaetus*
Bird Species	***Aves***	White Tailed Kite	*Elanus leucurus*
Red Throated Loon	*Gavia stellata*	Northern Harrier	*Circus cyaneus*
Common Loon	*Gavia immer*	Sharp Shinned Hawk	*Accipiter striatus*
Pied Billed Grebe	*Podilymbus podiceps*	Cooper's Hawk	*Accipiter cooperii*
Horned Grebe	*Podiceps auritus*	Red Shouldered Hawk	*Bueto lineatus*
Eared Grebe	*Podiceps nigricollis*	Swainsons Hawk	*Bueto swainsoni*
Western Grebe	*Aechmophorus occidentalis*	Red Tailed Hawk	*Bueto jamaicensis*
Clark's Grebe	*Aechmophorus clarkii*	Ferriginous Hawk	*Bueto regalis*
American White Pelican	*Pelecanus erythrorhynchos*	Golden Eagle	*Aquila chrysaetos*
Brown Pelican	*Pelecanus occidentalis*	Bald Eagle	*Haliaeetus leucocephalus*
Double Crested Cormorant	*Phalacrocorax auritus*	American Kestrel	*Falco sparvarius*
American Bittern	*Botaurus lentiginosus*	Merlin	*Falco columbarius*
Least Bittern	*Ixobrychus exilis*	Peregrine Falcon	*Falco peregrinus*
Great Blue Heron	*Ardea herodias*	Prairie Falcon	*Falco mexicanus*
Great Egret	*Ardea alba*	California Quail	*Callipepla californica*
Snowy Egret	*Egretta thula*	Virginia Rail	*Rallus limicola*
Cattle Egret	*Bubulcus ibis*	Sora	*Porzana carolina*
Green Heron	*Butorides virescens*	Common Moorhen	*Gallinula chloropus*
Black Crowned Night Heron	*Nycticorax nycticorax*	American Coot	*Fulica americana*
White Faced Ibis	*Plegadis chihi*	Black Bellied Plover	*Pulvialis squatarola*
Swan	*Cygnus sp*	Semipalmated Plover	*Charadrius semipalmatus*

Gadwall	*Anas strepera*	Baird's Sandpiper	*Calidris bairdii*
Eurasian Wigeon	*Anas penelope*	Pectoral Sandpiper	*Calidris melanotos*
American Wigeon	*Anas americana*	Dunlin	*Calidris alpina*
Canvasback	*Aythya valisineria*	Long Billed Dowitcher	*Limnodromus scolopaceus*
Ring Necked Duck	*Aythya collaris*	Common Snipe	*Gallinago gallinago*
Greater Scaup	*Aythya marila*	Wilson's Phalarope	*Phalaropus tricolor*
Lesser Scaup	*Aythya affinis*	Bonapartes Gull	*Larus philadelphia*
Common Goldeneye	*Bucephala clangula*	Ring Billed Gull	*Larus delawarensis*
Buffelhead	*Bucephala albeola*	California Gull	*Larus californicus*
Hooded Merganser	*Lophodytes cucullatus*	Western Gull	*Larus occindentalis*
Greater White-fronted Goose	*Anser albifrons*	Killdeer	*Chandrius vociferus*
Snow Goose	*Chen caerulenscens*	Mountain Plover	*Chandrius montanus*
Ross' Goose	*Chen rossii*	Black Necked Stilt	*Himantopus mexicanus*
Canada Goose	*Branta canadensis*	American Avocet	*Recurvirostra americana*
Wood Duck	*Aix sponsa*	Greater Yellowlegs	*Tringa melanoluca*
Green Winged Teal	*Ansa crecca*	Lesser Yellowlegs	*Tringa flavipes*
Mallard	*Anas platyrhynchos*	Solitary Sandpiper	*Tringa solitaria*
Northern Pintail	*Anas acuta*	Spotted Sandpiper	*Actitius macularia*
Blue Winged Teal	*Anas discors*	Whimbrel	*Numenius phaeopus*
Cinnamon Teal	*Anas cyanoptera*	Western Sandpiper	*Calidris mauri*
Northern Shoveler	*Anas clypeata*	Least Sandpiper	*Calidris minutilla*

Common Name	**Scientific Name**	**Common Name**	**Scientific Name**
Bird Species	**Aves**	**Bird Species**	**Aves**
Caspian Tern	*Sterna caspia*	Bushtit	*Psaltriparus minimus*
Common Tern	*Sterna hirundo*	Red Breasted Nuthatch	*Sitta canadensis*
Forster's Tern	*Sterna forsteri*	Bewick's Wren	*Thyromanes bewickii*
Black Tern	*Chlidonias niger*	House Wren	*Troglodyres aedon*
Black Skimmer	*Rhynchops niger*	Marsh Wren	*Cistothorus palustris*
Rock Dove	*Columba livia*	Ruby Crowned Kinglet	*Regulus calendula*
Band Tailed Pigeon	*Columba fasciata*	Blue-gray Gnatcatcher	*Polioptila caerulea*
Spotted Dove	*Streptopelia chinensis*	Western Bluebird	*Sialia mexicana*
Mourning Dove	*Zenaida macroura*	Mountain Bluebird	*Sialia currucoides*
Common Ground Dove	*Columbina passerina*	Hermit Thrush	*Catharus guttatus*
Barn Owl	*Tyto alba*	American Robin	*Turdus migratorius*
Great Horned Owl	*Bubo virginianus*	Varied Thrush	*Ixoreus naevius*
Burrowing Owl	*Athene cunicularia*	Wrentit	*Chamaea fasciata*
Short Eared Owl	*Asio flammeus*	Northern Mockingbird	*Mimus polyglottos*
Lesser Knighthawk	*Chordeiles acutipennis*	California Thrasher	*Toxostoma redivivum*
Vaux's Swift	*Chaetura vauxi*	American Pipit	*Anthus rubescens*
White Throated Swift	*Aeronautes saxatalis*	Cedar Waxwing	*Bombycilla cedrorum*
Black Chinned Hummingbird	*Archilocus alexandri*	Phainopepla	*Phainopepla nitens*
Costas Hummingbird	*Calypte costae*	Loggerhead Shrike	*Lanius ludovicianus*
Anna's Hummingbird	*Calypte anna*	European Starling	*Sturnus vulgaris*
Rufous Hummingbird	*Selasphorus rufus*	Least Bell's Vireo	*Vireo bellii*
Allen's Hummingbird	*Selasphorus sasin*	Cassin's Vireo	*Vireo cassinii*
Belted Kingfisher	*Ceryle alcyon*	Plumbeous Vireo	*Vireo plumbeus*
Acorn Woodpecker	*Melanerpes formicivorus*	Hutton's Vireo	*Vireo huttoni*

Nuttall's Woodpecker	*Picoides nuttallii*	Warbling Vireo	*Vireo gilvus*
Downy Woodpecker	*Picoides pubescens*	Tennessee Warbler	*Vermivora peregrina*
Northern Flicker	*Colaptes auratus*	Orange Crowned Warbler	*Vermivora celata*
Red Breasted Sapsucker	*Saphyrapicus ruber*	Lucy's Warbler	*Vermivora luciae*
Olive Sided Flycatcher	*Contopus cooperi*	Nashville Warbler	*Vermivora ruficapilla*
Western Wood Pewee	*Contopus sordidulus*	Yellow Warbler	*Dendrocia petechia*
Pacific Slope Flycatcher	*Empidonax difficilis*	Magnolia Warbler	*Dendrocia magnolia*
Black Phoebe	*Sayornis nigricans*	Yellow Rumped Warbler	*Dendrocia coronata*
Say's Phoebe	*Sayornis saya*	Black throated Gray	*Dendrocia nigrescens*
Ash Throated Flycatcher	*Myiarchus cinerascens*	Townsend's Warbler	*Dendrocia townsendi*
Tropical Kingbird	*Tyrannus melancholicus*	Hermit Warbler	*Dendrocia occidentalis*
Cassin's Kingbird	*Tyrannus vociferans*	Palm Warbler	*Dendrocia palarum*
Western Kingbird	*Tyrannus verticalis*	Black & White Warbler	*Mniotita varia*
Eastern Kingbird	*Tyrannus tyrannus*	Common Yellowthroat	*Geothlypis trichas*
Horned Lark	*Eremophila alpestris*	Wilson's Warbler	*Wilsonia pusilla*
Tree Swallow	*Tachycineta bicolor*	Northern Waterthrush	*Seiurus noveboracensis*
Violet Green Swallow	*Tachycineta thalassina*	Yellow Breasted Chat	*Icteria virens*
N. Rough Winged Swallow	*Stelgidopteryx serripennis*	Summer Tanager	*Piranga rubra*
Cliff Swallow	*Hirundo pyrrhonota*	Western Tanager	*Pirange ludoviciana*
Barn Swallow	*Hirundo rustica*	Black Headed Grosbeak	*Pheucticus melanocephalus*
Western Scrub-jay	*Aphelocoma californica*	Blue Grosbeak	*Guiraca caerulea*
American Crow	*Corvus brachyrhyncos*	Lazuli Bunting	*Passerine amoena*
Common Raven	*Crovus corax*	Indigo Bunting	*Passerina cyanea*
Mountain Chicadee	*Parus gambeli*	Green Tailed Towhee	*Pipilo chlorurus*

2.3.5 THREATENED AND ENDANGERED SPECIES

Regulatory Setting. The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act (FESA): 16 United States Code (USC), Section 1531, et seq. See also 50 CFR Part 402. This act and subsequent amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of this act, federal agencies, such as the Federal Highway Administration, are required to consult with the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NOAA Fisheries) to ensure that they are not undertaking, funding, permitting or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species. The outcome of consultation under Section 7 is a Biological Opinion or an incidental take permit. Section 3 of FESA defines take as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or any attempt at such conduct.”

California has enacted a similar law at the state level, the California Endangered Species Act (CESA), California Fish and Game Code, Section 2050, et seq. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project caused losses of listed species populations and their essential habitats. The California Department of Fish and Game (CDFG) is the agency responsible for implementing CESA. Section 2081 of the Fish and Game Code prohibits "take" of any species determined to be an endangered species or a threatened species. Take is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful development projects; for these actions an incidental take permit is issued by CDFG. For projects requiring a Biological Opinion under Section 7 of the FESA, CDFG may also authorize

impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the Fish and Game Code.

Regional Federal and State Listed Species. The following table lists the regional sensitive species that were identified using the California Natural Diversity Database (CNDDB). Further evaluation of species that may have habitat present in the project area is discussed immediately below in the following section.

Table 41. Sensitive Species - Regional Federal and State Listed

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/Absent	Rationale
Vireo bellii pusillus	Least Bell's Vireo	FT, ST	(Nesting) Summer resident of Southern Ca. in low riparian in vicinity of water or in dry river beds below 2000 ft	P	Habitat associated with this species is not present within the project site. This species is know to be present adjacent to the impact area, but was not observed during general surveys.
Athene cunicularia	Burrowing Owl	SSC	Subterranean nester, dependent upon burrowing mammals, mot notably, the California ground squirrel	P	Habitat associated with this species may be present within the project limits. This species is historically known to be present in this area and during general surveys, signs of possible presence were found.
Polioptila californica	Coastal California gnatcatcher	FT, SSC	Permanent resident of coastal sage scrub	A	The habitat within the project limits is not suitable for this species.
Clemmys marmorata pallida	Southwestern pond turtle	FSC, SSC	Permanent to nearly permanent water source, vegetation mats or mud banks	A	The habitat within the project limits is not suitable for this species.
Phrynosoma coronatum blainvillei	San Diego horned lizard	SSC	Coastal sage scrub, chaparral in arid areas; friable swallow sandy soils	A	The habitat within the project limits is not suitable for this species
Berberis nevinii	Nevin's Barberry	FE , SE	Chaparral, cismontane woodlands, riparian and coastal scrub	A	The habitat within the project limits is not suitable for this species.
Dudleya multicaulis	Many-stemmed dudleya	CNPS 1B	Heavy often clayey soils or grassy slopes	A	The habitat within the project limits is not suitable for this species.
Malacothamnus davidsonii	Davidson's bush mallow	FSC, CNPS 1B	Coastal scrub, riparian woodland, chaparral,; sandy washes	A	The habitat within the project limits is not suitable for this species.
Chorizanthe parryi Fernandina	San Fernando valley spineflower	FC, SE	Coastal scrub, sandy soils	A	The habitat within the project limits is not suitable for this species, possibly extirpated
Calochortus plummerae	Plaummer's mariposa lily	CNPS 1B	Rocky sandy areas, usually granitic or alluvial material, many habitat types	A	The habitat within the project limits is not suitable for this species.

Absent [A] means no further work needed. Present [P] means general habitat is present and species may be present. Status: Federal Endangered (FE); Federal Threatened (FT); Federal Proposed (FP, FPE, FPT); Federal Candidate (FC), Federal Species of Concern (FSC); State Endangered (SE); State Threatened (ST); Fully Protected (FP); State Rare (SR); State Species of Special Concern (SSC); California Native Plant Society (CNPS)

Regional Federal and State Listed Species with Highest Probability of Occurrence

Special status animal species that were listed in the CNDDB or U.S. Fish and Wildlife Service species list, including Least Bell's Vireo, as well as species identified by the San Fernando Audubon Society as having an historic presence in the area, were further studied to determine the potential impacts that the project may have and are discussed below. The proposed project is currently not expected to affect these special status animal species.

Discussion of Least Bell's Vireo. Least Bell's Vireo (*Vireo bellii pusilla*) is a state and federally listed endangered species. These birds are small, measuring only 4.5 to 5.0 inches long (11.5-12.5 cm). The have short rounded wings, short straight bills and have a faint white eye ring. The feathers of this vireo are mostly gray above and pale below. Least Bell's Vireo's are typically found in the dense deciduous shrubs along riparian habitats as well as in ravines and along forest edges. The range of the least Bell's Vireo is along the southern coastal areas of California as well as parts of Colorado, Indiana and Mexico. This species is threatened by cowbird parasitism, habitat degradation and increases in agricultural land use.

A search of the CNDDB revealed a recent occurrence of this species within the Sepulveda Basin Wildlife Reserve. The observation was made by Scott Harris of the Department of Fish and Game in 2004. During several field surveys of the project area, however, this species was not observed. Additionally, the dense deciduous shrubs favored by this bird is not found within the project footprint. Habitat for this species is found at approximately 500 ft from where the new connector alignment is proposed.

Discussion of Burrowing Owl. The burrowing owl (*Athene cunicularia*) is a California species of special concern. This owl is one of the smallest owls ranging in size from 7 – 10 in (19-25 cm) in height and is brown with spots on back and bars on the front. The burrowing owl is a ground nesting bird of prairie and grassland habitats, typically using the burrows of ground squirrels. Suitable habitat for this bird includes low ground cover and adequate roosting sites. Burrowing owls are found in most states, but over the last several decades has shown a rapid decline in numbers in California. This decline in numbers is due primarily to an increase in urbanization and development, resulting in a the loss of quality habitat.

A search of the CNDDB did not reveal any historic occurrences of this species. However the San Fernando Audubon Society lists the burrowing owl as having a historic presence within the Sepulveda Basin Preserve. A preliminary, non-protocol, survey of the area did reveal suitable habitat at the very southern point of the project area, however the presence of owls could not be determined. Additional protocol surveys will need to be done to definitively determine the presence or absence of burrowing owls within the project site.

Discussion of Bald Eagle. The bald eagle (*Haliaeetus luecocephalus*) is a state listed and federally endangered species. This is a large raptor with a wingspan of approximately 7 feet. Juveniles are a brown and white mottled color throughout and do not obtain their adult plumage until they maturity at six years old. Adults have a dark brown body and wings with a conspicuous white head with some white also on the tail. These birds have a powerful yellow beak and talons, which they use to hunt fish, their primary food source. They typically range through out the United States, but only breed in Aleutians, Alaska, and parts of Canada, northern United States and Florida. Although currently listed as endangered by the Fish and Wildlife Service, population numbers are increasing and may soon be delisted by the Service.

A search of the CNDDB did not reveal any occurrences of this species. However, the San Fernando Audubon Society lists the bald eagle as having a historic presence within the reserve. During surveys of the project area, no sightings of this bird were observed.

Discussion of Swainson's Hawk. The Swainson's hawk (*Buteo swainsoni*) is a state listed, threatened species in California. This bird is a medium sized hawk with relatively long, pointed wings and a square tail. Adult hawks range in weight from 25 to 34 ounces and are generally dark brown with a white throat and body. The breast is accentuated by a dark, bib-like band that runs across it. This hawk primarily ranges throughout California's Central Valley, but migrates through Central America and into Argentina. Because Southern California is within this migratory route, this hawk can occasionally be seen during the migratory season.

A search of the CNDDB did not reveal any occurrences of this species. However, the San Fernando Audubon Society lists the bald eagle as having a historic presence within the reserve. During surveys of the project area, no sightings of this bird were observed.

Environmental Consequences

Project Impacts (Least Bell's Vireo). Due the to lack of suitable habitat found within the project site as well as directly adjacent to the project area, it is not likely that the proposed alternatives would have a direct impact on this species.

A study was recently done by Caltrans to analyze highway noise and anticipated impacts to the Sepulveda Basin Wildlife. This study showed that there would be a temporary, but substantial increase in noise levels during the construction phase of this project associated with pile driving and other high noise signature equipment, but a small increase overall from an increase in traffic noise, post construction. Using information from this study and applying the interim guidelines developed in a recently published report on the effects of highway noise on birds, it is anticipated that there would be little to no effect, direct or indirect, on any least Bell's vireo associated with this project.

Cumulative Effects (Least Bell's Vireo). Because direct impacts to this species are anticipated to be very minimal or none at all, there will be no cumulative effects.

Project Impacts (Burrowing Owl). The potential burrowing owl habitat is located directly in the path of two of the proposed alternatives at the southern most corner of the project area. Either of these alternatives, if chosen, may impact this habitat.

Cumulative Effects (Burrowing Owl). Although there may be potential impacts to the habitat of this species, mitigation can be done to minimize any cumulative impacts.

Project Impacts (Bald Eagle). Due the to lack of suitable habitat, it is not likely that the proposed alternatives would have a direct impact on this species.

Cumulative Effect (Bald Eagle). Because no impacts to this species are anticipated, there will be no cumulative effects.

Project Impact (Swainson's Hawk). Due the to lack of suitable habitat, it is not likely that the proposed alternatives would have a direct impact on this species.

Cumulative Effects (Swainson's Hawk). Because no impacts to this species are anticipated, there will be no cumulative effects.

Avoidance, Minimization, and/or Mitigation Measures

Avoidance and Minimization Efforts (Least Bell's Vireo). Standard avoidance and minimization practices will be followed as outlined in the Migratory Bird Treaty Act.

Compensatory Mitigation (Least Bell's Vireo). Presence of least Bell's vireo was not determined within the project site, therefore compensatory mitigation will not be required. However, if least Bell's vireos are found prior to construction, mitigation will be required according to Department of Fish and Game guidelines.

Avoidance and Minimization Efforts (Burrowing Owl). If burrowing owls are determined to be present within the project area, passive translocation will be employed during the non-breeding season to encourage nesting in an area away from the project location. This passive translocation technique will be used in accordance to the guidelines outlined by the Department of Fish and Game.

Compensatory Mitigation (Burrowing Owl). Presence of burrowing owl was not determined within the project site, therefore compensatory mitigation will not be required. However, if owls are found prior to construction, mitigation will be required according to Department of Fish and Game guidelines.

Avoidance and Minimization Efforts (Bald Eagle). Standard avoidance and minimization practices will be followed as outlined in the Migratory Bird Treaty Act.

Compensatory Mitigation (Bald Eagle). Because no impacts to this species are anticipated, compensatory mitigation is not required.

Avoidance and Minimization (Swainson's Hawk). Standard avoidance and minimization practices will be followed as outlined in the Migratory Bird Treaty Act.

Compensatory Mitigation (Swainson's Hawk). Because no impacts to this species are anticipated, compensatory mitigation is not required.

2.3.6 INVASIVE SPECIES

Regulatory Setting. On February 3, 1999, President Clinton signed Executive Order 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as "any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health." Federal Highway Administration guidance issued August 10, 1999 directs the use of the state's noxious weed list to define the invasive plants that must be considered as part of the NEPA analysis for a proposed project.

Avoidance, Minimization, and/or Mitigation Measures. In compliance with the Executive Order on Invasive Species, E.O. 13112, and subsequent guidance from the Federal Highway Administration, the landscaping and erosion control included in the project will not use species listed as noxious weeds. In areas of particular sensitivity, extra precautions will be taken if invasive species are found in or adjacent to the construction areas. These include the inspection and cleaning of construction equipment and eradication strategies to be implemented should an invasion occur.

2.4 CONSTRUCTION IMPACTS

Traffic Impacts Related to Construction Activities. It is expected that detailed construction staging plans will be completed for the project, and that a detailed analysis of how traffic will be impacted during the construction phase of the various build alternatives will be provided by Caltrans once these plans are available. The purpose of this section is to provide an overview or discussion of the expected traffic impacts related to construction activities. Similar projects have been constructed along Interstate 405 and other freeways within the Los Angeles metropolitan area in the recent past, and it is believed that this project will have similar impacts.

Construction of the planned improvements will probably require the narrowing of traffic lanes and a loss of shoulder areas for a prolonged period, thereby reducing the effective capacity of the freeway segments and/or ramps where construction is taking place. This can result in overall traffic delay increases by as much as 10 percent or more during peak traffic periods. The impact on traffic delays is particularly significant when construction starts, due to spectator slowing and the need for the average driver to adjust to changes in the roadway. However, within one-to-two weeks after construction starts, regular commuters usually become accustomed to driving through a construction zone and the amount of traffic delays caused by construction decreases accordingly. The following table details preliminary lane closure plans during construction by alternative.

Table 42. Preliminary Lane Closure Plans During Construction

Alternative/Stage	Duration	Segment	Lane Number	Work Description
Alternative 1				
Stage 1	One weekend	Northbound US-101	6	Tie-in southbound I-405 connector to Northbound US-101.
Stage 2A	3-4 months	Southbound I-405	4	Tie-in southbound I-405 to US-101 northbound/southbound connectors.
Stage 2B	1-2 months	Southbound I-405 on-ramp at Burbank Boulevard	On-ramp	Full on-ramp closure to tie-in southbound I-405 to US-101 connector and tie-in with the re-aligned on-ramp.
Stage 2C	One Weekend	Southbound I-405 to US-101 Connector	Connector	Tie-in southbound I-405 connector to existing southbound US-101 connector.
Stage 3A	1-2 months	Southbound I-405 on-ramp at Burbank Boulevard	On-ramp	Full on-ramp closure - tie-in to southbound I-405.
Stage 3B	One weekend	Southbound I-405	3	Southbound I-405 onramp tie-in to southbound I-405.
Alternative 2				
Stage 1A	One weekend	Northbound US-101	6	Tie-in southbound I-405 connector to northbound US-101.
Stage 1B	One weekend	Southbound I-405	4	Tie-in southbound I-405 on-ramp at Burbank Boulevard to southbound I-405.
Stage 2	Six months	Southbound & Northbound I-405 HOV lanes	HOV	Closure of southbound I-405 HOV and northbound I-405 HOV lanes to reconstruct bridge columns (eastbound part of the elevated structure).
Stage 3	3-4 months	Northbound I-405 off-ramp at Burbank Boulevard	Off-ramp	Reconstruct off-ramp for re-grading of Burbank Boulevard between Sepulveda Boulevard and Burbank Boulevard overcrossing/bridge.
Stage 4	Six months	Southbound & Northbound I-405 HOV lanes	HOV	Closure of southbound I-405 HOV and northbound I-405 HOV lanes to reconstruct bridge columns (eastbound part of the elevated structure).
Stage 5	3-4 months	Northbound I-405 on-ramp at Burbank Boulevard	On-ramp	Reconstruct on-ramp for re-grading of Burbank Boulevard between Sepulveda Boulevard and Burbank Boulevard overcrossing/bridge.
Stage 6	Two weekends	Southbound I-405	4	Widen southbound I-405 to accommodate the re-aligned southbound I-405 on-ramp at Burbank Boulevard.
Stage 7	Two weekends	Southbound I-405	4	Tie-in southbound I-405 to northbound/southbound US-101 connectors.

Alternative 3				
Stage 1A	One weekend	Northbound US-101	6	Tie-in southbound I-405 connector to northbound US-101.
Stage 1B	One weekend	Southbound I-405	4	Tie-in southbound I-405 off-ramp at Burbank Boulevard to southbound I-405.
Stage 2	Two weekends	Southbound I-405	4	Tie-in southbound I-405 on-ramp at Burbank Boulevard to southbound I-405.
Stage 3	One weekend	Southbound I-405	4	Tie-in southbound I-405 to northbound/southbound US-101 connectors.

Water Quality Impacts Related to Construction Activities. Pursuant to the Clean Water Act (Section 402), Caltrans has obtained from the SWRCB a NPDES permit that regulates storm water discharges from Caltrans facilities. The permit requires Caltrans to maintain and implement an effective Storm Water Management Plan (SWMP) that identifies and describes the BMPs used to reduce or eliminate the storm water runoff discharge of pollutants to waters of drainage conveyances and waterways. The SWMP is the framework for developing and implementing guidance to meet permit requirements for Caltrans' storm water discharges.

With respect to storm water quality, avoidance and minimization are accomplished by implementation of approved BMPs, which are generally broken down into four categories: Pollution Prevention, Treatment, Construction, and Maintenance BMPs. Certain projects may require installation and maintenance of permanent controls to treat storm water. Selection and design of permanent project BMPs is primarily refined in the next phase of the project: the Project Specifications and Estimates phase.

During construction activities, Caltrans has a comprehensive program for preventing water pollution via the preparation and implementation of the aforementioned SWPPP and WPCP. Caltrans has also developed and obtained the SWRCB approval of numerous BMPs for preventing water pollution during construction. Caltrans construction BMPs, SWPPP, and WPCP also incorporate the requirements of the SWRCB NPDES permit. This is all implemented jointly by both Caltrans, and the contractor hired to construct the project, prior to construction.

Potential for Exposure of Workers to Geologic/Soils Hazards During Construction. There are currently no special considerations of provisions recommended as a result of this project and the geologic conditions in the area, although, workers are subject to implementation and practice of general safety practices within constructions zones.

Potential for Detrimental Hazardous Waste Impacts During Construction Activities. The purpose of the ISA is to identify, to the extent feasible, hazardous and potential hazardous waste problems within and next to the right-of-way, and proposed project area. Based on the results of historical research, review of environmental databases, regulatory agency inquiries, and site reconnaissance, properties were evaluated and classified as High, Moderate, or Low with regard to the potential for detrimental impacts during construction activities for this project. Of the (84) properties that were evaluated, the following (5) properties of High or Moderate risk emerged, as presented in the following table.

Table 43. Identified Properties of Concern

Property Name/Address	Description of Site Operations/Primary Reasons for Risk Classification	Data Source	Risk Classification
Segment A (US-101)			
Fashion Square Car Wash/ 4625 Woodman Avenue (approximately 0.10 mile SE of the US-101 freeway	Car Wash, with underground storage tanks - release to groundwater; status of "remedial action"	Reconnaissance, Database	Moderate
Segment D (I-405)			
Chevron-Texaco Van Nuys Terminal/15359 Oxnard Street/approximately 0.10 mile NE of the I-405 freeway	Petroleum bulk station, this facility was listed on the Leaking Underground Storage Tank (LUST), Resource Conservation Databases, as well as the Recovery Act Generator (RCRAGN) database maintained by the United State Environmental Protection Agency and the SPILLS database, maintained by the California Regional Water Quality Control Board	Reconnaissance, Database, and Historical Documentation	High
Chevron/5600 Sepulveda Boulevard/approximately 0.10 mile NE of I-405 freeway	Gasoline station that has experienced an unauthorized release of gasoline to the soil only, this facility is listed on the LUST database	Reconnaissance, Database	Moderate
Shell Service Station/5556 Sepulveda Boulevard/approximately 0.10 mile southeast from the I-405	Gasoline station that has experienced an unauthorized release of gasoline to the soil only, this facility is listed on the LUST database	Reconnaissance, Database	Moderate
Segment E (I-405)			
Unocal 76 Station/15410 Ventura Boulevard/approximately 0.10 mile NW from the I-405	Gasoline station that has experienced an unauthorized release of gasoline and is currently listed on the LUST database as undergoing "remedial action"	Reconnaissance, Database	Moderate

Air Quality and Construction-Related Emissions. Construction activities associated with the proposed project would be temporary and would last the duration of Project construction. The discussion below has concluded that Project construction would not create adverse pollutant emissions for any of the alternatives under consideration. Short-term impacts to air quality would occur during minor grading/trenching, new pavement construction and the re-striping phase. Additional sources of construction related emissions include:

- Exhaust emissions and potential odors from construction equipment used on the construction site as well as the vehicles used to transport materials to and from the site; and
- Exhaust emissions from the motor vehicles of the construction crew.

Project construction would result in temporary emissions CO, NO_x, ROG, and PM_{10}. Stationary or mobile powered on-site construction equipment includes trucks, tractors, signal boards, excavators, backhoes, concrete saws, crushing and/or processing equipment, graders, trenchers, pavers and other paving equipment. The amount of worker trips to the site is unknown at this time. However, given the high volume of traffic in this area, the addition of worker trips will be inconsequential. Based on the insignificant relative amount of daily work trips required for Project construction, construction worker trips are not anticipated to significantly contribute to or affect traffic flow on local roadways and are therefore not considered significant. During the demolition phase some asphalt concrete (AC) pavement and curbs and gutters would have to be removed.

In order to further minimize construction-related emissions, all construction vehicles and construction equipment would be required to be equipped with the state-mandated emission control devices pursuant to state emission regulations and standard construction practices. After construction of the Project is complete, all construction-related impacts would cease, thus resulting in a less than significant impact. Short-term construction PM_{10} emissions would be further reduced with the implementation of required dust suppression measures outlined within SCAQMD Rule 403 presented in Section 5.5. Note that Caltrans Standard Specifications for construction (Section 10 and 18 [Dust Control] and Section 39-3.06 [Asphalt Concrete Plants]) must also be adhered to. Therefore, Project construction is not anticipated to violate State or Federal air quality standards or contribute to the existing air quality violation in the air basin.

Section 93.122(d)(2) of the EPA Transportation Conformity Rule requires that in PM_{10} non-attainment and maintenance areas (for which the SIPs identify construction-related fugitive dust as a contributor to the area problem), the RTIP should conduct the construction-related fugitive PM_{10} emission analysis. The 2003 PM_{10} SIP/AQMP emissions budgets for SCAB include the construction and unpaved-road emissions. The 2006 RTIP PM_{10} regional emissions analysis includes the construction and unpaved road emissions for conformity finding.

Mitigation of PM_{10} During Construction. The approved 2003 Particulate Matter SIP contains provisions calling for mitigation of PM_{10} emissions during construction. Pursuant § 93.117, the Department, the project sponsor, is required to stipulate to include, in its final plans, specification, and estimates, control measures that will limit the emission of PM_{10} during construction. Such control plans must be contained in an applicable SIP.

The PM_{10} emissions is a composite of geologic and aerosol variety. The prime concern during construction is to mitigate geologic PM_{10} that occurs from earth movement such as grading. The agency who sponsored the PM_{10} SIP is SCAQMD with concurrence from the California Air Resource Board. SCAQMD has established Rule 403 that addresses the mitigation PM_{10} by reducing the ambient entrainment of fugitive dust and Rule 402 which requires that air pollutant emissions not be a nuisance off-site. Fugitive dust consists of solid particulate matters that becomes airborne due to human activity (i.e. construction) and is a subset of total suspended particulates. Likewise, PM_{10} is a subset of total suspended particulates. The Handbook states that 50% of total particulate matter suspended comprise of PM_{10}. Hence, in mitigating for fugitive dust, emissions of geologic PM_{10} are reduced.

During construction of the proposed project, the property owner/development and its contractors shall be required to comply with regional rules, which shall assist in reducing short-term air pollutant emissions. SCAQMD Rule 402 requires that air pollutant emissions not be a nuisance off-site. SCAQMD Rule 403 requires that fugitive dust be controlled with the best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source . Two options are presented in Rule 403: monitoring of particulate concentrations or active control. Monitoring involves a sampling network around the project with no additional control measures unless specified concentrations are exceeded. The active control option does not require any monitoring, but requires that a list of measures be implemented starting with the first day of construction.

Rule 403 requires that “No person conducting active operations without utilizing the applicable best available control measures included in Table 1 of this Rule to minimize Fugitive dust emissions from each fugitive dust source type within the active operation.” The measures from Table 1 of Rule 403 are presented in **Error! Reference source not found.** of this report. The applicable measures presented in Table 1 are required to be implemented by Rule 403.

Rule 403 requires that “Large Projects” implement additional measures. A Large Project is defined as “any active operations on property which contains 50 or more acres of disturbed surface area; or any earth-moving operation with a daily earth-moving or throughput volume of 3,850 cubic meters (5,000 cubic yards) or more three times during the most recent 365 day period. Depending on the scheduling of grading of the project may be considered a Large Project under Rule 403. Therefore, the project will be required to implement the applicable actions specified in Table 2 of the Rule. Table 2 from Rule 403 is

presented in **Error! Reference source not found.** of this report. As a Large Operation, the project would also be required to:

- Submit a fully executed Large Operation Notification (SCAQMD Form 403N) to the SCAQMD Executive Officer within 7 days of qualifying as a large operation;
- Include, as part of the notification, the name(s), address(es), and phone number(s) of the person(s) responsible for the submittal, and a description of the operation(s), including a map depicting the location of the site;
- Maintain daily records to document the specific dust control actions taken, maintain such records for a period of not less than three years; and make such records available to the Executive Officer upon request.
- Install and maintain project signage with project contact signage that meets the minimum standards of the Rule 403 Implementation Handbook, prior to initiating any earthmoving activities.
- Identify a dust control supervisor that is employed by or contracted with the property owner/developer, is on the site or available on-site within 30 minutes during working hours, has the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance with all Rule requirements, and has completed the AQMD Fugitive Dust Control Class and has been issued a valid Certificate of Completion for the class.
- Notify the SCAQMD Executive Officer in writing within 30 days after the site no longer qualifies as a large operation.

Rule 403 also requires that the construction activities "shall not cause or allow PM_{10} levels exceed 50 micrograms per cubic meter when determined by simultaneous sampling, as the difference between upwind and down wind sample." Large Projects that cannot meet this performance standard are required to implement the applicable actions specified in Table 3 of Rule 403. Table 3 from Rule 403 is presented in **Error! Reference source not found.** of this report. Rather than perform monitoring to determine conformance with the performance standard, which will not reduce PM_{10} emissions, the project shall implement all applicable measures presented in Rule 403 Table 3 regardless of conformance with the Rule 403 performance standard. This potentially results in a higher reduction of particulate emissions than if these measures were implemented only after being determined to be required by monitoring.

Further, Rule 403 requires that that the project shall not "allow track-out to extend 25 feet or more in cumulative length from the point of origin from an active operation." All track-out from an active operation is required to be removed at the conclusion of each workday or evening shift. Any active operation with a disturbed surface area of five or more acres or with a daily import or export of 100 cubic yards or more of bulk materials must utilize at least one of the measures listed in **Error! Reference source not found.** at each vehicle egress from the site to a paved public road. All measures presented in **Error! Reference source not found.** through **Error! Reference source not found.** applicable to the construction activities associated with the project should be implemented to the greatest extent feasible.

Noise Impacts Related to Construction. During the construction phases of the project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Construction noise is regulated by Caltrans standard specifications, Section 7-1.01I, Sound Control Requirements (7). These requirements state that noise levels generated during construction shall comply with applicable local, state, and federal regulations and that all equipment shall be fitted with adequate mufflers according to the manufacturers' specifications.

The table below summarizes typical noise levels produced by construction equipment commonly used on roadway construction projects. As indicated, equipment involved in construction is expected to generate noise levels ranging from 70 to 90 dBA at a distance of 15 meters (50 feet). Noise produced by construction equipment would be reduced over distance at a rate of about 6 dBA per doubling of distance. No adverse noise impacts from construction are anticipated because construction would be conducted in accordance with Caltrans standard specifications and would be short-term, intermittent, and dominated by local traffic noise. Implementing the following measures would minimize temporary construction noise impacts:

- All equipment shall have sound-control devices no less effective than those provided on the original equipment. No equipment shall have an unmuffled exhaust.
- As directed by the Engineer, the contractor shall implement appropriate additional noise mitigation measures including, but not limited to, changing the location of stationary construction equipment, turning off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, or installing acoustic barriers around stationary construction noise sources.

Table 44. Construction Equipment Noise

Equipment	Maximum Noise Level, 15 m (50 ft) distance
Scrapers	89 dBA
Bulldozers	85 dBA
Heavy trucks	88 dBA
Backhoes	80 dBA
Pneumatic tools	85 dBA
Concrete pump	82 dBA

Source: Federal Transit Administration, 1995

Maintenance of Access During Construction. There will be short-term (temporary) access problems (pedestrian and vehicular) which will result from construction of the proposed project. Thus, these construction impacts are not considered permanent, and are therefore, below the level of significance as defined by CEQA. Funds have been allocated in order to provide a Traffic Management Plan (TMP), which will be developed and incorporated as part of the project design and prior to the onset of construction to minimize disruption to the existing traffic flow conditions.

A TMP typically serves to notify the motoring public and affected parties of construction dates, activities, and alternate routes (if proposed as part of a project), in an effort to reduce the volume of traffic through the area. The TMP may also provide motorists with alternate routes around any congestion-related delays. The TMP will consist of the following elements to minimize construction related traffic and access disruption:

1) Temporary traffic controls and signing shall be utilized
2) The implementation of traffic control procedures will be in conformance with the Caltrans Traffic Manual
3) A minimum of two through travel lanes in each direction will be provided
4) Public information center
5) Additional project signing
6) Advertising in local and regional newspapers
7) Staff attendance at local neighborhood and business association meetings to inform residents and merchants/landowners of project progress

Any bus stops located at in the vicinity of the interchange will have to be relocated temporarily during construction since pedestrians will not be allowed in construction areas. The Department will order the resident construction engineer to post notifications prior to each bus stop relocation. The Department will coordinate its efforts with the Metropolitan Transit Authority (MTA), Los Angeles Department of Transportation (LADOT), and all other appropriate transit agencies with operations in the area. A pedestrian traffic detouring plan shall be developed and implemented in order to ensure the safety of pedestrians, as well as to minimize pedestrian traffic disruption.

Additional Public Safety Measures During Construction. Whenever the Contractor's operations create a condition hazardous to traffic or to the public, the Contractor shall furnish, erect, and maintain fences, temporary railing, barricades, lights, signs, and other devices, and take such other protective measures that are necessary to prevent accidents or damage or injury to the public.

- The contractor shall also furnish flaggers as are necessary to give adequate warning to traffic or to the public of any dangerous conditions to be encountered.
- Construction equipment shall enter and leave the highway via existing ramps and crossovers and shall move in the direction of public traffic. All movements of workmen and construction equipment on or across lanes open to public traffic shall be performed in a manner that will not endanger public traffic.
- Pedestrian openings through falsework shall be paved or provided with full width continuous wood walks and shall be kept clear. Pedestrians shall be protected from falling objects and curing water for concrete. All pedestrian openings through falsework shall be illuminated.
- No material or equipment shall be stored where it will interfere with the free and safe passage of public traffic, and at the end of each day's work and at other times when construction operations are suspended for any reason, the Contractor shall remove all equipment and other obstructions from that portion of the roadway open for use by public traffic.

2.5 CUMULATIVE IMPACTS

Regulatory Setting. Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of this project. A cumulative effect assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor, but collectively substantial impacts taking place over a period of time.

Cumulative impacts to resources in the project area may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive types of agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.

CEQA Guidelines, Section 15130, describes when a cumulative impact analysis is warranted and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts, under CEQA, can be found in Section 15355 of the CEQA Guidelines. A definition of cumulative impacts, under NEPA, can be found in 40 CFR, Section 1508.7 of the CEQ Regulations.

Identified Cumulative Impacts. Currently, the cumulative impacts are limited to TEMPORARY construction-related activities, such as noise, dust, and increased traffic congestion. Caltrans would ensure that this project is not constructed simultaneously with any other Caltrans project on the I-405 or the US-101 freeways. Caltrans would also ensure that the proposed project is not constructed simultaneously with any other City of Los Angeles or County of Los Angeles roadway improvement projects in the vicinity of the project area. Other Caltrans improvement projects on Interstate 405 are listed below, complete with construction dates, which may be preliminary, and subject to change at any time.

Other Caltrans Improvement Projects on Interstate-405

EA 19590 | Southbound Interstate 405 Carpool Lane
Mile Marker: 29.2/32.1
From I-10/I-405 Interchange to Waterford Street
Add auxiliary lane, add carpool lane
Construction: 4/2005-9/2008

EA 1667U | Southbound Interstate 405 Carpool Lane
Mile Marker: 31.9/39.7
From Waterford Street to I-405/US-101 Interchange
Construct southbound carpool lane
Construction completed

EA 19100 | Northbound Interstate 405 Auxiliary Lane
Mile Marker 37.0/39.0
Add auxiliary lane from Mulholland Drive
Construction completed

EA 20120 | Northbound Interstate 405 Gap Closure
Mile Marker : 38.7/39.4
Carpool gap closure with structure
Construction: 3/2005-8/2008

EA 19130 | Northbound Interstate 405 to Southbound US Route 101 Widening
Mile Marker: 39.0/39.4
Widen northbound I-405 to southbound US-101 connector
Construction completed

EA 19962 | Northbound Interstate 405 Carpool Lane
Mile Marker: 38.8/40.1
Construct carpool lane from Greenleaf to Burbank Boulevard
Construction completed

EA 12030 | Northbound Interstate 405 Carpool Lane
Mile Marker: 17.14
Construct carpool lane from National Boulevard to Greenleaf Street
Construction: 12/2008-4/2013

EA 1178U | Southbound & Northbound Interstate 405 Carpool Lane
Mile Marker: 25.9/29.5
Construct carpool lane from Route 90 to Interstate 10
Construction: 10/2004-3/2010

Climate Change

Regulatory Setting. While climate change has been a concern since at least 1988, as evidenced by the establishment of the United Nations and World Meteorological Organization's Intergovernmental Panel on Climate Change (IPCC), the efforts devoted to greenhouse gas (GHG) emissions reduction and climate change research and policy have increased dramatically in recent years. In 2002, with the passage of Assembly Bill 1493 (AB 1493), California launched an innovative and pro-active approach to dealing with GHG emissions and climate change at the state level. AB 1493 requires the Air Resources Board (ARB) to develop and implement regulations to reduce automobile and light truck GHG emissions; these regulations will apply to automobiles and light trucks beginning with the 2009 model year.

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California's GHG emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the 2020 and 3) 80% below the 1990 levels by the year 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that ARB create a plan, which includes market mechanisms, and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." Executive Order S-20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the state's Climate Action Team.

Climate change and GHG reduction is also a concern at the federal level; however, at this time, no legislation or regulations have been enacted specifically addressing GHG emissions reductions and climate change.

The Project Within the Context of Climate Change. According to a recent white paper by the Association of Environmental Professionals , "an individual project does not generate enough greenhouse gas emissions to significantly influence global climate change. Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of greenhouse gases.

The Department and its parent agency, the Business, Transportation, and Housing Agency, have taken an active role in addressing GHG emission reduction and climate change. Recognizing that 98 percent of California's GHG emissions are from the burning of fossil fuels and 40 percent of all human made GHG emissions are from transportation, the Department has created and is implementing the Climate Action Program at Caltrans (December 2006).

One of the main strategies in the Department's Climate Action Program to reduce GHG emissions is to make California's transportation system more efficient. The highest levels of carbon dioxide from mobile sources, such as automobiles, occur at stop-and-go speeds (0-25 miles per hour) and speeds over 55 mph. Relieving congestion by enhancing operations and improving travel times in high congestion travel corridors will lead to an overall reduction in GHG emissions.

The Department recognizes the concern that carbon dioxide emissions raise for climate change. However, modeling and gauging the impacts associated with an increase in GHG emissions levels, including carbon dioxide, at the project level is not currently possible. No federal, state or regional regulatory agency has provided methodology or criteria for GHG emission and climate change impact analysis. Therefore, the Department is unable to provide a scientific or regulatory based conclusion regarding whether the project's contribution to climate change is cumulatively considerable.

The Department continues to be actively involved on the Governor's Climate Action Team as ARB works to implement AB 1493 and AB 32. As part of the Climate Action Program at Caltrans (December 2006), the Department is supporting efforts to reduce vehicle miles traveled by planning and implementing smart land use strategies: job/housing proximity, developing transit-oriented communities, and high density housing along transit corridors. The Department is working closely with local jurisdictions on planning activities; however, the Department does not have local land use planning authority. The Department is also supporting efforts to improve the energy efficiency of the transportation sector by increasing vehicle fuel economy in new cars, light and heavy-duty trucks. However it is important to note that the control of the fuel economy standards is held by the United States Environmental Protection Agency and ARB. Lastly, the use of alternative fuels is also being considered; the Department is participating in funding for alternative fuel research at the University of California Davis.

CHAPTER 3 | COMMENTS AND COORDINATION

Early and continuing coordination with the general public and appropriate public agencies is an essential part of the environmental process to determine the scope of environmental documentation, the level of analysis, potential impacts and mitigation measures and related environmental requirements. Agency consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including: project development team meetings, interagency coordination meetings, Scoping meetings, etc. This chapter summarizes the results of the Department's efforts to fully identify, address and resolve project-related issues through early and continuing coordination.

Scoping

What is Scoping? Scoping is a process designed to examine a proposed project early in the Environmental Impact Statement / Environmental Impact Report (EIS/EIR) analysis and review process. Scoping is intended to identify the range of issues raised by the proposed project and to outline feasible alternatives or mitigation measures to avoid potentially significant environmental effects. The Scoping process inherently stresses EARLY consultation with local agencies, responsible agencies, review agencies, trustee agencies, cooperating agencies, tribal governments, elected officials, interested/affected individuals, any other stakeholders, and any federal agency whose approval or funding of the proposed project will be required for completion of the project.

Scoping is considered an effective way to bring together and resolve the concerns of other agencies and individuals who may potentially be affected by the proposed project, as well as other interested persons, such as the general public, who might not be in accord with the action on environmental grounds.

Scoping Procedures for the Proposed Project. At this time, the environmental document for this project is an EA/IS, not an EIS/EIR. The California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) regulations do not require an EA/IS to undergo formal Scoping procedures. However, consistent with Caltrans' early involvement philosophy, and in light of the project's vital importance, scoping procedures were undertaken.

The hope was to ensure that the concerns of ALL stakeholders were known early in the process and incorporated into the environmental analyses and CEQA/NEPA/Section 4(f) document. During the Scoping period, the Department solicited comments and input from all stakeholders and attempted to ensure their early involvement in the project development and environmental process.

Scoping was conducted from May 22, 2006 to June 30, 2006. Public Scoping Notification ads were placed in the following newspapers on the following dates:

Los Angeles Times: June 1, 2006
Daily News: June 1, 2006
La Opinion: June 1, 2006
Studio City Sun: June 8, 2006
Sherman Oaks Sun: June 8, 2006
Note: Publication dates varied because the Studio City Sun and the Sherman Oaks Sun do not publish daily.

Public Scoping Notification letters were mailed (postmarked May 30, 2006) to every individual, official, business, and agency listed in the project mailing list. To view the project mailing list, please refer to the Appendices section of this document. In addition to the Public Scoping Notification Letters, residents in a half-mile radius of the proposed project area were also mailed a Scoping Notification newsletter (postmarked May 30, 2006). All told, Public Scoping Notification letters and newsletters were sent to

approximately 1,126 property owners, residents, local businesses, pertinent public agencies and federal, state, and local elected officials.

Consistent with the aforementioned goals of Scoping, the aforementioned Scoping notification newspaper ad, letter, and newsletter solicited project participation from all stakeholders and encouraged the interested public to submit written comments, questions, and concerns to:

Mr. Ronald Kosinski
Deputy District Director
Division of Environmental Planning
California Department of Transportation
100 South Main Street, MS-16A
Los Angeles, CA 90012

The Scoping Notification newspaper ad, letter, and newsletter also invited the public to the Public Scoping Meeting held on Wednesday, June 14, 2006, from 6:00 to 8:00 PM, at Valley Beth Shalom located at 15739 Ventura Boulevard, in the community of Encino, in the City of Los Angeles.

Please refer to the Appendices section of this document to view the said Scoping Notification newspaper ads, letters, and flyers, as well as, for copies of the formal written comments received from the public during the Scoping period. The Department's responses to those comments will be provided in the Appendices section of the final draft of this environmental document (after the public comment period and public hearing).

The following table provides a brief summary of Scoping Comments:

Table 45. Summary of Scoping Comments

SOUTHBOUND I-405 TO US-101 CONNECTORS IMPROVEMENT PROJECT (EA 199610)
ENVIRONMENTAL SCOPING: JUNE 1 - JUNE 30, 2006

NAME	NO-BUILD ALTERNATIVE	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	SUMMARY OF WRITTEN COMMENTS
ELECTED OFFICIALS						
Hon. Dennis P. Zine, LA City Council - Third District	No Specific Comment	No Specific Comment	No Specific Comment	No Specific Comment	Concerned	Supports right-of-way acquisition when absolutely necessary. Requests that any residential right-of-way acquisition is done in a very narrowly confined setting such that only those properties which are ABSOLUTELY
Hon. Sheila James Kuehl, State Senator - 23rd District	Opposed	Supports Conditionally	Opposed	Opposed	Opposed	Strongly supports the proposal to upgrade the connector. Wants Caltrans to further develop Alternative 1 and to find a way for Alternative 1 NOT lose access to the US-101 from Burbank Blvd. Opposed to any encroachment upon the wildlife refuge or the loss of homes (i.e. Alternatives 2, 3, 4,
Hon. Paul Koretz, State Assembly - 42nd District	Opposed	Supports Conditionally	Opposed	Opposed	Opposed	Wants Caltrans to further develop Alternative 1 and to find a way for Alternative 1 NOT lose access to the US-101 from Burbank Blvd.
Hon. Llyod E. Levine, State Assembly - 40th District	Opposed	Supports Conditionally	Opposed	Opposed	Opposed	Wants Caltrans to further develop Alternative 1 and to find a way for Alternative 1 NOT lose access to the US-101 from Burbank Blvd. Wants to schedule a meeting with Caltrans in order to be fully briefed on the project. Once Alternative 1 is fully developed (i.e. no loss of access to US-101 from Burbank Blvd., he would ask his district to suppot it).
Hon.Howard L. Berman, US Member of Congress - 28th District	Opposed	No Specific Comment	Opposed	Opposed	Opposed	Supports "taking steps to alleviate traffic in the Valley", but not "at the expense of our environment nor our homeowners." Requests that Caltrans listen carefully to the community input, and not take actions that would destroy the "critically important" Sepulveda Basin Wildlife Refuge.
ENVIRONMENTAL ORGANIZATIONS						
Sepulveda Basin Wildlife Areas Steering Committee	No Specific Comment	No Specific Comment	Opposed	Opposed	No Specific Comment	Opposed to any encroachment upon the Sepulveda Basin Wildlife Reserve.
Los Angeles Audubon Society	Supports	Supports	Opposed	Opposed	No Specific Comment	Opposed to any encroachment upon the Sepulveda Basin Wildlife Reserve.
San Fernando Valley Audubon Society	Supports	Supports	Opposed	Opposed	Opposed	Opposed to any encroachment upon the Sepulveda Basin Wildlife Reserve.
Resource Conservation District of the Santa Monica Mountains	Supports	Supports	Opposed	Opposed	No Specific Comment	Opposed to any encroachment upon the Sepulveda Basin Wildlife Reserve.
California Native Plant Society	No Specific Comment	No Specific Comment	Opposed	Opposed	No Specific Comment	Opposed to any encroachment upon the Sepulveda Basin Wildlife Reserve.
COMMUNITY BASED ORGANIZATIONS						
Homeowners of Encino	Opposes	Supports	Supports	Supports	Opposed	Supports "limited system fixes" with "minimal negative impacts on residents."
Sherman Oaks Homeowners Association	Opposes	No Specific Comment	No Specific Comment	No Specific Comment	Opposed	Strongly opposes Alternative 4, encourages further study of the other four options.
Sherman Oaks Neighborhood Council - Parking, Traffic and Transportation Committee	No Specific Comment	No Specific Comment	No Specific Comment	No Specific Comment	No Specific Comment	Add to the e-mail list.
RESOURCE AGENCIES						
US Army Corps of Engineers	No Specific Comment	Concerned	Concerned	Concerned	Concerned	Indicated concerns regarding "problems associated with freeway construction and their use in sensitive areas," and potential adverse impacts to flood control, public recreation, and natural resources conservation.
State of California, Department of Fish and Game	No Specific Comment	No Specific Comment	Concerned	Concerned	No Specific Comment	Informs that funds from the Wildlife Conservation Board (WCB) were used for improvements to the Wildlife Refuge. Concerned about impacts to the refuge.
STATE/COUNTY/CITY GOVERNMENTS						
City of Los Angeles, Department of Transportation	Opposes	Supports Conditionally	Supports Conditionally	Supports Conditionally	Supports Conditionally	Fully supports the project. Describes suggested improvements to the proposed alternatives.
County of Los Angeles, Department of Parks and Recreation						
County of Los Angeles, Department of Public Works						
Southern California Association of Governments (SCAG)						
INTERESTED INDIVIDUALS						
Written Comments Submitted at the Meeting	Supports=5 Opposes=0	Supports=4 Opposes=0	Supports=1 Opposes=3	Supports=3 Opposes=3	Supports=0 Opposes=10	
Verbal Comments Submitted to the Court Reporter at the Meeting	Supports=2 Opposes=4	Supports=1 Opposes=1	Supports=2 Opposes=4	Supports=3 Opposes=4	Supports=2 Opposes=5	
Written Comments Submitted by Mail or Email	Supports=56 Opposes=0	Supports=55 Opposes=0	Supports=1 Opposes=101	Supports=2 Opposes=101	Supports=1 Opposes=25	
Interested Individuals Totals	**Supports=63 Opposes=4**	**Supports=60 Opposes=1**	**Supports=4 Opposes=108**	**Supports=8 Opposes=108**	**Supports=3 Opposes=40**	

Consultation and Coordination

PID Phase of the Project. The Project Initiation Document (PID) phase of the project is the time during which the project's feasibility, schedule, cost, impacts, and design alternatives are studied at a preliminary and a conceptual level. Coordination with the project's primary stakeholders begins during this phase. In this case, it was at this time that Caltrans engineers first began coordination with the US Army Corps of Engineers.

Value Analysis Phase of the Project. Value Analysis (VA) or Value Engineering (VE) is a function-oriented, structured, multi-disciplinary team approach to solving problems or identifying improvements. The goal of any VA Study is to: Improve value by sustaining or improving performance attributes (of the project, product, and/or service being studied) while at the same time reducing overall cost (including lifecycle operations and maintenance expenses).

During this phase of the project, a multi-agency, multi-disciplinary team was assembled to study the existing alternatives alongside the Department, as well as to propose new design alternatives, and if necessary, drop existing design alternatives. This phase was conducted during: August 5, 6, 7 of 2003 and August 19, 20, 21 of 2003.

The stakeholders whom were invited and attended were representatives of the U.S. Army Corps of Engineers and the City of Los Angeles. Below is the Value Analysis attendance grid.

Table 46. Value Analysis Attendance Grid

MEETING ATTENDEES *Southbound I-405 Connectors to Northbound US 101*									Caltrans		
2003 August						NAME	ORGANIZATION	POSITION	TELEPHONE		FAX
5	6	7	19	20	21				E-MAIL		
X				X	X	Edward Andraos	Caltrans	Senior Transportation Engineer/Project Manager	213	897-7722	
									Edward_andraos@dot.ca.gov		
X	X	X	X	X	X	Ed Aguilar	Caltrans Environmental Planning	Assistant Environmental Planner	213	897-8492	
									Eduardo_aguilar@dot.ca.gov		
X	X	X	X	X	X	Debbie Wong	Caltrans Maintenance Support	Transportation Engineer D	213	897-7305	
									Debbie_wong@dot.ca.gov		
X	X	X	X	X	X	Rene Yin	Caltrans Design	Transportation Engineer D	213	897-0389	
									Rene_yin@dot.ca.gov		
X		X			X	Bill Zeigler	Corps of Engineers	Civil Engineer Engineering Permits Value Engineer	213	452-3747	452-4248
									William.j.zeigler@usace.army.mil		
X	X	X	X	X	X	Mynh Tran	Caltrans	Transportation Engineer	213	897-9526	
									Mynh_s_tran@dot.ca.gov		
X	X	X	X	X	X	Loi Lam	Caltrans	Transportation Engineer D	213	897-0448	
									Loi_lam@dot.ca.gov		
X	X	X	X	X	X	Shafiq Islam	Caltrans	Project Engineer	213	897-0969	
									Shafiq_islam@dot.ca.gov		

MEETING ATTENDEES *Southbound I-405 Connectors to Northbound US 101*									Caltrans		
2003						NAME	ORGANIZATION	POSITION	TELEPHONE		FAX
August									E-MAIL		
5	6	7	19	20	21						
X	X		X	X		Majid Madani	Caltrans	Structures Design Senior Bridge Engineer	213	897-7722	
									Majid_Madani@dot.ca.gov		
X	X	X	X	X	X	Vladimir Y. Gurfinkel	Caltrans Encino Construction Office	Assistant Resident Engineer	818	788-3303 x204	
									Vladimir_gurfinkel@dot.ca.gov		
X	X	X			X	Talal Balaa	Caltrans	VA Unit	213	897-4195	
X						Duke Huynh	Caltrans DTM-TMP	Transportation Engineer	213	897-7775	
X						Florizel Bautista	Caltrans Design B	Design Manager	213	897-1609	897-7023
									Florizel_bautista@dot.ca.gov		
X	X	X	X	X	X	Elsie Robinson	Caltrans Design B	Transportation Engineer	213	897-0128	
X						Robert A. Ringler	Police Advisory Board Traffic Committee	Chair	310	475-5978	475-0281
									wlatraffic@apelphia.net		
X						Dan Murdoch	Caltrans Right-of-Way		213	879-1816	

MEETING ATTENDEES *Southbound I-405 Connectors to Northbound US 101*									Caltrans		
2003						NAME	ORGANIZATION	POSITION	TELEPHONE		FAX
August									E-MAIL		
5	6	7	19	20	21						
X						Carvel Bass	Corps of Engineers Operations	Ecologist/NEPA	213	452-3392	
									cbass@spl.usace.army.mil		
X	X	X	X	X	X	Larisa Bolotsky	Los Angeles Department of Transportation	Transportation Engineer Associate III	213	977-7847	
									lbolotsky@dot.lacity.org		
X				X	X	Haripal Vir	Los Angeles Department of Transportation	Principal Transportation Engineer	213	580-1190	
									hvir@dot.lacity.org		
		X				Cheryl Powell	Caltrans Planning	Senior Transportation Planner	213	897-3747	
									Cheryl_j_powell@dot.ca.gov		
X	X	X	X	X	X	Rob Stewart	VMS, Inc.	VA Facilitator	503	531-8864	531-9784
									rob@vms-inc.com		
					X	David Joseph	California Highway Patrol		818	888-0980	
					X	Adriai Torres	California Highway Patrol		818	888-0980	
					X	Steve Sethi	Caltrans	Highway Operations	213	897-2077	

MEETING ATTENDEES *Southbound I-405 Connectors to Northbound US 101*									Caltrans		
2003						NAME	ORGANIZATION	POSITION	TELEPHONE		FAX
August									E-MAIL		
5	6	7	19	20	21						
				X	X	Jim DeLuca	Caltrans	HQ Design Reviewer	213	897-0384	
					X	Greg Farr	Caltrans	Design B - Senior Transportation Engineer	213	899-0108	
					X	Greg Damico	Caltrans	Design D - Senior Transportation Engineer	213	897-9046	
					X	Aziz Elattar	Caltrans	Senior Environmental Planner	213	897-0686	
					X	Bill Regan	Caltrans	Design – Deputy District Director	213	897-0362	
					X	Raja Mitwasi	Caltrans	Chief Deputy – Deputy District Director	213	897-0362	
					X	Frank Quan	Caltrans	Operations – Deputy District Director	213	897-0362	
					X	Massoud Nabifar	Caltrans	PSR	213	897-0994	

Pre-Scoping Phase of the Project. Prior to the Scoping phase of the project, the Department met with various stakeholders to discuss the proposed project, the upcoming Scoping period for the project and its public participation invitation to all stakeholders and interested individuals. The emphasis of the dialogue was to begin gathering comments on the project's potential impacts to the Sepulveda Dam, the Sepulveda Basin, the Sepulveda Basin Wildlife Refuge, Woodley Park, and the neighboring communities.

- The Department met with U.S. Army Corps of Engineers on October 26, 2005.
- The Department met with the City of Los Angeles Department of Recreation and Parks on March 23, 2006.
- The Department met with the Sepulveda Basin Wildlife Refuge Steering Committee Members, first onsite at the Sepulveda Basin Wildlife Refuge, then at City of Los Angeles Department of Recreation and Parks offices.
- The Department provided a project briefing to the field deputies and the representatives from the offices of pertinent elected officials on June 12, 2006.

Scoping Phase of the Project. During the Scoping phase of the project, the Department conducted the outreach efforts discussed previously in the Scoping Procedures Section of this document. The following outreach efforts were also performed:

- On June 5, 2006, the previously discussed Scoping Notification letter and newsletter were hand-delivered to approximately 30 residences on and around La Maida Street, which is located immediately southeast of the I-405/U.S.-101 interchange. These residences were also personally invited to the June 14, 2006 Public Scoping Meeting. These residents would have been the most likely to be directly and indirectly impacted by rejected Alternative 4 of the proposed project.
- The previously discussed Scoping Notification letter and newsletter were also placed at a number of repository locations in the area along with a repository drop letter. These repository locations primarily included all local public libraries.
- The Department provided a project briefing to the field deputies and the representatives from the offices of pertinent elected officials prior to the June 14, 2006 Public Scoping Meeting.

Post-Scoping Phase of the Project. After conclusion of the Scoping phase of the project, the Department performed the additional outreach efforts:

- The Department provided a project briefing to City of Los Angeles Council member Tony Cardenas on June 27, 2006. The emphasis of the dialogue was on the project's potential impacts to the Sepulveda Dam, the Sepulveda Basin, the Sepulveda Basin Wildlife Refuge, Woodley Park, and the neighboring communities.
- The Department provided a project briefing to the United Chambers of Commerce on August 21, 2006.
- The Department provided a project briefing to the field deputies and the representatives from the offices of pertinent elected officials on January 17, 2007.
- The Department met with the U.S. Army Corps of Engineers on June 19, 2007 to provide a project status update and presentation. The discussion ranged from the various project alternatives to the project's various design and environmental constraints. The Department also provide the Corps with the following project technical studies for their review and comment:
    a) Floodplain Study and Mitigation Proposals
    b) Natural Environment Study Report
    c) Bioacoustics Study
    d) Historic Property Survey Report
    e) A few days later, Caltrans submitted to the Corps the project's Traffic Noise Investigation Study.

- The Department received a letter from the U.S. Army Corps of Engineers dated October 9, 2007.
- The Department replied to the U.S. Army Corps of Engineers' October 9, 2007 letter with a letter dated December 27, 2007.
- The Department was contacted by the U.S. Army Corps of Engineers on January 9, 2008. The Corps indicated that they had misplaced the Floodplain Study and Mitigation Proposals presented to them on June 19, 2007 and proceeded to request an electronic copy via email. The Department provided the Corps with the requested electronic copy via email, same day.

Draft EA/IS Public Comment Period and Public Hearing. At this time, the Department has sent this Draft EA/IS to all of the project stakeholders discussed in the aforementioned Scoping section, as well as the numerous new individuals that were added the project mailing list database during the Scoping period. To view the project mailing list, please refer to the appendices section of this document.

The Department is soliciting questions, comments, and concerns from all stakeholders regarding the proposed project and its potential environmental and community impacts as discussed in this EA/IS. The Department will also hold a public hearing so that all stakeholders may voice their questions, comments, and concerns in person. All written comments received during this Public Comment Period, as well as verbal comments made at the public hearing, will be considered formal comments and will become part of the public record.

The Draft EA/IS and Availability Notification letters and newsletters shall be sent to all stakeholders, as listed in the project mailing list that is located in the appendices section of this document. Draft EA/IS Availability Notification newspaper ads will run in the same newspapers that were used during the Scoping phase of the project.

The Draft EA/IS Availability Notification letters, newsletters, and newspaper ads will provide all the specific details, as they did during the Scoping phase of the project.

Chapter 4 | LIST OF PREPARERS

Caltrans District 7, Division of Environmental Planning

Ronald Kosinski, Deputy District Director
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Joel Bonilla, Environmental Planner (CEQA/NEPA, GIS)
Anthony R. Baquiran, Environmental Planner (CEQA/NEPA, CIA)
Grant Nierenberg, SA (CEQA/NEPA)

Project Development Team/Specialists:
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Maureen Doyle, Project Biologist
Kelly Schmoker, Project Biologist
Gary Iverson, Branch Chief (Cultural Resources)
Kelly Ewing-Toledo, Associate Architectural Historian
Alex Kirkish, Associate Archaeologist
Cheryl Henderson, Branch Chief (QA/QC Reviewer)

Caltrans District 7, Division of Project Development

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Itti Tewinpagti, Project Engineer

Caltrans District 7, Division of Project Management

Edward Andraos, Office Chief
Ashraf Habbak, Project Manager

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Mestre Greve Associates:
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Matthew B. Jones

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Dorothy Straum, Right of Way Agent (Relocation Impact Study)
Cynthia Stroud, Right of Way Agent (Relocation Impact Study)

Caltrans District 7, Office of Environmental Engineering and Feasibility Studies

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Ayubur Rahman, Senior Transportation Engineer (Hazardous Waste)
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Roland Cerna, Transportation Engineer (Traffic Noise Investigations)
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Caltrans District 7, Headquarters Engineering Geology

Cuong Yip, Engineering Geologist

Caltrans District 7, Office of Traffic Operations

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Ashraf Hanna, Transportation Engineer (Caltrans Traffic Study Reviewer)

Traffic Study Consultants

IBI Group:

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Lydia LaPoint

Caltrans District 7, Office of Engineering Services/Hydraulics

Dave Bhalla, Senior Transportation Engineer (Location Hydraulics Study)
Loi Lam, Transportation Engineer (Location Hydraulics Study)

Caltrans District 7, Storm Water Unit

Shirley Pak, Senior Transportation Engineer

CHAPTER 5 | DISTRIBUTION LIST

I-405 Master Database - EA 199610

CATEGORY

Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
Agencies						
California Highway Patrol						
	Badilla		5825 De Soto Ave			818-888-0980
	Steve		Woodlands Hills	CA	91367	
Caltrans						
	Dunlap	Acting Office Chief	1120 "N" Street			916-651-8164
	Kelly		Sacramento	CA	95814	
Caltrans						
	Frederick	Acting Aeronautics Program Manager	1120 "N" Street			
	Mary		Sacramento	CA	95814	
Caltrans						
	Higa		100 S. Main Street			213-897-0394
	Derek		Los Angeles	CA	90012	213-897-0394
Caltrans, District 7						
	Brazile	External Affairs	100 S. Main Street, MS 13-063			213-897-0849
	Joe		Los Angeles	CA	90012	213-897-8603
Caltrans, Public Affairs						
	Gish	Pubic Affairs Officer				
	Judy			CA		
City of Los Angeles						
	Fujioka	Administrative Officer	200 N. Main St.			
	William T.		Los Angeles	CA	90012-419	
City of Los Angeles						
	Grant		200 N. Main St., Room 1500			
	Tom		Los Angeles	CA	90012	
City of Los Angeles						
	King		6262 Van Nuys Blvd., Suite 351			
	Marianne		Van Nuys	CA	91401	
City of Los Angeles						
	Shull	Superintendent of Planning and Construction	1200 W. 7th Street, #700			213-928-9191
	Mike		Los Angeles	CA	90017	213-928-9180
City of Los Angeles						
	Singh		6262 Van Nuys Blvd., Suite 351			
	Michelle		Van Nuys	CA	91401	
City of Los Angeles						
	Whettam	Field Deputy, CD5	200 N. Spring Street, Rm. 440			818-756-8083
	Kimberlina		Los Angeles	CA	90012	818-788-9210
City of Los Angeles, Board of Public Works						
	Gibson	Executive Officer	200 N. Spring Street, #361			213-978-0250
	James		Los Angeles	CA	90012	213-978-0278
City of Los Angeles, Bureau of Engineering						
	Armstrong	Environmental Specialists	1149 S. Broadway, Suite 600			213-485-5762
	Carol S.		Los Angeles	CA	90015-220	213-847-0656
City of Los Angeles, Bureau of Engineering						
	Kasparian	Environmental Affairs Officer	1149 S. Broadway, Suite 700			213-485-5729
	Ara		Los Angeles	CA	90015	
City of Los Angeles, Bureau of Engineering						
	Richardson	Principal Civil Engineer	1149 S. Broadway, Suite 700			213-485-4523
	Phil		Los Angeles	CA	90015	213-485-4838
City of Los Angeles, Bureau of Street Lighting						
	Ebrahimian	Director	600 South Spring Street, Suite 140			212-847-6401
	Ed		Los Angeles	CA	90014	213-847-5405
City of Los Angeles, Bureau of Street Services						
	Robertson	Director	600 South Spring Street, Suite 210			213-485-5681
	William A.		Los Angeles	CA	90014	213-622-2375

CATEGORY

Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
City of Los Angeles, City Planning Department						
	Blumenfeld Jane	Division Manager	200 N. Spring Street, 7th Floor Los Angeles	CA	90012-260	213-978-1372
City of Los Angeles, Community Planning Bureau						
	Rausch Charlie	Section Supervisor	200 N. Spring Street, 6th Floor Los Angeles	CA	90012	213-978-1167
City of Los Angeles, Department of City Planning						
			San Fernando Valley, Constituent Van Nuys	CA	91401	
City of Los Angeles, Department of Public Works						
		Planning Division	650 S. Spring St. Suite 200 Los Angeles	CA	90014-191	
City of Los Angeles, Department of Public Works						
		Planning Division	650 S. Spring St. Suite 200 Los Angeles	CA	90014-191	
City of Los Angeles, Department of Public Works						
	Ruiz Cynthia M.	President	200 N. Spring Sreet, M-464, Rm 36 Los Angeles	CA	90012	
City of Los Angeles, Department of Public Works						
	Troyan Vitaly		1149 S. Broadway St., #700 Los Angeles	CA	90015	
City of Los Angeles, Department of Transportation						
	Banerjee Frances	Acting General Manager	100 S. Main Street Los Angeles	CA	90012	213-972-8480 213-972-8410
City of Los Angeles, Department of Transportation						
	Kim Jay	Senior Transportation Engineer	100 S. Main Street, 94 Los Angeles	CA	90012	213-972-8476
City of Los Angeles, Department of Transportation						
	Shao Bill	Transportation Engineer	6262 Van Nuys Blvd., Suite 320 Van Nuys	CA	91401	818-374-4688 818-374-4676
City of Los Angeles, Department of Water and Power						
			P.O. Box 51111 Los Angeles	CA	90051-010	
City of Los Angeles, Department of Water and Power						
	Giese Jodean M.		111 N. Hope St., Rm. 1121 Los Angeles	CA	90012	
City of Los Angeles, Dept of Power & Water						
	Moore Linda		1149 S. Broadway Los Angeles	CA	90015	213-485-5751
City of Los Angeles, Dept. of Recreation & Parks						
	Attaway David	Environmental Supervisor	1200 W. 7th Street, Suite 700 Los Angeles	CA	90017	213-928-9130 213-928-9180
City of Los Angeles, Dept. of Recreation and Parks						
	Huntley Susan	Management Analyst, Grants Administration	1200 W. 7th Street, #700 Los Angeles	CA	90017	213-928-9153 213-928-9122
City of Los Angeles, Environmental Affairs Department						
	Hunter Wayde		200 N. Spring St., Suite 2005, MS Los Angeles	CA	90012	213-978-2366
City of Los Angeles, Housing Authority						
	Agbor Agbor		8121 Van Nuys Blvd., #600 Van Nuys	CA	91402	818-756-1194
City of Los Angeles, Housing Authority						
	Montiel Rudolf	Executive Director	2600 Wilshire Blvd. Los Angeles	CA	90057	
City of Los Angeles, Office of Transportation						
	Vir Haripal	Principal Transportation Engineer	100 S. Main Street, 10th Floor Los Angeles	CA	90012	213-972-8404

CATEGORY Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
City of Los Angeles, Plan Approval/Site Plan Review						
			200 N. Spring Street, 6th Flr			
			Los Angeles	CA	90012	
City of Los Angeles, Plan Approval/Site Plan Review						
	Duenas	South Valley	6262 Van Nuys Blvd.			818-374-5072
	Bob		Van Nuys	CA	91401	
City of Los Angeles, Plan Approval/Site Plan Review						
	Platkin	North Valley	6262 Van Nuys Blvd., 6th Floor			818-374-5074
	Dick		Van Nuys	CA	91401	
City of Los Angeles, Planning Dept.						
	Vidal	City Planner	6262 Van Nuys Blvd., Suite 351			818-374-5043
	Anna		Van Nuys	CA	91401	
City of Los Angeles, Recreation and Parks Department						
			200. N. Main Street, Room 1330			
			Los Angeles	CA	90012	
City of Los Angeles, West Valley Region						
	Novak	Senior Park Maintenance Supervisor	6335 Woodley Ave.			818-756-8189
	Ken		Van Nuys	CA	91406	818-908-9786
County of Los Angeles						
	McCormack		P.O. Box 1024			562-462-2716
	Conny		Norwalk	CA	90651-102	
County of Los Angeles						
	Stone	Director, Public Works	P.O. Box 1460			
	H.W.		Alhambra	CA	91802	
County of Los Angeles Dept. of Regional Planning						
	Hartl	Director	320 West Temple Street			213-974-6401
	James		Los Angeles	CA	90012	
County of Los Angeles Fire Department						
	Freeman	Chief	1320 N. Eastern Ave.			323-881-2401
	P. Micheal		Los Angeles	CA	90063	
County of Los Angeles Sanitation District						
	Horvath	Technical Services	1955 Workman Mill Road			
	Robert		Whittier	CA	90601	
County of Los Angeles Sanitation District						
	Stahl	Chief Engineer and General Manager	1955 Workman Mill Road			562-699-7411
	Jim		Whittier	CA	90601	
County of Los Angeles Sheriff's Department						
	Baca	Sheriff	4700 Romona Boulevard			
	Lee		Monterey Park	CA	91754-216	
County of Los Angeles, Department of Parks and Recreation						
	Guiney	Director	433 South Vermont Ave.			213-738-2961
	Russ		Los Angeles	CA	90020	
County of Los Angeles, Department of Public Works						
	Dechellis		900 S. Fremont Avenue			
	Brad		Alhambra	CA	91803	
County of Los Angeles, Department of Public Works						
	Lopez	LA River Master Plan	900 S. Fremont Ave.			
	Maria		Alhambra	CA	91803-133	
County of Los Angeles, Department of Public Works						
	Sharp	Senior Civil Engineer	900 S. Fremont Ave.			
	Dan		Alhambra	CA	91803-133	
County of Los Angeles, Department of Public Works						
	Wolfe	Director	P.O. Box 1460			
	Donald L.		Alhambra	CA	91802-146	
County of Los Angeles, Department of Regional Planning						
	Meneses	Administrator	320 West Temple Street, Rm. 1351			213-974-6441
	Frank		Los Angeles	CA	90012	213-626-0434

CATEGORY

Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
Metropolitan Transportation Authority						
	Inge Carol	Interim Chief Planning Officer	1 Gateway Plaza Mail Stop: 99-22- Los Angeles	CA	90012-293	213-922-3056
Municipal Area Express (MAX)						
		Director	20500 Madrona Avenue Torrance	CA	90503-369	310-618-6266
Museum of Vertebrate Zoology						
	Moritz Craig M.	Director	3101 Valley Life Sciences Bldg. Berkeley	CA	94720	510-642-3567
National Oceanic and Atmospheric Administration						
		Director, Office of Ecology and Conservation	14th Street & Constitution NW, R Washington	DC	20230	202-482-6090
Office of the Attorney General						
	Jordan Patterson Jamee		P.O. Box 944255 Sacramento	CA	94244	916-322-3360
Project Development and Management						
		Chief, Environmental Planning	400 P Street, Suite 3460 Sacramento	CA	95814	
State of California, Governor's Office of Planning and Research						
	Walsh Sean	Director	P.O. Box 3044 Sacramento	CA	95812-304	916-322-2318
Van Nuys Community Police Station						
	Miller James A.	Area Commanding Officer	6240 Sylmar Avenue Van Nuys	CA	91401	818-756-8343

Association

Building Industry Association						
	Ayala Natalie		28460 Ave. Stanford, #110 Santa Clarita	CA	91355	661-257-5046 ext. 2 661-257-5045
Building Industry Association						
	Schroeder Holly		28460 Ave. Stanford, #110 Santa Clarita	CA	91355	661-257-5046 661-257-5045

CBOs

American Legion, Sun Valley, Post 520						
			9026 Sunland Blvd. Sun Valley	CA	91352	818-767-9461
American Legion, Sunland-Tujunga Post 377						
			10039 Pinewood Avenue Tujunga	CA	91042	818-353-9856
Armenian National Committee						
			4500 Stansbury Avenue Van Nuys	CA	91423	818-207-8416
Armenian Relief Society						
			11719 Moorpark Street Studio City	CA	91604	818-753-8227
Art Association of Sunland-Tujunga						
	Saurer Pat					818-352-2484
Bel-Air Association						
	Aylesworth Barbara	Executive Director	100 Bel Air Road Los Angeles	CA	90077	310-474-3527 310-475-6994
Bel-Air Camera						
	Ponder Frank	President	10925 Kinross Ave. Los Angeles	CA	90024	310-208-5150
Cabrini Villas Homeowners Association						
			9600 Cabrini Drive Burbank	CA	91504	818-504-9600

CATEGORY Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
CPAB Traffic Committee/Residents of Beverly Glen						
	Ringler Robert A.	Chair/President	1604 Crater Lane Los Angeles	CA	90077-313	310-475-5978 310-475-0281
Creator of the FITCALM Proposal						
	Roth Paul		23916 Avenida Entrana Valencia	CA	91355	
Economic Alliance of the San Fernando Valley						
			5121 Van Nuys Blvd., #200 Sherman Oaks	CA	91403	818-379-7000
Economic Alliance of the San Fernando Valley						
	Ackerman Bruce	President & Chief Executive Officer	5121 Van Nuys Blvd., Suite 200 Sherman Oaks	CA	91403	818-379-7000
Encino Business Improvement District						
	Levi Susan	Executive Director	17547 Ventura Blvd. #106 Encino	CA	91316	323-525-0406 323-525-0407
Equestrian Trails Inc., Corral 20 Shadow Hills Rogh Riders						
Foothill Funsters Senior Club						
			8640 Fenwick Street Sunland	CA	91040	818-353-9571
Foothill Optimist Club						
	Chagolla Minu					818-760-4770
Four Oaks Townhomes Estate						
			5200 White Oak Ave. Encino	CA	91316	
Friends of McGroarty Arts Center						
			7570 McGroarty Terrace Tujunga	CA	91042	818-352-5285
Friends of the Los Angeles River						
	MacAdams Lewis		570 W. Ave. 26, Suite 100 Los Angeles	CA	90065	
Friends of the Studio City Library						
			12511 Moorpark Street Studio City	CA	91604	818-755-7873
Friends of Westwood						
	Faxon Prudence	Vice President	10737 Le Conte Ave. Los Angeles	CA	90024	310-474-1072
Friends of Westwood/Save Westwood Village						
	Lake Laura	President	10558 Kinnard Ave. Los Angeles	CA	90024	310-470-4522
Lake View Terrace Homeowner's Association						
			P.O. Box 453 Sunland	CA	91040	818-503-2333
Lake View Terrace Improvements Association						
			P.O. Box 224 Sunland	CA	91341	818-897-7644
Laurel Plaza Neighborhood Association						
			6013 Carpenter Avenue North Hollywood	CA	91606	818-754-1220
Little Landers Historical Society						
			10110 Commerce Avenue Tujunga	CA	91042	818-352-3420
Los Angeles and San Gabriel Rivers Watershed Council						
	Golding Arthur	President	700 N. Alameda Street Los Angeles	CA	90012	213-229-9945

CATEGORY

Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
Los Angeles and San Gabriel Rivers Watershed Council						
	Harter Rick	Executive Director	700 N. Alamda Street Los Angeles	CA	90012	213-229-9952
Mid-Valley Chamber of Commerce						
			7120 Hayvenhurst Avenue Van Nuys	CA	91406	818-989-0300 818-989-3836
North Village Neighborhood Association						
			11471 Delano Street North Hollywood	CA	91606	818-487-5850
North Westwood Village Association						
	Taylor Shelley		444 Kelton Los Angeles	CA	90024	310-208-8007
Pacific Palisades Council						
	Wolfberg George	President	P.O. Box 1131 Pacific Palisades	CA	90272	310.454.9959
Residents of Beverly Glen						
	Buben Dan	Vice President	2042 N. Beverly Glen Blvd. Los Angeles	CA	90077	310-288-0105 x15
Roscomare Valley Association						
	Harper Scott	President	2337 Roscomare Road #2-228 Los Angeles	CA	90077	310-471-1523
Roscomare Valley Association						
	Twining Stephen	Director	2337 Roscomare Road #2-228 Los Angeles	CA	90077	
Rotary Club of Studio City-Sherman Oaks						
			P.O. Box 1234 Studio City	CA	91614	818-906-1951
Rotary Club of Sun Valley						
Rotary Club of Sunland-Tujunga						
						818-352-0534
Rotary Club of Van Nuys						
			11733 Victory Blvd. North Hollywood	CA	91606	818-760-4700
Save Westwood Village						
			1093 Broxton Ave. PMB 620 Los Angeles	CA	90024	
Save Westwood Village						
	Metcalfe Mike	Co-President	1421 Pandora Ave. Los Angeles	CA	90024	
Shadow Hills Property Owner's Association						
			P.O. Box 345 Sunland	CA	91041	818-352-3693
Sherman Oaks Chamber of Commerce						
			14827 Ventura Blvd., #207 Sherman Oaks	CA	91403	818-906-1951 818-783-3100
Sherman Oaks Homeowner's Association						
			P.O. Box 5223 Sherman Oaks	CA	91413	818-377-4590
SMC Civic Association						
	Wolfberg George	President	P.O. Box 1131 Pacific Palisades	CA	90272	310.454.9959
Studio City Beautification Association						
			P.O. Box 1374 Studio City	CA	91614	

CATEGORY Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
Studio City Chamber of Commerce			4024 Radford Avenue Studio City	CA	91604	818-655-5916
Studio City Improvements Association			4024 Radford Avenue Studio City	CA	91604	818-655-5377
Studio City Resident's Association			P.O Box 1374 Studio City	CA	91614	818-509-1230 818-509-1060
Sun Valley Chamber of Commerce			8133-A Sunland Blvd. Sun Valley	CA	91352	818-768-2014
Sun Valley Watershed Stakeholders Group						
Sunland-Tujunga Business Business and Professional Women						818-782-4236
Sunland-Tujunga Chamber of Commerce			8250 A Foothill Blvd. Sunland	CA	91042	818-352-4433
Sunland-Tujunga Coordinating Council						818-353-7056
Sunland-Tujunga Elks Lodge			10137 Commerce Ave. Tujunga	CA	91042	818-352-2098
Sunland-Tujunga Kiwanis Club	McDougall Bonnie					818-541-9068
Sunland-Tujunga Lion's Club	Schellenbach Marynance & Peter					818-353-4554
Sunland-Tujunga Merchant's Association			9929 Commerce Avenue Tujunga	CA	91042	818-353-6186
Tujunga Watershed Council and Stakeholders			P.O. Box 176 Sunland	CA	91041	
Valley Glen Neighborhood Association			13659 Victory Blvd., PMB 283 Valley Glen	CA	91401	818-780-4189
Valley Horse Owners Association						818-771-0156
Valley Industry and Commerce Association			5121 Van Nuys Blvd., #203 Sherman Oaks	CA	91403	818-817-0545
Valley Village Homeowners Association			P.O. Box 4916 Valley Village	CA	91617	818-506-5158
Chamber of Commerce						
Canoga Park/West Hills Chamber	Heigh Mouivia		7248 Owensmouth Ave. Canoga Park	CA	91303	818-884-4222 818-884-4604

CATEGORY

Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
Canoga Park/West Hills Chamber of Commerce						
	Leyner Barbara	Administrative Director	7248 Owensmouth Ave. Canoga Park	CA	91303	818-884-4222 818-884-4604
Canoga Park/West Hills Chamber of Commerce						
	Young Ed		7248 Owensmouth Ave. Canoga Park	CA	91303	818-704-1505 818-884-4604
Chatsworth/Porter Ranch Chamber of Commerce						
	Himes Les		10038 Old Depot Plaza Road Chatsworth	CA	91311	818-625-1983
Encino Chamber of Commerce						
	Davis Seth	President	4933 Balboa Blvd. Encino	CA	91316	818-789-4711 818-789-2485
Encino Chamber of Commerce						
	Simon Joel M.		15760 Ventura Blvd., #1520 Encino	CA	91436	818-501-3100 818-461-0559
Granada Hills Chamber of Commerce						
			17723 Chatsworth Street Granada Hills	CA	91344	818-368-3235
Granada Hills Chamber of Commerce						
	Bursk Bonnie		17723 Chatsworth Street Granada Hills	CA	91344	818-368-8646 818-368-9547
Granada Hills Chamber of Commerce						
	Knepper Dorena		17723 Chatsworth Street Granada Hills	CA	91344	818-366-5005
Granada Hills Chamber of Commerce						
	Vitti Joe		17723 Chatsworth Street Granada Hills	CA	91344	818-366-1668
Sherman Oaks Chamber of Commerce						
	Cohen Bob		14827 Ventura Blvd., #207 Sherman Oaks	CA	91403	818-990-7260 818-990-1643
Sherman Oaks Chamber of Commerce						
	Frohlich Sondra	Executive Director	14827 Ventura Blvd., #207 Sherman Oaks	CA	91403	818-360-5986 818-360-5986
Sherman Oaks Chamber of Commerce						
	Myers Roger		14827 Ventura Blvd., #207 Sherman Oaks	CA	91403	818-654-2491 818-654-2491
Studio City Chamber of Commerce						
	Reed-Funnel Sandra	Executive Director	4024 Radford Ave., Editorial Bldg 2 Studio City	CA	91604	818-655-5916 818-655-8392
Tarzana Chamber of Commerce						
	Hornstein Steve	President	P.O. Box 570414 Tarzana	CA	91356	818-343-3687 818-705-0127
Toluca Lake Chamber of Commerce						
	Budzichowski Allen		2003 Toluca Lake Chamber of Co Toluca Lake	CA	91610	818-761-6594 818-980-0052
United Chamber of Commerce						
	Haendle Amy		5121 Van Nuys Blvd., #208 Sherman Oaks	CA	91403	818-981-4491 818-981-4256
Universal City North Hollywood Chamber of Commerce						
	Kent Linda	Administrative Director	6369 Bellingham Ave. North Hollywood	CA	91606-320	818-508-5155 818-508-5156
Westchester/Marina Del Rey Chamber of Commerce						
	Ciancimino Tony	Executive Director	6151 W. Century Blvd., #514 Westchester	CA	90045	310-645-5151
Winnetka Chamber of Commerce						
	Tallent Pauline					818-998-3833 818-998-4056

CATEGORY

Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
Woodland Hills Chamber of Commerce						
	Goldwater		20121 Ventura Blvd., #309			818-347-4737
	Rose		Woodland Hills	CA	91364	818-347-3321
Woodland Hills Chamber of Commerce						
	Holzer		20121 Ventura Blvd.			818-347-4737
	Stephen		Woodland Hills	CA	91364	818-347-3321
Woodland Hills Chamber of Commerce						
	Keowen	Chairman of the Board	20121 Ventura Blvd., #309			818-347-4737
	Sherry		Woodland Hills	CA	91364	818-347-3321
Woodland Hills Chamber of Commerce						
	Kunz		20121 Ventura Blvd., #309			818-620-8434
	Robert		Woodland Hills	CA	91364	
Woodland Hills Chamber of Commerce						
	McCarthy		20121 Ventura Blvd., #309			818-389-1876
	Sean		Woodland Hills	CA	91364	
Education						
Bellagio Road Newcomer						
		Principal	11301 Bellagio Road			310-476-2281
			Los Angeles	CA	90049	
Burbank Boulevard Elementary School						
		Principal	12215 Albers Street			818-763-6497
			North Hollywood	CA	91607	
Canfield Elementary School						
		Principal	9233 Airdrome Street			310-552-2525
			Los Angeles	CA	90035	
Carthay Center Elementary School						
		Principal	6351 W. Olympic Blvd.			323-935-8173
			Los Angeles	CA	90048	
Castle Heights Elementary School						
		Principal	9755 Cattaraugus Avenue			310-839-4528
			Los Angeles	CA	90034	
Cheviot Hills High School						
		Principal	9200 Cattaraughus Avenue			310-839-4051
			Lso Angeles	CA	90034	
Clover Elementary School						
		Principal	11020 Clover Avenue			310-479-7739
			Los Angeles	CA	90034	
Emerson Middle School						
		Principal	1650 Selby Avenue			323-654-8417
			Los Angeles	CA	90024	
Encino Elementary School						
		Principal	16941 Addison Street			818-784-1762
			Encino	CA	91316	
Fairburn Elementary School						
		Principal	1403 Fairburn Aveneue			310-470-1344
			Los Angeles	CA	90024	
Fairfax High School						
		Principal	7850 Melrose Avenue			323-651-5200
			Los Angeles	CA	90046	
Hamilton High School						
		Principal	2955 S. Robertson Blvd.			310-836-1602
			Los Angeles	CA	90034	
Lanai Elementary School						
		Principal	424 Lanai Road			818-788-1590
			Encino	CA	91436	

CATEGORY

Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
Laurel Elementary School						
		Principal	925 N. Hayworth Avenue Los Angeles	CA	90046	323-654-1930
Los Angeles Unified School District						
	Romer Roy	Office of the Superintendent	333 S. Beaudry Ave., 24th Floor Los Angeles	CA	90017	213-241-7000
Marymount High School						
	Gozdecki Mary Ellen	Principal	10643 Sunset Blvd. Los Angeles	CA	90077	310-472-1205
Melrose Elementary School						
		Principal	731 N. Detroit Street Los Angeles	CA	90046	323-938-6275
Overland Elementary School						
		Principal	10650 Ashby Aveneue Los Angeles	CA	90064	310-838-7308
Palms Middle School						
		Principal	10860 Woodbine Street Los Angeles	CA	90034	310-837-5236
Riverside Elementary School						
		Principal	13061 Riverside Drive Sherman Oaks	CA	91423	818-990-4525
Roscomare Elementary School						
		Principal	2425 Roscomare Road Los Angeles	CA	90077	310-472-9829
Rosewood Elementary School						
		Principal	503 N. Croft Avenue Los Angeles	CA	90048	323-651-0166
Sherman Oaks Elementary School						
		Principal	14755 Greenleaf Street Sherman Oaks	CA	91403	818-784-8283
UCLA Watch						
	Midler Alvin		134 Greenfield Ave. Los Angeles	CA	90049	310-472-6799 310-472-5652
UCLA, Local Government and Community Relations						
	Brueggemann Diana	Executive Director	10920 Wilshire Blvd., Suite 1500 Los Angeles	CA	90024-398	310-794-6824
UCLA, Local Government and Community Relations						
	Chamorro Carmen		10920 Wilshire Blvd., Suite 1500 Los Angeles	CA	90024-398	310-794-6837 310-794-6827
University of California, Los Angeles						
	Harris Adrian	Vice Chancellor, Planning, Emeritus	15744 Greenleaf Street Encino	CA	91436	818-990-1950
Van Nuys High School						
	Clay Herm	Principal	6235 Cedros Avenue Van Nuys	CA	91411-159	818-781-2371 818-781-5181
Walt Whitman High School						
		Principal	7795 Rosewood Avenue Los Angeles	CA	90036	323-651-0645
Warner Elementary School						
		Principal	615 Holmby Avenue Los Angeles	CA	90024	310-475-5893
Westwood Elementary School						
		Principal	2050 Shelby Avenue Los Angeles	CA	90025	310-474-7788
Wonderland Elemenary School						
		Principal	8510 Wonderland Avenue Los Angeles	CA	90046	323-654-4401

CATEGORY

Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
Elected Offices - City						
City of Los Angeles, Council District 12						
	Burarie John		200 N. Spring Street, Room 405 Los Angeles	CA	90012	818-756-8501
City of Los Angeles, Council District 4 - Valley Field Office						
	Roth Alice	Field Deputy	10116 Riverside Dr., Room 200 Los Angeles	CA	91602	818-755-7630 818-755-7631
City of Los Angeles, Council District 6						
	Flores Macaria	Legislative Deputy	200 N. Spring Street, Rm. 455 Los Angele	CA	90012	213-473-7006 213-847-0549
City of Los Angeles, Council District 9						
	Perry Jan	Council Member	200 N. Spring Street, Rm. 420 Los Angeles	CA	90012	213-473-7009 213-473-5946
City of Los Angeles, District 2						
	Bartels Claire	Chief of Staff	200 N. Spring Street, Rm. 475 Los Angeles	CA	90012	213-473-7002
City of Los Angeles, District 2						
	Hernandez Nancy	District Director	6350 Laurel Canyon Blvd., Suite 20 North Hollywood	CA	91606	818-755-7676
City of Los Angeles, District 2						
	Keene Jackie	Field Deputy	7747 Foothill Blvd. Tujunga	CA	91042	818-352-3287
City of Los Angeles, District 2						
	Tarica Daniel	Legislative Deputy	200 N. Spring Street, Rm. 475 Los Angeles	CA	90012	213-473-7002
City of Los Angeles, District 5						
	Ippoliti Fortuna	District Director	15760 Ventura Blvd., Suite 1020Ve Encino	CA	91436	818-971-3088 818-788-9210
City of Los Angeles, District 5						
	Sample Denise	Chief of Staff, Policy & Communications	200 N. Spring Street, Rm. 440 Los Angeles	CA	90012	213-473-7005
City of Los Angeles, District 5						
	Trifiletti Lisa	District Counsel & Senior Planning	822 S. Robertson Blvd., #102 Los Angeles	CA	90035	310-289-0353
City of Los Angeles, District 6						
	Cornejo Jose	Council Aide	200 N. Spring Street, Rm. 455 Los Angeles	CA	90012	213-473-7006
City of Los Angeles, District 6						
	Gonzalez Arturo	District Director	8135 San Fernando Road Sun Valley	CA	91352	818-756-7558
City of Los Angeles, District 6						
	Gonzalez Arturo	District Director	14410 Sylvan Street, #215 Van Nuys	CA	91401	818-778-4999
Elected Offices - County						
Los Angeles County Board of Supervisors, District 3						
	Gil Krisiloff Flora	Senior Field Deputy	500 W. Temple Street, Room 821 Los Angeles	CA	90012	213-974-3333 213-625-7360
Los Angeles County Board of Supervisors, District 3						
	Nissman Susan	Policy Deputy	26600 Agoura Road, # 100 Calabasas	CA	91302	818-880-9416 818-880-9346
Los Angeles County Board of Supervisors, District 3						
	Rescalvo Vivian	Deputy	500 W. Temple Street, Rm 821 Los Angeles	CA	90012	213-974-3333 213-625-7360

CATEGORY

Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
Elected Offices - Federal						
Office of Senator Dianne Feinstein						
	Daley Trevor	Senior Field Representative	11111 Santa Monica Blvd., #915 Los Angeles	CA	90025	310-914-7300
U.S. House of Representatives, District 27						
	Tou Michael	Policy Deputy	5000 Van Nuys Blvd., Suite 420 Sherman Oaks	CA	91403-179	818-501-9200 818-501-1554
U.S. House of Representatives, District 28						
	Blumenfield Bob		14546 Hamlin Street, Suite 202 Van Nuys	CA	91411	818-994-7200
Elected Offices - State						
California State Assembly, District 40						
	Kaufman Talia		6150 Van Nuys Blvd., #300 Van Nuys	CA	91401	818-904-3840
California State Assembly, District 41						
	Lippman Timothy		6355 Topanga Canyon, #205 Woodland Hills	CA	91367	818-596-4141
California State Assembly, District 42						
	Isaacs Ellen	Field Representative	9200 W. Sunset Blvd., PH 15 West Hollywood	CA	90069	310-285-5490 310-285-5499
California State Senate, District 21						
	Carroll Damian		215 N. Marengo, #185 Pasadena	CA	91101	626-683-0282
California State Senate, District 28						
	Pinzler Arlene	District Director	2512 Artesia Blvd., Suite 200 Redondo Beach	CA	90278	310-318-6994 310-318-6733
Office of Assembly Member Paul Koretz, District 42						
	Greenstein Jay	Policy Deputy	9200 Sunset Blvd., PH 15 West Hollywood	CA	90069	310-285-5490 310-285-5499
Office of Senator Sheila Kuehl, District 23						
	Newman Lori	Policy Deputy	10951 W. Pico Blvd., #202 Los Angeles	CA	90064	310-441-9084 310-441-0724
Electeds - City						
City of Los Angeles, Council District 1						
	Reyes Ed P.	Council Member	200 N. Spring Street, Rm. 410 Los Angeles	CA	90012	213-473-701 213-485-8907
City of Los Angeles, Council District 11						
	Rosendahl Bill	Council Member	200 N. Spring Street, Rm. 415 Los Angeles	CA	90012	213-485-3811 213-473-6926
City of Los Angeles, Council District 12						
	Smith Greig	Council Member	200 N. Spring Street, Rm. 405 Los Angeles	CA	90012	213-473-7012 213-473-6925
City of Los Angeles, Council District 13						
	Garcetti Eric	Council Member	200 N. Spring Street, Rm. 470 Los Angeles	CA	90012	213-473-7013 213-613-0819
City of Los Angeles, Council District 2						
	Greuel Wendy	Council Member	200 N. Spring Street, Rm. 475 Los Angeles	CA	90012	213-473-7002 213-680-7895
City of Los Angeles, Council District 3						
	Zine Dennis P.	Council Member	200 N. Spring Street, Rm. 450 Los Angeles	CA	90012	213-473-7003 213-485-8988
City of Los Angeles, Council District 4						
	LaBonge Tom	Council Member	200 N. Spring Street, Rm. 480 Los Angeles	CA	90012	213-485-3337 213-624-7810

CATEGORY Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
City of Los Angeles, Council District 4						
	Weitzer Renee	Chief of Staff	200 N. Spring Street, Rm. 480 Los Angeles	CA	90012	213-485-3337 213-624-7810
City of Los Angeles, Council District 6						
	Cardenas Tony	Council Member	200 N. Spring Street, Rm. 455 Los Angeles	CA	90012	213-473-7006 213-847-0549
City of Los Angeles, District 5						
	Weiss Jack	Council Member	200 N. Spring Street, Rm. 440 Los Angeles	CA	90012	213-473-7005 213-978-2250
City of Los Angeles, Office of the Mayor						
	Villaraigosa Antonio	Mayor	200 N. Spring Street, Rm. 303 Los Angeles	CA	90012	213-978-0600 213-978-0750
Electeds - County						
Los Angeles County Board of Supervisors, District 3						
	Yaroslavsky Zev	Supervisor	500 W. Temple Street Los Angeles	CA	90012	213-974-3333 213-625-7360
Electeds - Federal						
United States House of Representatives, District 27						
	Sherman Brad	Congress Member	5000 Van Nuys Blvd., Suite 420 Sherman Oaks	CA	91403	818-501-9200 818-501-1541
United States House of Representatives, District 28						
	Berman Howard L.	Congress Member	14546 Hamlin Street, Suite 202 Van Nuys	CA	91411	818-994-7200 818-994-1050
United States House of Representatives, District 30						
	Waxman Henry	Congress Member	8436 West Thirds Street, Suite 600 Los Angeles	CA	90048	(323) 651-1040
United States Senate						
	Bailon Adolfo	Senior Field Representative	312 N. Spring Street, Suite 1748 Los Angeles	CA	90012	213-894-5000 213-894-5012
United States Senate						
	Boxer Barbara	Senator	112 Hart Senate Office Building Washington	DC	20510	202-224-3553 213-894-5042
United States Senate						
	Feinstein Dianne	Senator	331 Hart Senate Office Building Washington	DC	20510	202-224-3841 202-228-3954
Electeds - State						
California State Assembly, District 40						
	Levine Lloyd E.	Assembly Member	6150 Van Nuys Blvd., #300 Van Nuys	CA	91401	818-904-3840 818-902-0764
California State Assembly, District 41						
	Brownley Julia	Assembly Member	6355 Topanga Canyon Blvd.,#205 Woodland Hills	CA	91367	818-596-4141 818-596-4150
California State Assembly, District 42						
	Feuer Mike	Assembly Member	9200 Sunset Blvd., PH 15 West Hollywood	CA	90069	310-285-5490 310-285-5499
California State Senate, District 21						
	Scott Jack	Senator	215 N. Marango Ave., #185 Pasadena	CA	91101	626-683-0282 626-793-5803
California State Senate, District 23						
	Kuehl Sheila James	Senator	10951 W. Pico Blvd., #202 Los Angeles	CA	90064	310-441-9084 310-441-0724
Emergency Responder						
California Highway Patrol, West Valley						
	Tang Leland	Public Affairs Officer	5825 De Soto Ave. Woodland Hills	CA	91367-529	818-888-0980

CATEGORY

Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
City of Los Angeles, Fire Department						
			200 N. Main Street			
			Los Angeles	CA	90012	
State of California - Department of California Highway Patrol						
	Tang		6300 Bristol Parkway			310-642-3939
	Leland		Culver City	CA	90230	
State of California - Department of California Highway Patrol - West Valley						
	Greenfield		5825 DeSoto Avenue			818-888-0980
	Gary		Woodland Hills	CA	91367	
Environmental Groups						
California Native American Heritage Commission						
		Executive Secretary	915 Capitol Mall, Rm 364			
			Sacramento	CA	95814	
California Native Plant Society						
			2707 K Street, Suite 1			916-447-2677
			Sacramento	CA	95816	916-447-2727
Friends of the Los Angeles River						
	Stoever	Development Director	570 W. Ave. 26, Suite 100			
	Mary-Kate		Los Angeles	CA	90065	
Los Angeles Audubon Society						
			7377 Santa Monica Blvd.			323-876-0202
			West Hollywood	CA	90046	323-876-7609
Los Angeles River Connection						
		Director	315 W 9th St., Suite 1110			213-622-5237
			Los Angeles	CA	90015	213-629-5288
Native American Tribal Councils						
	Alcala		P.O. Box 9090			
	Martin		Marina Del Rey	CA	90292	
Resource Conservation District of the Santa Monica Mountains						
	Preece	District Manager	122 N. Topanga Canyon Blvd.			310-455-1030
	Dave		Topanga	CA	90290	310-455-1172
San Fernando Valley Audubon Society						
	Ohlenkamp	President	20082 Stites Drive			310-455-1827
	Kris		Topanga	CA	90290	
San Fernando Valley Audubon Society						
	Oppenheimer		8933 Darbey Avenue			818-885-7493
	Carolyn		Northridge	CA	91325	
San Fernando Valley Audubon Society						
	Polak-Rechet		11002 Garden Grove			818-360-1438
	Jeanne		Northridge	CA	91326	
San Fernando Valley Audubon Society						
	Shteir		14355 Huston Street, #225			818-995-6429
	Seth		Sherman Oaks	CA	91423	
San Fernando Valley Audubon Society						
	Timlin		10539 Hillview Avenue			818-341-9354
	Donna		Chatsworth	CA	91311	
Santa Monica Mountains Conservancy, River Projects						
	Arnold		570 W. Ave. 26, Suite 100			310-589-3200
	Chuck		Los Angeles	CA	90065	310-221-8900
Sierra Club						
	Robinson	Conservation Coordinator	3435 Wilshire Boulevard, Suite 320			213-387-4287 Ext. 2
	Jennifer		Los Angeles	CA	90010-190	213-387-5383
Sierra Club						
	Silverman	Director	3435 Wilshire Boulevard, Suite 320			213-387-4287 Ext. 2
	Ron		Los Angeles	CA	90010-190	213-387-5383

CATEGORY Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
Southwestern Herpetologists Society						
	Marrtin	President	P.O. Box 7469			818-992-8959
	Elisa		Van Nuys	CA	91409	
The River Project						
	Winters		11950 Ventura Blvd.			818-980-9660
	Melanie		Studio City	CA	91604	
The Tree People						
			12601 Mullholland Drive			818-753-4600
			Beverly Hills	CA	90210	818-753-4635
Homeowners Associations						
Brentwood Glen Homeowners Association						
			11420 Bolas St.			310-472-2808
	Elizabeth		Los Angeles	CA	90049	310-476-5698
Brentwood Homeowners Association						
	Renee	President	P.O. Box 49427			310-471-8350
	Robert		Los Angeles	CA	90049	
Crestwood Hills Homeowners Association						
	Regberg	President	1036 Tigertail Road			310-475-5735
	Scott		Los Angeles	CA	90049	
Homeowners of Encino						
	Silver	President	P.O. Box 260205			818-990-2757
	Gerry		Encino	CA	91426	818-990-7273
Sherman Oaks Homeowners Association						
	Close	President	P.O. Box 5223			818-377-4590
	Richard		Sherman Oaks	CA	91413	
West of Westwood Homeowners Association						
	Tippit	President	P.O. Box 64496			310-474-2326
	Terri		West Los Angeles	CA	90064	310-475-2126
Westdale Homeowners Association						
	Smith		3308 Butler Ave.			310-567-5704
	Rem		Los Angeles	CA	90066	
Westwood Homeowners Association						
	Agay	President	1363 Woodruff Ave.			818-986-2569
	Richard		Los Angeles	CA	90024-512	310-234-0301
Woodland Hills Homeowners Organization						
	Ward	President				818-761-4065
	Polly			CA		
Interested Parties						
	Ahlin & Al D'Andrea		1240 Marion Drive			
	Margit		Glendale	CA	91205	
	Almdale		1433 11th Street, #5			
	Chuck		Santa Monica	CA	90401	
	Alvarez		15131 La Maida Street			818-784-7405
	Deseire		Sherman Oaks	CA	91403	
	Arthur		109 Roanoke Street			
	Stephanie		San Francisco	CA	94131	
	Assor		15159 La Maida Street			818-995-6713
	Jeacques		Sherman Oaks	CA	91403	
	Bailey		5926 Hesperia Avenue			
	Glenn		Encino	CA	91316	

CATEGORY Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
	Baker Martin		15136 La Maida Street Sherman Oaks	CA	91403	
	Barbar Ahmed Robert		3029 E. Cardinal Street Anaheim	CA	92806	714-588-8368 or 56
	Bass Judy		2303 Glen Canyon Road Altadena	CA	91001	
	Batten Edmund Stanley & Jo		22678 Cass Avenue Woodland Hills	CA	91264	
	Benneti Wilma		P.O. Box 370236 Reseda	CA	91337	818-343-4076
	Berman Joshua			CA		
	Bermini Jeff & Laric		15206 La Maida Street Sherman Oaks	CA	91403	818-986-7764
	Blorfroshan Mo			CA		
	Bolotsky Larisa		100 S. Main Street, 9th Floor Los Angeles	CA	90012	213-972-5024
	Bolten Joseph		11620 Mayfield Avenue Los Angeles	CA	90049	
	Borman Cile		11453 Alberni Avenue Lake View Terrace	CA	91342	818-896-6058
	Brown Mark		1741 Colby Avenue, #301 Los Angeles	CA	90025	310-592-9267
	Butler Paul		575 S. Barrington Avenue., #206 Los Angeles	CA	90049	
	Cantor Sue		4423 Noble Ave. Sherman Oaks	CA	91403	
	Collins Paul		5748 Costello Valley Glen	CA	91401	
	Collins Paul & Ellen		2655 Creston Drive Los Angeles	CA	90068	
	Conner Fox		17819 Rinaldi Street Granada Hills	CA	91344	
	Cutuli Sandra		1840 Preuss Road Los Angeles	CA	90035	
	Cyger Ron		209 S. Oakland Avenue, #F Pasadena	CA	91101	

CATEGORY Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
	De Vita Linda		28130 Bobwhite Circle, #48 Saugus	CA	91350	
	Ecker Dorothy M.		3944 Windsor Place La Canada Flintridg	CA	91011	
	Elinoff Katie		4836 Norwich Avenue Sherman Oaks	CA	91403	
	Esterve Jim		4530 Densmore Encino	CA	91436	310-864-3224
	Eytan Avisar		4155 Dixie Canyon Avenue Sherman Oaks	CA	91403	818-981-1707
	Faber Joyce and Garold		10053 Halifax Street Ventura	CA	93004	
	Fag Deborah & Frank		15140 La Maida Street Sherman Oaks	CA	91403	818-501-0634
	Feagans Nancy J.		2010 1/2 Pullman Lane Redondo Beach	CA	90278	
	Fenning Rebecca		4434 Densmore Avenue Encino	CA	91436	
	Fomm E. & I.		3201 Plaza del Amo Torrance	CA	90503	
	Ford Sharon		13028 Aetna Street Valley Glen	CA	91401	818-780-5816
	Galaviz Jesse		18110-11 Killion Street Tarzana	CA	91356	818-345-6918
	Garrett Laura		711 S. Mentor Avenue Pasadena	CA	91106	
	Gassert Leland C.		22122 Itasca Street Chatsworth	CA	91311	
	Gilliland Susan		525 Avon Avenue Pasadena	CA	91105	
	Gispan Nathalie & Eran		15118 La Maida Street Sherman Oaks	CA	91403	818-915-4118
	Goldstein Michael		4938 Densmore Encino	CA	91436	818-783-1684
	Green Zan		18333 Hatteras Street, #122 Tarzana	CA	91356	818-344-2144
	Green Lesa		15234 La Maida Street Sherman Oaks	CA	91403	818-981-3929

CATEGORY Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
	Greuel Bridget		5931 Reseda Blvd., #123 Tarzana	CA	91356	
	Griffin Don		4801 Columbus Avenue Sherman Oaks	CA	91403	
	Hearn Connie		4844 Noble Aveue Sherman Oaks	CA	91403	
	Henry Dorothy		15245 La Maida Street, #101 Sherman Oaks	CA	91403	818-539-2051
	Hope Leslie			CA		
	Hopkins Lynne		13053 Rose Avenue Los Angeles	CA	90066	
	Houghton Mona		8544 Walnut Drive Los Angeles	CA	90046	
	Howell Judy		6633 Burnet Aveneu Van Nuys	CA	91405	
	Johnston Rory		3434 Troy Drive Los Angeles	CA	90068	
	Jones Linda		11116 Van Alden Avenue Northridge	CA	91326	
	Kaczmarek Ana		4907 Radford Avenue Studio City	CA	91604	818-906-6942
	Kanno Brenda		P.O. Box 280067 Northridge	CA	91328	
	Kassel Deborah		12049 Dunblane Avenue Northridge	CA	91326	
	Kater Natalie		16149 Otego Street Encino	CA	91436	818-788-1682
	Katz Ronna		6610 Whitman Avenue Van Nuys	CA	91406	818-997-7377
	Khan Rarn		12717 Tiara Street Valley Village	CA	91607	818-985-9447
	Klamnman Ken		5005 Gloria Avenue Encino	CA	91436	818-906-0110
	Klemic Priscilla		5420 Buffalo Avenue Sherman Oaks	CA	91423	
	Kobler Marie Danielle		1503 S. Crescent Heights Blvd. Los Angeles	CA	90035	

CATEGORY Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
	Lamb Walter		4201 Duquesne Avenue, #4 Culver City	CA	90232	
	Landau Norma & John		4959 Densmore Encino	CA	91436	
	Langford Carol		1703 Avendia Del Manzano Camarillo	CA	93010	
	Langton Arthur		7435 Lena Avenue West Hills	CA	91307	818-887-0973
	Leisten Laurence M.			CA		
	Lepler Bill		4928 Morse Avenue Sherman Oaks	CA	91423	
	MacInnis Alex		1475 Silver Lake Blvd. Los Angeles	CA	90026	
	Malone George		15440 Milbank Street Encino	CA	91436	818-798-8304
	Marenus Margie		15105 La Maida Street Sherman Oaks	CA	91403	818-981-1607
	Marqhart Elizabeth		15132 La Maida Street Sherman Oaks	CA	91403	
	Martin Tudor		11538 San Vicente Blvd. Los Angeles	CA	90049	310-571-1326
	Maseda Margie		4201-102 Las Virgenes Road Calabasas	CA	91302	
	Mebasser Samuel		2525 Pearl Street Santa Monica	CA	90405	
	Meksin Isa-Kae		1028 1/2 Laguna Avenue Los Angeles	CA	90026	213-250-4350
	Messick Tim		15245 La Maida Street, #102 Sherman Oaks	CA	91403	415-215-3180
	Molinari Marilyn		7309 Asman Avenue West Hills	CA	91307	
	Moore James E.		31830 Firecrest Road Agua Dulce	CA	91390	
	Ogata Peggy		2002 Mentone Avenue Pasadena	CA	91103	
	Onderwyzer Sonya		323 Allen Avenue Glendale	CA	91201-250	

CATEGORY Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
	Osokow Mark		22035 Burbank Blvd., #310 Woodland Hills	CA	91367	
	Ota Teiko		15217 La Maida Street Sherman Oaks	CA	91403	310-435-6972
	Paulson Cathy		10518 Andasol Avenue Granada Hills	CA	91344	
	Prince Karl		15245 La Maida Street Sherman Oaks	CA	91403	818-783-7893
	Raskin Judith		1833 Lemoyne Street Los Angeles	CA	90026	
	Rena Ravive		14936 Camarillo Street Sherman Oaks	CA	91403	818-784-9221
	Renaker Mary M.		4414 Finley Ave. Los Angeles	CA	90027	
	Roosevelt Evan		6350 Laurel Canyon Blvd., #210 North Hollywood	CA	91606	818-755-7676 818-755-7862
	Rosen Diane		17437 Rancho Street Encino	CA	91316	818-788-1223
	Ross Janice		5355 Quakertrown Avenue Woodland Hills	CA	91364	
	Ross Alan C.		1925 Bayview Drive Hermosa Beach	CA	90254	
	Schatz, EDD, RD Pauline E.		22315 Miranda Street Woodland Hills	CA	91367-452	
	Scheel Janet		12023 Eddleston Drive Northridge	CA	91326	
	Scheel Mark		12023 Eddleston Drive Northridge	CA	91326	
	Schermerhorn Robert		15242 La Maida Street Sherman Oaks	CA	91403	818-784-4873
	Scott Earl		15153 La Maida Street Sherman Oaks	CA	91403	
	Seeley Karen		9333 Sierra Hwy. Agua Dulce	CA	91390	
	Shanman Roberta		712 36th Street Manhattan Beach	CA	90266	
	Shentov Shalom		15126 La Maida Street Sherman Oaks	CA	91403	818-906-0665

CATEGORY Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
	Shlom Shemtou Lea		15126 La Maida Street Sherman Oaks	CA	91403	818-906-0665
	Silver Gerand		P.O. Box 260205 Encino	CA	91426	
	Smith Jeanne		15102 La Maida Street Sherman Oaks	CA	91403	818-784-2669
	Smith Arlene		15224 Morrison Street Sherman Oaks	CA	91403	818-788-2436
	Smith Christine C.		9227 Balcom Avenue Northridge	CA	91325	
	Solek Christopher		3828 Latrobe Street Los Angeles	CA	90031	
	Spilkoman Andy		15131 La Maida Street Sherman Oaks	CA	91403	
	Stauss Jane		24125 Albers Street Woodland Hills	CA	91367	
	Stevens Theresa A.		1506 1/2 Maple Street Santa Monica	CA	90409	
	Stoddard Glenn		20417 Hamlin Street Winnetka	CA	91306	818-346-8585
	Sugden Tanis		2947 S. Beverly Drive Los Angeles	CA	90034	
	Tapia Hilda		4867 Noble Sherman Oaks	CA	91403	
	Taylor Coral		25052 Walnut Stret, #116 Santa Clarita	CA	91321	
	Timpers Erik		15202 La Maida Street Sherman Oaks	CA	91403	818-728-4562
	Timpers-Bonord Sophie		15202 La Maida Street Sherman Oaks	CA	91403	818-728-4562
	Tobias Michele		6147 Paseo Encantada Camarillo	CA	93012	
	Travel Beck		10921 Oso Avenue Chatsworth	CA	91311	818-998-3122 818-998-3588
	Trogman Elaine		6709 Calhoun Avenue Van Nuys	CA	91405	818-780-8345
	Tsai Chihfang		15217 La Maida Street Sherman Oaks	CA	91403	

CATEGORY Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
	van Hartesveldt Patricia		7719 Nestle Avenue Reseda	CA	91335	
	Venable James		15137 La Maida Street Sherman Oaks	CA	91403	818-523-2359
	Walter Shelton		6755 Rhodes Avenue, #131 North Hollywood	CA	91606	818-982-1617
	Wang Robert		12249 Collins Street North Hollywood	CA	91607	818-763-2214
	Wang Ann		2560 Centinela Avenue Los Angeles	CA	90064	
	Watkins Ron & Audrey		1780 O'Leary Cout Newbury Park	CA	91320	
	Weinberg Charlotte		15123 La Maida Street Sherman Oaks	CA	91403	818-981-4120
	Wells Marcella		15154 La Maida Street Sherman Oaks	CA	91403	
	White Rosemarie		11576 Marrison Street Valley Village	CA	91601	
	Willahan Barbara		20082 Stites Drive Topanga	CA	90290	
	Zarky Michael		10963 Citrus Drive Moorpark	CA	93021	
Balboa Park						
			17015 Burbank Blvd. Encino	CA	91316	
Brentwood Glen						
	Smith Hal					
California Native Plant Society - LA-Santa Monica Mountains Chapter						
	Hartman Steve		6117 Reseda Blvd., Suite H Reseda	CA	91335	818-881-3706 818-881-3206
California State University, Northridge						
	Maxwell Joyce B.	Professor Emerita	18111 Nordhoff Street Northridge	CA	91330-830	
Canada Goose Project						
			11576 Morrison Street Valley Village	CA	91601	
City of Los Angeles						
	Husting Ken		100 S. Main Street, 9th Floor Los Angeles	CA	90012	213-972-5008
City of Los Angeles, District 1						
	Campbell Helen		200 N. Spring Street, Room 410 Los Angeles	CA	90012	213-473-5890 213-485-8907
Delano Park						
			15100 Erwin St. Van Nuys	CA	91411	818-756-8529 818-756-7757

CATEGORY

Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
Encino/Tarzana Regional Medical Center Encino Hospital						
			16237 Ventura Blvd.			818-995-5000
			Encino	CA	91436	
Hillside Federation						
	Twining	Chairman	P.O. Box 1041			310-472-6091
	Stephen C.		Studio City	CA	91614	
HMB Enterprises						
	Sobol	President	15103 La Maida Street			818-986-8577
	Ronald		Sherman Oaks	CA	91403	
Julien Communications Public Relations						
	Julien		4325 Park Fortuna			818-222-6790
	Lois		Calabasas	CA	91302	818-225-0560
Los Angeles Audubon Society						
	George		7377 Santa Monica Balvd.			
	Garry		West Hollywood	CA	90046	
Los Angeles Valley College, Dept of Biology						
	Huang	Associate Professor	5800 Fulton Avenue			
	Sara		Valley Glen	CA	91401	
Moorpark College						
	Ehrgott	Geography/GIS Instructor	810 Ol Topanga Rd.			310-455-8609
	Andrea		Topanga	CA	90290	
Planning and Zoning						
	Cooke		10256 Chrysanthemum Lane			310-441-5415
	Pam		Los Angeles	CA	90077	
Post-Production Services						
	Hearn					818-687-3696
	Constance					
Santa Monica Bay Audubon Society						
	Plauzoles	President	533 Fourth Street			
	Lucien (Lu)		Santa Monica	CA	90402	
Sepulveda Basin Wildlife Areas Steering Committee						
	MacKinnon		15938 Haynes			818-901-9234
	Joyce		Van Nuys	CA	91406	
Sepulveda Basin Wildlife Committee						
	Winters	Chaiperson	11950 Ventura Blvd., #9			
	Melanie		Studio City	CA	91604	
Sherman Oaks Fashion Square						
			14006 Riverside Dr.			
			Sherman Oaks	CA	91423	
Sherman Oaks Homeowners Association						
	Maloney		14214 Hortense Street			
	Mike		Sherman Oaks	CA	91423	
Sherman Oaks Homeowners Association						
	Rankell		15030 Ventura Blvd., #707			818-469-3367
	David		Sherman Oaks	CA	91403	
Southland Regional Association of Realtors						
	Ezell		17048 Chatsworth Street			818-993-9470
	Jim		Granada Hills	CA	91344	
Tetra Tech, Inc.						
	Artz, PE	Divisional Vice President	17770 Cartwright, Suite 500			949-250-6788
	Ira Mark		Irvine	CA	92614	949-608-5870
UCLA, Dept. of Psychology						
	Finley		A Franz Hall			
	Jason		Los Angeles	CA	90095	
United States Army Reserve Center						
			5161 Sepulveda Blvd.			
			Sherman Oaks	CA	91403	

CATEGORY Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
Valley Presbyterian Hospital						
		President	15107 Vanowen Street			818-782-6600
			Van Nuys	CA	91405	
Van Nuys Airport						
			16461 Sherman Way, #200			818-785-8838
			Van Nuys	CA	91406	
Van Nuys/Sherman Oaks Park						
			14201 Huston St.			818-783-5121
			Van Nuys	CA	91423	
West L.A. Veloway						
	Snyder		431 South Burnside Ave. #10-C			323-571-2910
	Ryan		Los Angeles	CA	90036	
West Van Nuys/Lake Balboa Neighborhood Council						
	Haller	President	8121 Van Nuys Blvd., #401			818-780-8240
	William		Panorama City	CA	91402	
Westwood Hills Property Owners Association						
	Fontanes		370 Dalkeith Avenue			310-288-1667
	Lori		Los Angeles	CA	90049	
Woodley Ave. Park						
			Woodley Ave. and Victory Blvd.			
			Van Nuys	CA	91411	
Your North Village						
	Taylor	President	P.O. Box 49700			310-208-8007
	Shelley		Los Angeles	CA	90049	
Interested Partites						
The Federation of Hillside & Canyon Association						
	Luchs	President	3309 Carse Drive			323-851-1597
	Joan		Hollywood Hills	CA	90068	
Libraries						
Encino Tarzana Library						
			18231 Ventura Blvd.			818-343-1983
			Tarzana	CA	913560	
Palms-Rancho Park Library						
			2920 Overland Ave.			310-840-2142
			Los Angeles	CA	90064	
Robertson Library						
			1719 S. Robertson			310-840-2147
			Los Angeles	CA	90035	
Sherman Oaks Branch Library						
			14245 Moorpark St.			818-205-9716
			Sherman Oaks	CA	91423	
Sherman Oaks Library						
			14245 Moorpark Street			818-755-7878
			Sherman Oaks	CA	91423	
Studio City Branch Library						
			12511 Moorpark Street			818-755-7873
			Studio City	CA	91604	
Studio City Library						
			12511 Moorpark Street			818-755-7878
			Studio City	CA	91604	
Sunland-Tujunga Branch Library						
			7771 Foothill Blvd.			818-352-4481
			Tujunga	CA	91042	
Valley Plaza Branch Library						
			Closed for construction			

CATEGORY Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
West Los Angeles Regional Library						
			11360 Santa Monica Blvd.			310-575-8323
			Los Angeles	CA	90025	
Westwood Library						
			1246 Glendon Avenue			310-474-1739
			Los Angeles	CA	90024	
Media						
Daily News						
	Kaye	Editor	P.O. Box 4200			818-713-3000
	Ron		Woodland Hills	CA	91367	
Daily News						
	Nelson		P.O. Box 4200			
	Eric		Woodland Hills	CA	91367	
Daily News						
	Parker		P.O. Box 4200			
	Chris		Woodland Hills	CA	91367	
Neighborhood Councils						
Bel-Air Beverly Crest Neighborhood Council						
	Lukasiks	President	1714 Stone Canyon Road			310-472-9872
	Steve		Los Angeles	CA	90077	
Bel-Air Beverly Crest Neighborhood Council						
	Twining	Vice President	1525 Sepulveda Blvd., #5			310-479-6247
	Stephen C.		Los Angeles	CA	90025	
Encino Neighborhood Council						
	Goldstein	President	4933 Balboa Blvd.			818-817-6998
	Linda		Encino	CA	91316	
Encino Neighborhood Council						
	Kater		16149 Otsego Street			818-788-1682
	Pat		Encino	CA	91436	
Foothill Trails District Area Neighborhood Council						
						818-896-6058
Mid-Town North Hollywood Neighborhood Council						
						818-762-9267
Neighborhood Council Valley Village						
			P.O. Box 4703			818-759-8204
			Valley Village	CA	91617	818-760-1243
North Hollywood North East Neighborhood Council						
	Garcia					818-761-7482
	Jose Roy					
Sherman Oaks Neighborhood Council						
	Barad		P.O. Box 5721			818-503-2399
	Jill		Sherman Oaks	CA	91413	
Studio City Neighborhood Council						
			4024 Radford Ave., Editorial Bldg.,			818-762-2865
			Studio City	CA	91604	818-655-8240
Sun Valley Area Neighborhood Council						
	O'Sullivan					818-768-7494
	Dennis					
Sunland-Tujunga Neighborhood Council						
			7747 Foothill Blvd., Room 101			818-951-7411
			Tujunga	CA	91042	
Valley Alliance of Neigborhood Councils						
	Banks Barad					818-990-4002
	Jill					818-990-4002

CATEGORY Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
Valley Glen Community Council						
			PMB 331, 13659 Victory Blvd.			818-994-4741
			Valley Glen	CA	91401	
Van Nuys Neighborhood Council						
			6331 Columbus Avenue			818-416-0223
			Van Nuys	CA	91411	
Westside Neighborhood Council						
	Spector		P.O. Box 64370			310-474-2326
	Steve		Los Angeles	CA	90064	
Westwood Community Neighborhood Council Organizing Committee						
	White		908 Malcolm Ave.			310-441-4461
	Liza		Los Angeles	CA	90024	
Parks						
Beeman Park						
			12621 Rye Street			818-769-4415
			Studio City	CA	91604	
Beverly Glen Park						
			Angelo Dr. and Baywood Ct.			
			Los Angeles	CA	90077	
Briarwood Park						
			461 Almaden Ct.			
			Los Angeles	CA		
Carthay Circle Park						
			McCarthy Vista & Wilshire			
				CA		
Cheviot Hills Recreation Center						
			2551 Motor			
			Los Angeles	CA	90064	
Coldwater Canyon Park						
			12601 Mulholland Drive			
			Los Angeles	CA	90210	
De Neve Square Park						
			314 Beverly Glen			
				CA		
Encino Park						
			16953 Ventura			
			Encino	CA	91316	
Erwin Park						
			6150 Atoll Avenue			
			Van Nuys	CA	91401	
Fairfax Senior Citizen Center						
			7929 Melrose			
			Los Angeles	CA	90046	
Fehlhaber-Houk Park						
			Elmhurst at Tujunga Canyon Blvd.			
			Tujunga	CA		
Finn Park						
			7747 Foothill Blvd.			
			Tujunga	CA	91042	
Fryman Park						
			Laurel Canyon and Fryman			
			Studio City	CA	91604	
Haines Canyon Park						
			Haines Canyon Avenue			
				CA		

CATEGORY Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
Hansen Dam Park and Recreation Center			11770 Foothill Blvd. Lake View Terrace	CA	91040	818-896-6215
Holmby Park			601 Clubview Dr. Los Angeles	CA	90024	
Kittridge Mini-Park			Kittenridge Street and Greenbush Valley Glen	CA		
Lake View Terrace Park and Recreation Center			11075 Foothill Blvd. Lake View Terrace	CA	91342	818-899-8087
Libbit Park			5101 Libbit Encino	CA	91436	
Little Landers Park			10116 Commerce Avenue Tujunga	CA	91042	
Los Angeles River Greenway			Los Angeles River			
McGroarty Park			McGroarty Street & McGroarty Ter Tujunga	CA	91042	
Moorpark Park			12061 Moorpark Street Studio City	CA	91604	
Oro Vista Park			Oro Vista Avenue at Grove Stret Sunland	CA	91040	
Palms Recreation Center			2950 Overland Los Angeles	CA	90064	
Park			Club Dr. and McDonnel	CA		
Pasko Park			7579 McGroarty Terrace Tujunga	CA	91042	
Poinsettia Recreation Center			7431 Willoughby Avenue Los Angeles	CA	90046	
Robertson Recreation Center			1641 Preuss Road Los Angeles	CA	90035	
Schachter Park (Irving Park)			2599 Beverwil Drive Los Angeles	CA	90034	
Sepulveda Garden Center			16633 Magnolia Encino	CA	91436	
Sherman Oaks Castle Park			4989 Sepulveda Blvd. Sherman Oaks	CA	91403	
Stonehurst Park and Recreation Center			9901 Dronfield Avenue Sun Valley	CA	91352	

CATEGORY Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
Strathern Park, West						
			12541 Saticoy Street			
			North Hollywood	CA	91605	
Studio City Park and Recreation Center						
			12621 Rye Street			
			Studio City	CA	91604	
Sunland Park and Recreation Center						
			8651 Foothill Blvd.			
			Sunland	CA	91040	
Sunland Senior Citizen Center						
			8640 Fenwick Street			818-353-9571
			Sunland	CA	91040	
Tujunga Greenbelt & Pedestrian Bridge						
			Coldwater Canyon			
			Van Nuys	CA	91401	
Valley Glen Community Park						
			6150 Atoll Avenue			
			Van Nuys	CA	91401	
Valley Plaza Park and Recreation Center						
			12240 Archwood Street			818-765-5885
			North Hollywood	CA	91606	
Valley Village Park						
			500 Westpark Drive			
			Valley Village	CA		
Van Nuys-Sherman Oaks Park and Recreation Center						
			14201 Huston Street			818-783-5121
			Sherman Oaks	CA	91423	
Van Nuys-Sherman Oaks Senior Citizen Center						
			5040 Van Nuys Blvd.			818-905-8985
			Sherman Oaks	CA	91423	
Verdugo Mountain Park						
Victory-Vineland Park and Recreation Center						
			11117 Victory Blvd.			
			North Hollywood	CA	91606	
Villa Cabrini Park						
			9401 Villa Cabrini Drive, West			
			Burbank	CA	91504	
Wilacre Park						
			12601 Mulholland Drive			
			Los Angeles	CA	90210	
Woodbine Park						
			3409 Vinton			
			Los Angeles	CA	90034	
Woodbridge Park						
			11240 Moorpark Street			
			Studio City	CA	91604	
Project Team						
IBI Group						
	La Point		18401 Von Karman Ave., #110			949-833-5588
	Lydia		Irvine	CA	92612	
Property Owners Associations						
Encino Property Owners Association						
	Jasper	President	15601 Meadowgate Road			818-981-0474
	Bill		Encino	CA	91436	818-788-2473

CATEGORY Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
Holmby-Westwood Property Owners Association						
	Brown Sandy	Co-President	10778 Weyburn Ave. Los Angeles	CA	90024	310-475-5931
Holmby-Westwood Property Owners Association						
	Freedman Jackie	Co-President	10782 Weyburn Ave. Los Angeles	CA	90024	310-474-2946
Holmby-Westwood Property Owners Association						
	Paterson Tom		914 Westwood Blvd. #573 Los Angeles	CA	90024	310-470-1785
Westwood Hills Property Owners Association						
	Magnuson Carole	President	11147 Ophir Ave. Los Angeles	CA	90024-743	310-472-9352
Westwood Hills Property Owners Association						
	Miller Harriet		11011 Cashmere Street Los Angeles	CA	90049	310-472-7437

Resource Agencies

Army Corp of Engineers, L.A. District						
			P.O. Box 532711 Los Angeles	CA	90053	213-452-3349
California Department of Education						
		Chief, Bureau of School Planning	1430 N Street, #5111 Sacramento	CA	95814	

Resource Agencies continued on next page

CATEGORY Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
California Department of Fish and Game						
	Ingram		402 E. Ojai Ave., Suite 101, Box 52			
	Trudy		Ojai	CA	93023	
California Wildlife Federation						
			P.O. Box 1527			
			Sacramento	CA	95812-152	
DC Tillman Water Reclamation Plant						
	Netto		6100 Woodley Ave.			818-778-4138
	Hiddo		Van Nuys	CA	91406	
Department of Fish and Game						
	Eng		4949 Viewridge Ave.			858-467-4210
	Larry		San Diego	CA	92123	
Department of Housing and Urban Development						
		Environmental Clearance Officer	600 Harrison Street, 3rd Floor			415-489-6400
			San Francisco	CA	94107	415-489-6419
Federal Aviation Administration						
			15000 Aviation Blvd.			
			Hawthorne	CA	90250	
Federal Aviation Administration						
	Rustad, AWP474		P.O. Box 92007			
	Clifford		Los Angeles	CA	90009	
Federal Aviation Adminstration						
	Roberts	Chief, Airports Division	P.O. Box 92007			310-725-3608
	Dennis E.		Los Angeles	CA	90009	
Federal Emergency Management Agency						
	Armes	Regional Director, District 9	1111 Broadway, Suite 1200			510-627-7100
	Karen E.		Oakland	CA	94607	
Federal Highway Administration						
	Perez	Senior Transportation Engineer	650 Capitol Mall, Suite 4-100			916-498-5065
	Cesar		Sacramento	CA	95814	
Federal Transit Administration, Region 9						
			201 Mission Street, Suite 2210			
			San Francisco	CA	94105	
Los Angeles Regional Water Quality Control Board (RWQCB)						
	Carrillo		320 W. 4th St., Suite 200			213-576-5759
	Valerie		Los Angeles	CA	90013	213-576-6640
Naval and Marine Corps Reserve Center						
			6337 Balboa Blvd.			
			Encino	CA	91316	
South Coast Air Quality Management District						
	Smith	Program Supervisor	21865 E. Copley Dr.			909-396-2000
	Steve		Diamond Bar	CA	91765	
U.S. Army Corps of Engineers						
	Castanon	Chief Regulatory Branch	P.O. Box 532711			213-452-3967
	David		Los Angeles	CA	90053	213-452-4214
U.S. Army Corps of Engineers						
	DeSaddi	Project Manager	P.O. Box 532711			213-452-3967
	Susan A.		Los Angeles	CA	90053-232	213-452-4214
U.S. Department of Agriculture						
		Office of the Secretary	1400 Independence Ave., SW			
			Washington	DC	20250	
U.S. Department of Commerce, Room 6800						
		Director, Office of Ecology and Conservation	14th & Constitution NW			202-482-2000
			Washington	DC	20230	
U.S. Department of Energy						
		Director, Office of Envronmental Compliance	1000 Independence Ave., SW Rm.			800-342-5363
			Washington	DC	20585	202-586-4403

CATEGORY Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
U.S. Department of Homeland Security						
						202-282-8000
			Washington	DC	20528	
U.S. Department of Interior						
		Director, Office of	1849 C Street, NW			202-208-3100
		Environmental Policy and	Washington	DC	20240	
U.S. Environmental Protection Agency						
			1000 Pennsylvania Ave. NW			
			Washington	DC	20460	
U.S. Environmental Protection Agency						
		EIS Coordinator, Region 9	75 Hawthorne Street 14th Floor M			415-947-8000
			San Francisco	CA	94105-394	
U.S. Environmental Protection Agency, Region 9						
	Hashimoto		75 Hawthorne Street			415-947-4406
	Janet		San Francisco	CA	94105	
U.S. Fish and Wildlife Service						
	Zoutendyk	North San Diego Division	6010 Hidden Valley Road			760-431-9440
	David	Chief	Carlsbad	CA	92011	
USDA Natural Resources Conservation Service						
			44811 N. Date Avenue, Suite G			661-945-2604
			Lancaster	CA	93534	
USDA Natural Resources Conservation Service						
			4500 Glenwood Dr., Building B			951-684-1552
			Riverside	CA	92501	951-683-3814
Sensitive Receptor						
Sherman Oaks Galleria						
	Emmet	Galleria Managaement	15301 Ventura Blvd., Bldg. B, Suite			818-382-4100
	Douglas		Sherman Oaks	CA	91403	
Sherman Oaks Galleria						
	Rediger	Office Leasing	15301 Ventura Blvd., Bldg. B, Suite			818-382-4100
	Lis		Sherman Oaks	CA	91403	
Sensitive Receptors						
Radisson Valley Center						
			15433 Ventura Blvd			
			Sherman Oaks	CA	91403	
Sepulveda Basin Wildlife Areas Steering Committee						
	Kotin	Youth Activities Chair &	6801 Las Olas Way			310-457-5796
	Muriel S.	Representative	Malibu	CA	90265	
Sepulveda Dam Recreation Area						
			17017 Burbank Blvd.			
			Encino	CA	91316	
Sherman Oaks Galleria						
			15301 Ventura Blvd.			818-382-4100
			Sherman Oaks	CA	91403	
Transportation Agencies						
Caltrans, District 7						
	Aguilar		100 S. Main Street			213-897-8492
	Eduardo		Los Angeles	CA	90012	
Caltrans, District 7						
	Struhl	Associate Environmental	100 S. Main Street, MS 16A			213-897-5446
	Mine	Planner	Los Angeles	CA	90012	
Caltrans, Freeway Operations						
	Hanna		100 S. Main Street			213-897-7916
	Ashraf W.		Los Angeles	CA	90012	

CATEGORY Organization	Last Name First Name	Title	Address City	State	Zip	Phone Fax
City of Torrance Transit System						
	Turner		20500 Madrona Avenue			310-618-6266
	Kim		Torrance,	CA	90503-369	
Metro						
	Mack		One Gateway Plaza			213-922-2844
	Marta		Los Angeles	CA	90012	
Santa Monica Municipal Bus Lines						
	Megriff		1660 7th. Street			
	Stephanie		Santa Monica	CA	90401	
Southern California Association of Governments						
	Jones		818 W. 7th. Street 12th Floor			213-236-1800 Ext. 8
	Laverne		Los Angeles	CA	90017	213-236-1963
Westside Cities Council of Governments						
	Bar-El		1685 Main Street			310-458-8341
	Elizabeth		Santa Monica	CA	90401	
Utilities						
Southern California Gas Company						
			8141 Gulana Avenue			
			Playa Del Rey	CA	90293	

APPENDICES

APPENDIX A: CEQA CHECKLIST

ENVIRONMENTAL SIGNIFICANCE CHECKLIST

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included in Section VI following the checklist. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?		X		
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?		X		
c) Substantially degrade the existing visual character or quality of the site and its surroundings?		X		
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	
II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				X
III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?				X
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				X
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				X
d) Expose sensitive receptors to substantial pollutant concentrations?				X
e) Create objectionable odors affecting a substantial number of people?				X
IV. BIOLOGICAL RESOURCES -- Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?			X	
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X	
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?			X	

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?		X		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?			X	
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	
d) Disturb any human remains, including those interred outside of formal cemeteries?				X
VI. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?				X
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				X
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				X
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
VII. HAZARDS AND HAZARDOUS MATERIALS –				
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				X
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X
VIII. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?			X	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				X

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			X	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?		X		
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?		X		
f) Otherwise substantially degrade water quality?			X	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?		X		
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?		X		
j) Inundation by seiche, tsunami, or mudflow?				X
IX. LAND USE AND PLANNING - Would the project:				
a) Physically divide an established community?			X	
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			X	
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?		X		
X. MINERAL RESOURCES -- Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XI. NOISE –				
Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		X		
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X
XII. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?			X	
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?			X	

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XIII. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?				X
Police protection?				X
Schools?				X
Parks?				X
Other public facilities?				X
XIV. RECREATION –				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X
XV. TRANSPORTATION/TRAFFIC -- Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?				X
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				X
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
e) Result in inadequate emergency access?				X
f) Result in inadequate parking capacity?				X

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X
XVI. UTILITIES AND SERVICE SYSTEMS –				
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				X
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				X
g) Comply with federal, state, and local statutes and regulations related to solid waste?				X
XVII. MANDATORY FINDINGS OF SIGNIFICANCE –				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?		X		

c) Does the project have environmental effects which will cause substantial adverse effects on human beings,		X		

APPENDIX B: SECTION 4(F) EVALUATION

Draft Section 4(f)/Section 6(f) Evaluation

I-405/US-101 Connector
07-LA-405 PM 39.4/40.5
07-LA-101 PM 17.0/19.4

Prepared by the
State of California Department of Transportation

Submitted Pursuant to
42 U.S.C. 42(2)(c) and 49 U.S.C. 303

The environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried-out by the Department under its assumption of responsibility pursuant to 23 U.S.C. 327.

March 2008

1 | APPLICATION OF SECTION 4(f)

1-1 Introduction

Section 4(f) was created with the establishment of the United States Department of Transportation (USDOT) in 1966. Codified in federal law at 49 U.S.C. §303, Section 4(f) of the United States Department of Transportation Act of 1966 declares that "it is the policy of the United States government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

Section 4(f) specifies that the Federal Highway Administration (FHWA) and other DOT agencies cannot approve the use of land from a significant publicly owned public park, recreation area, wildlife or waterfowl refuge, or any significant historic site unless the following conditions apply:

- There is no feasible and prudent alternative to the use of land; and
- The action includes all possible planning to minimize harm to the property resulting from use.

Each project proposal must include a 4(f) avoidance alternative.

Section 4(f) further requires consultation with the Department of the Interior and, as appropriate, the involved offices of the Department of Agriculture and Housing and Urban and Development in developing transportation projects and programs that use lands protected by Section 4(f). If historic sites are involved, then coordination with the State Historic Preservation Officer is also needed.

This Section 4(f) evaluation has been prepared pursuant to the FHWA regulations for Section 4(f) compliance codified at 23 CFR Section 774. Additional guidance has been obtained from the FHWA Technical Advisory T 6640.8A (1987), the FHWA Section 4(f) Policy Paper (2005), and the FHWA Western Resource Center Section 4(f) Checklist (1997).

1-2 Section 4(f) "Use"

A Section 4(f) use occurs when one or more of the following conditions are met:

Land is permanently acquired for a transportation project by partial or full acquisition (i.e., **"direct use"**).

Temporary occupancy of the protected resource is considered adverse in terms of the preservationist purposes of Section 4(f) (i.e., **"temporary use"**).

Even though there's no permanent incorporation of land, the project's proximity impacts are so severe that the protected activities, features or attributes that qualify the resource for protection under Section 4(f) are substantially impaired (i.e., **"constructive use"**).

1-2.1 Direct Use

As the term implies, the action involves the direct use of Section 4(f) lands by permanent incorporation of such lands into a transportation facility. This may occur as a result of a partial or full acquisition of a fee simple interest (right-of-way acquisition), or permanent easements. Permanent easement use differs from fee simple use in that the easement may not necessarily change the landscape permanently.

1-2.2 Temporary Use

During the construction phase of the highway project, a temporary easement such as a staging or access area may be needed. Once the easement is no longer needed, the Section 4(f) resource must be restored to the condition in which it was originally found. Temporary easement use may be considered Section 4(f) use if the land is subject to temporary or permanent adverse changes, such as contour alterations or removal of mature trees and other vegetation. Temporary easement use may not be considered a Section 4(f) use if all of the following conditions exist:

- Duration of occupancy must be temporary, i.e., less than the time needed for construction of the project, and there should be no change in ownership of the land.
- Scope of the work must be minor, i.e., both the nature and magnitude of the changes to the 4(f) resource must be minimal.
- There are no anticipated permanent adverse physical impacts, nor will there be interference with the activities or purposes of the resource, on either a temporary or permanent basis.
- The land being used must be fully restored, i.e., the resource must be returned to a condition which is at least as good as that which existed prior to the project.
- There must be documented agreement of the appropriate Federal, State, or local officials having jurisdiction over the resource regarding the above conditions.

1-2.3 Constructive Use

Constructive use [23 CFR 771.135(p)(2)] involves the evaluation of indirect or “proximity impacts” to a 4(f) resource. No actual use or “take” is involved. A constructive use occurs when the project’s proximity impacts (i.e., noise, vibration, visual, access, and/or ecological impacts) are so severe that those protected activities, features or attributes that qualify the resource for protection under Section 4(f) are “substantially impaired.” Substantial impairment occurs only when the protected activities, features or attributes are substantially diminished by the proposed project. This determination is made through the following practices:

- Identification of the current activities, features, or attributes of the resource that may be sensitive to proximity impacts.
- Analysis of the potential proximity impacts on the resource.
- Consultation with the appropriate officials having jurisdiction over the resource [23 CFR 771.135(p)(6)].

2 | PROPOSED ACTION–PROJECT NEED AND DESCRIPTION

2-1 Purpose and Need of the Proposed Project

The existing non-standard connector experiences extensive congestion, delays, and queue lengths throughout the day. The purpose of the project is to improve safety, operation, capacity, and traffic flow through the interchange by replacing the existing 20 mph single-lane connector, with a new 50 mph two-lane connector.

Discussion of Purpose

The Southern California Association of Governments (SCAG), along with the Offices of Mayor Antonio Villaraigosa and U.S. Congressman Brad Sherman have identified this interchange as in need of improvement to relieve congestion and improve safety, operation, capacity, and traffic flow.

The I-405/US-101 interchange is critical to the effective operation of the entire freeway system in the San Fernando Valley and the Los Angeles region as a whole. The SB I-405 to the NB US-101 connector is considered one of the busiest in the nation. The purpose of this project is to:

- To transfer through-vehicle trips to the regional highway system.
- To provide congestion relief in order to improve traffic flow.
- To provide a balanced circulation system and reduce out of direction travel.
- To improve the operational and safety design to meet current standards to the greatest extent possible.
- To enhance the safety throughout the project area while minimizing environmental and socio-economic impacts.

The following discussion summarizes the present and future conditions of the existing I-405/US-101 project area that constitutes the need for action. Several project alternatives have been developed to meet the purpose and need. If no improvements are made, the I-405/US-101 project area will continue as a “bottleneck” condition during peak hour traffic.

Improvements to Safety, Operation, Capacity, and Traffic Flow. In the existing condition, the SB I-405 to NB US-101 connector is considered to be one of the busiest in the world, and experiences heavy congestion, long delays, and high accident rates. Undesirable conditions on the SB I-405 freeway in the vicinity of the US-101 connector are attributable to a number of factors, including high volumes, low ramp design speed, and limited ramp capacity. All of the proposed build alternatives result in improved conditions on the freeway mainline, and produce similar operational improvements. The existing single-lane connector from SB I-405 to NB US-101 has a sharp, non-conventional curve with a design speed of 20 miles-per-hour. Replacing the existing connector with a two-lane, 50 mile-per-hour ramp is expected to improve flow through the area and reduce the spillback from the ramp queue on to the I-405 freeway mainline. This connector improvement is included in all of the proposed alternatives.

A weaving segment is a length of highway over which traffic streams cross paths through lane-changing maneuvers, formed between merge and diverge points. In all build alternatives, the new configuration would eradicate the weaving segment between the existing Burbank Boulevard on-ramp and the US-101 connector diverge. Weaving areas are attributable to significant disruption in traffic flow, particularly with high metering volumes, as opposing movements compete for merge space. Elimination of the weaving segment will provide improved average speed and level of service, as well as enhance safety, operation, capacity, and flow along the SB I-405 freeway in this area.

Discussion of Need

The I-405 freeway carries an average of 115,000 to 160,000 vehicles per day in the vicinity of the Sepulveda Basin, and the US-101 carries an average of 160,000 to 165,000 vehicles per day in this area. The connector between the SB I-405 freeway and the US-101 carries over 50,000 vehicles per day, with just over half of those vehicles heading to the NB US-101 freeway and the remaining heading to SB US-101. The existing connector is a non-standard, single-lane structure with an operational speed of 20 miles-per-hour, and the facility is not sufficient to handle the traffic demand. As previously mentioned, vehicles form a queue at this location that frequently backs up onto the I-405 mainline, with a weaving segment between the existing Burbank Boulevard on-ramp and the US-101 connector diverge that contributes to high accident rates.

2-2 Proposed Project Description

the Department has considered nine (9) alternatives. Currently, five (4) alternatives remain under consideration, including the No-Build Alternative. The other five (5) alternatives have been rejected. This section will elaborate on that discussion.

The Current Four (4) Alternatives that Remain Under Consideration

This section describes the design alternatives that were developed by a multi-disciplinary team to achieve the project purpose and need while avoiding or minimizing environmental impacts. There are four viable alternatives proposed for this project consisting of the No-Build Alternative and Alternative 1 through 3. Also, listed in this section are five alternatives that were analyzed and rejected, Alternative A through E.

The three “Build” Alternatives (1, 2 & 3) that are under consideration will be discussed further in this section. They each share the following common features:

- Replacing the existing 20 mph single-lane connector from the SB I-405 to the NB U.S.-101 with a new 50 mph two-lane connector bridge that encroaches upon and spans over the spillway of the Sepulveda Dam
- Eliminating the existing erratic and conflicting traffic weaving patterns between the Burbank Blvd on-ramp and the SB I-405 mainline as well as the traffic weaving patterns with SB I-405 mainline traffic attempting to access the US-101 connectors
- Realignment and reconstruction of the Burbank Boulevard on-ramp to the SB I-405 and/or the US-101
- Realignment and reconstruction of the current U.S. Army Corps of Engineers service road (northwest side of the interchange) for the operation and maintenance of the Sepulveda Dam
- Each poses an adverse impact to the historic Sepulveda Dam, which is a Section 4(f) resource.

THE “NO-BUILD” ALTERNATIVE

The “No Build” or “Do Nothing” alternative calls for the existing connector, from the SB I-405 to the NB U.S.-101, to remain as is. The No-Build alternative would do nothing to improve the present day, or projected congestion and congestion related problems, thereby leading to a progressive deterioration of the issues identified in the Need and Purpose of this project. Therefore, the Need and Purpose of this project would remain unaddressed and its objectives unrealized.

ALTERNATIVE 1

This alternative calls for a new, elevated, connector bridge structure that spans over the spillway of the Sepulveda Dam, from the SB I-405 to the NB U.S.-101. It will eliminate the sharp turn radius curve of the existing connector, thereby accomplishing the project's Need and Purpose.

However, the Burbank Boulevard on-ramp to the SB I-405 would need to be reconstructed to pass beneath the new connector structure. Furthermore, to implement this new Burbank Boulevard on-ramp structure, both of the existing connectors from the SB I-405 to the U.S.-101 would need to be removed, therefore, traffic from Burbank Boulevard would lose access to both directions of the U.S.-101.

Additionally, with both of the existing connectors from the SB I-405 to the U.S.-101 requiring removal, this alternative will also require the construction of a new connector from the SB I-405 to the SB U.S.-101, in order to maintain that particular access.

PROS/CONS Summary
These are the pros of Alternative 1:

- Of the "Build" alternatives, this proposal has the smallest impact footprint
- This alternative requires no residential right-of-way acquisition
- This alternative requires no encroachment onto the Sepulveda Basin Wildlife Refuge within the Sepulveda Flood Control Basin

These are the cons of Alternative 1:

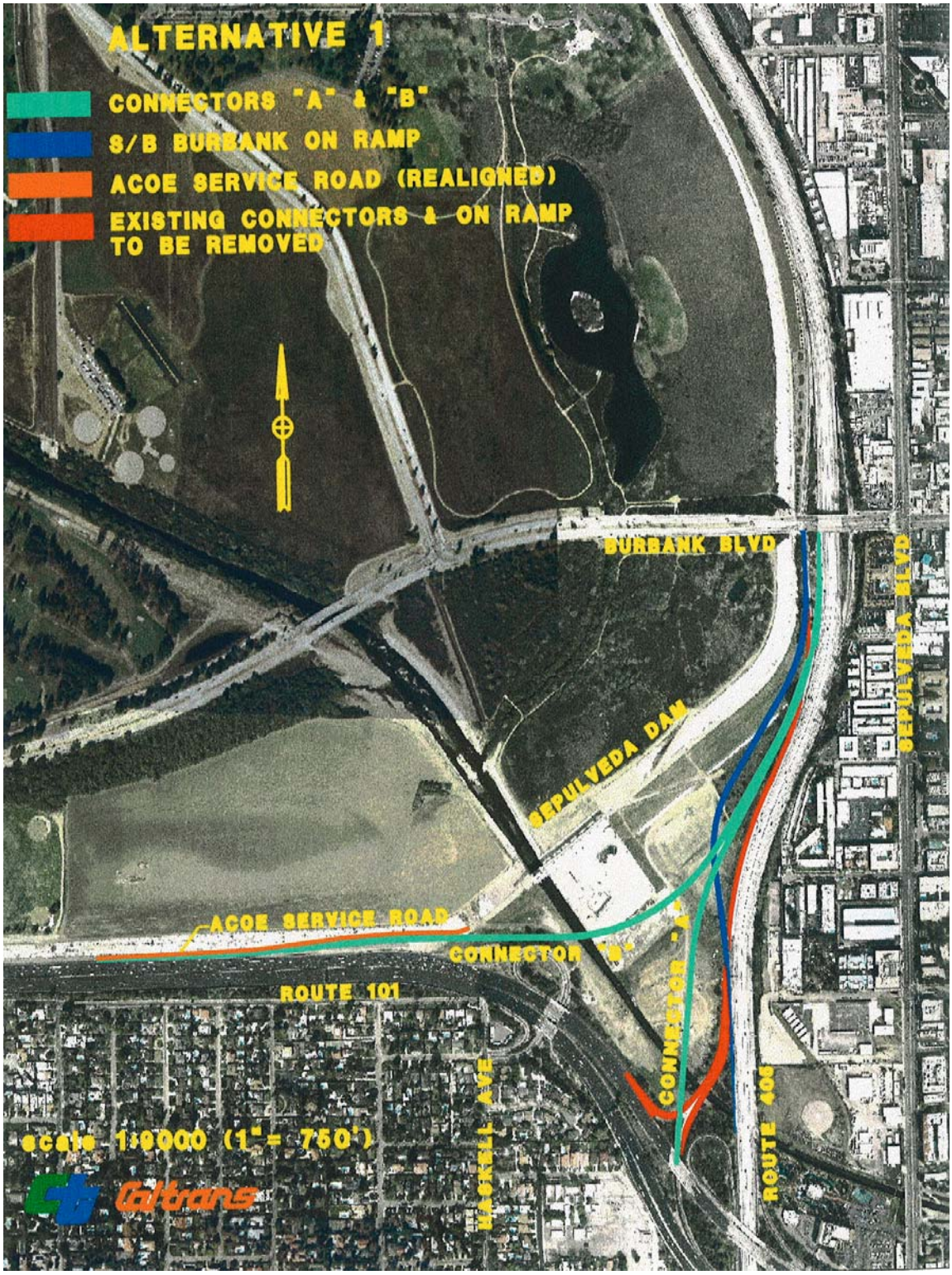
- Loss of access from Burbank Boulevard to the U.S.-101
- Due to the said loss of access, this alternative increases the traffic congestion to the immediately adjacent City of Los Angeles streets and intersections
- For this reason, the City of Los Angeles Department of Transportation is opposed to this alternative

Project Alternative Cost Estimates:
These are the estimates for costs associated with this alternative only, which are subject to change and revision:

- Roadway Items: $34,900,000.
- Structure Items: $46,300,000.
- Right-of-Way Cost: $200,000.
- Mitigation Cost: $5,000,000.

Size and Location of Impact Area/Volume:
This alternative will occupy approximately 4.93 acres of the spillway outlet area, and 0.45 acres of permanent footing easement, in addition to approximately 1.07 acres of the upstream dam embankment, 0.59 acres of fill, and 49,014 ft^3 of the dam reservoir. The dam reservoir will be affected only on the south end of the Sepulveda Dam. The length and width of the structure on the dam will be 550 and 41 feet, respectively.

Delay Cost Analysis for the No-Build Condition (2015) versus Alternative 1:
A delay cost analysis has been performed by the Division of Operations for the No-Build Condition in the year 2015 and the selection and construction of Alternative 1. By 2015 and based on the foregoing discussion, the annual savings in travel delay cost associated with Alternative 1 over the No-Build Condition is anticipated to be approximately $38.3 million/year. It is obvious from this analysis that Alternative 1 provides the highest travel delay savings over the other alternatives.


ALTERNATIVE 1
CONNECTORS "A" & "B"
S/B BURBANK ON RAMP
ACOE SERVICE ROAD (REALIGNED)
EXISTING CONNECTORS & ON RAMP TO BE REMOVED
BURBANK BLVD
SEPULVEDA DAM
SEPULVEDA BLVD
ACOE SERVICE ROAD
CONNECTOR "B"
CONNECTOR "A"
ROUTE 101
MACKELL AVE
ROUTE 405
scale 1:9000 (1" = 750')
Caltrans

ALTERNATIVE 2

Like Alternative 1, this alternative calls for a new, elevated, connector bridge structure that spans over the spillway of the Sepulveda Dam, from the SB I-405 to the NB U.S.-101.

However unlike Alternative 1, this alternative maintains access from Burbank Boulevard to the U.S.-101 via the construction of a constricted loop on-ramp, which encroaches onto the Sepulveda Basin Wildlife Refuge (within the flood control basin) located immediately north of Burbank Boulevard, immediately west of the I-405. Since the loop design is constricted to minimize the encroachment onto the Sepulveda Basin Wildlife Refuge, in order to properly implement the on-ramp loop, a reconstruction of the Burbank Boulevard/I-405 over-crossing bridge would be required. This would result in an additional increase in temporary construction-related traffic congestion.

Also unlike Alternative 1, since the new Burbank Boulevard loop onramp (which also provides access to the SB I-405) encroaches upon the Sepulveda Basin Wildlife Refuge rather than on the existing connectors, this alternative does not require the removal of the existing connector from the SB I-405 to the SB U.S.-101. In other words, unlike Alternative 1, this alternative does not carry the added burden of having to construct a new connector from the SB I-405 to the SB U.S.-101.

PROS/CONS Summary
These are the pros of Alternative 2:

- This alternative retains access from Burbank Boulevard to the U.S.-101
- This alternative requires no residential right-of-way acquisition
- Due to the constricted loop on-ramp, the encroachment onto the Sepulveda Basin Wildlife refuge is minimized to the maximum extent

These are the cons of Alternative 2:

- This alternative requires an encroachment onto the Sepulveda Basin Wildlife Refuge. For this reason, many environmental groups and the U.S. Army Corps of Engineers are opposed to this alternative
- Due to the constricted loop on-ramp, a reconstruction of the existing Burbank Boulevard/I-405 over-crossing bridge would be required, resulting in an increase in temporary construction related traffic congestion

Project Alternative Cost Estimates:
There are the estimates for costs associated with this alternative only, which are subject to change and revision:

- Roadway Items: $42,700,000.
- Structure Items: $69,100,000.
- Right-of-Way Cost: $200,000.
- Mitigation Cost: $5,000,000.

Size and Location of Impact Area/Volume:
This alternative will occupy approximately 0.28 Acres of the spillway outlet area, 1.07 acres of the upstream dam embankment, in addition, 0.79 acres of footing easement, 0.59 acres of fill, 0.16 acres of the downstream embankment into the basin north of Burbank Boulevard, and 76,950 ft^3 of the dam reservoir. The south end (49,014 ft^3) and northeast section (27,936 ft^3) of the Sepulveda Dam would be affected. Length and width of the structure on the dam will be 550 and 41 feet, respectively. 2.64 acres of the 225 total acreage (**1.17%**) of the Sepulveda Dam Wildlife Refuge will be encroached upon by new connector structures.

Delay Cost Analysis for the No-Build Condition (2015) versus Alternative 2:
A delay cost analysis has been performed by the Division of Operations for the No-Build Condition in the year 2015 and the selection and construction of Alternative 2. By 2015 and based on the foregoing discussion, the annual savings in travel delay cost associated with Alternative 2 over the No-Build Condition is anticipated to be approximately $29.4 million/year. While Alternative 1 provides the highest travel delay savings over all other alternatives, Alternative 2 would provide a better operational level for the freeway system in the vicinity of the project and would still lead to a substantial amount in travel delay savings.

ALTERNATIVE 2
CONNECTOR "B"
S/B BURBANK ON & OFF RAMP
ACOE SERVICE ROAD (REALIGNED)
EXISTING CONNECTOR, ON & OFF RAMP TO BE REMOVED
BURBANK BLVD
SEPULVEDA BLVD
SEPULVEDA DAM
ACOE SERVICE ROAD
CONNECTOR "B"
ROUTE 101
MACKELL AVE
ROUTE 405
scale 1:9000 (1" = 750')
Caltrans

ALTERNATIVE 3

Alternative 3 is identical to Alternative 2, except that this alternative seeks to eliminate the need for a reconstruction of the existing Burbank Boulevard/I-405 over-crossing. To accomplish this, a non-constricted on-ramp loop would need to be implemented, thereby encroaching an additional 15m (50ft) onto the Sepulveda Basin Wildlife Refuge (within the flood control basin).

PROS/CONS Summary
These are the pros of Alternative 3:

- This alternative retains access from Burbank Boulevard to the U.S.-101.
- This alternative requires no residential right-of-way acquisition.
- Unlike Alternative 2, this alternative does not require a reconstruction of the Burbank Boulevard/I-405 over-crossing.

These are the cons of Alternative 3:

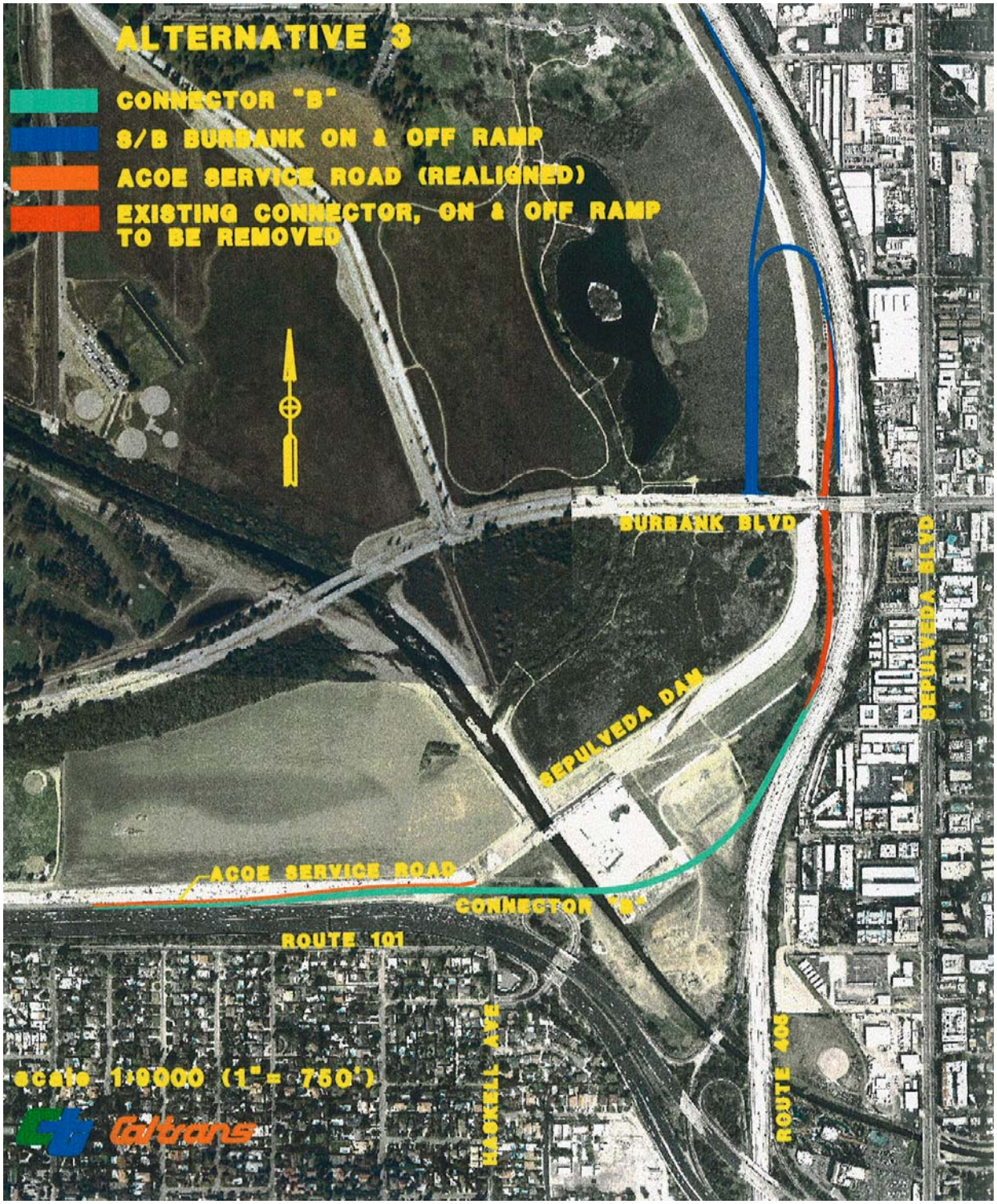
- Unlike Alternative 2, this alternative requires an additional 50ft encroachment onto the Sepulveda Basin Wildlife Refuge. And like Alternative 2, many environmental groups and the U.S. Army Corps of Engineers are opposed to this alternative.

Project Alternative Cost Estimates:
These are the estimates for Right-of-Way costs associated with this alternative only, which are subject to change and revision:

- Roadway Items: $26,400,000.
- Structure Items: $57,300,000.
- Right-of-Way Cost: $100,000.
- Mitigation Cost: $5,000,000.

Size and Location of Impact Area/Volume:
This alternative will occupy approximately 0.25 acres of the spillway outlet area, and 1.07 acres of the upstream dam embankment, 76,950 ft^3 of the dam reservoir, in addition to 0.80 acres of footing easement, 0.59 acres of fill, and 1.90 acres of the downstream embankment into the basin north of Burbank Boulevard. The south end (49,014 ft^3) and northeast section (27,936 ft^3) of the Sepulveda Dam would be affected. The length and width of the structure on the dam will be 550 and 41 feet, respectively. 2.92 acres of the 225 total acreage (**1.30%**) of the Sepulveda Dam Wildlife Refuge would be encroached upon by new connector structures.

Delay Cost Analysis for the No-Build Condition (2015) versus Alternative 3:
A delay cost analysis has been performed by the Division of Operations for the No-Build Condition in the year 2015 and the selection and construction of Alternative 3. By 2015 and based on the foregoing discussion, the annual savings in travel delay cost associated with Alternative 3 over the No-Build Condition is anticipated to be approximately $28.4 million/year. While Alternative 1 provides the highest travel delay savings over all other alternatives, Alternative 3—which calls for the reconstruction of the Burbank Boulevard ramps with full standard features—would represent the best operational improvement to the interchange. Please reference section 2.1.6 for the supporting traffic data.


ALTERNATIVE 3
CONNECTOR "B"
S/B BURBANK ON & OFF RAMP
ACOE SERVICE ROAD (REALIGNED)
EXISTING CONNECTOR, ON & OFF RAMP TO BE REMOVED
BURBANK BLVD
SEPULVEDA BLVD
SEPULVEDA DAM
ACOE SERVICE ROAD
CONNECTOR "B"
ROUTE 101
HAZELL AVE
ROUTE 405
scale 1:9000 (1" = 750')
Caltrans

The Five (5) Previously Rejected Alternatives

ALTERNATIVE 4: RECENTLY REJECTED

This alternative was only recently rejected and is similar to Alternative 1, except it sought to completely **avoid** the impacts posed by Alternative 1, as well as, the impacts posed by Alternatives 2 and 3. Unlike Alternative 1, this alternative would have retained access from Burbank Boulevard to the U.S.-101 by allowing traffic to use a new on-ramp to the SB I-405 (as required by Alternative 1) to access the U.S.-101 via the existing connectors from the SB I-405 to the U.S.-101 (rather than removing these connectors as is required by Alternative 1). This would have been accomplished by constructing the said new Burbank Boulevard on-ramp to the SB I-405 so that it also connects with the existing connectors at its terminus (unlike Alternative 1).

Since this alternative would have retained access to the U.S.-101 from Burbank Boulevard, it would not require an encroachment upon the Sepulveda Basin Wildlife Refuge (as is required by Alternatives 2 and 3). **However**, the consequence of not closing and removing the existing connectors (as required by Alternative 1) is that this alternative would not only require the construction a new connector from the SB I-405 to the SB U.S.-101, but also face the added challenge/burden of having to "go around" the existing connectors, and therefore, would have to be more than five times as long as the same connector required per Alternative 1. Consequently, this would have required (3) full and (10) partial right-of-way acquisitions of residential property on the southeast side of the interchange.

PROS/CONS Summary
These are the pros of Alternative 4:

- This alternative retains access from Burbank Boulevard to the U.S.-101.
- This alternative does not require an encroachment upon the Sepulveda Basin Wildlife Refuge.
- Prior to its elimination, this alternative was highly favored because: a) Unlike Alternative 1, Alternative 4 would have maintained access to the U.S.-101 from Burbank Boulevard, and thereby would have avoided adverse impacts to the adjacent City streets, and b) Unlike Alternatives 2 and 3, Alternative 4 would have required the improvement of BOTH SB I-405 Connectors to the U.S.-101.

These are the cons of Alternative 4:

- Prior to its elimination, this alternative had the largest impact footprint of the four "Build" alternatives.
- This alternative would have posed a residential right-of-way impact to residents of the City of Los Angeles who reside on the southeast side of the interchange.
- The City of Los Angeles Department of Transportation is opposed to this alternative.
- This alternative would have provided the least amount of travel delay savings.

Project Alternative Cost Estimates:
These are the estimates for Right-of-Way costs associated with this alternative only, which are subject to change and revision:

- Roadway Items: $56,235,672.
- Structure Items: $83,834,200.
- Right-of-Way Cost: $5,747,200.
- Mitigation Cost: $5,000,000.

Size and Location of Impact Area/Volume:
This alternative will occupy approximately 5.04 acres of the spillway outlet area, 0.45 acres of permanent footing easement and 0.59 acres of fill, in addition to 0.98 acres of the upstream dam embankment, and 49,014 ft^3 of the dam reservoir. The dam reservoir will be affected only on the south end of the Sepulveda Dam. Length and width of the structure on the dam will be 550 and 41 feet, respectively.

Delay Cost Analysis for the No-Build Condition (2015) versus Alternative 4:
A delay cost analysis was performed by the Division of Operations for the No-Build Condition in the year 2015 and the selection and construction of Alternative 4. By 2015 and based on the foregoing discussion, the annual savings in travel delay cost associated with Alternative 4 over the No-Build Condition is anticipated to be approximately $20 million/year.

Basis for Rejection:
Alternative 4 was rejected on the basis of its incompatibility with the project's Need and Purpose, because it provided the least amount of travel delay savings, and because it had the largest impact footprint of the "Build" Alternatives.

ALTERNATIVE A

Alternative A was considered during the Project Initiation Phase. This alternative, which is similar to Alternative 4, was withdrawn from further consideration due to the use of slip ramps, which would connect the new Burbank Boulevard on-ramp to the U.S.-101 via slip ramps connections to the new connectors (thereby retaining access unlike Alternative 1).

As previously discussed, slip ramps are not in conformity with Federal Highway Administration (FHWA) design standards. FHWA has already once denied Caltrans' request for a slip ramp design exemption.

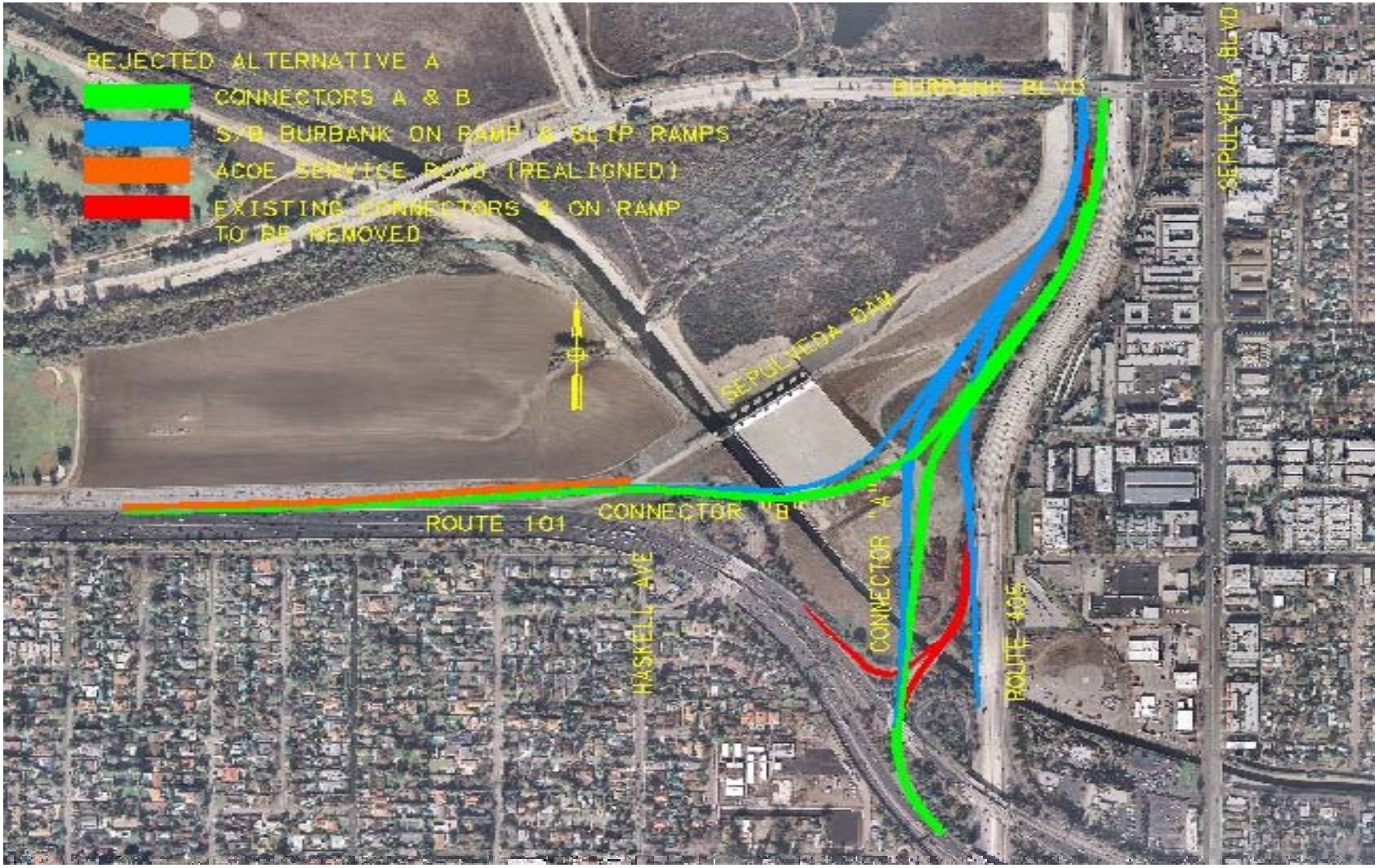
FHWA states that: 1) Local connections within interchanges – especially on freeway-to-freeway ramps – violate driver expectancy and introduce additional decision points in an area where the information processing task is already complex. They also create a high potential for traffic queuing back onto the through freeway lanes (which defeats the Need and Purpose of this project). In addition, such ramps seldom provide for full directional services, thus creating the possibility of wrong-way movements by drivers who wish to return or continue in the same direction. 2) It is poor public policy as well as poor engineering practice to allow additional access to existing freeway ramps. 3) FHWA does not support any type of slip ramp.

Additionally, Section 502.3 of the Highway Design Manual (HDM) states that "local traffic service interchanges should not be located within freeway-to-freeway interchanges unless geometric standards and level of service will be substantially maintained."

Therefore, since Alternative A calls for slip ramps to connect to the NEW connectors, per FHWA, this will create a high potential for traffic queuing back onto the through freeway lanes. For this reason, Alternative A defeats the purpose of the project's "Need and Purpose". Hence, Alternative A was rejected on the basis of its incompatibility with the project's Need and Purpose.

Project Alternative Cost Estimates:
These are the estimates for Right-of-Way costs associated with this alternative only, which are subject to change and revision:

- Roadway Items: $44,169,213
- Structure Items: $48,279,800.
- Right-of-Way Cost: $68,008,337.
- Mitigation Cost: $5,000,000.


REJECTED ALTERNATIVE A
CONNECTORS A & B
S/B BURBANK ON RAMP & SLIP RAMPS
ACOE SERVICE ROAD (REALIGNED)
EXISTING CONNECTORS & ON RAMP
TO BE REMOVED
BURBANK BLVD
SEPULVEDA BLVD
SEPULVEDA DAM
ROUTE 101
CONNECTOR "B"
CONNECTOR "A"
HASKELL AVE
ROUTE 405

ALTERNATIVE B

This alternative was proposed by the City of Los Angeles during the Scoping phase of this project back in 2006. The City was seeking to achieve the objectives of Alternative 1 and 4, minus the impacts of each. Alternative B is essentially a hybrid between Alternative 1 and Alternative 4, minus the loss of access to the U.S.-101 from Burbank Boulevard, and minus the residential right-of-way acquisition impacts to the southeast side of the interchange.

Unfortunately, the proposal has been deemed fatally flawed. Like Alternative 4, Alternative B calls for the existing connectors to remain as is. However the City of Los Angeles overlooked that the consequence of not closing and removing the existing connectors (as required by Alternative 1) is that this alternative (like Alternative 4) would also require the construction of a new connector from the SB I-405 to the SB U.S.-101.

The new connector, however, would not be able to meet grade and vertical clearance standards. It is not feasible for the new connector "A" to pass over the Burbank Boulevard on-ramp to the NB US-101, and then under the NB US-101 mainline to tie in to the SB US-101 mainline.

Project Alternative Cost Estimates:
These are the estimates for Right-of-Way costs associated with this alternative only, which are subject to change and revision:

- Roadway Items: $41,960,752.
- Structure Items: $45,865,810.
- Right-of-Way Cost: $791,829,108.
- Mitigation Cost: $5,000,000.

REJECTED ALTERNATIVE B
CONNECTORS A & B
S/B BURBANK ON RAMP & SLIP RAMPS
REALIGNED HASKELL ON RAMP
EXISTING CONNECTORS & ON RAMP
TO BE REMOVED
BURBANK BLVD
SEPULVEDA BLVD
SEPULVEDA DAM
ROUTE 101
CONNECTOR "B"
CONNECTOR "A"
HASKELL AVE
ROUTE 405

ALTERNATIVE C

This alternative avoids ALL encroachment upon land owned and operated by the U.S. Army Corps of Engineers (i.e. Sepulveda Dam), as well as the floodplain and Section 4(f) resources on that land. Unlike Alternatives 1, 2, 3, 4, A, and B, this Alternative does NOT call for a new connector bridge from the SB I-405 to the NB U.S.-101 that encroaches upon and spans over the spillway of the Sepulveda Dam.

Instead, Alternative C calls for the complete relocation of the improved SB I-405/U.S.-101 connectors to the northeast, southeast, and southwest of the existing connectors, thereby completely avoiding any encroachment upon the northwest side of the interchange, where the U.S. Army Corps of Engineers land is located.

This non-conventional configuration requires that both new connectors “connect” to the U.S.-101 from the south side, and would consequently pose right-of-way acquisition impacts to the northeast, southeast, and southwest corners of the interchange. Right-of-way acquisitions for this alternative involve (329) total properties.

Compared to Alternatives 1, 2, 3, 4, A and B, Alternative C poses:

- The largest project impact footprint.
- The largest and most disproportionate right-of-way acquisition impact requirements.
- The most adverse temporary and permanent community disruption impacts.

When compared to Alternatives 1, 2, 3, 4, A and B, the undesirable geometrics and the impacts posed by Alternative C are of extraordinary magnitude, but yet avoidable by simply eliminating Alternative C from further consideration. Therefore, the Department has concluded that continuing to pursue Alternative C as a viable option is not reasonable, nor prudent.

Per the Council on Environmental Quality (CEQ), as part of its oversight of implementation of NEPA, CEQ Regulations 40 CFR Sec. 1502.14 requires that all reasonable alternatives be examined. In **determining the scope of alternatives to be considered**, the emphasis is on what is "reasonable". The Department has concluded that Alternative C is not a reasonable alternative, and therefore, not fit for further consideration.

Project Alternative Cost Estimates:
These are the estimates for Right-of-Way costs associated with this alternative only, which are subject to change and revision:

- Roadway Items: $128,881,234
- Structure Items: $214,895,731.
- Right-of-Way Cost: $791,829,108.
- Mitigation Cost: $5,000,000.

REJECTED ALTERNATIVE C
CONNECTORS A & B
S/B BURBANK ON RAMP
VICTORY BLVD
BURBANK BLVD
SEPULVEDA DAM
ROUTE 101
BALBOA BLVD
VAN NUYS BLVD

ALTERNATIVE D

This alternative also avoids ALL encroachment upon land owned and operated by the U.S. Army Corps of Engineers (i.e. Sepulveda Dam), as well as the floodplain and Section 4(f) resources on that land. Unlike Alternatives 1, 2, 3, 4, A, and B, this Alternative does NOT call for a new connector bridge from the SB I-405 to the NB U.S.-101 that encroaches upon and spans over the spillway of the Sepulveda Dam.

Instead, Alternative D calls for a complete relocation of the new SB I-405/NB U.S.-101 connector toward the far northwest, completely "going around and behind" U.S. Army Corps of Engineers land. This configuration requires no alteration of the existing SB I-405/NB U.S.-101 connector, and therefore, it would remain as is.

The new SB I-405/NB U.S.-101 connector would originate from the SB I-405, just south of Saticoy Street, and would connect to the NB U.S.-101 just east of Tampa Avenue, via a 5.2-mile long fly over connector bridge structure. Consequently, this alternative would require (2422) full right-of-way property acquisitions. The Sepulveda Basin Wildlife Refuge would not be impacted, nor any other part of the Sepulveda Flood Control Basin.

Compared to Alternatives 1, 2, 3, 4, A, B and C, Alternative D poses:

- By far, the largest project impact footprint of ALL alternatives.
- The largest and most disproportionate right-of-way acquisition impact requirements.
- The most adverse temporary and permanent community disruption impacts.

When compared to Alternatives 1, 2, 3, 4, A, B and C, the impacts posed by Alternative D are of extraordinary magnitude, but yet avoidable by simply eliminating Alternative D from further consideration. Therefore, the Department has concluded that continuing to pursue Alternative D as a viable option is not reasonable, nor prudent.

Per the Council on Environmental Quality (CEQ), as part of its oversight of implementation of NEPA, CEQ Regulations 40 CFR Sec. 1502.14 requires that all reasonable alternatives be examined. In **determining the scope of alternatives to be considered**, the emphasis is on what is "reasonable". The Department has concluded that Alternative D is not a reasonable alternative, and therefore, not fit for further consideration.

Per Section 4(f) of the Department of Transportation Act of 1966, the Department has deemed Alternative C as neither a feasible (due to its prohibitively high costs) nor a prudent (due to the severity of its community disruption impacts) alternative to the "Build" Alternatives 1, 2, 3, or 4, which require adverse impacts to Section 4(f) resources.

Right-of-Way Cost Estimates:
These are the estimates for Right-of-Way costs associated with this alternative only, which are subject to change and revision:

- Roadway Items: $67,314,401.
- Structure Items: $329,982,051.
- Right-of-Way Cost: $3,360,600,304.
- Mitigation Cost: $5,000,000.

REJECTED ALTERNATIVE D
CONNECTOR B
EXISTING CONNECTORS & ON RAMP
TO BE REMOVED
SATTEDY ST
SHERMAN WAY
ROUTE 405
CONNECTOR "B"
VICTORY BLVD
BALBOA BLVD
WOODLEY AVE
RESEDA BLVD
TAMPA AVE
ROUTE 101
SEPULVEDA DAM

3 | DESCRIPTION OF SECTION 4(f) RESOURCES

As noted above, resources subject to Section 4(f) consideration include publicly owned lands consisting of a public park/recreation area; public wildlife and waterfowl refuges of national, state, or local significance; or historic sites of national, state, or local significance, whether publicly or privately owned. As recommended in the FHWA Section 4(f) Checklist, all NRHP-eligible historic sites within the Area of Potential Effects (APE) and all public parks, recreational facilities, and wildlife refuges within approximately 0.5-mi (0.8-km) of any of the project alternatives were included in this evaluation.

All the Section 4(f) resources that are evaluated in this section are located within the Sepulveda Basin.

The Sepulveda Basin:

The 405/101 Connector project encroaches upon the Sepulveda Dam Flood Control Basin and Recreation Area (Basin). The Basin is located at the junction of the I-405 and US-101 Freeways in the San Fernando Valley (Valley), City of Los Angeles (City), and is owned by the U.S. Army Corps of Engineers (USACE). The Basin encompasses 2,097 acres, and provides flood protection to properties within the Los Angeles River drainage area.

The primary purpose of the dam and its associated Basin is to provide flood protection. The Basin is also designated as a regional park in the Los Angeles City General Plan, and is zoned as open space. The area's land use is governed by its 1981 Master Plan, which specifies the recreational uses of the proposed project site and its alternatives. Portions of the Basin are currently used for recreational activities, wildlife habitat, agriculture, as well as utility and military facilities.

The Corps leases 1,527 acres to the city of Los Angeles Department of Recreation and Parks for recreational purposes. Recreational facilities include a wildlife area, Woodley Park, Beilenson Park, three golf courses, Hjelte Sports Field, tennis courts, Balboa Recreation Center, a dog park, cricket fields, the Japanese Garden Center and numerous playing fields, picnic areas and other amenities. The Sepulveda Basin includes the largest recreation area in the Valley.

Table 3-1 lists major land uses in the Basin. Figure 3-1 illustrates the land uses in the Basin. Two parcels in the eastern portion of the Basin have been dedicated for a wildlife area. Several small farms are present within the Basin. Public utilities including the Donald C. Tillman Water Reclamation Plant (Tillman) are also located within the Basin.

Table 3-1: Sepulveda Basin Land Use		
Sepulveda Basin Land Users	**Type of Use**	**Acres Used**
National Guard Navy Air National Guard	Armory Reserve Training	 60 Acres
City of Los Angeles, Dept. of Public Works	Tillman	80 Acres
City of Los Angeles, Fire Department	Fire Station	9 Acres
Agricultural Lessees	Agriculture	390 Acres
City of Los Angeles, Department of Recreation and Parks	Recreation and Parks Sepulveda Golf Course Woodley Golf Course	 300 Acres 200 Acres
	Balboa Sports Center Baseball Fields Franklin Field Victory Blvd. Field White Oak Ave. Field Hayvenhurst Ave. Field Woodley Ave. Park Model Airplane Center Garden Center Bicycle Trail Valley Youth Center Woodley Golf Course & Bike Trail Parking Lot Miniature Golf Course Wildlife Refuge Park & Management Center	80 Acres 33 Acres 9 Acres 23 Acres 13 Acres 80 Acres 31 Acres 16 Acres 11 Acres 15 Acres 7 Acres 6 Acres 48 Acres (currently 225 Acres)
Source: Sepulveda Basin Master Plan, 1981.		

Figure 3-2 illustrates the Section 4(f) resources within 0.5-mile of the project alternatives.

Public Parks and Recreation Areas

In order to qualify as a Section 4(f) resource, a park or recreation area must meet the following criteria:
It must be publicly owned
It must be open to the public
Its major purpose must be recreation
It must be significant as a park or recreation area

One public park has been identified in the proposed project area. Detailed description of this resource is provided below.

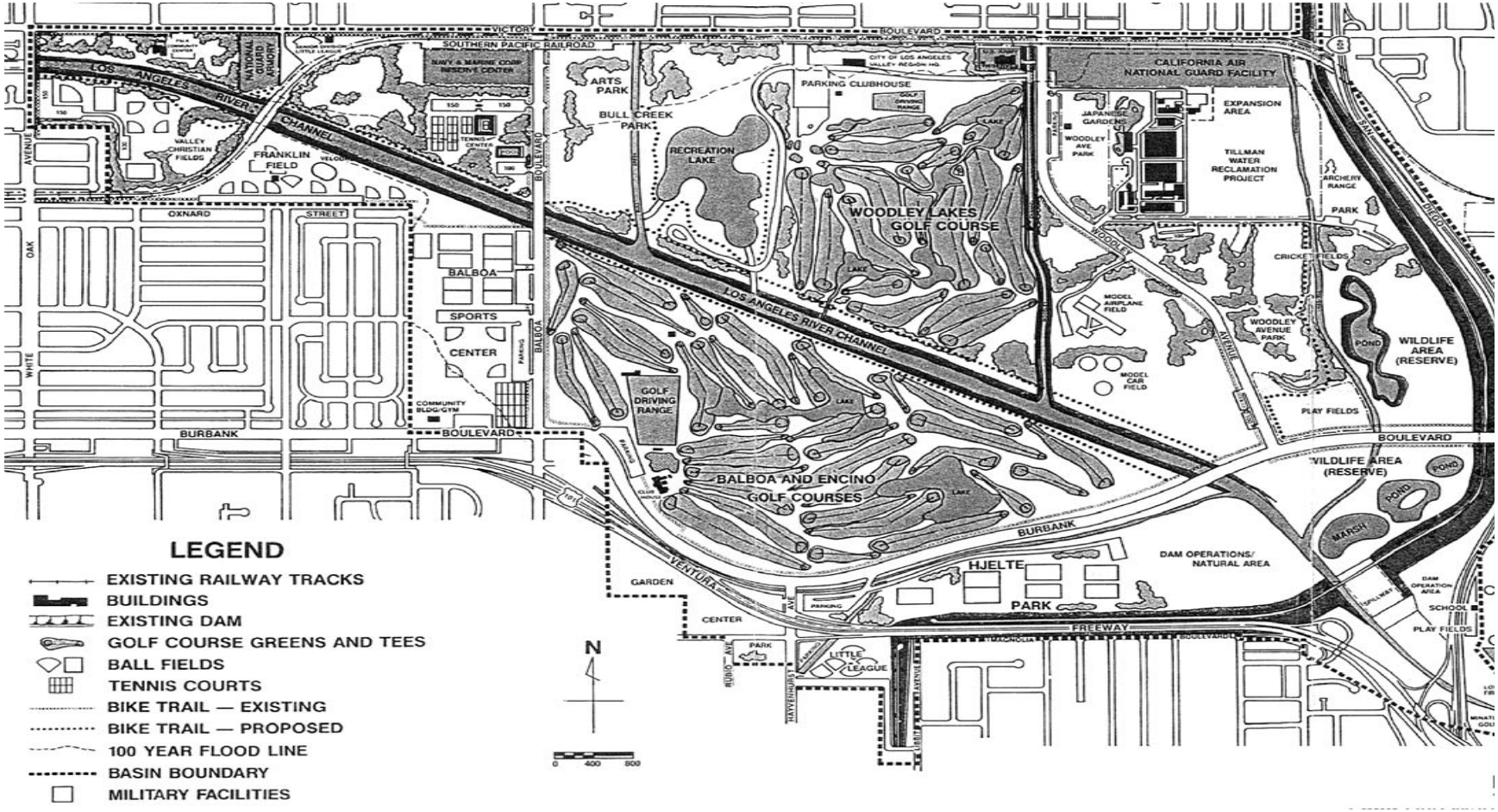
3-1.1 Woodley Park – Description and Significance of Property

A. Type/Location/Size
Woodley Park is a public park located east of Woodley Avenue, and south of Victory Boulevard, in the northeast corner of the Basin immediately adjacent to Tillman. The size of the park is approximately 80 acres.

B. Access/Facilities/Usage
Vehicular and pedestrian access to the park is from Woodley Avenue. The park includes the following existing facilities:

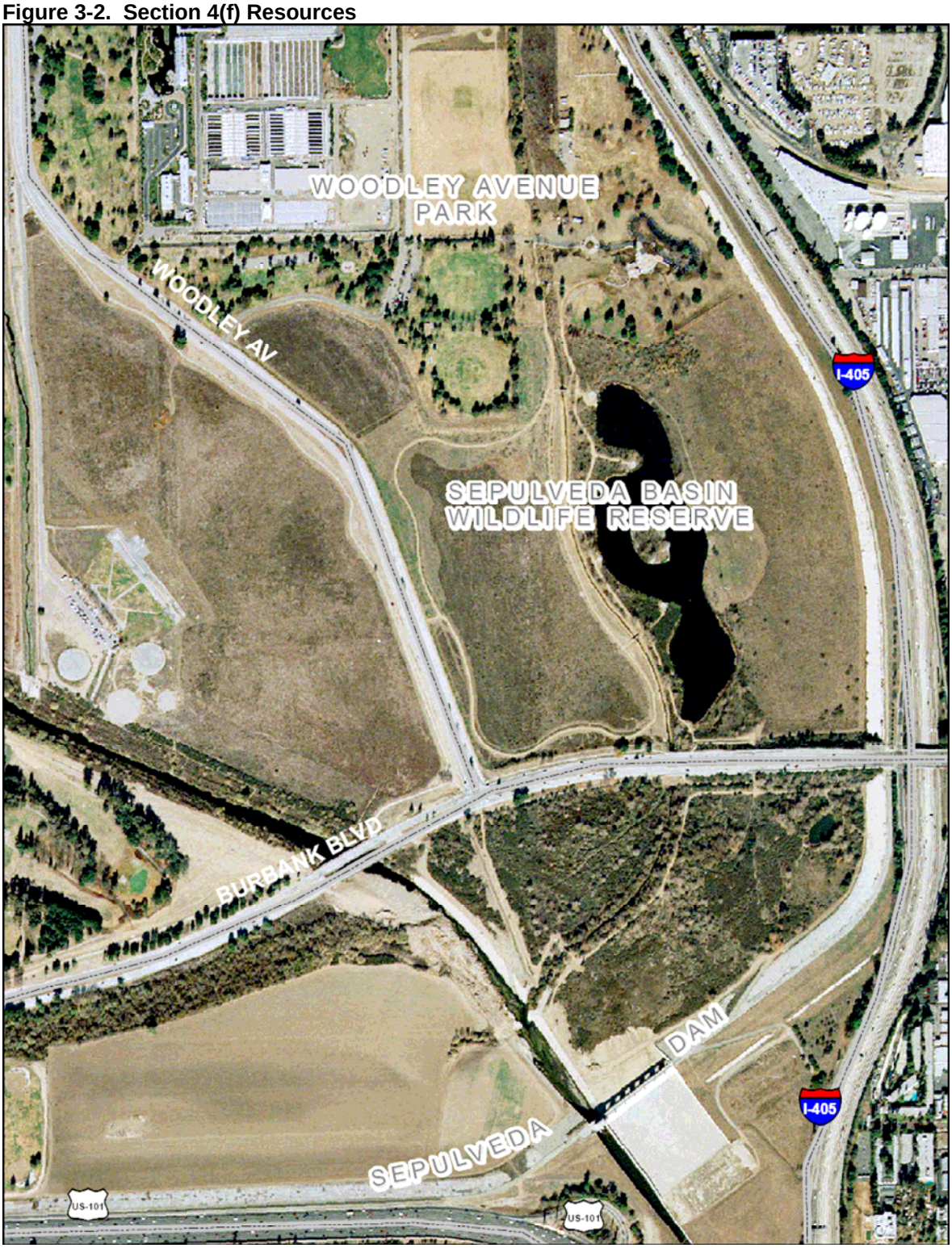
- Turfed park area
- Picnic sites
- Barbecue pits
- Cricket fields
- Children's play area
- Baseball diamond (unlighted)
- Apollo 3 flight field
- Archery Range
- Restrooms.
- Woodley Park is open from dawn to dusk.

Figure 3-1. Generalized Land Use – Sepulveda Basin Recreation Area



Source: City of Los Angeles, Department of Public Works, Sepulveda Wetlands Park – Draft Concept Design Report

Figure 3-2. Section 4(f) Resources



Map created by Joel Bonilla/Environmental Planner - Caltrans District 7, Division of Environmental Planning

C. Relationship to Similar Facilities in the Area
Woodley Park is part of the Sepulveda Basin Recreation Area.

D. Ownership/Jurisdiction
Woodley Park is developed jointly by City of Los Angeles R & P Department and USACE under Code 710 cost-sharing program.

E. Significance
The availability and function of this park plays an important role in meeting the recreational objectives of the community.

Why a 4(f) Resource:
Woodley Park is owned by the USACE and operated by the City of Los Angeles, and is open to the public. It serves as a significant recreation area for the surrounding community because of its picnic and play areas, cricket fields, baseball diamond and archery range. Thus, it meets all four criteria for the protection of Section 4(f) parks and recreation areas, and is considered a Section 4(f) resource.

3-2 Wildlife Refuges

In order to qualify as a Section 4(f) resource, a wildlife or waterfowl refuge must meet the following criteria:

- It must be publicly owned
- Its major purpose must be that of a refuge
- It must be significant as a refuge

One wildlife refuge has been identified in the proposed project area. Detailed description of this resource is provided below.

3-2.1 Sepulveda Basin Wildlife Reserve – Description and Significance of Property

A. Type/Location/Size
The Sepulveda Basin Wildlife Reserve (Reserve) is located east of Woodley Avenue, and south of Victory Boulevard, stretching from south of Woodley Park to south of Burbank Boulevard.

The Reserve is currently 225 acres, the result of several phases of development. It was initially established as a 48-acre riparian area in 1979, and went through several expansions over the years. The latest addition was in 1998 funded by the USACE.

B. Access/Facilities/Usage
Vehicular and pedestrian access is from Woodley Avenue. The following are included in the reserve:

- Restrooms
- Amphitheatre
- Haskell Creek and Riparian Woodland Habitat
- Wildlife Lake and Island with Shoreline Habitat
- Canada Geese/Migratory Waterfowl Forage Area (no entry)
- Hummingbird Hill (Native Plant Garden)
- Expansion Area (undergoing natural plant succession)
- South Area with Coastal Sage Scrub and Riparian & Mulefat Scrub

The Reserve is open to the public, with the exception of the designated foraging areas. Various activities take place during various times of the year such as walks, group hikes and educational field trips for local schools. Figure 3-3 illustrates the various functions of the Reserve.

C. Relationship to Similar Facilities in the Area
The Sepulveda Basin Wildlife Reserve is part of the Sepulveda Basin Recreation Area.

D. Ownership/Jurisdiction
The land is owned by the USACE, who currently leases it to the City. The area is rehabilitated by local interests. Serving as an advisory to the City is the Sepulveda Basin Wildlife Areas Steering Committee, whose members include the Audubon Society, Canada Goose Project, California Native Plant Society, Friends of the LA River, Resource Conservation District of the Santa Monica Mountains, and the Sierra Club.

E. Significance
The area was developed as a restored natural habitat for birds and small animals with native vegetation. Its major purpose is as a refuge. However, public is allowed as visitors.

Why a 4(f) Resource:
The Sepulveda Basin Wildlife Reserve is owned by the USACE and operated by the City of Los Angeles. Its major purpose is as a refuge, and it is significant, as it is the only wildlife refuge in the surrounding community. Thus, it meets all three criteria for the protection of Section 4(f) wildlife refuges, and is considered a Section 4(f) resource.

Figure 3-3. Sepulveda Basin Wildlife Reserve

3-3 Historic Sites

In order to qualify for protection under Section 4(f), a cultural resource must meet the following criteria:
It must be of national, state or local significance.
If it is not on or eligible for listing on the National Register of Historic Places (NRHP), its protection must be considered appropriate by the Federal Highway Administration (FHWA).

Archaeological Resources. According to the Archaeological Survey Report (Caltrans, December 2006), the results of the records search and field investigation has revealed that there are no recorded archaeological resources within the Area of Potential Effect (APE). Therefore, this Section 4(f) Evaluation does not include any archaeological resources. However, the following provisions would be included that address unanticipated discovery of archaeological resources:

- If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.
- If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC).

One significant architectural resource has been identified in the proposed project area. Detailed description of this resource is provided below.

3-3.1 Sepulveda Dam

Description and Significance of Property
Sepulveda Dam is a single purpose flood control project constructed and operated by the U.S. Army Corps of Engineers, Los Angeles District. Construction of the project was completed on December 30, 1941. Sepulveda Dam is the western-most of the Corps of Engineers projects in the Los Angeles County Drainage Area (LACDA) flood control system. The flood control elements include the dam and a dry-land reservoir. The dam is a “compacted earthfill structure with a concrete spillway and outlet structure near the center” and the reservoir has a storage capacity of 17,300 acre-feet at “crest of spillway gates raised.” (Sepulveda Basin Master Plan EIS/EIR 1981).

The purpose of the project is to collect flood runoff from the uncontrolled drainage areas upstream, store it temporarily, and release it to the Los Angeles River at a rate that does not exceed the downstream channel capacity. The project has eight outlet passages, of which, only four have gates. Because the other four passages have no gates, Sepulveda Dam cannot "shut off" flow to the Los Angeles River.

The Sepulveda Flood Control Dam was found **eligible for listing in the NRHP**. In a letter dated March 14, 2007, the State Historic Preservation Officer (SHPO) concurred that the Sepulveda Dam is eligible for the NRHP under criteria A and C, at the local level, with 1941-1949 as the period of significance. Under criterion A, the dam’s construction coincides with a major shift in the operation of flood relief in the Los Angeles Basin from a local venture to its being federally funded and managed. Under criterion C, the Sepulveda Dam was designed in a straightforward engineering approach prevalent in Southern California. It is a compacted earth fill dam constructed during a time when accelerated changes in construction equipment allowed for larger and faster excavations. The work also involved a massive pile driving operation, reportedly one of the largest such jobs undertaken in the region at the time. The dam is also notable for the PWA Moderne design of the outlet works and spillway.

Why a 4(f) Resource:
Coordination with the State Historic Preservation Officer (SHPO) confirmed the historic significance of Sepulveda Dam, which is eligible for listing on the NRHP. Because of its significance and eligibility, it is considered a Section 4(f) resource.

4 | IMPACTS TO SECTION 4(f) RESOURCES

As discussed in Section 1, the use of Section 4(f) properties typically occurs when: 1) land is permanently acquired for a transportation project by partial or full acquisition (i.e., **"direct use"**), 2) temporary occupancy of the protected resource is considered adverse in terms of the preservationist purposes of Section 4(f) (i.e., **"temporary use"**), or 3) the project's proximity impacts are so severe that the protected activities, features or attributes that qualify the resource for protection under Section 4(f) are substantially impaired (i.e., **"constructive use"**).

The following sections describe how the proposed alternatives would affect Section 4(f) resources. A summary of potential effects is provided in Table 4-1.

The analysis of potential impacts on Section 4(f) resources below includes:

- A discussion of how the proposed project alternatives would affect each Section 4(f) resource, and whether the effects would result in a "use" of the resource.
- An evaluation of any feasible and prudent alternatives to avoid use of the Section 4(f) resource. An alternative is not feasible if it cannot be built as a matter of sound engineering practice. A feasible alternative is not prudent if there are truly unusual factors present in a particular case, if there are uniquely difficult problems, or if the cost or community disruption resulting from the alternative reach extraordinary magnitude. A feasible alternative that fails to satisfy the purpose of and need for the project is usually also not prudent.
- A discussion of measures to minimize harm to Section 4(f) resources where a potential "use" has been identified. When a Section 4(f) resource must be used, all planning to minimize harm, including development of mitigation measures, must be undertaken in coordination with the agency owning and/or administering the resource.

Woodley Park – Application of Section 4(f) Criteria for Use

Direct Use

The proposed project alternatives would not require any permanent use (permanent acquisition/easement) of Woodley Park.

Temporary Use

The proposed project alternatives would not require any temporary use of Woodley Park. There will be no temporary construction easements, access areas and detours on Woodley Park.

Constructive Use

For the reasons described below, no constructive use would occur:

Access – The proposed project alternatives would not affect vehicular or pedestrian access to the park. There would be no construction related impacts to accessibility of the park.

Noise/Vibration – Alternative 2 and 3 includes construction of a new loop on-ramp that connects to Burbank Boulevard to the west of the current ramp intersection. Under Alternative 2 and 3, the new structure will be approximately 650-feet and 665-feet away from the park, respectively. Woodley Park is used for activities that do not require quiet surroundings. Also, the existing park is located in a busy urban area, surrounded by a busy traffic corridor.

According to the supplemental noise study conducted by Caltrans to analyze and highway noise impacts to the biological environment (please see Chapter 2 of the IS/EA), the existing traffic noise level in the northernmost section of the Sepulveda Basin Wildlife Refuge/southernmost section of

Table 4-1: Potential Effects on Section 4(f) Resources										
Resource	Alternative 1			Alternative 2			Alternative 3			**Remarks**
	Use			Use			Use			
	D*	T*	C*	D	T	C	D	T	C	
Woodley Park										No use.
Sepulveda Basin Wildlife Reserve				X			X			***Direct Use –*** **Alternative 2: 2.64 acres (1.17% of the 225 total acreage)** **Alternative 3: 2.92 acres (1.30% of the 225 total acreage)**
Sepulveda Dam	X			X			X			***Direct Use –*** **Alternative 1: 4.93 acres of the spillway outlet area, 0.45 acres of permanent footing easement, 1.07 acres of upstream dam embankment.** **Alternative 2: 0.28 acres of the spillway outlet area, 0.79 acres of permanent footing easement, 1.07 acres of upstream dam embankment, 0.16 acres of downstream dam embankment.** **Alternative 3: 0.25 acres of the spillway outlet area, 0.80 acres of permanent footing easement, 1.07 acres of upstream dam embankment, 1.90 acres of downstream dam embankment.**
* D=Direct, T=Temporary, C=Constructive										

Woodley Park currently is 56 decibels. After project implementation, if Alternatives 2 or 3 were to be selected and therefore generate additional traffic noise from the south due to the new on-ramp, the noise levels would rise 1 decibel, to 57 decibels. That noise impact is well below the Noise Abatement Criteria (NAC) threshold for parks: 67 decibels.

Short-term noise and/or vibration impacts associated with construction activities would be temporary and intermittent. Because these impacts would be limited in duration, they could not reasonably be considered so substantial as to impair the activities, features, or attributes that qualify the park under Section 4(f).

Aesthetics – There would be no effects to the aesthetic quality of the park. Views to or from the park are not a feature or characteristic of the property.

Biological Resources (Vegetation and Wildlife) – The proposed project alternatives would not impact any biological resources within the park.

Air Quality – A comprehensive analysis of potential air pollutants has concluded that the proposed project alternatives do not pose any significant operational impact on the ambient air quality in the project vicinity. The Southern California Association of Governments (SCAG)'s Transportation Conformity Working Group determined that the proposed project alternatives are not a "project of air quality concern," and that $PM_{2.5}$ and PM_{10} local impacts will not occur. A discussion of fugitive dust control measures is provided as part of this project and the measure is included as project commitments prior to construction of this project. The analysis shows that the project would not be expected to cause any new violations, worsen existing violations, or delay timely attainment of the NAAQS. The analysis shows Mobile Source Air Toxic (MSAT) emissions in the project area will decrease in future years and that the project would not result in an increase in MSAT emissions compared to no project conditions. Control measures have been identified for naturally occurring asbestos should rock containing asbestos be uncovered.

Water Quality – The proposed project will not have any specific impacts to water quality in park. In general, the proposed project calls for an encroachment into the Sepulveda Flood Control Basin. Therefore, the receiving water is the Sepulveda Basin Reservoir, a component of the Los Angeles River Watershed. The proposed project is larger than 1 acre, and therefore, will require implementation of Storm Water Pollution Prevention Plan (SWPPP) pursuant to the Clean Water Act (Section 402). Please refer to Chapter 2 of the IS/EA for a more detailed discussion of Water Quality and Storm Water Runoff.

4-1.2 Woodley Park – Avoidance Alternatives

Because none of the proposed alternatives would result in a use of Woodley Park, no analysis of avoidance alternatives is required.

4-1.3 Woodley Park – Measures to Minimize Harm

Since no Section 4(f) use would result from the proposed alternatives, no measures to minimize harm would be needed.

4-2 Sepulveda Basin Wildlife Reserve

4-2.1 Sepulveda Basin Wildlife Reserve – Application of Section 4(f) Criteria for Use

Alternatives 2 and 3 propose to acquire land by permanent easement in Sepulveda Basin Wildlife Reserve (Reserve) to be incorporated into the proposed transportation facility. As such, this action would result in **direct use of the Section 4(f) resource**.

Under Alternative 2, the proposed alignment over the Reserve would cover approximately 2.64 acres of the 225 total acreage (1.17%). The area covered under Alternative 3 is 2.92 acres (1.30%). These easements will not alter the land use of the location; the primary uses of open space and recreation would be maintained.

The access roads will most likely be located at the two loops at Haskell on/off ramps, and adjacent to the I-405, completely within the Caltrans right-of-way. The contractor will determine the location of equipment storage.

Within the Reserve, a number of coastal live oak trees and walnut trees located north of Burbank Blvd, and approximately 18 acres of an area that has been designated as a migratory forage corridor directly adjacent to the I-405 will be permanently impacted by Alternatives 2 and 3. The proposed alternatives may have both permanent and temporary impacts to sensitive species such as burrowing owl (*Athene cunicularia*) and least Bell's Vireo (*Vireo bellii*), as well as to other bird species that utilize this area as an important stopping point along their migratory routes. The proposed project may result in permanent habitat loss, which would be subject to minimization measures and compensatory mitigation. Although the project is anticipated to be completed in one season, some impacts primarily those due to an increase in noise to nesting birds and the local avian populations, are anticipated to be temporal prolonged impacts.

4-2.2 Sepulveda Basin Wildlife Reserve – Avoidance Alternatives

No-Build Alternative
The No Build alternative would result in the connectors between the freeways remaining as they are. The Sepulveda Dam would remain intact without further encroachments on the spillway, earthen embankment and reservoir. No direct use would occur, however the project's purpose and need would remain unfulfilled and the project's objectives unrealized. The No-Build Alternative is considered not prudent because it fails to meet the needs which the project was designed to address.

Alternative 1
This alternative would avoid the Reserve, however would still result in use of a Section 4(f) resource, the Sepulveda Dam. Furthermore, there are problems associated with this alternative which include loss of access to the US-101 from Burbank Boulevard, and the resulting potential increase in congestion to the adjacent city streets and intersections.

Alternative 4
Like Alternative 1, this alternative would also avoid the Reserve, but result in use of the Sepulveda Dam, another Section 4(f) resource. In addition, this alternative proposes the largest footprint, and would require acquisition of up to 30 homes. This alternative was withdrawn from further study because it requires the implementation of a slip ramp, which is not in conformity with Federal Highway Administration (FHWA) design standards.

FHWA states that:
Local connections within interchanges – especially on freeway-to-freeway ramps – violate driver expectancy and introduce additional decision points in an area where the information-processing task is already complex. They also create a high potential for traffic queuing back onto the through freeway lanes (which defeats the Need and Purpose of this project). In addition, such ramps seldom provide for full directional services, thus creating the possibility of wrong-way movements by drivers who wish to return or continue in the same direction.

It is poor public policy as well as poor engineering practice to allow additional access to existing freeway ramps.

FHWA does not support any type of slip ramp.

Alternative A
As with Alternative 4, this alternative was also withdrawn from further study because the use of slip-ramps does not conform to FHWA policy.

Alternative B
Even though this alternative would avoid the Reserve, it was determined to be was flawed and physically impossible to implement.

Alternative C
As discussed in Section 2-3, this alternative would completely avoid the Sepulveda Dam Basin by moving the 405/101 Interchange Connector to southeast and then southwest from the existing location. It would not result in a use of the Section 4(f) resource. However, it would require full and partial acquisition of approximately 50 privately owned properties, and displace a substantial number of families or businesses. In addition, it would result in a serious disruption of established travel patterns on local streets in the area. The cost of this avoidance alternative has been estimated at seven hundred million dollars. Given the very high costs for acquisition of right-of-way, relocation costs, lost tax base for the City, disruption of local traffic and the substantial adverse community impacts to an entire community, Alternative C is not a prudent alternative.

Alternative D
As discussed in Section 2-3, this alternative also would completely avoid the Sepulveda Dam Basin by moving the 405/101 Interchange Connector northwest from the existing location. It would not result in a use of the Section 4(f) resource. This connector would be approximately 5.2 mile long. It would require full and partial acquisition of approximately 100 privately owned properties, and displace a substantial number of families or businesses. In addition, it would result in a serious disruption of established travel patterns on local streets in the area. The estimated cost of this avoidance alternative would be one billion dollars. Given the very high costs for acquisition of right-of-way, disruption of local traffic and the substantial adverse community impacts to an entire community, Alternative D is not a prudent alternative.

4-2.3 Sepulveda Basin Wildlife Reserve – Measures to Minimize Harm

All possible planning to minimize harm include the following (please refer to Chapter 2 of the IS/EA for a more detailed discussion):

- Provide funding to other proposed projects that are identified in the Reserve (Bull Creek Restoration Project and Sepulveda Wetlands Park Project).
- Develop and implement a restoration plan for the Sepulveda Basin forage area.
- Planting of native trees along the length of the new 405 connector.
- Plant at a minimum ratio of 5:1
- Primary species would be coast live oak and California walnut.
- Off-site: In-lieu fee transfer to the SMMC to be applied to restoration efforts within the San Fernando Valley watershed but outside the Sepulveda Basin Wildlife Reserve.

4-3 Sepulveda Dam

4-3.1 Sepulveda Dam – Application of Section 4(f) Criteria for Use

All three Build Alternatives propose to acquire land by permanent easement on the Sepulveda Dam to be incorporated into the proposed transportation facility. The three proposed alternatives will encroach into the Sepulveda Dam by constructing elevated structures that cross the dam spillway outlet area to connect to northbound and southbound US-101. A portion of the earthen embankment of the dam adjacent to northbound US-101 will be modified to accommodate the change. A retaining wall would be erected to minimize the volume loss of the reservoir as a result of realigning the Army Corps of Engineers (ACOE) service road. Additionally, alternatives two and three propose a new structural on-ramp and off-ramp north of Burbank Boulevard that will cross the dam maintenance access road at grade on the earthen embankment. As such, this action would result in **direct use of the Section 4(f) resource**.

Alternative 1
This alternative would remove the existing connector ramps from the southbound I-405 to northbound and southbound US-101, along with the existing southbound I-405/US-101 on-ramp from Burbank Boulevard. New two-lane US-101 connector ramps (structures) would be constructed over the Sepulveda Dam spillway connecting southbound I-405 with northbound (connector B) and southbound (connector A) US-101, and Burbank Boulevard with southbound I-405. The elevated connectors that pass through the dam spillway will be approximately fifty (50) feet high, the same approximate height as the Sepulveda Dam gates. The ACOE service road adjacent to northbound 101 will be realigned to accommodate the new connector which would drop down on top of the earthen embankment as it merges with northbound 101. The proposed encroachment on the embankment is approximately 550 feet long and 39 feet wide. A retaining wall will be built along the earthen embankment (northbound US-101) to mitigate for a loss of volume in the reservoir due to the realigned service road.

This alternative would constitute an Adverse Effect on the Sepulveda Dam under Adverse Effect Criterion 2(i) as the dam embankment along northbound US-101 will be excavated for footings for the descending ramp structure, the retaining wall and the realigned ACOE access road (1.07 acres). This alternative would constitute an Adverse Effect on the Sepulveda Dam under Adverse Effect Criterion 2(i) because it would entail the physical destruction of or damage to all or part of the property. This alternative would constitute an Adverse Effect on the Sepulveda Dam under Adverse Effect Criterion 2(ii) as the elevated structures to be built through the dam spillway (4.93 acres) and upon the earthen embankment, as well as the proposed retaining wall, are alterations of the property that is not consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines. This alternative would constitute an Adverse Effect on the Sepulveda Dam under Adverse Effect Criterion 2(iv) as the addition of elevated freeway connector ramps through the dam spillway, and the utilization of the earthen embankment for the descending freeway connector ramp, change the character of the Sepulveda Dam's use (flood control) and physical features within the dam setting that contribute to its historic significance. The earthen embankment, spillway and reservoir are character defining features of the Sepulveda Dam. This alternative would constitute an Adverse Effect on the Sepulveda Dam under Adverse Effect Criterion 2(v) by introducing a visual element (elevated connector ramps) into the spillway area and on top of the embankment that diminishes the integrity of the property's significant historic features. The Dam is eligible because it was designed in a straightforward engineering approach prevalent in Southern California at the time. The earth fill dam was constructed during a time when accelerated changes in construction equipment allowed for larger and faster excavations. The work also involved a massive pile driving operation, reportedly one of the largest undertaken in the region at the time. The dam is also notable for the PWA Moderne design of the outlet works and spillway.

Alternative 2
This alternative would constitute an Adverse Effect on the Sepulveda Dam under the same Adverse Effect Criteria as were listed for Alternative 1. Under this alternative only Connector B (S/B I-405 to N/B US-101) would be constructed through the dam spillway. Under Alternative 2 there would be additional adverse effects as a result of the construction of new structures that connect to Burbank Boulevard approximately 120 yards west of the current ramp intersection. The new on ramp would extend north from Burbank Boulevard, and loop around to join the I-405 southbound just after the Burbank Boulevard Overcrossing. This alternative will require 22,000 cubic feet of the dam reservoir and 0.79 acres of footing

easement in the Wildlife Refuge for the ramp structure. Both the on and off ramps would cross over and sit on top of the earthen embankment of the dam north of Burbank Boulevard requiring 0.15 acres of embankment. The earthen embankment, spillway and the reservoir are character defining features of the Sepulveda Dam.

Alternative 3
This alternative would constitute an Adverse Effect on the Sepulveda Dam under the same Adverse Effect Criteria as were listed for Alternatives 1 and 2. This alternative has the same general alignment as Alternative 2, except that the Burbank Boulevard loop on ramp would be of a standard design requiring an additional 50 feet of encroachment onto the reservoir Wildlife Refuge. The earthen embankment and the reservoir are character defining features of the Sepulveda Dam.

4-3.2 Sepulveda Dam – Avoidance Alternatives

The project area is a built environment, with little room for geometrical improvements. As clearly demonstrated below, each of the following alternatives has been fully evaluated and determined not to be feasible and prudent.

No-Build Alternative
The No Build alternative would result in the connectors between the freeways remaining as they are. The Sepulveda Dam would remain intact without further encroachments on the spillway, earthen embankment and reservoir. No direct use would occur, however the project's purpose and need would remain unfulfilled and the project's objectives unrealized. The No-Build Alternative is considered not prudent because it fails to meet the needs which the project was designed to address.

Alternative C
As discussed in Section 2-3, this alternative would completely avoid the Sepulveda Dam Basin by moving the 405/101 Interchange Connector to southeast and then southwest from the existing location. It would not result in a use of the Section 4(f) resource. However, it would require full and partial acquisition of approximately 50 privately owned properties, and displace a substantial number of families or businesses. In addition, it would result in a serious disruption of established travel patterns on local streets in the area. The cost of this avoidance alternative has been estimated at seven hundred million dollars. Given the very high costs for acquisition of right-of-way, relocation costs, lost tax base for the City, disruption of local traffic and the substantial adverse community impacts to an entire community, Alternative C is not a prudent alternative.

Alternative D
As discussed in Section 2-3, this alternative also would completely avoid the Sepulveda Dam Basin by moving the 405/101 Interchange Connector northwest from the existing location. It would not result in a use of the Section 4(f) resource. This connector would be approximately 5.2 mile long. It would require full and partial acquisition of approximately 100 privately owned properties, and displace a substantial number of families or businesses. In addition, it would result in a serious disruption of established travel patterns on local streets in the area. The estimated cost of this avoidance alternative would be one billion dollars. Given the very high costs for acquisition of right-of-way, disruption of local traffic and the substantial adverse community impacts to an entire community, Alternative D is not a prudent alternative.

4-3.3 Sepulveda Dam – Measures to Minimize Harm

Mitigation measures are currently in preparation to be presented to SHPO. Possible measures include the following:

The bents or piers of the elevated structures that cross through the spillway should be similar in shape to the Streamline Modern gates of the dam.

The elevated structures/connectors should have as low a profile as current safety/design guidelines will allow in order to reduce the visual impacts and views of the dam.

All new concrete should match in color and texture that of the dam outlet structure.

Mitigation measures will be presented in a Memorandum of Agreement (MOA) document that will be submitted to SHPO under separate cover, pursuant to Section 106 PA Stipulation XI, 36 CFR 800.6(a), and 800.6(b)(1).

4-3.4 Sepulveda Dam – Section 106 Consultation

Consultation with the SHPO and other cultural resources stakeholders has been initiated, and is described in Section 2.1.8, *Cultural Resources,* and in the Section 106 documentation (Historic Property Survey Report [HPSR] and Finding of Effect [FOE]). Caltrans will seek SHPO concurrence with the finding of effect for this resource during circulation of the Draft IS/EA.

5 | SECTION 4(f) CONSULTATION AND COORDINATION

Chapter 3 of the IS/EA discusses consultation and coordination with officials with jurisdiction, the Army Corps of Engineers (USACE) and the City of Los Angeles Department of Recreation and Parks (City), in detail. The following discussion includes a summary.

Consultation and coordination with the USACE and the City began during the project initiation phase and has been ongoing. Representatives from the USACE and the City were invited and participated in Value Analysis of the project in August 2003. Prior to scoping, Caltrans held meetings with the USACE, the City and the Sepulveda Basin Wildlife Area Steering Committee (Committee) in 2005 and 2006. The goal of these meetings was to discuss the proposed project and solicit comments on potential impacts to the Basin. Public Scoping Meeting was held on June 14, 2006. An additional meeting was held with the USACE on June 19, 2007 to further address their concerns about the project.

More recently, in October and December of 2007, there has been further correspondence with the USACE. The USACE continued to express concern about the project. Caltrans has provided responses to their requests, as information became available during the IS/EA process.

Due to continued concern and requests for additional data from the USACE, Caltrans has decided to delay the request for concurrence from the officials with jurisdiction on Section 4(f) resources until after the circulation of this document. Concurrence and agreement with the USACE and the City will be pursued after their review is complete.

6 | SECTION 6(F)(3) CONSIDERATIONS

Section 6(f)(3) of the Land and Water Conservation Fund Act (LWCF Act) (16 USC Section 460l-4) contains provisions to protect federal investments in park and recreation resources and the quality of those assisted resources. The law recognizes the likelihood that changes in land use or development may make park use of some areas purchased with LWCF funds obsolete over time, particularly in rapidly changing urban areas, and provides for conversion to other use pursuant to certain specific conditions:

Section 6(f)(3) – No property acquired or developed with assistance under this section shall, without the approval of the Secretary, be converted to other than public outdoor recreation uses. The Secretary shall approve such conversion only if he finds it to be in accord with the then existing comprehensive statewide outdoor recreation plan and only upon such conditions as he deems necessary to assure the substitution of other recreation properties of at least equal fair market value and of reasonably equivalent usefulness and location.

This requirement applies to all parks and other sites that have been the subject of LWCF grants of any type, and includes acquisition of parkland and development or rehabilitation of park facilities.

A search of the California Department of Parks and Recreation (CDPR) LWCF grants database found that Sepulveda Dam Recreation Area Development received a grant from LWCF in the amount of $244,983.00 during the 1968/1969 fiscal year (Project Number 06-00061). CDPR was contacted on February 15, 2008. Richard Rendon, LWCF Project Officer, indicated that the grant was used for 160 picnic units, sanitation facilities, parking, roads, walks, lighting and playfields in **Woodley Park**. The portion of the LWCF grants list that includes the Sepulveda Dam and correspondence with CDPR is included in Appendix A.

Findings
Woodley Park is a Section 4(f) resource included in this evaluation. It has been determined that the proposed project alternatives do not result in a use of the Woodley Park. As no conversion of LWCF properties would occur under any of the Build alternatives, the requirements of Section 6(f) of the LWCF Act would not apply.

7 | FORMAL/OFFICIAL CONCLUSION

After the public circulation period of this document, all comments will be considered, and the Department will formally/officially select a preferred alternative and make the final determination of the project's effect on the environment. Should one of the build alternatives that would use land from a 4(f) resource be identified as the preferred alternative for the Project, a Final Section 4(f) Evaluation would be prepared to address the following:

a) the reasons why the alternatives to avoid a section 4(f) property are not prudent and feasible, and
b) all possible measures that would be taken to minimize harm to the section 4(f) property, per 23 CFR 771.135(j).

8 | SECTION 4(f)/6(f) EVALUATION REFERENCES

California Department of Transportation, *Standard Environmental Reference: Chapter 20 – Section 4(f) and Related Requirements*, Volume 1, August 2007.

City of Los Angeles, Department of Parks and Recreation, <http://www.laparks.org/dos/horticulture/sepulvedabasin.htm>, Accessed on January 2008.

Federal Highway Administration, *Section 4(f) Checklist*, May 1997.
_____, *Section 4(f) Policy Paper*, March 1, 2005.
_____, *Technical Advisory T6640.8A, Guidance for Preparing and Processing Environmental and Section 4(f) Documents,* October 1987.

I-405/US-101 Connector Project Archaeological Survey Report, December 2006.

I-405/US-101 Connector Project Finding of Effect, February 2008.

I-405/US-101 Connector Project Historic Property Survey Report, January 2007.

I-405/US-101 Connector Project Natural Environmental Study Report, January 2008.

I-405/US-101 Connector Project Supplemental Traffic and Construction Noise Study Report: Sepulveda Basin Wildlife Reserve, November 2006.

U. S. Army Corps of Engineers. *Sepulveda Basin Master Plan and Environmental Impact Report/Statement.* Los Angeles: 1981.
_____, *Supplement 1 to the 1981 Sepulveda Basin Master Plan Including Environmental Assessment.* Los Angeles: 1995.
_____, *Water Control Manual, Sepulveda Dam & Reservoir Los Angeles River.* Los Angeles: May 1989.

U.S. Department of the Interior, *Handbook on Departmental Review of Section 4(f) Evaluations,* February 2002.

National Park Service, Land and Water Conservation Fund, <http://www.parks.ca.gov/pages/1008/files/lw_all_funded_projects_2007.pdf>, Accessed on January 2008

SECTION 4(F) APPENDIX A

California Department of Parks and Recreation 8/29/2006
Office of Grants and Local Services

Land & Water Conservation Fund

Project Number	Project Name	Agency	Grant Amount
06-00060	MOJAVE RIVER WLDLF AREA ACQ	Wildlife Conservation Board	$389,130
06-00061	SEPULVEDA DAM REC AREA DEV	City of Los Angeles, Recreation & Parks	$244,983
06-00062	POCKET AREA/GARCIA BEND PARK	City of Sacramento	$66,183
06-00063	AMERICAN RIVER PARKWAY ACQ	County of Sacramento	$160,222
06-00064	EL DORADO PARK DEV	City of Long Beach, Parks, Rec &	$405,450
06-00065	SYCAMORE FLAT DEV (FEATHERLY)	County of Orange	$176,534
06-00066	PETIT PARK ACQ	City of Oxnard	$256,000
06-00067	TOLAND PARK DEV	County of Ventura	$35,190
06-00068	VALENCIA PARK(MARTIN LUTH.KING	City of San Diego, Parks	$201,548
06-00069	DOS PICOS PARK DEV	County of San Diego, Parks &	$180,400
06-00070	KERN RIVER STATE PARK DEV	County of Kern	$172,380
06-00071	TRUCKEE RIVER REG PK	Truckee-Donner R.P.D.	$57,500
06-00073	METRO MINI-PARKS ACQ & DEV	City & County of San Francisco RPD	$151,408
06-00075	DOG ISLAND FISHING ACCESS DEV	Wildlife Conservation Board	$24,327
06-00077	CORRP	Department of Parks and Recreation	$246,641
		Sub Total: 1968/69	$4,636,752
1967/68			
06-00025	SYCAMORE FLAT DEV (FEATHERLY)	County of Orange	$204,104
06-00027	OCEAN BEACH DEV	City of San Diego, Parks	$74,191
06-00028	SANTA ROSA PARK ACQ	County of Ventura	$132,973
06-00029	HANSEN DAM DEV	City of Los Angeles, Recreation & Parks	$166,667
06-00030	ROYAL OAKS PARK ACQUISITION	County of Monterey	$62,256
06-00031	BARTLETT PARK DEV	County of Tulare	$35,775
06-00034	SAN PEDRO PIER DEV	Wildlife Conservation Board	$372,233
06-00035	LOPEZ RESERVOIR DEV	County of San Luis Obispo	$399,342
06-00037	MODESTO RESERVOIR ACQ	County of Stanislaus	$91,261
06-00041	SAILOR BAR PARK	County of Sacramento	$60,000
06-00042	KESWICK LAKE ANGLING DEV	Wildlife Conservation Board	$38,345
06-00045	JOHN MCLAREN PARK DEV	City & County of San Francisco RPD	$300,000
06-00046	SUGAR PINE POINT SP	Department of Parks and Recreation	$300,000
06-00047	GLEN HELEN REGIONAL PARK DEV	County of San Bernardino	$180,000
06-00048	PASO NOGAL PARK ACQ	Pleasant Hill R.P.D.	$51,000
06-00049	MILL CREEK DEV	County of Tehama	$18,360
06-00050	CARPINTERIA VALLEY PARK DEV	County of Santa Barbara, Parks	$24,744
06-00051	WEST VALLEY RESERVOIR ACCESS	Wildlife Conservation Board	$17,576
06-00052	FOX GROVE ANGLING ACCESS DEV	Wildlife Conservation Board	$30,600
		Sub Total: 1967/68	$2,559,427

"Rendon, Richard" <RREND@parks.ca.gov>

02/15/2008 10:08 AM

Good morning Eddie,

Attached is one .pdf copy(not very good) of the original 6(f)(3) Boundary Map and one .pdf copy of the same area, which should help you out for your analysis. Also, here is the written project scope for the original project: ***Development of 160 picnic units, sanitary facilities, parking, roads, walks, lighting and playfields.***

If you need anything else, please let me know. I will be leaving at 12:15 today and will be back in the office on Tuesday, February 19th.

Thanks,

Richard

Richard Rendón, LWCF Project Officer
California State Parks
Office of Grants and Local Services
1416 9th Street, Room 918
Sacramento, CA 95814
Phone: (916) 651-7600
Fax: (916) 653-6511

From: Eddie Isaacs [mailto:eddie_isaacs@dot.ca.gov]
Sent: Friday, February 08, 2008 3:13 PM
To: jecks@parks.ca.gov; Rendon, Richard
Subject: 1968 Sepulveda Dam 06-00061 Land and Water Conservation Fund

Hello Richard,

My name is Eddie Isaacs and I am an Environmental Planner from Caltrans District 7 in Los Angeles.
I am working on the Section 4(f) document for the I-405/US-101 Connector Project.
Jeanne Eckstrom referred me to you for this grant information request.

This competitive Land and Water Conservation Fund grant was allocated to the City of Los Angeles'
Recreation and Parks Department in 1968 for $244,983 to improve the Sepulveda Dam Recreation Area
as part of project 06-00061. Its status is complete and was for development. According to computer records
Jeanne had as part of the project, it paid for 160 picnic unites, sanitation facilities, sewers, playfields, lighting,
parking, roads and walkways. I would appreciate it if you could please send a written project scope, a Section 6(f)
boundary map via email or to my mailing address or fax number below:

Eddie Isaacs
Caltrans District 7
Division of Environmental Planning
100 South Main Street MS16A
Los Angeles, CA 90012

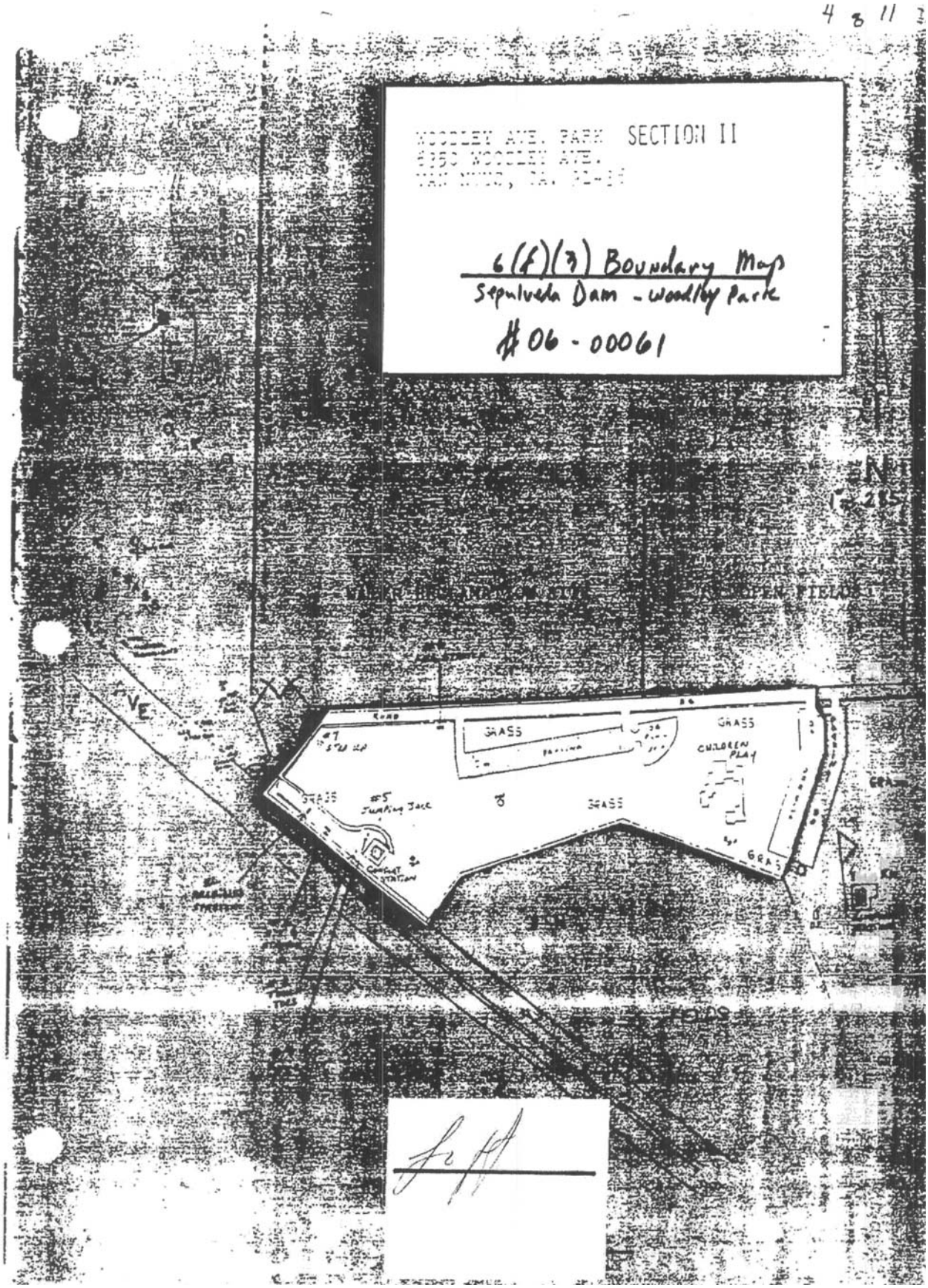
Fax (213) 897-0685

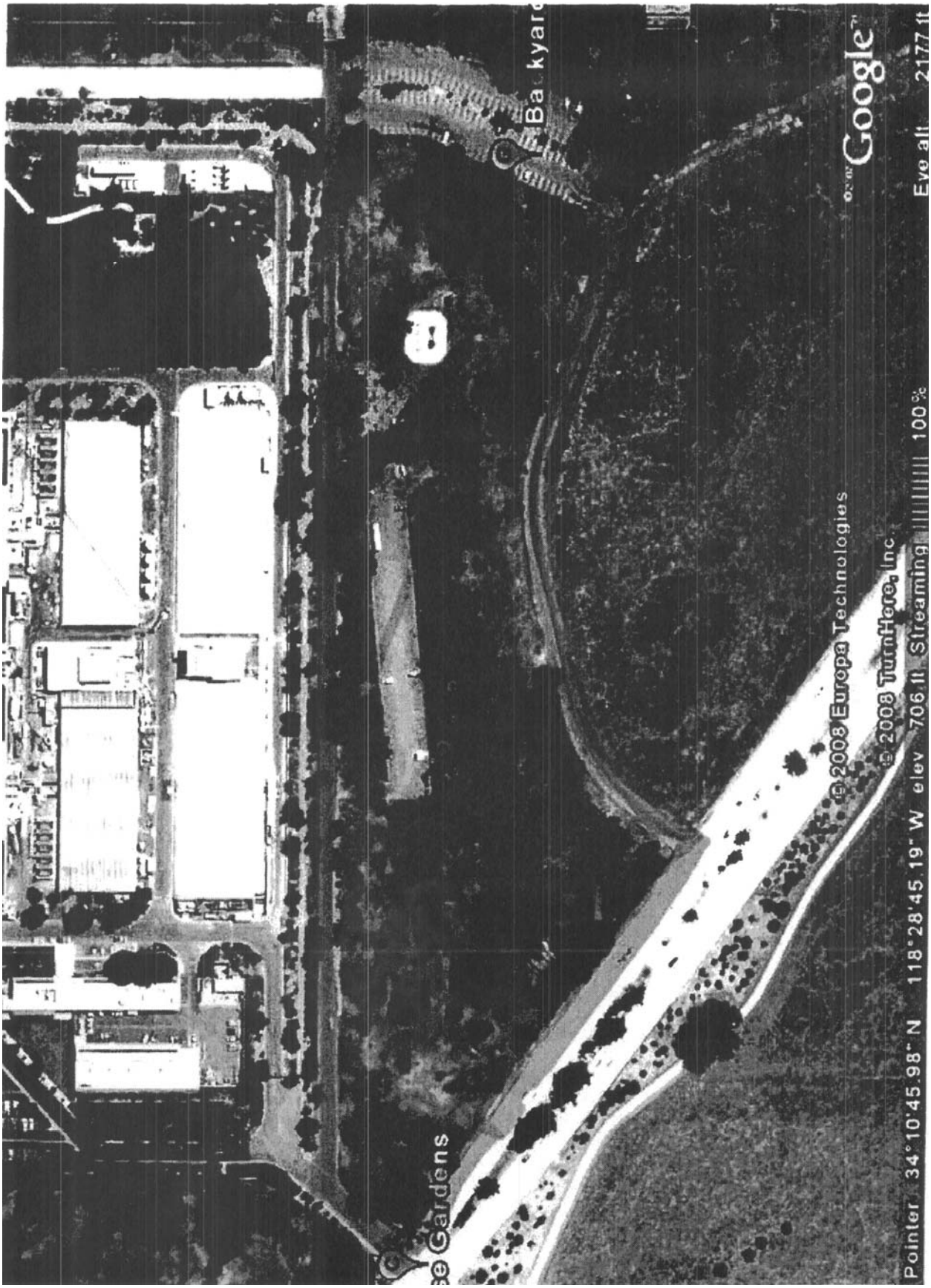
I will call you in a moment to discuss this project with you.

Thank you for your help,
Eddie

Eddie Isaacs
Environmental Planner-Maintenance Biological Services
California Coastal Commission Liaison
Caltrans District 7 Environmental Planning

(213) 897-2829 Eddie_Isaacs@dot.ca.gov 06-00061-1.pdf 06-00061-2.pdf


SECTION II
6(f)(3) Boundary Map
Sepulveda Dam - Woodley Park
#06-00061
GRASS
GRASS
CHILDREN PLAY
GRASS
#5 Jumping Jack
GRASS
GRASS
GRASS


Ba kyard
Google
© 2008 Europa Technologies
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Pointer 34°10'45.98" N 118°28'45.19" W elev 706 ft Streaming 100%
Eye alt 2177 ft
se Gardens

APPENDIX C: TITLE VI POLICY STATEMENT

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DIRECTOR
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P. O. BOX 942873
SACRAMENTO, CA 94273-0001
PHONE (916) 654-5266
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Flex your power!
Be energy efficient!

January 14, 2005

TITLE VI
POLICY STATEMENT

The California Department of Transportation under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, and age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

WILL KEMPTON
Director

"Caltrans improves mobility across California"

APPENDIX D: SUMMARY OF RELOCATION BENEFITS

RELOCATION ASSISTANCE ADVISORY SERVICES

The California Department of Transportation (the Department) will provide relocation advisory assistance to any person, business, farm or non-profit organization displaced as a result of the Department's acquisition of real property for public use. The Department will assist residential displacees in obtaining comparable decent, safe and sanitary replacement housing by providing current and continuing information on sales price and rental rates of available housing. Non-residential displacees will receive information on comparable properties for lease or purchase.

Residential replacement dwellings will be in equal or better neighborhoods, at prices within the financial means of the individuals and families displaced, and reasonably accessible to their places of employment. Before any displacement occurs, displaces will be offered comparable replacement dwellings that are open to all persons regardless of race, color, religion, sex or national origin, and are consistent with the requirements of Title VIII of the Civil Rights Act of 1968. This assistance will also include supplying information concerning federal and state assisted housing programs, and any other known services being offered by public and private agencies in the area.

RESIDENTIAL RELOCATION PAYMENTS PROGRAM

The links below are to the Relocation Assistance for Residential Relocation Brochure. Print them and place them in the EA/IS as applicable.

http://www.dot.ca.gov/hq/row/pubs/residential_english.pdf

http://www.dot.ca.gov/hq/row/pubs/residential_spanish.pdf

If the project requires relocation of mobile homes, print and include the following:

http://www.dot.ca.gov/hq/row/pubs/mobile_eng.pdf

http://www.dot.ca.gov/hq/row/pubs/mobile_sp.pdf

THE BUSINESS AND FARM RELOCATION ASSISTANCE PROGRAM

If the project requires relocation of businesses and/or farms, print and include the following:

http://www.dot.ca.gov/hq/row/pubs/business_farm.pdf

http://www.dot.ca.gov/hq/row/pubs/business_sp.pdf

ADDITIONAL INFORMATION

49 CFR Part 24.209–No relocation payment received by a displaced person under this part shall be considered as income for the purpose of the Internal Revenue Code of 1954, which has been redesignated as the Internal Revenue Code of 1986 (Title 26, U.S.Code), or for the purpose of determining eligibility or the extent of eligibility of any person for assistance under the Social Security Act (42 U.S. Code 301 *et seq.*)or any other federal law (except for any other Federal law providing low-income housing assistance).

Persons who are eligible for relocation payments and who are legally occupying the property required for the project will not be asked to move without being given at least 90 days advance notice, in writing. Occupants of any type of dwelling eligible for relocation payments will not be required to move unless at least one comparable "decent, safe and sanitary" replacement residence, open to all persons regardless of race, color, religion, sex or national origin, is available or has been made available to them by the state.

Any person, business, farm or non-profit organization, which has been refused a relocation payment by the Department, or believes that the payments are inadequate, may appeal for a hearing before a hearing officer or the Department's Relocation Assistance Appeals Board. No legal assistance is required; however, the displacee may choose to obtain legal counsel at his/her expense. Information about the appeal procedure is available from the Department's Relocation Advisors.

The information above is not intended to be a complete statement of all of the Department's laws and regulations. At the time of the first written offer to purchase, owner-occupants are given a more detailed explanation of the state's relocation services. Tenant occupants of properties to be acquired are contacted immediately after the first written offer to purchase, and also given a more detailed explanation of the Department's relocation programs.

IMPORTANT NOTICE

To avoid loss of possible benefits, no individual, family, business, farm or non-profit organization should commit to purchase or rent a replacement property without first contacting a Department of Transportation relocation advisor at:

State of California
Department of Transportation, District # 7
100 South Main Street
Los Angeles, California 90012-7028
213-897-4811

APPENDIX E: FHWA POLICY ON SLIP RAMPS

FHWA POLICY REGARDING SLIP RAMPS

"Holm, Jeff <FHWA>" <Jeff.Holm@fhwa.dot.gov> on 11/16/2000 04:31:00 PM

To: Elaheh_Yadegar@dot.ca.gov (IPM Return requested) (Receipt notification requested), JD_Bamfield@dot.ca.gov (IPM Return requested) (Receipt notification requested), "Cady, Robert <FHWA>" <Robert.Cady@fhwa.dot.gov> (IPM Return requested) (Receipt notification requested)
cc: Yogini_Patel@dot.ca.gov (IPM Return requested) (Receipt notification requested), "Schlicht, Robert <FHWA>" <Robert.Schlicht@fhwa.dot.gov> (IPM Return requested) (Receipt notification requested)
Subject: Re: FHWA Policy for the Slip Ramps EA 19961K, 405/101 connectors

Bob Cady asked that I respond to your question concerning slip ramps.

Our Federal-Aid Policy Guide states the following:

From FAPG
June 17, 1998, Transmittal 23

"ADDITIONAL ACCESS POINTS TO EXISTING FULL ACCESS-CONTROLLED INTERCHANGE RAMPS (23 CFR 630)

a. Local connections within interchanges -- especially on freeway-to-freeway ramps -- violate driver expectancy and introduce additional decision points in an area where the information processing task is already complex. They also create a high potential for traffic queuing back onto the through freeway lanes. In addition, such ramps seldom provide for full directional service, thus creating the possibility of wrong-way movements by drivers who wish to return or continue in the same direction.

b. It is poor public policy as well as poor engineering practice to allow additional access to existing freeway ramps. In many cases, the additional access ramps would provide traffic service to individual developments. Interchanges on the Interstate System and normally on other freeways are designed to provide access to local areas -- not to individual developments or parcels. Ramps to and from freeways should connect to local area road networks which in turn perform the function of land service to individual generators."

Basically, the our guidance frowns on any type of slip ramp.

Don't forget CT Design Manual Section 502.3, 2 d also frowns upon using them.

Jeff Holm, P.E.
Design/Traffic Operations Engineer
FHWA California Divison
Phone: 916-498-5021
FAX:916-498-5008
E-mail: Jeff.Holm@fhwa.dot.gov

>>> Elaheh_Yadegar@dot.ca.gov 11/16/00 08:37AM >>>
JD/Bob
One of the comments from Caltrans Environmental Branch is to add a reference to the FHWA policy for the slip-ramps as part of the PSR-PDS.

Is there any written policy stating that slip-ramp connecting a ramp to a connector is against FHWA policy?

Thanks,
Elaheh

EA/IS REFERENCES

Caltrans2005a	California Department of Transportation (Caltrans), Storm Water Data Report of EA 07-199631
Caltrans 2007a	California Department of Transportation (Caltrans), Guidance for Preparers of Growth-related, Indirect Impact Analyses. Accessed. November 7, 2007, from the Caltrans website at: http://www.dot.ca.gov/ser/Growth-related_IndirectImpactAnalysis/GRI_guidance06May_files/gri_guidance.pdf
Caltrans 2007b	California Department of Transportation (Caltrans), Visual Impact Assessment-Reconstruct SB 405 Connector Ramp to N&S Bound 101 Project. November 19, 2007.
Caltrans 2007c	California Department of Transportation, Historic Property Survey Report for the Southbound Interstate 405 (San Diego Freeway) to US Highway 101 (Ventura Freeway) connector Improvement Project, Los Angeles County, California. January 2007.
Caltrans 2007d	California Department of Transportation, Community Impact Assessment Report for the Southbound Interstate 405 (San Diego Freeway) to US Highway 101 (Ventura Freeway) Connector Improvement Project, Los Angeles County, California. January 2008.
City of Los Angeles 2007a	City of Los Angeles General Plan, Van Nuys Central Business District Streetscape Plan. Accessed October 16, 2007, from the City of Los Angeles, Department of City Planning website at: http://cityplanning.lacity.org/complan/othrplan/pdf/vnycbdstsplan.pdf
City of Los Angeles 2007b	City of Los Angeles General Plan, Van Nuys-North Sherman Oaks Community Plan. Accessed October 18, 2007, from the City of Los Angeles, Department of City Planning website at: http://cityplanning.lacity.org/complan/pdf/vnycptxt.pdf
City of Los Angeles 2007c	City of Los Angeles General Plan, Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass Community Plan - Ventura-Cahuenga Boulevard Corridor (VCBC) Specific Plan. Accessed October 19, 2007, from the City of Los Angeles, Department of City Planning website at: http://www.ci.la.ca.us/PLN/complan/pdf/shrcptxt.pdf
City of Los Angeles 2007d	City of Los Angeles General Plan, Encino-Tarzana Community Plan. Accessed October 18, 2007, from the City of Los Angeles, Department of City Planning website at: http://cityplanning.lacity.org/complan/pdf/enccptxt.pdf
City of Los Angeles 2007e	City of Los Angeles, Donald C. Tillman Reclamation Plant. Accessed October 24, 2007, from the City of Los Angeles website at: http://www.lacity.org/SAN/japanesegarden/noflash/tillman.htm
City of Los Angeles 2007f	City of Los Angeles General Plan, Transportation Element. Accessed November 16, 2007, from the City of Los Angeles, Department of City

Planning website at:
http://www.ci.la.ca.us/PLN/Cwd/GnlPln/TransElt/TE/T1Intro.htm#purpose

IBI Group 2007 — IBI Group, Southbound I-405 to US-101 Connector Improvement Project - Traffic Analysis Report. July 2007.

Mestre Greves 2008 — Mestre Greves Associates, Air Quality Assessment For: Southbound I-405 to US-101 Connector Improvement Project. January 15, 2008.

Ninyo & Moore 2005 — Ninyo & Moore Geotechnical and Environmental Sciences Consultants, Initial Site Assessment for the I-405 and US-101 Connector. April 6, 2005.

SCAG 2007a — SCAG—Southern California Association of Governments, "Destination 2030," 2004 Regional Transportation Plan. Accessed November 6, 2007, from the SCAG website at:
http://www.scag.ca.gov/rtp2004/2004/Final/FINAL_2004_RTP.pdf

SCAG 2007b — SCAG—Southern California Association of Governments, 2004 Regional Transportation Plan/Growth Vision: Socio-Economic Forecast Report. Accessed November 7, 2007, from the SCAG website at:
http://www.scag.ca.gov/forecast/downloads/forecastreport2004.pdf

State of California 2007a — California Transportation Plan 2025. Accessed November 5, 2007, from the California Department of Transportation website at:
http://www.dot.ca.gov/hq/tpp/offices/osp/ctp2025_files/CTP_2006.pdf