

INTERSTATE 405

Sepulveda Pass Widening Project

Draft Environmental Impact Report/ Environmental Impact Statement and Section 4(f) Evaluation

Widening and High Occupancy Vehicle (HOV) Improvements
from Interstate 10 to US Highway 101, in the City of Los Angeles,
Los Angeles County
PM 28.8/39.0
EA 120300

Prepared by
THE U.S. DEPARTMENT OF TRANSPORTATION
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WIDEN INTERSTATE 405 (SAN DIEGO FREEWAY) FROM INTERSTATE 10 TO US-101
IN LOS ANGELES COUNTY, CALIFORNIA

**DRAFT ENVIRONMENTAL IMPACT REPORT/
ENVIRONMENTAL IMPACT STATEMENT
AND SECTION 4(f) EVALUATION**

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THE STATE OF CALIFORNIA, Department of Transportation, and
Cooperating and Responsible Agencies

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Abstract

This Draft EIR/EIS addresses alternatives for improving Interstate 405 (I-405 from Interstate 10 (I-10) to U.S. Highway 101 (US-101) in Los Angeles County. The California Department of Transportation (Caltrans) and the Federal Highway Administration are proposing to add a High Occupancy Vehicle (HOV) lane on northbound I-405 from approximately I-10 to US-101 in the City of Los Angeles, Los Angeles County. The purpose of the proposed project is to reduce congestion by adding an HOV lane and closing the HOV gap by providing a continuous HOV lane from the Orange County line to the I-405/US-101 interchange. The proposed alternatives would involve landform alterations and aesthetic impacts, impacts to homes and businesses, displacement of existing urban land uses and community disruption, air quality and noise effects, water quality, biological resources, impacts on utilities and short-term construction impacts. Mitigation measures would reduce the level of significance of these impacts.

Please send comments by July 11, 2007 to:
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Summary

S-1 Introduction and Background

The proposed project is a joint project by the California Department of Transportation (Department) and the Federal Highway Administration (FHWA) and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). The Department is the lead agency under CEQA and the FHWA is lead agency under NEPA. Some impacts determined to be significant under CEQA may not lead to a determination of significance under NEPA.

After comments are received from the public and reviewing agencies, the Department and the Federal Highway Administration may undertake additional environmental and/or engineering studies. A Final EIR/EIS will be circulated; the Final EIR/EIS will include responses to comments received on the Draft EIR/EIS and will identify the preferred alternative. Following circulation of the Final EIR/EIS, if the decision is made to approve the project, a Notice of Determination will be published for compliance with the California Environmental Quality Act and a Record of Decision will be published for compliance with the National Environmental Policy Act.

The Interstate 405 (I-405) corridor begins at Interstate 5 (I-5) in Orange County, in the City of Irvine, and ends at I-5 in Los Angeles County, in the City of Los Angeles near the community of Mission Hills. I-405 is a north-south route that is classified as an interstate/interregional urban highway. I-405 is a part of the National Highway System and serves as a major access route for the coastal, westside, and San Fernando Valley communities in the Los Angeles area.

The high occupancy vehicle (HOV) system along the I-405 corridor is continuous in the northbound direction from the I-405/I-5 interchange in Orange County to the State Route 90 interchange in Culver City. The I-405 Sepulveda Pass Project, described in this document, would then pick up the HOV lane from National Boulevard and carry it all the way through to Greenleaf Street just south of the U.S. Highway 101 (US-101) interchange.

This document is the Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the project. Caltrans has analyzed various alternatives to widen and rehabilitate this portion of the freeway. Project alternatives would add a 10-mile northbound carpool lane on I-405 through the Sepulveda Pass from I-10 (Santa Monica Freeway) to US-101 (Ventura Freeway) (See Figure S-1: Project Vicinity Map). A southbound carpool lane opened for service in 2002; however, standard lanes were deferred due to inadequate right-of-way width. Other improvements for this project include modifications to various freeway overcrossings and undercrossings and on/off-ramps.

Figure S-1: Project Vicinity Map



The project limits are from approximately I-10 (Post Mile 28.8) to US-101 (Post Mile 39.0) in the City of Los Angeles (see Figure S-2: Project Location Map).

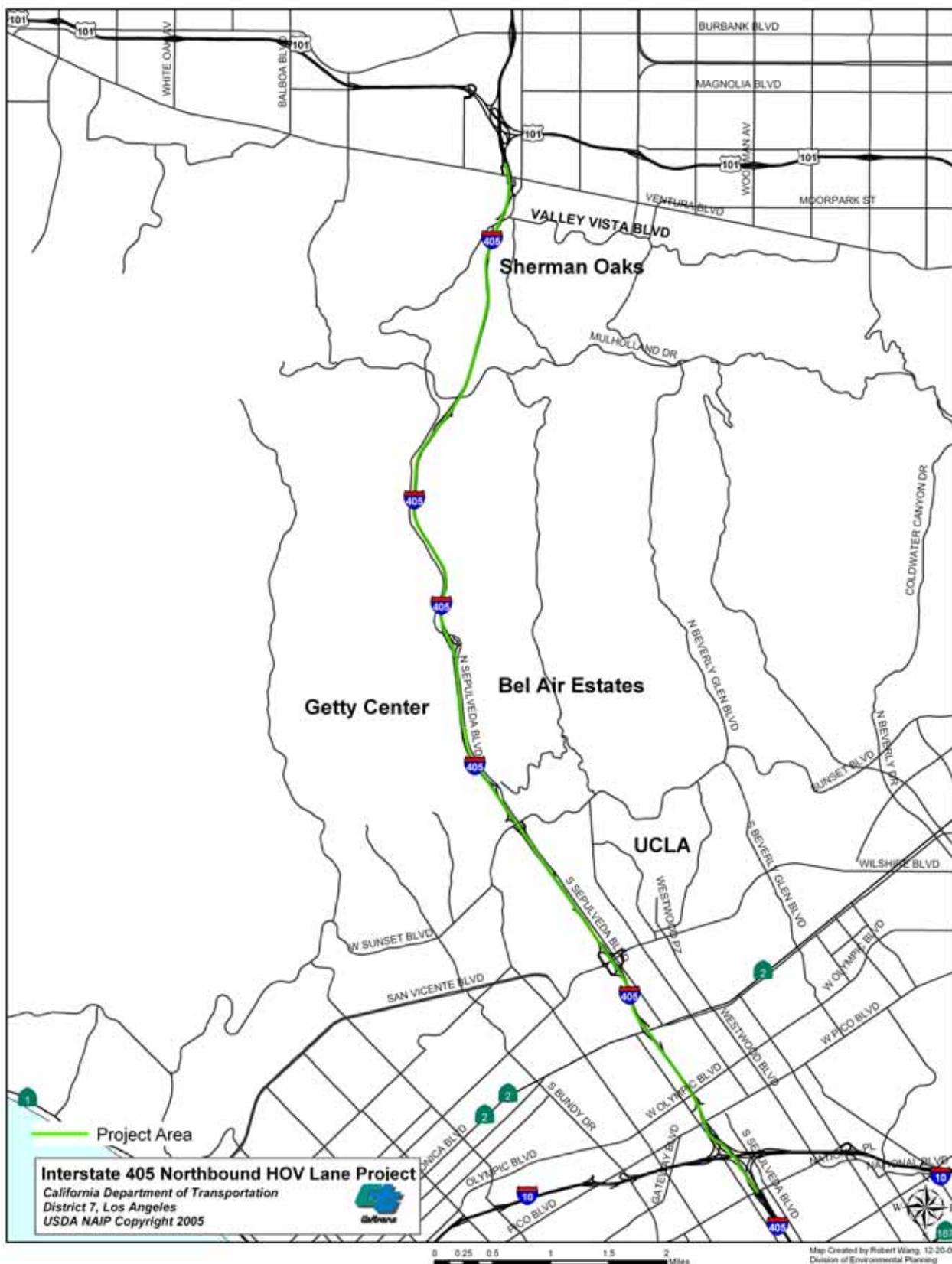
This project would be funded by the Transportation Congestion Relief Program (TCRP). This project was assigned the Project Development Processing Category 4A because it would require substantial new right-of-way and increase traffic capacity. This project is included in the Southern California Association of Government's (SCAG) 2004 Regional Transportation Plan (RTP) and the 2006 Regional Transportation Improvement Program (RTIP). It is also included in the FY 2006/2007 Federal Statewide Transportation Improvement Program (FSTIP) and is proposed for funding from the HB5 program (System Operational Improvements) of the TCRP.

S-2 Project Purpose

The primary purpose of the proposed project is to reduce existing and forecast traffic congestion on I-405 between I-10 to US-101. This project would reduce congestion and is expected to enhance traffic operations by adding freeway capacity in an area that already experiences heavy congestion.

The secondary goal is to improve both existing and future mobility and enhance safety throughout the corridor, while minimizing environmental and economic impacts. The project would transfer through-vehicle trips to the regional highway system, ease congestion, improve mobility by moving twice as many vehicles as a regular traffic lane, decrease commuter times for all drivers, reduce air pollution, and promote ridesharing.

Figure S-2: Project Location Map



S-3 Project Need

Currently, there is a gap in the HOV network along the entire I-405 corridor in Los Angeles County (see Figure S-3: 2006 Interregional HOV System Map). HOV lanes are currently operating on both northbound and southbound I-405 from the Orange County line to State Route 90 (Marina Freeway) (see Figure 1.1-2: Related Projects in the I-405 Project Area).

S-3.1 Inadequate Roadway Capacity

Freeway

I-405 currently operates at a deficient level of service for a large portion of the day within the project limits. If capacity improvements are not made, conditions will continue to deteriorate in the future due to growth alone. Standardizing the southbound traffic lanes, median and shoulder to meet mandatory design standards would also make the freeway safer.

Access Ramps

In the existing condition, 41 on/off-ramps along I-405 within the project limits were identified for analysis. Three ramps in the year 2015 and eight ramps in the year 2031 are forecast to carry volumes that exceed theoretical capacity during one or more peak periods due to traffic growth alone.

Intersections

In the existing condition, 13 of the 53 project study intersections currently operate at Level of Service (LOS) F. LOS is an indicator of operating conditions on a roadway and is defined in categories ranging from “A” to “F.” An LOS of “A” indicates free-flowing traffic with no hindrance to driving speed caused by traffic conditions, whereas LOS “F” indicates substantial congestion with slow-moving, stop-and-go traffic.

For Alternative 1 (the no-build condition), 22 intersections are forecast to operate at LOS F in the year 2015, and 41 would be at LOS F in the year 2031.

S-3.2 Accident History

Accident data was analyzed within in the project limits for the time period between October 1, 2002 through September 30, 2005. Data for northbound I-405 shows a total of 1,738 accidents of which 60.4% were rear-ends, 21.8% were sideswipes, 13.5% involved hitting fixed objects, and in decreasing order of frequency were broadside, overturn, other types not specified as well as head-on. There is a high percentage of rear-end type accidents occurring in both directions of travel which is indicative of stop-and-go traffic related to congested conditions. There is also a relatively large proportion of accidents occurring during the midday traffic period on southbound I-405, which may be related to high traffic volumes combined with intermittent congestion, where drivers may not anticipate stop-and-go traffic. Southbound I-405 within the project limits has experienced more than the statewide average accident rate for injury-related accidents and total accidents. A higher than average number of accidents of 2,738 of which 69.9% were rear ends, 17.3% were sideswipes, 8.7% involved hitting fixed objects, and in decreasing order of frequency were broadside, overturn, other types not specified as well as head-on.

S-4 Proposed Action

Based on the results of the alternatives' evaluation, two build alternatives and a no build alternative were identified as the most reasonable and feasible for full environmental impact assessment. Alternative 2 appears to be the Locally Preferred Alternative. Alternatives 4 and 5 were deemed "non-viable" and thus will not be analyzed further either from an engineering, cost and environmental standpoint (for further discussion, please refer to Section 2.4 Alternatives Considered but Eliminated from Further Discussion). A brief description of each alternative is described below.

S-4.1 Alternative 1: No Build

This alternative would maintain the current configuration of the existing freeway, ramps, and local intersections within the project limits.

S-4.2 Alternative 2: Add a Standard Northbound HOV Lane and Standardize Northbound Mixed-Flow Lanes, Median and Shoulder

This alternative would add one standard northbound HOV lane to the existing facility. Standard freeway profiles for northbound I-405 within the project limits except through the I-405/I-10 interchange would be provided (see Figure S-4: Conceptual Cross-Section of the Build Alternatives). A 12-foot half median, a 12-foot HOV lane, a 4-foot HOV buffer, five 12-foot mixed-flow lanes, and a 10-foot outside shoulder would also be provided. Several interchanges would also be improved in order to reduce accidents associated with traffic on the ramps.

Most of the freeway widening required for this project would occur along the east side of I-405 along Sepulveda Blvd. between Montana Ave. and Moraga Dr. and between Getty Center Drive and the northbound Getty Center off-ramp. Sepulveda Blvd. would be slightly realigned at the relocated southbound I-405 Skirball Center Drive on/off-ramps in order to add a left-turn lane to the on-ramp. Some widening would also occur along the west side of the freeway within the following segments: between Ohio Avenue and Waterford Street; between Bel Air Crest and Mulholland Drive; and between the southbound on-ramp from Sepulveda/Valley Vista to the north end of the project (just south of Ventura Boulevard).

The Wilshire Blvd. interchange would be improved in both directions. The northbound on-ramp from eastbound Wilshire Blvd. would be grade-separated from the northbound off-ramp to westbound Wilshire Blvd. and from Sepulveda Blvd. The southbound off-ramp to eastbound Wilshire Blvd. would be grade-separated from the southbound off-ramp to westbound Wilshire Blvd.

The northbound I-405 off-ramp to Montana Blvd./Sepulveda Blvd. would be closed in order to accommodate freeway widening (this closure would be required under all build alternatives).

The northbound I-405 Sunset Blvd. interchange would also be improved. The northbound I-405 off-ramp to eastbound Sunset Blvd. would be widened to include one more lane. The

northbound I-405 on-ramp from eastbound Sunset Blvd. would have two exclusive 12-foot lanes on the reconstructed Sunset Blvd. overcrossing and two 12-foot lanes on the on-ramp. In the eastbound direction, three 12-foot lanes and three 11-foot lanes in the westbound direction would be provided, which would solve the existing reduction from three lanes to two lanes in the eastbound direction. In both directions, 4-foot shoulders and 5-foot sidewalks as well as a 13-foot median would be provided on the Sunset Blvd. overcrossing.

The irregular northbound I-405 on/off-hook ramps at the Getty Center interchange would be reconfigured to a standard diamond interchange to increase stopping sight distances in order to improve safety.

The southbound I-405 Skirball Center Drive interchange would be relocated approximately 1,640 feet to the south to form a “T” intersection with Sepulveda Blvd. This would eliminate the existing intersection at the end of the southbound I-405 Skirball Center Drive off-ramp located 66 feet east of the Skirball Center Drive/Sepulveda Blvd. intersection. The traffic congestion problems caused by the close proximity of these two traffic intersections would be eliminated.

The southbound Valley Vista/Sepulveda Blvd. off-ramp would be reconstructed due to freeway widening.

A total of 12 soundwalls and 54 retaining walls within the project limits would be constructed at embankments where right-of-way is constrained.

A total of 12 undercrossings within the project limits would be widened. Three overcrossings at Sunset Boulevard, Skirball Center Drive, and Mulholland Drive would need to be replaced.

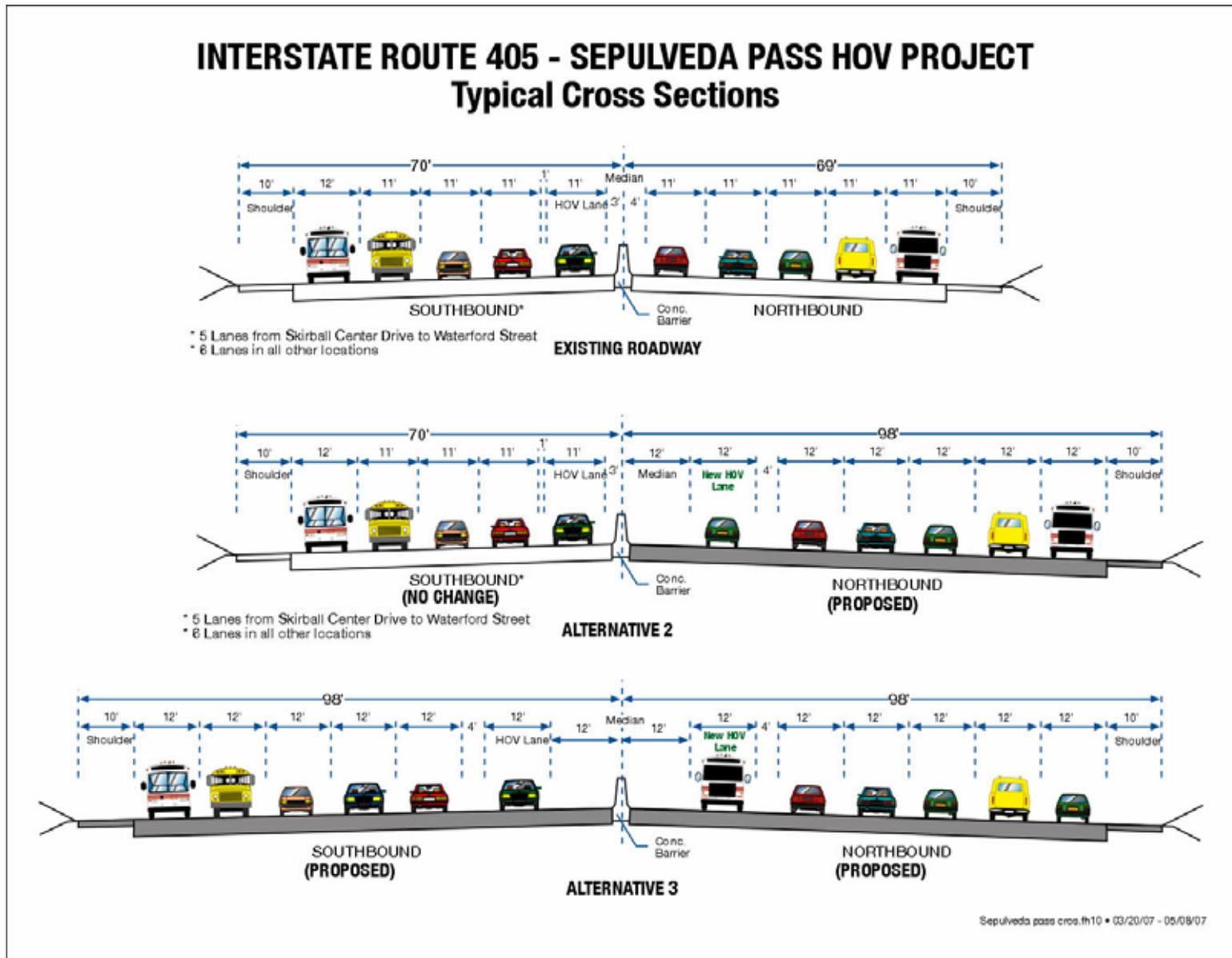
The capital outlay cost of Alternative 2 is estimated at \$649 million in 2006 dollars.

Design Options Mandated by FHWA at Skirball Center Dr. and Valley Vista Blvd.

Caltrans and FHWA have also analyzed another geometrically preferred design option to relocate the Skirball Center Dr. northbound and southbound on/off-ramps. The proposed northbound on/off-ramps would be relocated just north of the existing ramp. The proposed southbound on/off-ramps would require the realignment of Sepulveda Blvd. Both options would improve safety by increasing the stopping-sight distance for motorists using the southbound I-405 on/off-ramps (see Appendix I – L3A and L4A).

As a result of community input from meetings held in March, Caltrans has been analyzing design options for the southbound I-405 Valley Vista Blvd. on/off-ramps. In an effort to improve freeway operations and reduce the number of property takes that would be required to reconstruct the southbound off-ramp due to freeway widening, a geometrically preferred option has been developed. New hook on/off-ramps would be relocated south of the existing Valley Vista off-ramp to Sepulveda Blvd. The hook-ramp design would reduce the number of property takes by allowing Caltrans to use its available right-of-way as well as improve driver sight distance, increase vehicle storage and decrease motorist weaving from the 101/405 interchange (see Appendix I – L1A).

Figure S-4: Conceptual Cross-Section of the Build Alternatives



S-4.3 Alternative 3: Add a Standard Northbound HOV Lane and Standardize Northbound and Southbound Lanes, Median and Shoulder

In addition to the features as described in Alternative 2, standard freeway profiles would be provided for northbound and southbound I-405 within the project limits except through the I-405/I-10 interchange. Similar to Alternative 2, I-405 would be widened along the east side and along most of the west side throughout the project limits. Changes associated with this alternative that are not a part of Alternative 2 include:

- Closure of the southbound I-405 on-ramp from eastbound Sunset Boulevard. In conjunction with this ramp closure, the ramp intersection located immediately north of the Sunset Boulevard/Church Lane intersection would be reconfigured so that the existing island would be eliminated and the middle lane at the northbound approach would be changed from a through lane to a shared through/right-turn lane;
- Approximately 2,300 feet of Sepulveda Boulevard would be realigned along the westside of I-405 north of the Getty Center/I-405 interchange due to the widening planned along the westside of I-405; and
- Most of Church Lane between approximately Chenault Street and Kiel Street would be realigned to the west to facilitate the I-405 widening.
- A total of 13 soundwalls and 75 retaining walls within the project limits would be constructed at embankments where right-of-way is constrained.

The capital outlay cost of Alternative 3 is estimated at \$911 million in 2006 dollars.

S-5 Proposed Design Features for Alternative 2 and 3

Ramp Metering

All proposed on-ramps would provide ramp metering.

CHP Enforcement Area

Under Alternative 2, the median is not wide enough for California Highway Patrol (CHP) enforcement areas except at the Wilshire Blvd. interchange area and the southbound Skirball Center interchange area. However, if CHP enforcement areas were constructed at these locations, they would be in conflict with the ingress and egress for the northbound I-405 ramps to Sunset Blvd. and Greenleaf St. As a result, no CHP enforcement area is proposed.

Under Alternative 3, there would be three CHP enforcement areas within the project limits. One would be located between the Wilshire Blvd. and Sunset Blvd. interchanges. Another would be located between the Sunset Blvd. and Getty Center interchanges. The third would be located between the Getty Center and northbound Skirball Center Drive interchanges.

Park and Ride Facilities

The existing Park and Ride facility located near the Skirball Center Drive overcrossing would not be affected.

Utility and Other Owner Involvement

Several utilities will be relocated at an estimated cost of \$29 million for Alternative 2 and \$29.6 million for Alternative 3. Most utility relocations would occur along Sepulveda Blvd. between Montana Ave. and Church Lane.

Railroad Involvement

Union Pacific Railroad tracks have been temporarily removed under the I-405/I-10 northwest connector, and the Pico Blvd./Exposition Blvd. undercrossing-overhead. However, required railroad clearance over the former railroad tracks is provided under the connector and the undercrossing-overhead structure. A railroad clearance and Section B short clause would be required for the Project, Specifications and Estimates stage.

Highway Planting

Landscaping in this alternative includes planting, irrigation, erosion control, slope paving, and retaining wall aesthetics.

Erosion Control

The landscape work includes an erosion control item. The Storm Water Data Report for this project includes treatment Best Management Practices (BMPs), design BMPs, and temporary construction BMPs to prevent sediments and other pollutants from entering the storm drain system. Six treatment BMPs have been incorporated in this project. The gross solid removal devices (GSRD) would be selected and then designed for this project. Some of the existing GSRD within the project limits would be incorporated into the project BMPs. Under Alternative 2, the total cost for storm water pollution mitigation in this alternative is \$22 million and \$32 million for Alternative 3.

Noise Barriers and Retaining Walls

Under Alternative 2, a total of 12 soundwalls and 54 retaining walls within the project limits would be constructed at embankments where right-of-way is constrained.

Under Alternative 3, a total of 13 soundwalls and 75 retaining walls within the project limits would be constructed at embankments where right-of-way is constrained.

Non-Motorized and Pedestrian Features

A 2.4-meter wide sidewalk would be provided along eastbound Wilshire Blvd. near the Federal Building. A 1.5-meter wide sidewalk would be provided on the Sunset Blvd. overcrossing, Skirball Center Drive overcrossing, Mulholland Drive overcrossing, and at various locations within project limits. 1.22-meter wide shoulders are provided on the three overcrossings and can be jointly used as bicycle lanes.

S-6 Alternatives Considered and Withdrawn

S-6.1 Alternative 4: Add a Four-Lane HOV Viaduct Structure

This alternative would widen the existing facility to provide for four standard HOV lanes on an elevated viaduct within the freeway median throughout the project limits. In addition to connecting with the existing I-405 HOV lanes at both ends of the project, this alternative would

involve constructing direct HOV connectors to and from I-10. However, no direct-access ramps to or from local streets would be included in this alternative. Standard freeway profiles for northbound and southbound I-405 would be provided within the project limits except through the I-405/I-10 interchange. This alternative would provide for a 5-foot half column, a one-foot half-median barrier, a 10-foot inside shoulder, five 12-foot mixed-flow lanes, and a 10-foot outside shoulder in each direction of travel.

This alternative was withdrawn from consideration due to seismic safety concerns associated with a viaduct structure as analyzed in the 405 HOV Viaduct Feasibility Study Memo, provided as an attachment in the Draft Project Report.

S-6.2 Alternative 5: Add a Four-Lane HOV Viaduct Structure with Transit Enhancement

Similar to Alternative 4, this alternative proposed widening the existing facility to provide four standard HOV lanes on an elevated viaduct within the freeway median with the addition of direct on/off-ramps to the northbound and southbound HOV lanes at Sunset Blvd. and Wilshire Blvd. This alternative would require the widening and re-striping of I-405 in both directions along with realigning and reconfiguring numerous ramps.

This alternative was withdrawn from consideration due to seismic safety concerns associated with a viaduct structure, as analyzed in the I-405 Viaduct Feasibility Study Memo, provided as an attachment in the Draft Project Report.

S-6.3 Traffic Systems Management Alternative

This alternative would incorporate implementation of Traffic Systems Management (TSM) measures along the existing arterials paralleling the I-405 corridor to provide increased efficiency on existing facilities. TSM measures generally entail a series of low-capital traffic engineering measures designed to provide increased operational efficiency on existing freeways. Such measures were considered on arterials such as Sepulveda Blvd. as well as east-west arterials.

TSM measures may include signal synchronization, freeway ramp metering, freeway acceleration lanes, enhanced transit service through the I-405 corridor, isolated intersection improvements. These types of improvements are included in the Metropolitan Transit Authority (MTA) 2003 Short-Range Transportation Plan for the Westside Cities Subregion in Los Angeles County. To address the subregion's mobility challenges, the Westside cities and MTA have undertaken many transportation improvement projects that are expected to be operational by 2009. These include the following MTA projects:

- Transportation Demand Management: To improve the capacity and inter-modal efficiency of the transportation system, a number of projects that involve policies, programs or actions that focus on reducing dependency on automobile use or modifying travel behavior have been or will be implemented in the Westside including: the Santa Monica Transit Mall and bike racks on Culver City buses;

- Bikeway and Pedestrian Improvement Projects: To encourage residents and commuters to use cleaner forms of transportation, MTA has funded several bikeway and pedestrian transportation projects including pedestrian and bikeway improvements in Culver City, Los Angeles, Santa Monica and West Hollywood;
- Transportation Enhancements: A number of transportation enhancement projects have been undertaken to enhance the quality of life and provide more livable communities including landscaping in the medians along major arterials, gateway signs indicating the entry into particular Westside cities, renovating Santa Monica Blvd. in West Hollywood and Culver Blvd. in Culver City; and
- Transit: MTA and the municipal transit operators are working to improve transit facilities in the subregion by providing transit centers, bus stop improvements and utilizing new transit technologies. The MTA Board approved a 24-line expansion of the Metro Rapid system of which 10 additional lines will serve the Westside with the help of the municipal operators including Fairfax Avenue, Beverly, Olympic, Pico, Santa Monica, Florence and Crenshaw/LAX, La Cienega, Sepulveda and Lincoln Boulevards. The Metro Central/Westside Service Sector began operation during Fiscal Year 2003. The Westside cities will be forming a Council of Governments and will participate with the newly created Service Sector Council that will be nominated and ratified by the MTA Board within the time-frame of this plan. This body will make recommendations on transit service improvements for the subregion.

This alternative has been rejected for the following reasons:

- TSM alone would not provide adequate capacity for projected traffic volumes which would not address projected travel demands;
- TSM alone would not improve future safety;
- TSM would be insufficient to facilitate the movement of people and goods, or comply with local, regional, and state plans and policies;
- Additional cost to the cities; and
- The proposed improvements are within MTA’s jurisdiction.

S-6.4 Conversion of a Full-time HOV Lane to a Part-time HOV Lane Alternative

This alternative would convert an existing full-time HOV lane to a part-time lane in both directions on a 10-mile segment of the I-405. The proposed segment would begin from approximately I-10 to the south to U.S. 101 to the north. The HOV lane would be open to single-occupant vehicles during off-peak hours. Signage would be installed to inform motorists of the new hours of operation. There would be no additional changes (striping, ingress/egress, etc.) associated with this alternative.

This alternative has been rejected for the following reasons:

- Traffic volumes on both northbound and southbound I-405 are balanced.
- The Southern California Association of Governments would need to amend the Regional Transportation Improvement Program (RTIP) to reflect air quality conformity with the new proposed project description.

S-6.5 Addition of a Mixed-Flow Lane

This alternative would construct a northbound mixed-flow lane and also consider converting the southbound HOV lane to a mixed-flow lane. This alternative has been rejected because it would not address the purpose and need of the proposed project as stated in Section 1.3, would not complete the HOV system on I-405, does not encourage carpool/vanpool/transit use, and would not be in conformity with the RTIP.

S-7 Design Option Considered and Withdrawn

Direct-Access HOV On/Off-ramp at Santa Monica Boulevard – Alternative 2B/3B

This design option would add an HOV direct-access on/off-ramp at Santa Monica Blvd. Vehicles traveling in the HOV lane would be able to enter and exit directly from the carpool lane at Santa Monica Boulevard.

Just prior to Draft EIR/EIS circulation, the direct access HOV on/off-ramp at Santa Monica Blvd. (Alternative 2B/3B) was analyzed for its potential for conditional acceptance pursuant to Federal Highway Administration (FHWA) requirements for added (or modified) interchanges on the Interstate System (Title 23 USC 111). This engineering analysis determined that this alternative was not feasible.

The traffic analysis that was conducted for this direct-access design option concluded that the projected HOV traffic volumes entering the proposed freeway HOV lanes would cause the southbound HOV lane to become severely congested. This was an unacceptable condition and as a consequence, Alternatives 2B and 3B had to be withdrawn from consideration at this time. Contributing to this decision was the fact that if Caltrans wanted to continue to pursue these direct-access ramps, FHWA would require additional traffic analysis and review which would take several months to complete.

S-8 Environmental Impacts

Environmental impacts associated with the proposed Build Alternative 2, Build Alternative 3, and the No Build Alternative were fully analyzed, and the results are summarized in Table S-1.

Table S-1: Summary of Major Potential Impacts from Alternatives

Potential Impact		Alternative 2	Alternative 3	Alternative 1: No Build
Land Use and Planning (Consistency with City General Plan)		No impact	No impact	No impact
Community/ Economic	Business Displacement	2 commercial properties would be displaced	2 commercial properties would be displaced	No impact

Potential Impact		Alternative 2	Alternative 3	Alternative 1: No Build
Impacts	Housing Displacement	7 residential properties would be displaced	37 residential properties would be displaced	No impact
	Community Service Disruption	Possible disturbance to community service functions at various community service centers during project construction	Possible disturbance to community service functions at various community service centers during project construction Property acquisition of the Village Church of Westwood.	No impact
	Business Disruption	Possible obstruction of access during construction & property acquisition of a Verizon equipment facility and a professional financial services business	Possible obstruction of access during construction & property acquisition of a Verizon equipment facility and a professional financial services business	No impact
	Ramp Closures	Permanent closure of Montana Ave. off-ramp	Permanent closure of Montana Ave. off-ramp.	No impact
Environmental Justice		No impact	No impact	No impact
Utilities and Emergency Services		Temporary disruption of utilities and emergency services during construction	Temporary disruption of utilities and emergency services during construction	No impact
Traffic/ Parking/ Pedestrian Safety	Traffic Circulation	Traffic detours and disruption during construction Beneficial during operations	Traffic detours and disruption during construction Beneficial during operations	Substantial traffic congestion
	Transit Route	Temporary change of transit routes and bus stops during construction	Temporary change of transit routes and bus stops during construction	No impact
	Pedestrian Safety	Temporary detour of pedestrian routes during construction	Temporary detour of pedestrian routes during construction	No impact
	Parking	Temporary loss of parking at the southeast corner of the federal parking lot located in the southeast corner of Wilshire Blvd.	Temporary loss of parking at the southeast corner of the federal parking lot located in the southeast corner of Wilshire Blvd.	No impact
	Access	Temporary disruption of access to residences and businesses during construction	Temporary disruption of access to residences and businesses during construction	No impact
Visual Quality		Construction of soundwalls and new ramps would impact resources and views to residents adjacent to soundwalls and ramps.	Construction of soundwalls and new ramps would impact resources and views to residents adjacent to soundwalls and ramps.	No impact
Historical Cultural Resources		Adverse effect on one historic resource	Adverse effect on one historic resource	No impact
Archaeological Resources		Low likelihood of discovery of subsurface archaeological resources	Low likelihood of discovery of subsurface archaeological resources	No impact
Flood Control, Hydrology, Water Quality, and Stormwater Runoff		Relocation of 4 drainages would require agency coordination	Relocation of 4 drainages would require agency coordination	No impact
Geology/Soils/Seismicity		No impact	No impact	No impact

Potential Impact	Alternative 2	Alternative 3	Alternative 1: No Build
Hazardous Waste/Materials	Possibility of encountering aerially deposited lead (ADL), asbestos-containing materials (ACM), and lead-based paint (LBP)	Possibility of encountering aerially deposited lead (ADL), asbestos-containing materials (ACM), and lead-based paint (LBP)	No impact
Air Quality	Temporary emissions of criteria air pollutants during construction	Temporary emissions of criteria air pollutants during construction	No impact
Noise	Intermittently exceeding noise criterion during construction	Intermittently exceeding noise criterion during construction	No impact
Energy	No impact	No impact	No impact
Biological Resources	Removal of approximately 115 mature native trees; affect 3 known wildlife crossing corridors within the project limits during project construction	Removal of approximately 162 mature native trees; affect 3 known wildlife crossing corridors within the project limits during project construction	No impact
Section 4(f) properties	Use of 2 trailheads and trails. Approximately 4.0 acres to be impacted at the Getty View Trailhead and approximately 0.3 acres at the Skirball Center trailhead.	Use of 2 trailheads and trails. Approximately 4.0 acres to be impacted at the Getty View Trailhead and approximately 0.3 acres at the Skirball Center trailhead.	No impact
Cumulative and Secondary Impacts	Impacts to air quality, noise, socioeconomics, traffic and circulation, and area aesthetics during construction Impact to historical resources, post-construction No secondary impacts identified	Impacts to air quality, noise, socioeconomics, traffic and circulation, and area aesthetics during construction Impact to historical resources, post-construction No secondary impacts identified	No impact

S-9 Avoidance, Minimization and Mitigation Measures

Several of the project elements have been modified to avoid or minimize potential environmental impacts. Proposed mitigation measures are listed in Table S-2, where avoidance and minimization attempts could not fully resolve the impacts.

Table S-2: Proposed Mitigation Measures

Environmental Factor	Mitigation Measures	
	Alternative 2	Alternative 3
Relocation Impacts	<ul style="list-style-type: none"> FHWA and Caltrans would provide relocation assistance payments and counseling to persons, businesses, and nonprofit organizations to be relocated, in accordance with the Federal Uniform Relocation Assistance and Real Properties Acquisition Policies Act, as amended, to ensure adequate relocation benefits and decent, safe, and sanitary homes for displaced residents. 	<ul style="list-style-type: none"> FHWA and Caltrans would provide relocation assistance payments and counseling to persons, businesses, and nonprofit organizations to be relocated, in accordance with the Federal Uniform Relocation Assistance and Real Properties Acquisition Policies Act, as amended, to ensure adequate relocation benefits and decent, safe, and sanitary homes for displaced residents.

Table S-2: Proposed Mitigation Measures

Environmental Factor	Mitigation Measures	
	Alternative 2	Alternative 3
Community Impacts	<ul style="list-style-type: none"> • Develop a construction staging plan and Traffic Management Plan (TMP) in close coordination with others. The TMP would identify alternate traffic detour routes, bus terminals, transit routes and operation hours, pedestrian routes, and residential and commercial access routes to be used during the construction period. Signs notifying the bus users would be posted of changes in transit routes. • Continue the outreach program to keep residents, businesses, and any service providers within the area informed about relevant project information. • Coordinate with representatives of the homeowner associations and community organizations to avoid construction activities in the immediate vicinity during major events. 	<ul style="list-style-type: none"> • Develop a construction staging plan and TMP in close coordination with others. The TMP would identify alternate traffic detour routes, bus terminals, transit routes, pedestrian routes, and residential and commercial access routes to be used during the construction period. Signs would be posted. • Continue the outreach program to keep residents, businesses, and service providers within the area informed about all relevant project information. • Coordinate with businesses, homeowner associations and community organizations to avoid construction activities in the immediate vicinity during major events.
Transportation and Traffic	<ul style="list-style-type: none"> • Develop a construction staging plan and TMP in close coordination with MTA and with agencies or developers responsible for other planned projects in the immediate vicinity of the proposed project to minimize direct and cumulative construction impacts on the community. 	<ul style="list-style-type: none"> • Develop a construction staging plan and TMP in close coordination with MTA and with agencies or developers responsible for other planned projects in the immediate vicinity of the proposed project to minimize direct and cumulative construction impacts on the community.
Visual and Aesthetics	<ul style="list-style-type: none"> • Proposed soundwalls should match the existing soundwalls. 	<ul style="list-style-type: none"> • Proposed soundwalls should match the existing soundwalls.
Cultural/ Historical Resources	<ul style="list-style-type: none"> • A Memorandum of Agreement (MOA) would be prepared by Caltrans with recommended mitigation measures for the Mulholland Drive Overcrossing and submitted to the Federal Highway Administration and the State Historic Preservation Officer for comment 	<ul style="list-style-type: none"> • A Memorandum of Agreement (MOA) would be prepared by Caltrans with recommended mitigation measures for the Mulholland Drive Overcrossing and submitted to the Federal Highway Administration and the State Historic Preservation Officer for comment
Hazards and Hazardous Materials	<ul style="list-style-type: none"> • Require the contractor to implement all recommendations proposed in the Initial Site Assessment (ISA) prior to project construction to avoid impacts associated with hazardous waste and materials that may be encountered. 	<ul style="list-style-type: none"> • Require the contractor to implement all recommendations proposed in the ISA prior to project construction to avoid impacts associated with hazardous waste and materials that may be encountered.
Air Quality	<ul style="list-style-type: none"> • Require the construction contractor to implement PM₁₀ control by applying measures contained in Tables 1 and 2 of SCAQMD Rule 403 (see Section 3.12.4) • Contractor shall be responsible for compliance with all asbestos-related regulations of SCAQMD, in particular Rule 1403 – Asbestos Emissions from Demolition/ Renovation Activities. 	<ul style="list-style-type: none"> • Require the construction contractor to implement PM₁₀ control by applying measures contained in Tables 1 and 2 of SCAQMD Rule 403 (see Section 3.12.4) • Contractor shall be responsible for compliance with all asbestos-related regulations of SCAQMD, in particular Rule 1403 – Asbestos Emissions from Demolition/ Renovation Activities.

Table S-2: Proposed Mitigation Measures

Environmental Factor	Mitigation Measures	
	Alternative 2	Alternative 3
Noise	<ul style="list-style-type: none"> Require the construction contractor to address temporary impacts by: <ul style="list-style-type: none"> Utilizing construction methods or equipment that would provide the lowest level of noise impact. Schedule construction such that the absolute minimum number of pieces of equipment would be operating within the same vicinity simultaneously to reduce the number of concurrent noise sources. Schedule the duration and timing of construction activities to minimize noise impacts on exposed individuals. Keep area residents and businesses informed of the schedule, duration, and progress of the construction to minimize public objections of unavoidable noise. Notify communities in advance of construction and of the expected temporary noise impacts during the construction period. 	<ul style="list-style-type: none"> Require the construction contractor to address temporary impacts by: <ul style="list-style-type: none"> Utilizing construction methods or equipment that would provide the lowest level of noise impact. Schedule construction such that the absolute minimum number of pieces of equipment would be operating within the same vicinity simultaneously to reduce the number of concurrent noise sources. Schedule the duration and timing of construction activities to minimize noise impacts on exposed individuals. Keep area residents and businesses informed of the schedule, duration, and progress of the construction to minimize public objections of unavoidable noise. Notify communities in advance of construction and of the expected temporary noise impacts during the construction period.
Biological Resources	<ul style="list-style-type: none"> Native and walnut trees to be removed would be replaced at a 5:1 ratio. Conduct pre-construction surveys for nesting birds. Consultation with regulatory agencies regarding impacts to drainages. Wildlife crossing mitigation including a wildlife crossing at Skirball Center overcrossing, a culvert to funnel wildlife at the Getty View Trailhead area, removal of fencing in various areas; and appropriate signage 	<ul style="list-style-type: none"> Native and walnut trees to be removed would be replaced at a 5:1 ratio. Conduct pre-construction surveys for nesting birds. Consultation with regulatory agencies regarding impacts to drainages. Wildlife crossing mitigation including wildlife crossing at Skirball Center overcrossing, a culvert to funnel wildlife at the Getty View Trailhead, removal of fencing in various areas; and appropriate signage
Cumulative Effects	<ul style="list-style-type: none"> Establish a Construction Traffic Committee, which would consist of a representative(s) from each planned project, to develop a construction plan that would minimize cumulative community impacts. The committee would meet on a regular basis to discuss project progress, problems confronted, and issues to be resolved. Coordinate with MTA to ensure that construction activities of multiple projects would not occur at the same location simultaneously. 	<ul style="list-style-type: none"> Establish a Construction Traffic Committee, which would consist of a representative(s) from each planned project, to develop a construction plan that minimizes the cumulative community impacts. The committee would meet on a regular basis to discuss project progress, problems confronted, and issues to be resolved. Coordinate with MTA to ensure that construction activities of multiple projects would not occur at the same location simultaneously.

S-10 Areas of Concern (Unresolved Issues)

Areas of concern relate to potential project impacts upon the human environment along the corridor. Key areas of concern include potential displacements, community disruption, economic

costs, noise increases, air pollution, temporary loss of parkland, visual resources, parking and effects upon traffic circulation. Another area of concern involves potential effects of project alternatives on historic cultural resources, particularly those listed or eligible for the National Register of Historic Places. Finally, a third concern relates to potential effects on natural resources such as vegetation, wildlife and trails.

Unresolved issues related to project design include concerns expressed by community members regarding ramp closures and property acquisition (full or partial) required for freeway widening. The community and the City of Los Angeles support the proposed project, however design variations to alternatives are currently under coordination and evaluation.

S-11 Public and Agency Involvement

Caltrans has initiated an outreach program that has included several meetings with elected officials, stakeholders and the community at large. Through the program, the public has been kept apprised of the status of the project (including design changes) and has been given the opportunity to provide input as the project proceeds through the environmental process and design.

A Notice of Preparation (NOP) and Notice of Intent (NOI) were issued in January 2001. The NOI was published in the Federal Register on January 7, 2002. Two scoping meetings were held in January 2002 and scoping was reinitiated in October 2005. In addition, meetings with elected officials and resource agencies have been conducted. Caltrans has also participated in several community meetings with homeowner associations in the project area. Caltrans presented project updates and received feedback. Most recently in November 2006, a newsletter presenting project alternatives and design variations was sent to approximately 8,000 community members. After the public hearing and circulation of the environmental document, Caltrans will continue the outreach effort with the community.

S-12 Permits

The following permits/agreements would be required for project construction:

- Section 404 nationwide permit from the Army Corps of Engineers (ACOE)
- Section 401 Water Discharge Permit from the California Department of Water Resources Board (DWR)
- Section 1602 Streambed Alteration Agreement from the California Department of Fish and Game (CDFG)
- Section 106 Memorandum of Agreement (MOA) for the Mulholland Drive Overcrossing
- Freeway Agreement with the City of Los Angeles Department of Transportation (LADOT)

CHAPTER 1 PURPOSE AND NEED FOR PROJECT

1.1 Introduction

The Interstate 405 (I-405) corridor begins at Interstate 5 (I-5) in Orange County, in the City of Irvine, and ends at I-5 in Los Angeles County, in the City of Los Angeles, near the community of Mission Hills. I-405 is a north-south route that is classified as an interstate/interregional, urban highway. I-405 is a part of the National Highway System and serves as a major access route for the coastal, westside and San Fernando Valley communities in the Los Angeles area.

I-405 is the primary transportation facility connecting the southern Los Angeles area with the San Fernando Valley and is heavily used for commuter traffic. Within the project limits, which are roughly bounded by Interstate 10 (I-10) to the south and U.S. Highway 101 (US-101) to the north, the Sepulveda Pass amounts to approximately 70% of the study corridor and is a geographically constrained area, bounded on both sides by mountainous terrain. In the City of Los Angeles, Sepulveda Boulevard is used as an alternate route to the I-405 freeway, otherwise there are limited convenient parallel routes or a grid system of streets in the Sepulveda Pass area. The I-405 operates at full capacity, approximately 15 hours a day, including peak hours in the proposed project area.

In 2000, Governor Gray Davis implemented the Traffic Congestion Relief Program (TCRP) that provided \$5.3 billion in critically needed transportation resources to fund more than 100 locally recommended projects throughout California. The I-405 Sepulveda Pass Project received funding of \$90 million through this program. 2005 Federal legislation earmarked \$130 million for this project and Governor Arnold Schwarzenegger's Strategic Growth Plan includes \$350 million to bring the I-405 Sepulveda Pass Project to completion. On January 13, 2006, Governor Schwarzenegger signed Senate Bill 1026 proposed by Sheila Kuehl (D-Los Angeles). The bill authorized the Los Angeles Metropolitan Transportation Agency (LAMTA) to use the design-build process for a project that would widen this segment of I-405.

The California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA) are proposing to add a High Occupancy Vehicle (HOV) lane to northbound I-405 from approximately I-10 to US-101 in Los Angeles, California. As part of the Transportation Congestion Relief Program (TCRP), this project is expected to enhance traffic operations by adding freeway capacity in an area that experiences heavy congestion. Figure 1.1-1 shows a Project Vicinity Map and Figure S-2 shows a Project Location Map.

This project is included in the Southern California Association of Government's (SCAG) 2004 Regional Transportation Plan (RTP). 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. The 2004 Regional Transportation Improvement Program (RTIP) was adopted by SCAG in September 2004. The 2006 RTIP was approved by the federal agencies on October 2, 2006. This project is also included in the FY 2006/2007 Federal Statewide Transportation Improvement Program (FSTIP) and is proposed for funding from the HB5 program (System Operational Improvements) of the Transportation Congestion Relief Program.

The Transportation Facility and Roadway Deficiencies

The segment of I-405 within the project limits was originally constructed between 1958 and 1963 as an eight-lane facility consisting of four 12-foot-wide mixed-flow lanes (MFL) in each direction, 8-foot to 10-foot wide outside shoulders and a 2.2-foot wide half-median. The existing lane widths were reduced to non-standard (11 ft) and the median was used to accommodate the addition of two mixed-flow lanes (northbound and southbound) through a re-striping project in 1985. There are twelve freeway undercrossings and three overcrossings within the project limits.

The existing freeway in the northbound direction consists of five non-standard 11-foot wide mixed-flow lanes and a 4-foot wide non-standard half-median. The outside shoulder varies from 8 ft. to 10 ft. The existing southbound I-405 freeway from I-10 to Waterford Street has five non-standard 11-foot wide MFL, a non-standard 4-foot wide half-median, and the outside shoulder varying from 8 ft. to 10 ft. The existing I-405 southbound freeway from Waterford Street to Ventura Boulevard has a non-standard 11-foot wide HOV lane, five non-standard 11-foot wide MFL, a non-standard 2.2-foot wide half-median, and a non-standard 8-foot wide outside shoulder.

Figure 1.1-1: Project Location Map



1.2 Purpose of the Proposed Project

The primary purpose of the proposed project is to improve mobility by reducing existing and forecasted traffic congestion on I-405 between I-10 to US-101. This project would reduce congestion and is expected to enhance traffic operations by adding freeway capacity in an area that already experiences heavy congestion.

A secondary project goal is to enhance safety throughout the corridor, while minimizing environmental and socio-economic impacts. In addition to improving mobility and reducing congestion, the project aims to transfer through-vehicle trips to the regional freeway system, decrease commuter times for all travelers, reduce air pollution, and promote ridesharing.

1.3 Need for the Proposed Project

The following discussion summarizes the present and future conditions of the existing I-405 project area that constitute the need for action. Several project alternatives have been developed to meet the purpose and need. If no improvements are made within the project limits, the Sepulveda Pass will continue as a major bottleneck.

The Sepulveda Pass between I-10 and US-101 experiences heavy traffic congestion due to inadequate lane width, a great deal of vehicle weaving (vehicles moving from one lane to another), and above average accident rates. An HOV lane would add capacity to the mainline freeway and prevent the existing traffic conditions from further deteriorating due to forecasted traffic volume increases for opening year 2015 and horizon year 2031. From a traffic operations perspective, HOV improvements would result in an improved condition with substantial benefits in reducing delay. The proposed project improvements would standardize traffic lanes, median, and shoulder and allow the State to implement current functional and safety design standards, which would increase safety and overall operation of the facility.

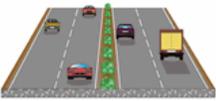
Currently, there is a gap in the HOV network along the entire I-405 corridor in Los Angeles County (see Figure S-3: 2006 Interregional HOV System Map). HOV lanes are currently operating on both northbound and southbound I-405 from the Orange County line to State Route 90 (Marina Freeway), from north of Burbank Blvd. to Route 118, and in the southbound direction from Waterford Street to north of Burbank Blvd. The southbound I-405 HOV lane from Waterford Street to I-10 is currently under construction (see Figure 1.1-2: Related Projects in the I-405 Project Area).

Existing Freeway Conditions

Within the project limits, I-405 currently operates at a deficient level of service for the majority of the day (approximately 15 hours). Level of service (LOS) is an indicator of operating conditions on a roadway and is defined in categories ranging from “A” to “F.” An LOS of “A” indicates free-flowing traffic with no hindrance to driving speed caused by traffic conditions, whereas LOS “F” indicates substantial congestion with slow-moving, stop-and-go traffic. If no capacity improvements are made, conditions will continue to deteriorate in the future from planned growth alone.

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

The existing I-405 provides five lanes in each direction which currently exceed capacity during peak periods. As a result, stop-and-go traffic conditions last two to five hours in the mornings and afternoons. These conditions are further aggravated by vehicle merges, traffic accidents, and vehicle breakdowns. Due to excess travel demand on I-405, many travelers take longer, alternate routes which also results in spillover traffic from I-405 onto parallel arterial roadways which increases local congestion.

Freeway Ramps

For this project, 41 on/off-ramps along the I-405 freeway in the project limits were analyzed. The analysis indicated that although saturated, all 41 ramps operate at an acceptable level of service. Three locations carry volumes that exceed 1,500 vehicles per hour during one or both peak periods and

may have capacity issues in the future. Six ramps in the year 2015 and 12 ramps in the year 2031 were forecast to carry more than 1,500 vehicles per hour during the peak period.

Intersections

In the existing condition, 14 of the 53 project study intersections currently operate at LOS F. For the No Build Alternative, 22 intersections are forecast to operate at LOS F by the year 2015, and 39 will be at LOS F in the year 2031.

The forecasts generated for the future years 2015 and 2031 are assumed to represent the total unconstrained travel demand in the corridor throughout the day. It is assumed that future traffic demand volumes (without the project) capture all trips that would use the northbound I-405, regardless of the condition of the roadway and the capacity of the freeway to meet the demand. Forecasts were generated based on compounded growth rates and data from Caltrans traffic counts. This represents a worst-case condition for traffic volumes for this project.

Northbound and southbound Annual Average Daily Traffic volumes (AADT) for year 2015 and 2031, are presented in Tables 1.3-1 and 1.3-2. The data indicates an increase in northbound traffic of 1.5% without any proposed improvements. This projected increase is reflective of the implementation of the projects included in the RTIP and this project would only cause a fraction

of the increase. The following tables provide traffic data that demonstrate how existing conditions will deteriorate with time under the no-build scenario. This increase is anticipated to be primarily comprised of passenger vehicles and a discernable increase in trucks is not anticipated. The project would not add any mixed-flow lanes in the southbound direction. However, the proposed northbound improvements would increase passenger vehicle capacity with an HOV lane and therefore, improve the level of service and travel delay time.

Table 1.3-1: Northbound and Southbound I-405 Traffic Volumes for Year 2015 Without Project

Segment	Northbound				Southbound			
	LOS (A.M.)	AADT	% Trucks	Truck AADT	LOS (A.M.)	AADT	% Trucks	Truck AADT
Venice Blvd. and I-10	F	169,800	2.16%	3,700	F	183,900	2.16%	4,000
I-10 and Olympic Blvd.	F	176,700	2.16%	3,800	F	156,700	2.16%	3,400
Olympic and Santa Monica Blvd.	D	188,300	2.16%	4,100	D	173,800	2.16%	3,800
Santa Monica and Wilshire Blvd.	F	175,500	2.16%	3,800	F	168,700	2.16%	3,600
Wilshire Blvd. and Montana Ave.	F	188,700	2.16%	4,100	F	142,400	2.16%	3,100
Montana Ave. and Sunset Blvd.	F	190,400	2.16%	4,100	F	132,300	2.16%	2,900
Sunset Blvd. and Moraga Drive	D	200,800	2.16%	4,300	D	133,900	2.16%	2,900
Moraga and Sepulveda Blvd.	F	205,000	2.16%	4,400	F	136,700	2.16%	3,000
Sepulveda Blvd. and Mulholland Dr.	F	188,000	2.16%	4,100	F	153,800	2.16%	3,300
Mulholland Drive and Greenleaf St.	D	184,700	2.16%	4,000	D	151,100	2.16%	3,300

Source: Traffic Analysis Report, July 2006

Table 1.3-2: Northbound and Southbound I-405 Traffic Volumes for Year 2031 Without Project

Segment	Northbound				Southbound			
	LOS (A.M.)	AADT	% Trucks	Truck AADT	LOS (A.M.)	AADT	% Trucks	Truck AADT
Venice Blvd. and I-10	F	214,400	2.16%	4,600	F	232,300	2.16%	5,000
I-10 and Olympic Blvd.	F	223,200	2.16%	4,800	F	197,900	2.16%	4,300
Olympic and Santa Monica Blvd.	F	237,700	2.16%	5,100	F	219,500	2.16%	4,700
Santa Monica and Wilshire Blvd.	F	221,700	2.16%	4,800	F	213,000	2.16%	4,600
Wilshire Blvd. and Montana Ave.	F	238,300	2.16%	5,100	F	179,800	2.16%	3,900
Montana Ave. and Sunset Blvd.	F	240,500	2.16%	5,200	F	167,100	2.16%	3,600
Sunset Blvd. and Moraga Drive	F	253,600	2.16%	5,500	F	169,000	2.16%	3,700
Moraga and Sepulveda Blvd.	F	259,000	2.16%	5,600	F	172,700	2.16%	3,700
Sepulveda Blvd. and Mulholland Dr.	F	237,400	2.16%	5,100	F	194,200	2.16%	4,200
Mulholland Drive and Greenleaf St.	F	233,300	2.16%	5,000	F	190,900	2.16%	4,100

Source: Traffic Analysis Report, July 2006

Safety

Caltrans, District 7, Traffic Accident Surveillance and Analysis System (TASAS) data was analyzed for both northbound and southbound I-405 within the project limits for the time period of April 1, 2002 through March 31, 2005. The total number of accidents for northbound I-405 was 1,738 and 2,738 for the same time period for southbound I-405. Average accident rates for the segment of the I-405 within the project limits, as well as the statewide average accident rates are provided in Table 1.3-3.

The TASAS data indicates that northbound I-405 within the project limits has experienced slightly lower accident rates than the statewide average for the three-year study period. The southbound I-405 within the project limits has experienced substantially higher than average accident rates for injury-related accidents and total accidents.

Table 1.3-3: Accident Rate Data for I-405 within the Project Limits
(October 1, 2002 through September 30, 2005)

Direction of Travel	Total Number of Accidents	I-405 Average Accident Rates (per million vehicle miles)			California Average Accident Rates (per million vehicle miles)		
		Fat ¹	F+I ²	Total ³	Fat ¹	F+I ²	Total ³
Northbound	1,738	0.003	0.33	1.19	0.006	0.38	1.22
Southbound	2,738	0.004	0.51	1.77	0.006	0.38	1.22

Source: Caltrans, District 7, Traffic Accident Surveillance and Analysis System

Notes: 1) Fat – accidents involving at least one fatality.

2) F+I – accidents involving either a fatality or injury.

3) Total – all reported accidents, which includes accidents with fatalities, injuries, and property damage only.

There is a high percentage of rear-end type accidents occurring in both directions of travel, which is indicative of stop-and-go traffic related to congested conditions. There is also a relatively large proportion of accidents occurring during the midday traffic period on southbound I-405, which may be related to high traffic volumes combined with intermittent congestion, where drivers may not anticipate stop-and-go traffic. The following locations along I-405 within the project limits have had much higher accident rates within the last 12 months of the three-year study period:

- Southbound I-405 On-ramp from eastbound Wilshire Blvd.
- Southbound I-405 Off-ramp from westbound Wilshire Blvd.
- Southbound I-405 near Olympic/Pico & Santa Monica Blvd.
- Northbound and Southbound I-405 from Santa Monica to Wilshire Blvd.
- Southbound I-405 from Wilshire to Santa Monica Blvd.
- Southbound I-405 from Wilshire to Sunset Blvd.
- Southbound I-405 from Sunset Blvd. to Church Lane
- Southbound I-405 from Getty Center to Wilshire Blvd.
- Southbound I-405 from Skirball Center to Mulholland Drive
- Northbound I-405 from Mulholland to Ventura/Greenleaf St.
- Northbound I-405 from Ventura/Greenleaf to Sepulveda Blvd.

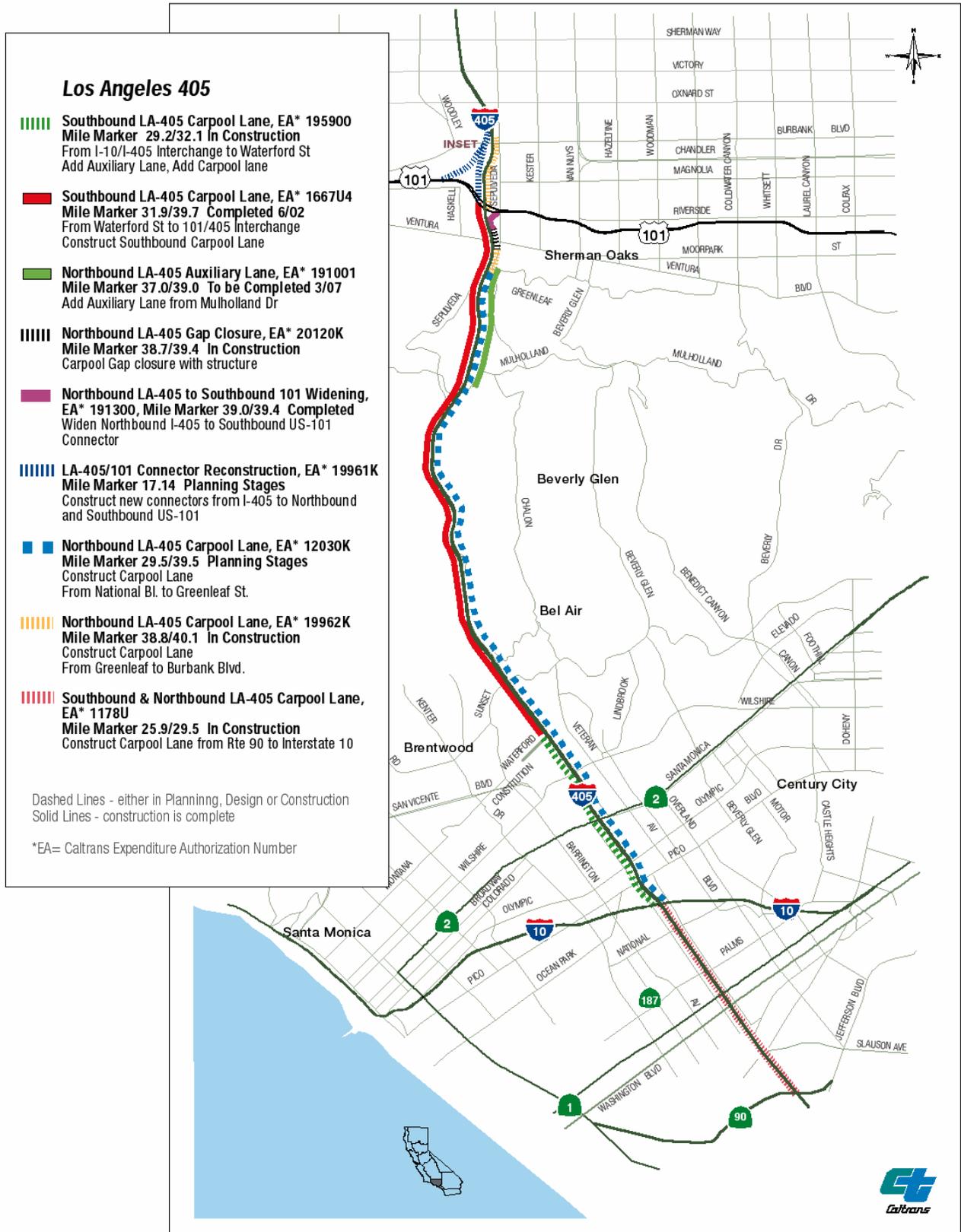
1.4 Related Projects

Caltrans District 7 is home to the nation's most extensive HOV lane program, which will be adding carpool lanes to virtually every freeway in the Los Angeles area. The HOV program is the backbone of a multi-modal transportation system. In providing an HOV system, Caltrans is providing the network necessary for higher-level mass transit systems in the future. The HOV system is also the least expensive method or alternative to accommodate economic growth and development and is seen as the next logical step in improving freeway efficiency to accommodate future increases in population and traffic. The \$4.3 billion HOV lane program is designed to quickly improve mobility in the region. HOV lanes are planned along the entire stretch of the I-405 corridor in Los Angeles County (see Figure S-3: 2006 Interregional HOV Lane System Map and Figure 1.1-2: Related Projects in the I-405 Project Area).

Besides the HOV lane program, another project would affect a local roadway in the I-405 Sepulveda Pass Project area. Construction of the Santa Monica Boulevard Transit Parkway Project began in March 2003 and roadway construction was completed in October 2006 and landscaping work will continue through summer 2007. The project involved the reconstruction and reconfiguration of 2.5 miles of Santa Monica Boulevard and Little Santa Monica Boulevard into a single roadway with three eastbound and three westbound travel lanes. The project included a new street lighting and traffic signal system, a landscaped median, bicycle lanes and bus priority features.

The City of Los Angeles, in coordination with the Federal Highway Administration (FHWA) and Caltrans, is in the planning stages for the Sepulveda Blvd. Reversible/Bike Lane and Intersection Improvement Project. Sepulveda Blvd. parallels I-405 for the length of the project area and the limits are from Wilshire Blvd. to Mulholland Drive in the city and county of Los Angeles. Improvements include auxiliary lanes, bike lanes, and up to six-foot wide shoulder additions for bicycle usage. Sepulveda Blvd. would be re-stripped through the Sepulveda Tunnel to provide a reversible lane that would operate during peak-hour traffic periods. Construction is proposed to begin in the summer of 2007 and would last for approximately 18-24 months.

Figure 1.1-2: Related Projects in the I-405 Project Area



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CHAPTER 2 PROJECT ALTERNATIVES

The proposed project is located in Los Angeles County on I-405 and would involve the addition of a 10-mile northbound carpool lane on I-405 through the Sepulveda Pass from approximately I-10 (Santa Monica Freeway) to US-101 (Ventura Freeway).

There are three viable alternatives proposed for this project consisting of the “No Build” alternative (Alternative 1) and two “Build” alternatives (Alternative 2 and 3). Alternatives involving an HOV viaduct structure (previously considered as “Build” Alternatives 4 and 5) were deemed “non-viable” by Caltrans from an engineering, cost and environmental standpoint (for details see Section 2.4 Alternatives Considered but Eliminated from Further Discussion) and therefore did not require full analysis. Alternative 2 appears to be the Locally Preferred Alternative.

The selection of a final recommended alternative would not be made until after the consideration of public comments on the Draft EIR/EIS is complete and the Final EIR/EIS has been approved. The final recommended alternative could be a hybrid combination of one or more of these alternatives.

2.1 Alternative 1: No Build

This alternative would maintain the current configuration of the existing freeway, ramps, and local intersections within the project limits. It is important to note that although the current configuration is maintained, travel demand and traffic congestion is expected to increase over time. According to the traffic study prepared for the proposed project, all project build alternatives would provide reduced congestion, smoother operations, a decrease in weaving, and improved safety in comparison to the “No Build” alternative. The “No Build” alternative would not address the purpose and need of the proposed project and serves mainly as a baseline to compare with all other alternatives.

2.2 Alternative 2: Add a Standard Northbound HOV Lane and Standardize Northbound Mixed-Flow Lanes, Median and Shoulder

This alternative would add one standard northbound HOV lane to the existing facility. Standard freeway profiles for northbound I-405 within the project limits except through the I-405/I-10 interchange would be provided (see Figure 2.2-1: Conceptual Cross-Section of Build Alternatives). A 12-foot half median, a 12-foot HOV lane, a 4-foot HOV buffer, five 12-foot mixed-flow lanes, and a 10-foot outside shoulder would also be provided.

Most of the freeway widening required for this project would occur along the east side of I-405 along Sepulveda Blvd. between Montana Ave. and Moraga Dr. and between Getty Center Drive and the northbound Getty Center off-ramp. Sepulveda Blvd. would be slightly realigned at the relocated southbound I-405 Skirball Center Drive on/off-ramps in order to add a left-turn lane to the on-ramp. Some widening would also occur along the west side of the freeway within the

following segments: between Ohio Avenue and Waterford Street; between Bel Air Crest and Mulholland Drive; and between the southbound on-ramp from Sepulveda/Valley Vista to the north end of the project (just south of Ventura Boulevard).

The Wilshire Blvd. interchange would be improved in both directions. The northbound on-ramp from eastbound Wilshire Blvd. would be grade-separated from the northbound off-ramp to westbound Wilshire Blvd. and from Sepulveda Blvd. The southbound off-ramp to eastbound Wilshire Blvd. would be grade-separated from the southbound off-ramp to westbound Wilshire Blvd.

The northbound I-405 off-ramp to Montana Blvd./Sepulveda Blvd. would be closed in order to accommodate freeway widening.

The northbound I-405 Sunset Blvd. interchange would also be improved. The northbound I-405 off-ramp to eastbound Sunset Blvd. would be widened to include an additional lane. The northbound I-405 on-ramp from eastbound Sunset Blvd. would include two exclusive 12-foot lanes on the reconstructed Sunset Blvd. overcrossing and two 12-foot lanes on the on-ramp. In the eastbound direction, three 12-foot lanes and three 11-foot lanes in the westbound direction would be provided, which would solve the existing reduction from three lanes to two lanes in the eastbound direction. In both directions, 4-foot shoulders and 5-foot sidewalks as well as a 13-foot median would be provided on the Sunset Blvd. overcrossing.

The irregular northbound I-405 on/off-hook ramps at the Getty Center interchange would be reconfigured to a standard diamond interchange to increase stopping sight distances improving safety.

The southbound I-405 Skirball Center Drive interchange would be relocated approximately 1,640 feet to the south to form a “T” intersection with Sepulveda Blvd. This would eliminate the existing intersection at the end of the southbound I-405 Skirball Center Drive off-ramp located 66 feet east of the Skirball Center Drive/Sepulveda Blvd. intersection. The traffic congestion problems caused by the proximity of these two traffic intersections would be eliminated.

The southbound Valley Vista/Sepulveda Blvd. off-ramp would be reconstructed due to freeway widening.

A total of 12 soundwalls and 54 retaining walls within the project limits would be constructed at embankments where right-of-way is constrained.

A total of 12 undercrossings within the project limits would be widened. Three overcrossings at Sunset Boulevard, Skirball Center Drive, and Mulholland Drive would need to be replaced.

Refer to Figure 2.3-1: Major Project Features for Alternative 2 and 3. Also refer to Appendix I for Proposed Layouts for Alternative 2 and 3.

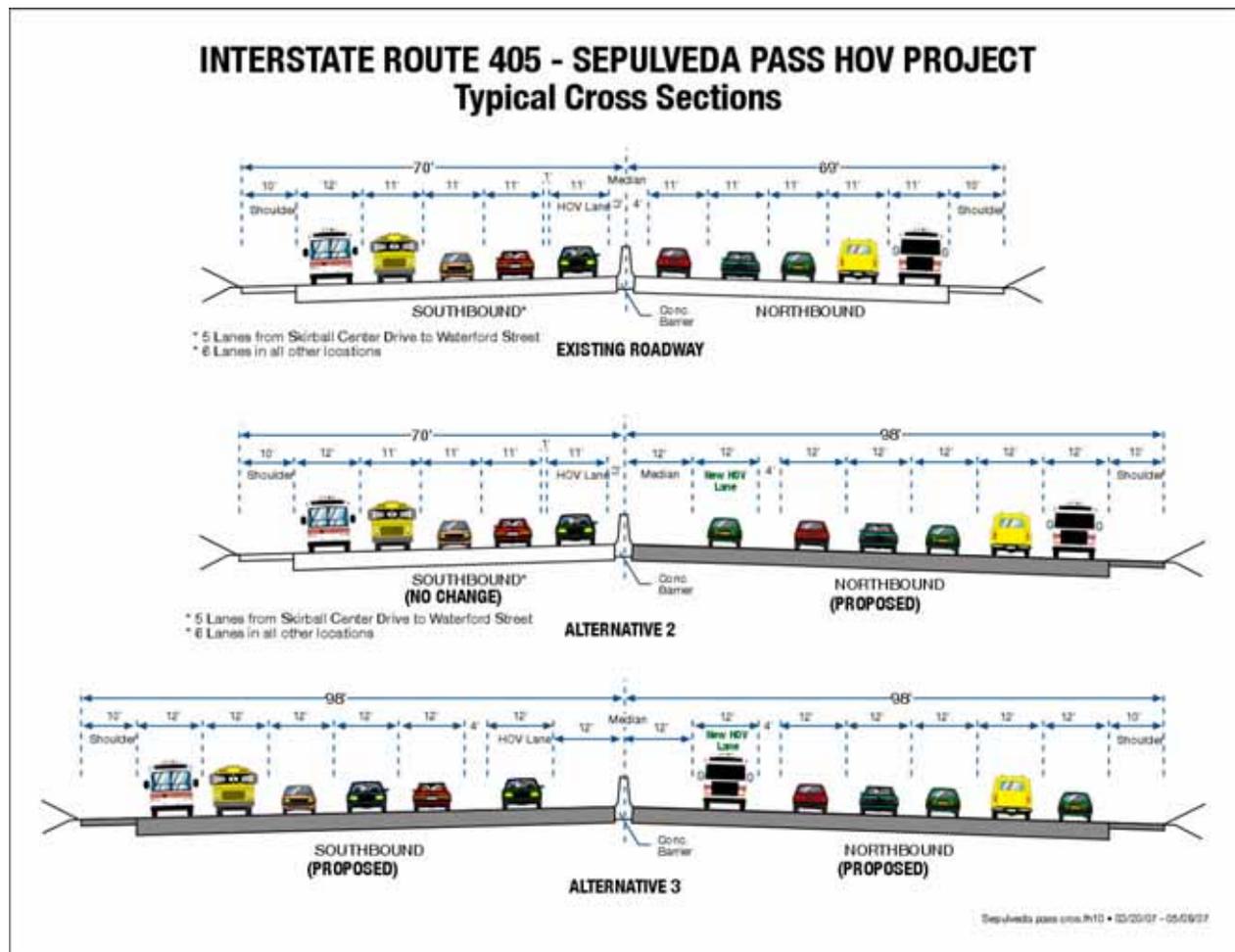
The capital outlay cost of Alternative 2 is estimated at \$649 million in 2006 dollars.

Design Options Mandated by FHWA at Skirball Center Dr. and Valley Vista Blvd.

Caltrans and FHWA have also analyzed another geometrically preferred design option to relocate the Skirball Center Dr. northbound and southbound on/off-ramps. The proposed northbound on/off-ramps would be relocated just north of the existing ramp. The proposed southbound on/off-ramps would require the realignment of Sepulveda Blvd. Both options would improve safety by increasing the stopping-sight distance for motorists using the southbound I-405 on/off-ramps (see Appendix I – L3A and L4A).

As a result of community input from meetings held in March, Caltrans has been analyzing design options for the southbound I-405 Valley Vista Blvd. on/off-ramps. In an effort to improve freeway operations and reduce the number of property takes that would be required to reconstruct the southbound off-ramp due to freeway widening, a geometrically preferred option has been developed. New hook on/off-ramps would be relocated south of the existing Valley Vista off-ramp to Sepulveda Blvd. The hook-ramp design would reduce the number of property takes by allowing Caltrans to use its available right-of-way as well as improve driver sight distance, increase vehicle storage and decrease motorist weaving from the 101/405 interchange (see Appendix I – L1A).

Figure 2.2-1: Conceptual Cross-Section of Build Alternatives



2.3 Alternative 3: Add a Standard Northbound HOV Lane and Standardize the Southbound HOV Lane, Mixed-Flow Lanes, Median, and Shoulder

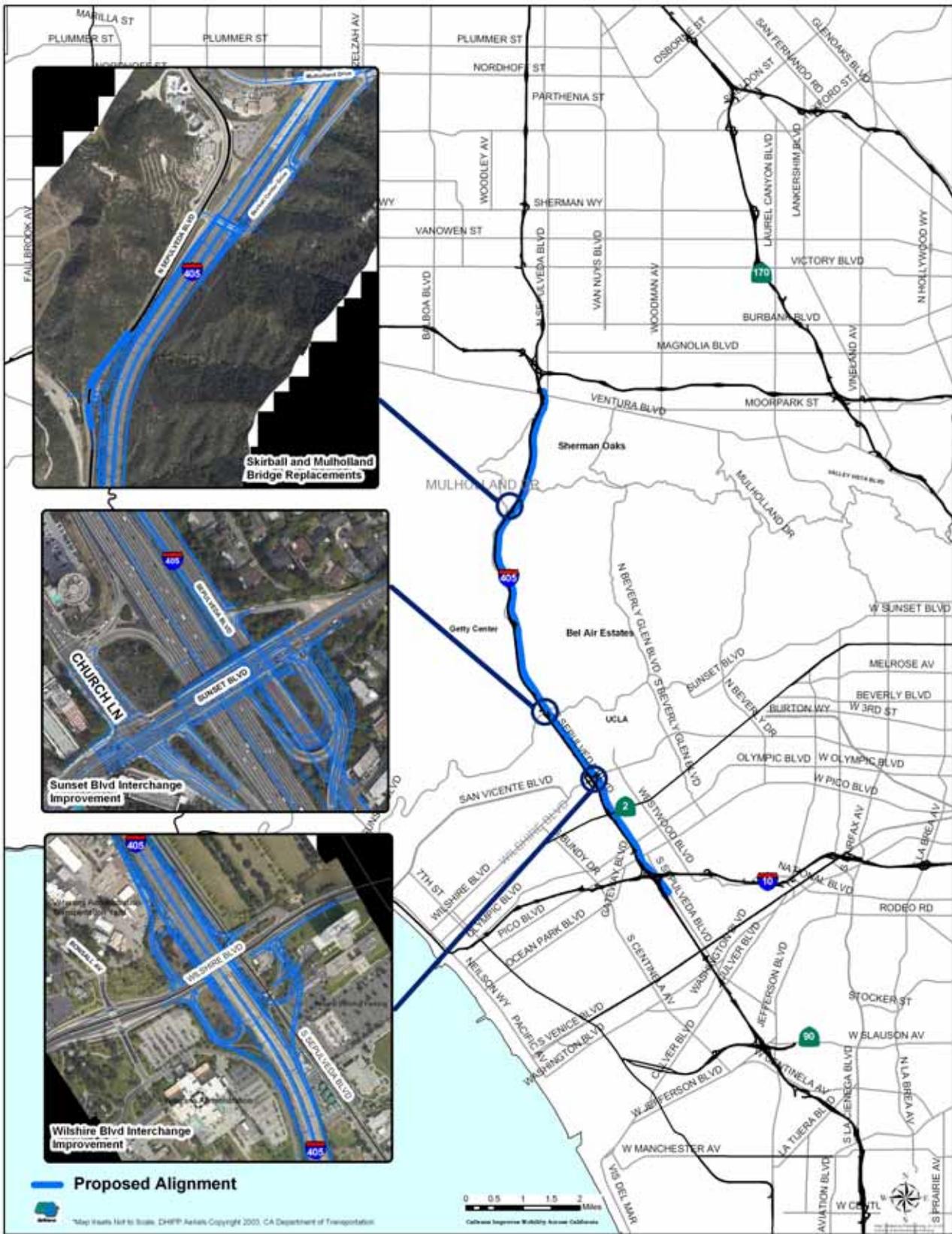
In addition to the features as described in Alternative 2, standard freeway profiles would be provided for northbound and southbound I-405 within the project limits except through the I-405/I-10 interchange. I-405 would be widened along the east side similar to Alternative 2 and along most of the west side throughout the project limits. Other changes associated with this alternative that are not a part of Alternative 2 include:

- Closure of the southbound I-405 on-ramp from eastbound Sunset Boulevard. In conjunction with this ramp closure, the ramp intersection located immediately north of the Sunset Boulevard/Church Lane intersection would be reconfigured so that the existing island would be eliminated and the middle lane at the northbound approach would be changed from a through lane to a shared through/right-turn lane;
- Approximately 2,300 feet of Sepulveda Boulevard would be realigned along the westside of I-405 north of the Getty Center/I-405 interchange due to the widening planned along the westside of I-405; and
- Most of Church Lane between approximately Chenault Street and Kiel Street would be realigned to the west to facilitate the I-405 widening.
- A total of 13 soundwalls and 75 retaining walls within the project limits would be constructed at embankments where right-of-way is constrained.

Refer to Figure 2.3-1: Major Project Features for Alternative 2 and 3. Also refer to Appendix I for Proposed Layouts for Alternative 2 and 3.

The capital outlay cost of Alternative 3 is estimated at \$911 million in 2006 dollars.

Figure 2.3-1: Major Project Features for Alternative 2 and 3 (1 of 2)



2.4 Alternatives Considered but Eliminated from Further Discussion

During the I-405 analysis, a wide range of alternatives were considered to address corridor deficiencies. A Value Analysis (VA) was conducted in October 2001 for the proposed project. One of the proposed alternatives consisted of constructing a northbound HOV off-ramp to Santa Monica Blvd., which has been incorporated into Alternative 2. In addition to the alternatives discussed above, the alternatives below were considered. These were later withdrawn because of their extraordinary costs, substantial environmental impacts and/or engineering unfeasibility.

Alternative 4 – Four-Lane HOV Viaduct Structure:

This alternative provides four standard HOV lanes on an elevated viaduct structure over the freeway median throughout the project limits. Two HOV lanes would run north and two would run south. No direct access ramps to or from local streets would be included in this alternative. At freeway level, this alternative would provide the same lane widths and shoulder widths as proposed in Alternative 2.

This alternative has been rejected due to seismic stability and safety concerns associated with a viaduct structure, as analyzed in the 405 HOV Viaduct Feasibility Study Memo, provided as an attachment in the Draft Project Report.

Alternative 5 – Four-Lane HOV Viaduct Structure with Transit Enhancements

Similar to Alternative 4, this alternative proposed widening the existing facility to provide four standard HOV lanes on an elevated viaduct within the freeway median with the addition of direct on/off-ramps to the northbound and southbound HOV lanes at Sunset Blvd. and Wilshire Blvd. This alternative would require the widening and re-striping of I-405 in both directions along with realigning and reconfiguring numerous ramps.

This alternative has been rejected due to seismic stability and safety concerns associated with a viaduct structure, as analyzed in the 405 HOV Viaduct Feasibility Study Memo, provided as an attachment in the Draft Project Report.

Traffic Systems Management Alternative

This alternative would incorporate implementation of Traffic Systems Management (TSM) measures along the existing arterials paralleling the I-405 corridor to provide increased efficiency on existing facilities. TSM measures generally entail a series of low-capital traffic engineering measures designed to provide increased operational efficiency on existing freeways. Such measures were considered on arterials such as Sepulveda Blvd. as well as east-west arterials.

TSM measures may include signal synchronization, freeway ramp metering, freeway acceleration lanes, enhanced transit service through the I-405 corridor, isolated intersection improvements. These types of improvements are included in the Metropolitan Transit Authority (MTA) 2003 Short-Range Transportation Plan for the Westside Cities Subregion in Los Angeles County. To address the subregion's mobility challenges, the Westside cities and MTA have

already undertaken many transportation improvement projects that are expected to be operational by 2009. These include the following MTA projects:

- Transportation Demand Management: To improve the capacity and inter-modal efficiency of the transportation system, a number of projects that involve policies, programs or actions that focus on reducing dependency on automobile use or modifying travel behavior have been or will be implemented in the Westside including the development of the Santa Monica Transit Mall;
- Bikeway and Pedestrian Improvement Projects: To encourage residents and commuters to use cleaner forms of transportation, MTA has funded several bikeway and pedestrian transportation projects including pedestrian and bikeway improvements in Culver City, Los Angeles, Santa Monica and West Hollywood;
- Transportation Enhancements: A number of transportation enhancement projects have been undertaken to enhance the quality of life and provide more livable communities including landscaping in the medians along major arterials, gateway signs indicating the entry into particular Westside cities, renovating Santa Monica Blvd. in West Hollywood and Culver Blvd. in Culver City; and
- Transit: MTA and the municipal transit operators are working to improve transit facilities in the subregion by providing transit centers, bus stop improvements and utilizing new transit technologies. The MTA Board approved a 24-line expansion of the Metro Rapid system of which 10 additional lines will serve the Westside with the help of the municipal operators including Fairfax Avenue, Beverly, Olympic, Pico, Santa Monica, Florence and Crenshaw/LAX, La Cienega, Sepulveda and Lincoln Boulevards. The Metro Central/Westside Service Sector began operation during Fiscal Year 2003. The Westside cities will be forming a Council of Governments and will participate with the newly created Service Sector Council that will be ratified by the MTA Board. This body will make recommendations on transit service improvements for the subregion.

This alternative has been rejected for the following reasons:

- TSM alone would not provide adequate capacity for projected traffic volumes which would not address projected travel demands;
- TSM alone would not improve future safety;
- TSM would be insufficient to facilitate the movement of people and goods, or comply with local, regional, and state plans and policies;
- Parallel arterials where TSM improvements could be applied are limited;
- The City of Los Angeles is already pursuing TSM improvements on Sepulveda Blvd; and
- The MTA is already pursuing transit improvements as noted above so they would be redundant if included as an alternative here.

Conversion of a Full-time HOV Lane to a Part-time HOV Lane Alternative

This alternative would convert an existing full-time HOV lane to a part-time lane in both directions on a 10-mile segment of the I-405. The proposed segment would begin from approximately I-10 to the south to U.S. 101 to the north. The HOV lane would be open to single-occupant vehicles during off-peak hours. Signage would be installed to inform motorists

of the new hours of operation. There would be no additional changes (striping, ingress/egress, etc.) associated with this alternative.

This alternative has been rejected for this project for the following reasons:

- Traffic volumes on both northbound and southbound I-405 are balanced.
- The Southern California Association of Governments would need to amend the Regional Transportation Improvement Program to reflect air quality conformity with the new proposed project description.

Addition of a Mixed-Flow Lane

This alternative would construct a northbound mixed-flow lane and also consider converting the southbound HOV lane to a mixed-flow lane. This alternative has been rejected because it would not address the purpose and need of the proposed project as stated in Section 1.3, would not complete the HOV system on I-405, does not encourage carpool/vanpool/transit use, and would not be in conformity with the RTIP.

2.5 Design Options Considered but Eliminated from Further Discussion

Direct-Access HOV On/Off-ramp at Santa Monica Boulevard

This design option would add an HOV direct-access on/off-ramp at Santa Monica Blvd. Vehicles traveling in the HOV lane would be able to enter and exit directly from the carpool lane at Santa Monica Boulevard.

Just prior to Draft EIR/EIS circulation, the direct access HOV on/off-ramp at Santa Monica Blvd. (Alternative 2B/3B) was analyzed for its potential for conditional acceptance pursuant to Federal Highway Administration (FHWA) requirements for added (or modified) interchanges on the Interstate System (Title 23 USC 111). This engineering analysis determined that this alternative was not feasible.

The traffic analysis that was conducted for this direct-access design option concluded that the projected HOV traffic volumes entering the proposed freeway HOV lanes would cause the southbound HOV lane to become severely congested. This was an unacceptable condition and as a consequence, Alternatives 2B and 3B had to be withdrawn from consideration at this time. Contributing to this decision was the fact that if Caltrans wanted to continue to pursue these direct-access ramps, FHWA would require additional traffic analysis and review which would take several months to complete.

2.6 Permits and Approvals

The following permits, agreements, reviews and approvals would be required for project construction.

Agency	Permit/Approval	Status
United States Army Corps of Engineers	Section 404 Nationwide Permit	Application for Section 404 permit anticipated submittal after final design and after final ED distribution.
California Department of Fish and Game	1602 Agreement for Streambed Alteration Agreement	Application for 1601 permit anticipated submittal after final design and after final ED distribution.
California Regional Water Quality Control Board	Section 401 Water Quality Certification	Application for Section 401 permit anticipated submittal after final design and after final ED distribution.
Southern California Air Quality Management District	Fugitive Dust – Rule 403	To be obtained by the contractor before start of construction.
Office of Historic Preservation	Memorandum of Agreement (MOA)	A draft MOA would be submitted to the State Historic Preservation Officer after sufficient design work has been completed for Environmental Planning to ascertain impacts and consider mitigation for the Mulholland Bridge.
City of Los Angeles Department of Transportation	Freeway Agreement	Coordination with the City of LA Department of Transportation has been ongoing.

CHAPTER 3 **AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES**

INTRODUCTION

As part of the scoping and environmental analysis conducted for the project, the following environmental resources were considered but no potential for adverse impacts to these resources were identified. Consequently, this document provides no further discussion regarding these resources:

- Wild and Scenic Rivers – No wild or scenic rivers are located within the project area.
- Farmlands – No farmlands are located within the project area. The project will not irreversibly convert farmland directly or indirectly to non-agricultural use.
- Coastal Barriers and Coastal Zone – The project area is not located within the coastal zone.
- Wildlife and Waterfowl Refuges – There are no wildlife or waterfowl refuges located within the project area.

Environmental impacts and mitigation measures reported in this Draft Environmental Impact Statement/Environmental Impact Report are based on technical studies conducted for this project. The studies are available for review at the Caltrans District 7 Office at 100 South Main Street, in Los Angeles, California 90012.

Technical Studies Prepared for the I-405 Sepulveda Pass Project

Air Quality Assessment	April 2007
Community Impact Analysis	September 2006
Cumulative Impact Analysis	November 2006
Initial Site Assessment	January 2001
Supplemental Initial Site Assessment	June 2006
Hydraulic Study	May 2006
Natural Environment Study Report	July 2006
Wildlife Corridor Assessment	October 2006
Noise Study Report	July 2006
Traffic Analysis Report	July 2006
Storm Water Data Report	May 2006
Visual Impact Analysis	February 2007
Historic Property Survey Report	May 2006
Archaeological Survey Report	May 2006
Geotechnical Report	April 2006
Relocation Impact Report	November 2006
Section 4(f)	December 2006

HUMAN ENVIRONMENT

3.1 LAND USE

3.1.1 Regulatory Setting

Public Resources Code 21083, 21087 and the California Environmental Quality Act Guidelines Section 15126.2(a) require lead agencies to assess the impact of a proposed project by examining alterations in the human use of the land, including population distribution and population concentration, and commercial and residential development. Section 15131 allows public agencies to consider economic and social impacts when determining the significance of an environmental impact.

The description of the affected environment is based on data from the U.S. Census Bureau and from State of California and County of Los Angeles sources. County-, city-, and tract-level data are available from the 2000 census. This section describes demographic characteristics of Los Angeles County, the affected communities, and where detailed tract-level data is available, the smaller “study area.”

Council on Environmental Quality (CEQ) regulations 40 CFR 1502.16(c) require environmental documents identify possible conflicts between the project and local land use plans.

The environmental transportation law known as Section 4(f), which is part of the United States Department of Transportation Act of 1966 (49 U.S.C. §303), 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.” Further, it is specified that, “the Secretary [of Transportation] may approve a transportation program or project...requiring the use of publicly owned land of a public park, recreation area, wildlife and waterfowl refuge of national, State or local significance, or land of an historic site of national, State, or local significance (as determined by Federal, State, or local officials having jurisdiction over the park, area, refuge, or site) only if –

- (1) there is no prudent and feasible alternative to using the land; and
- (2) the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.”

3.1.2 Affected Environment

Information regarding land use was obtained from the I-405 Sepulveda Pass Project Community Impact Assessment, July 2006.

Study Area

The study area includes the area along I-405 between National Boulevard and Greenleaf Street. Portions of the City of Los Angeles communities of Westwood, Brentwood, and Sherman Oaks are included in the study area, as is a small portion of an unincorporated area of Los Angeles

County. The City of Los Angeles has 35 Community Plan Areas. Of these areas, seven are within the footprint of the proposed project (please refer to Figure 3.1-1: Affected Communities/Community Plan Areas). These Community Plan Areas include:

- Encino-Tarzana
- Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass
- Bel Air-Beverly Crest
- Brentwood-Pacific Palisades
- Westwood
- West Los Angeles
- Palms-Mar Vista-Del Rey

Existing and Future Land Use

The segment of I-405 within the limits of the project is in a rolling terrain and is adjacent to light industrial, commercial, residential, and recreational facilities. The project area also passes through a part of unincorporated Los Angeles County that contains other facilities including: Salvation Army Low-Income Housing on Wilshire Blvd. (east of I-405), the Veterans Affairs Medical Center on Wilshire Blvd. (west of I-405), the Veterans Administration Center and Federal Office Building on Wilshire Blvd. (east of I-405), the Los Angeles National Cemetery between Wilshire Blvd. and south of Montana Ave. (east of I-405), and the Getty Center (west of I-405). Land uses in the County of Los Angeles adjacent to the project area include public facilities and semi-public facilities and open space (please refer to Figure 3.1-2: Land Use Within the Study Area).

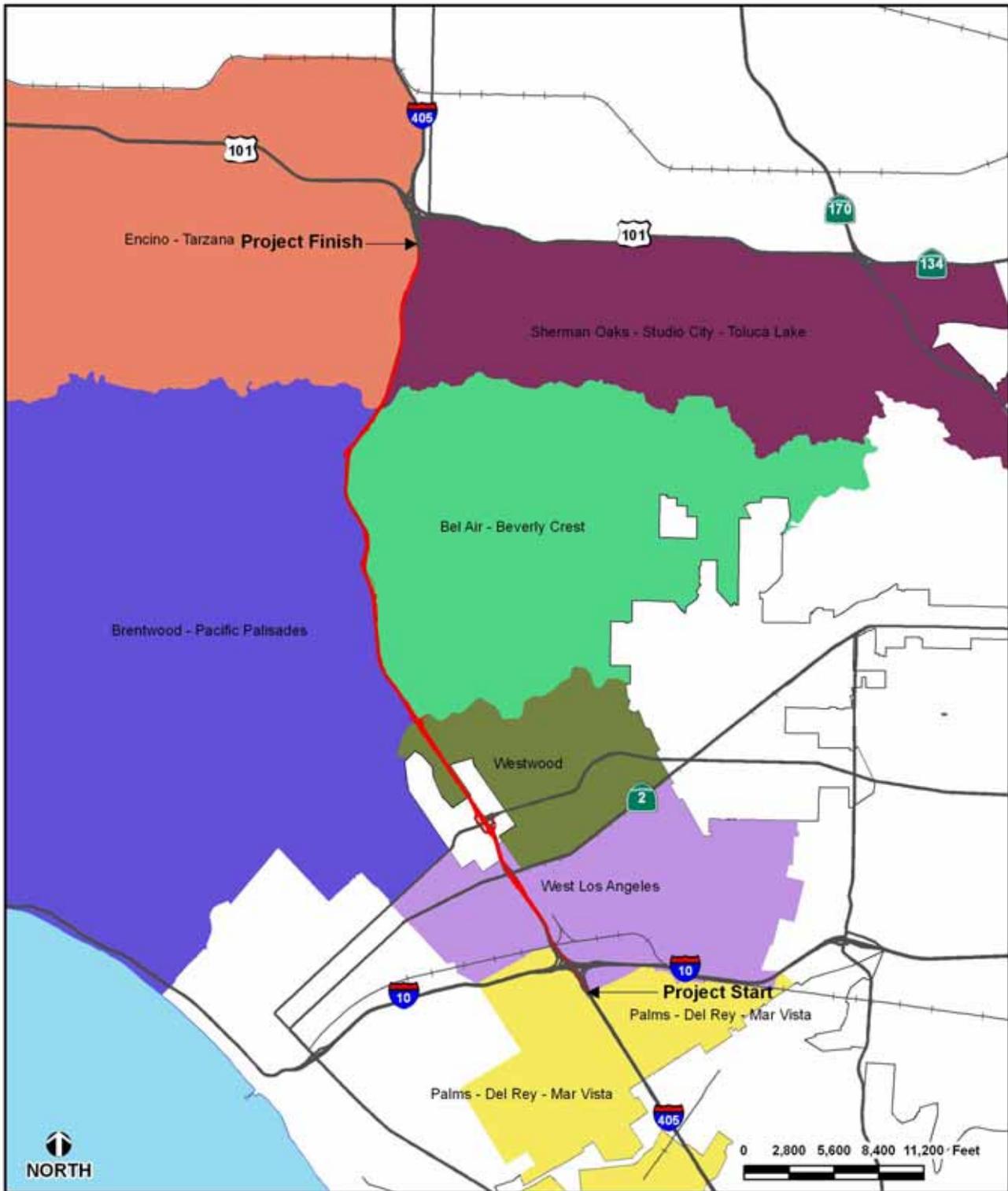
Encino-Tarzana Community Plan Area

The Encino-Tarzana Community Plan Area lies about 13 miles west of downtown Los Angeles. This area is bounded by the communities of Sherman Oaks, Studio City, Toluca Lake, Van Nuys, and North Sherman Oaks on the east, Canoga Park, Winnetka, Woodland Hills, and West Hills to the west, Brentwood and Pacific Palisades on the south, and Reseda and West Van Nuys on the north. The Plan is comprised of two community sub-areas, Encino and Tarzana.

Encino has two major development types: 1) a regional center where the predominant development pattern is that of high-rise buildings surrounded by specialty shops and restaurants that line Ventura Boulevard; and 2) a strip-center type commercial development area with residential development that is comprised of large estate-size single-family lots located south of Ventura Boulevard, and a mix of single-family and multiple-density dwellings located north, between US-101 and Ventura Blvd.

Development in Tarzana is comprised of commercial properties located along Ventura Blvd. that are developed with a mix of pedestrian-oriented storefronts and office structures and large estate lots south of Ventura Blvd. and a mix of single-family and multiple-density housing located between US-101 and Ventura Blvd. Contained within the diverse residential area north of Ventura Blvd., bounded by Tampa Ave. on the east, Corbin Ave. on the west, Topham St. on the north, and Martha Street on the south, lies Melody Acres. This area is zoned residential/agricultural and contains a neighborhood of nearly 300 homes on large lots.

Figure 3.1-1: Affected Communities/Community Plan Areas



Source: City of Los Angeles Planning (various), County of Los Angeles Assessor (2005), Caltrans (2005).

Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass Community Plan Area

The Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass Community Plan Area is located approximately eight (8) miles west of downtown Los Angeles, is bounded by the communities of North Hollywood, Van Nuys, and North Sherman Oaks on the north, Hollywood, Universal City, and a portion of the City of Burbank on the east, Encino and Tarzana on the west and Beverly Crest and Bel Air to the south. The Plan is comprised of four community sub-areas, each with its own identity.

Cahuenga Pass is the historical transition from the highly urbanized core of the city to the rural settings identified with the San Fernando Valley. Cahuenga Blvd. which runs parallel to US-101 serves as an alternate entrance to the Valley extending through the pass to Lankershim Blvd. where it transitions into Ventura Blvd., which is the predominant east-west street in the south valley. Cahuenga Pass and Ventura Blvd. are approximately five miles east of US-101 and I-405.

Studio City with its collection of film production and post-production businesses contains the majority of industrially-zoned properties found within the plan area. This sub-area is generally bounded by Lankershim Blvd. on the east and Fulton Ave. on the west.

Sherman Oaks bounded by Fulton Ave. on the east and I-405 on the west, is comprised of a mix of low level and high rise commercial and office development along Ventura Blvd. Two major north/south arterials, Van Nuys Blvd. and Sepulveda Blvd. serve as focal points for the community. The majority of single-family residential units are located south of Ventura Blvd. within the adjacent hillside areas of the plan area. The majority of multiple residential units are located north of Ventura Blvd. with high concentrations also found along and between major and secondary arterials.

Toluca Lake is generally bounded by Cahuenga Blvd. on the west, the City of Burbank on the east, and the Los Angeles County Flood Control Channel on the south. Riverside Dr. from Sancola Ave. east to the city boundary is the commercial focal point of the community. The area is developed with low-rise commercial buildings that cater to pedestrian use.

Bel Air-Beverly Crest Community Plan Area

The Bel Air-Beverly Crest Community Plan Area is located south of Mulholland Dr., west of Laurel Canyon Blvd., Wonderland Dr., and the City of Beverly Hills, north of Sunset Blvd., and east of I-405. Adjacent Community Plan Areas include Sherman Oaks, Studio City and Toluca Lake on the north, Hollywood on the east, Westwood on the south, and Brentwood and the Pacific Palisades on the west. The Plan includes the County of Los Angeles land located in Franklin Canyon, which is part of the Santa Monica Mountains National Recreation Area.

The Bel Air-Beverly Crest plan area contains approximately 9,900 acres. Residential development is predominantly single-family homes. A limited number of multi-family concentrations occur on upper Roscomare Rd. and near the intersection of Sepulveda Blvd. and Moraga Dr. Neighborhood commercial centers are located on upper Roscomare Rd., and at Beverly Glen Circle, with mixed office and retail at Sepulveda Blvd. and Moraga Drive. Commercial activity also occurs at two locations in Beverly Glen Canyon.

The Community is characterized by a number of distinct residential neighborhoods associated with canyon and hillside locations. These areas include Laurel Canyon, Laurel Hills, Lookout Mountain, Wonderland Park, Coldwater Canyon, Franklin Canyon, Benedict Canyon, Beverly Glen, Casiano Estates, Glenridge, Roscomare Valley, Bel Air Crest and Summitridge.

Brentwood-Pacific Palisades Community Plan Area

The Brentwood-Pacific Palisades Community Plan Area contains approximately 24,163 acres, or about eight percent of the City of Los Angeles' land area. It is located on the westside of Los Angeles. It is bordered on the southwest by the Pacific Ocean; on the south by the City of Santa Monica and Wilshire Blvd.; on the east by I-405 and an unincorporated area of Los Angeles County (Veterans Administration) and on the north by Mulholland Dr. The western border is also the City of Los Angeles' western border adjacent to the unincorporated portion of Los Angeles County which abuts the City of Malibu. Much of the acreage contained within the community plan is mountainous with public open space accounting for approximately 55 percent of the plan area.

The community is composed of many neighborhoods but is generally described by two major communities: Brentwood, which occupies the eastern portion of the plan area, and Pacific Palisades on the west. The two communities are traversed by Sunset Blvd., which runs the length of the area. Other major streets are San Vicente Blvd., Wilshire Blvd. and Pacific Coast Highway which cross the City limits into Santa Monica; Mulholland Dr. along the crest of the Santa Monica Mountains; and Barrington Ave. The communities are primarily residential, with supporting retail clusters with some professional offices and no industrial land uses.

The area covers about 3.5 million square feet of commercial development exists covering in about 130 acres. A pedestrian-oriented mixed mid- and low-rise corridor is located along San Vicente Blvd. A pedestrian-oriented area is also located in the Pacific Palisades Village Center along Sunset Blvd. Other commercial areas are along Wilshire Blvd., Barrington Ave./Sunset Blvd., Sunset Blvd./Pacific Coast Highway, Marquez Ave./Sunset Blvd., Channel Rd./ Pacific Coast Highway, Palisades Dr./Sunset Blvd. and Palisades Dr./Palisades Circle.

Westwood Community Plan Area

The Westwood Community Plan Area contains 2,571 acres (four square miles) which is less than one percent of the land in the City of Los Angeles. The plan area is generally bounded by Sunset Blvd. and the Bel Air community on the north; the City of Beverly Hills on the east; Santa Monica Blvd. and the West Los Angeles community on the south; and the Veterans Administration property, the Brentwood-Pacific Palisades community and Sepulveda Blvd. on the west.

Within the plan area's boundaries are some noteworthy land uses including the University of California at Los Angeles (UCLA), Westwood Village, the Los Angeles Country Club, and the Mormon Temple. Adjoining the area is the Veterans Administration facility located on unincorporated Los Angeles County land. The terrain varies from flat land in the southern section to rolling hillside in the north. The predominant land use in the area is residential with single-family housing located between Westwood Blvd. and the Country Club, both north and south of Wilshire Blvd.; and east of I-405 south of Sunset Blvd.

A majority of the multiple-family housing consists of high-medium and medium density residential. High-rise towers are located along Wilshire Blvd. between the Los Angeles Country Club and Malcolm Ave. Significant concentrations of multi-family development occur on Beverly Glen Blvd., adjacent to Veteran Ave., and in North Westwood Village. Low-rise multi-family housing, including three and four story buildings, is concentrated south of Wilshire Blvd., along Hilgard Ave. just east of the university, and on portions of Sepulveda Blvd.

Approximately three (3) percent of the land is designated for commercial uses. Westwood has four concentrations of commercial development. The high-rise office corridor along Wilshire Blvd. serves as a Regional Center with financial institutions and corporate headquarters. Westwood Village is a unique pedestrian-oriented low-rise Community Center consisting almost entirely of storefronts and is located between UCLA and Wilshire Blvd. Neighborhood-oriented commercial development is located on Westwood Blvd. south of Wilshire Blvd., which is predominantly a storefront corridor with small-scale commercial facilities designed to primarily serve the local population. The remaining commercial areas are designated general commercial and are located along Santa Monica Blvd. and Sepulveda Blvd.

A large portion of the plan area including all multiple-family development, and most of the commercial area is currently regulated through specific community plans that address such issues as development intensity, signage, parking, height, landscaping and design. These include the Westwood Village, Wilshire-Westwood Corridor, Westwood Community Plan Multiple Family Residential, and North Westwood Village Specific Plans which require Design Review Board approval for all projects.

West Los Angeles Community Plan Area

The West Los Angeles Community Plan Area is located in the western portion of the City of Los Angeles. It is generally bounded by Centinela Ave. on the west, Wilshire Blvd. and Santa Monica Blvd. on the north, National Blvd., Pico Blvd., and Exposition Blvd. on the south, and Durango Ave., Robertson Blvd., and Canfield Ave. on the east. The plan area is surrounded by the communities of Westwood, Brentwood, Pacific Palisades, Palms, Mar Vista, Del Rey, West Adams, Baldwin Hills, Leimert Park, and Wilshire Blvd.; and by the Cities of Culver City, Santa Monica, and Beverly Hills, and the County of Los Angeles. The majority of the Community Plan Area consists of low rolling hills and flat plains, and contains approximately 4,565 acres, which is 1.74 percent of the land in the City of Los Angeles.

Low-density, single-family development makes up most of the residential land use in the plan area. A mix of multiple-family development includes apartments and condominiums at varying densities and building types (duplexes, small, medium and large complexes and some high rise structures). Commercial land use consists primarily of strip development on major arterials such as Wilshire Blvd., Santa Monica Blvd., Pico Blvd., Sawtelle Blvd., and Westwood Blvd. The majority of commercial facilities are either small-scale and free-standing or mini-mall type buildings designed to primarily serve local neighborhoods. Most of the community's industrial land use is located between Sepulveda Blvd. and Cotner Ave., and west of Sepulveda Blvd. in the vicinity of Olympic Blvd., Exposition Blvd., and Pico Blvd. This development provides an employment base consisting of small, medium and large manufacturing businesses, wholesale/retail distribution outlets, and storage operations.

A civic center providing governmental functions is located in the vicinity of Santa Monica Blvd. west of I-405. This center provides administrative and community services for the greater West Los Angeles area and includes a county court building, library, post office, police station, and senior center.

Palms-Mar Vista-Del Rey Community Plan Area

The Palms-Mar Vista-Del Rey Community Plan Area contains 5,257 acres which is approximately two (2) percent of the land in the City of Los Angeles. The plan area is located in the western portion of Los Angeles with irregular boundaries. The terrain varies from flat land in the southern section to rolling hillside in the north. The plan area is bisected by a narrow strip of the City of Culver City along Washington Blvd. The plan area is surrounded by the communities of Venice, West Los Angeles, West Adams, Baldwin Hills, Leimert Park, Westchester, Playa Del Rey and the Cities of Santa Monica and Culver City.

The predominant land use in the community is residential with most of its low-density residential development located west of Sawtelle Blvd. and between Sepulveda Blvd. and Overland Ave., north of Rose Ave. The majority of the multi-family development of medium and high medium density is in areas located in the northeast area of the community east of Sawtelle Blvd. UCLA student housing is located along both sides of I-405.

Approximately 4.1 percent of the area is designated for commercial uses. The majority of commercial facilities are small-scale and designed to primarily serve local populations. These uses primarily consist of strip commercial on Pico Blvd. and Venice Blvd., freestanding buildings on Motor Ave. and Overland Ave.; mixed building types on Centinela Ave. and small shopping centers on Sepulveda Blvd. and National Blvd. and Inglewood Ave. Of the total plan area, approximately 6.8 percent is designated for manufacturing and industrial uses.

In addition to the seven community plan areas described above, specific plans by local governments to guide development in localized areas near the I-405 project study area are listed in Table 3.1-1.

Table 3.1-1: Transportation and Land Use Specific Plans in the Project Vicinity

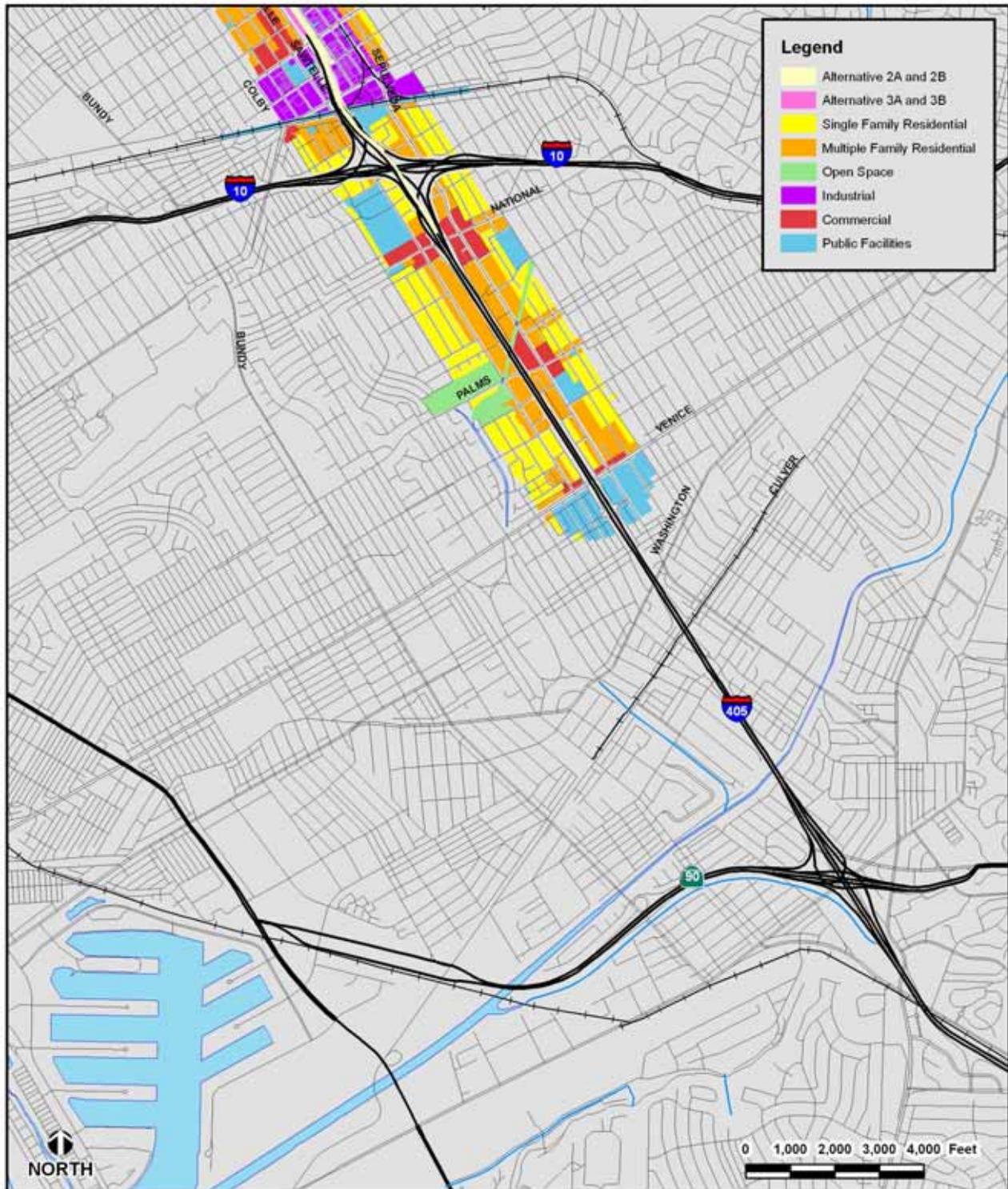
Description of Plans	Agency with Jurisdiction
WEST LOS ANGELES TRANSPORTATION IMPROVEMENT & MITIGATION SPECIFIC PLAN	
The goals of the plan are to promote and regulate transportation improvements; promote neighborhood preservation by limiting commuter traffic through residential neighborhoods; promote the development of coordinated and comprehensive transportation plans and programs with other jurisdictions and public agencies; and encourage Caltrans to widen the San Diego Freeway (I-405) for high-occupancy vehicle (HOV) lanes.	Caltrans/City of Los Angeles

Description of Plans	Agency with Jurisdiction
SEPULVEDA CORRIDOR SPECIFIC PLAN	
<p>The goals of the plan are to implement the provisions of the West Los Angeles Community Plan; to implement the settlement agreement dated September 1991 in the case <i>Southern Pacific Transportation Company v. City of Los Angeles</i>; to enhance the future development of the area by prohibiting construction on the railroad right-of-way on the west side of Sepulveda Boulevard and by allowing a transfer of allowable floor area from the right-of-way to other property in the Specific Plan area.</p>	City of Los Angeles
MULHOLLAND SCENIC PARKWAY SPECIFIC PLAN	
<p>The goals of the plan are to assure maximum preservation and enhancement of the parkway's unique scenic features and resources; to preserve Mulholland Drive as a slow-speed, low-intensity drive; and to assure that land uses are compatible with the parkway environment.</p>	Caltrans/City of Los Angeles
WESTWOOD MULTI-FAMILY SPECIFIC PLAN	
<p>The goals of the plan are to assure that the development of the area is in accordance with the provisions of the Westwood Community Plan; enhance the future development of the area by establishing coordinated and comprehensible standards for parking, height, design, building massing, and open space; to promote orderly, attractive harmonious multiple-family residential development; to enhance the aesthetic qualities of multi-family residential development; to adequately buffer single-family residential uses from adjacent multiple-family residential development to the greatest extent feasible.</p>	City of Los Angeles
WILSHIRE-WESTWOOD SCENIC CORRIDOR SPECIFIC PLAN	
<p>The goals of the plan are to implement expressed policies set forth in the Scenic Highways Plan including developing standards to minimize traffic and parking problems along Wilshire Boulevard, enhance aesthetic qualities of the Specific Plan area, encourage more open space, and reduce the impact of high-density residential development.</p>	City of Los Angeles

Development Projects

Within the project area, most of the land is developed or reserved as part of existing planned development. Due to the extraordinary land and construction costs in areas of the City of Los Angeles available for new development, the City prefers to protect low-density residential developments in place and to promote the construction of infill development, which is the redevelopment of existing development. The City of Los Angeles Planning and Housing Departments' documents were reviewed for descriptions of projects that are proposed and existing in the vicinity of the I-405 study area. Information from the Los Angeles County Community Development Commission (LACDC) was also reviewed to determine if any redevelopment projects were in the vicinity of the I-405 study area.

Figure 3.1-2: Land Use Within the Study Area (1 of 3)



Source: City of Los Angeles Planning (various), County of Los Angeles Assessor (2005), Caltrans (2005).

Figure 3.1-2: Land Use Within the Study Area (2 of 3)

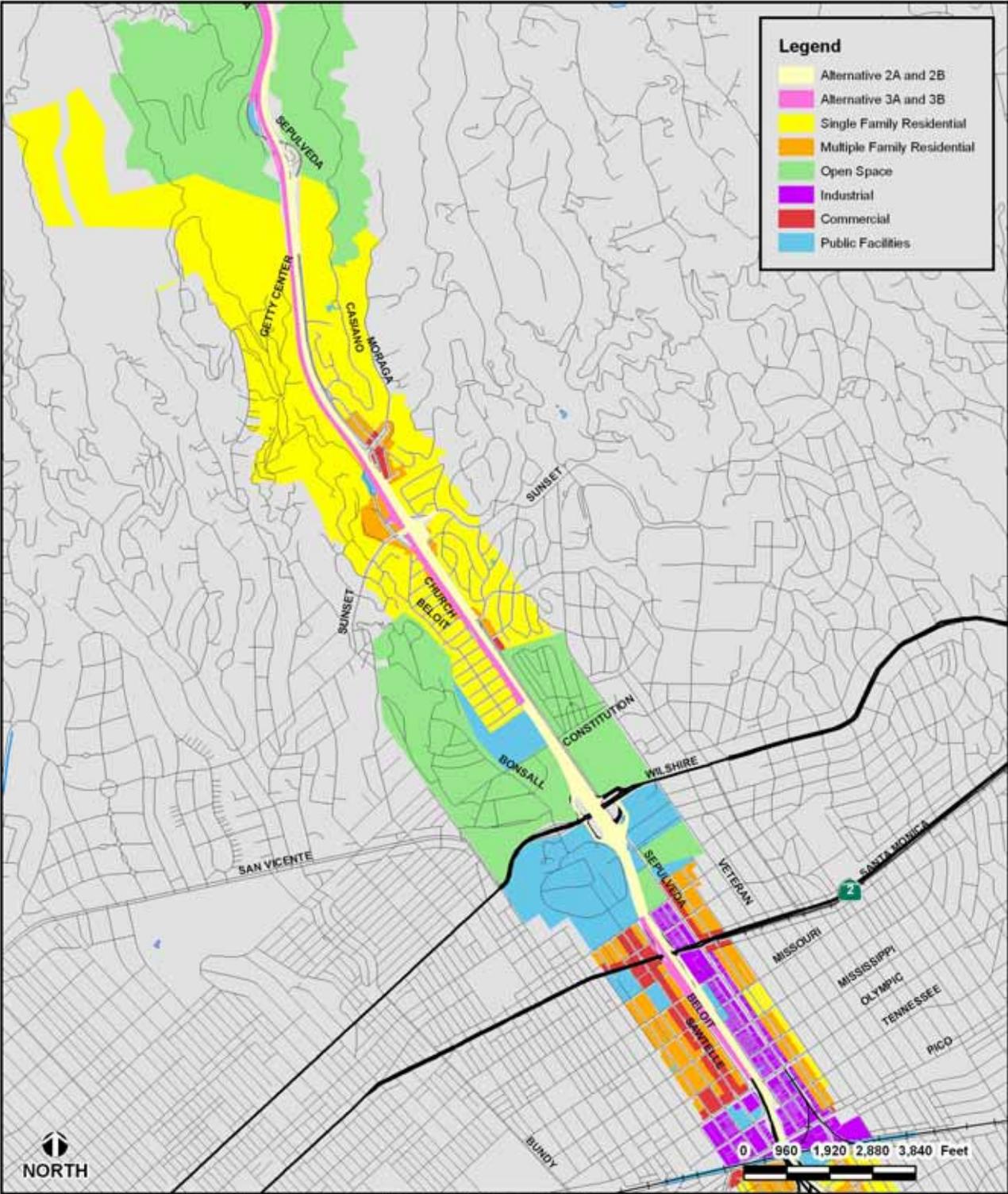
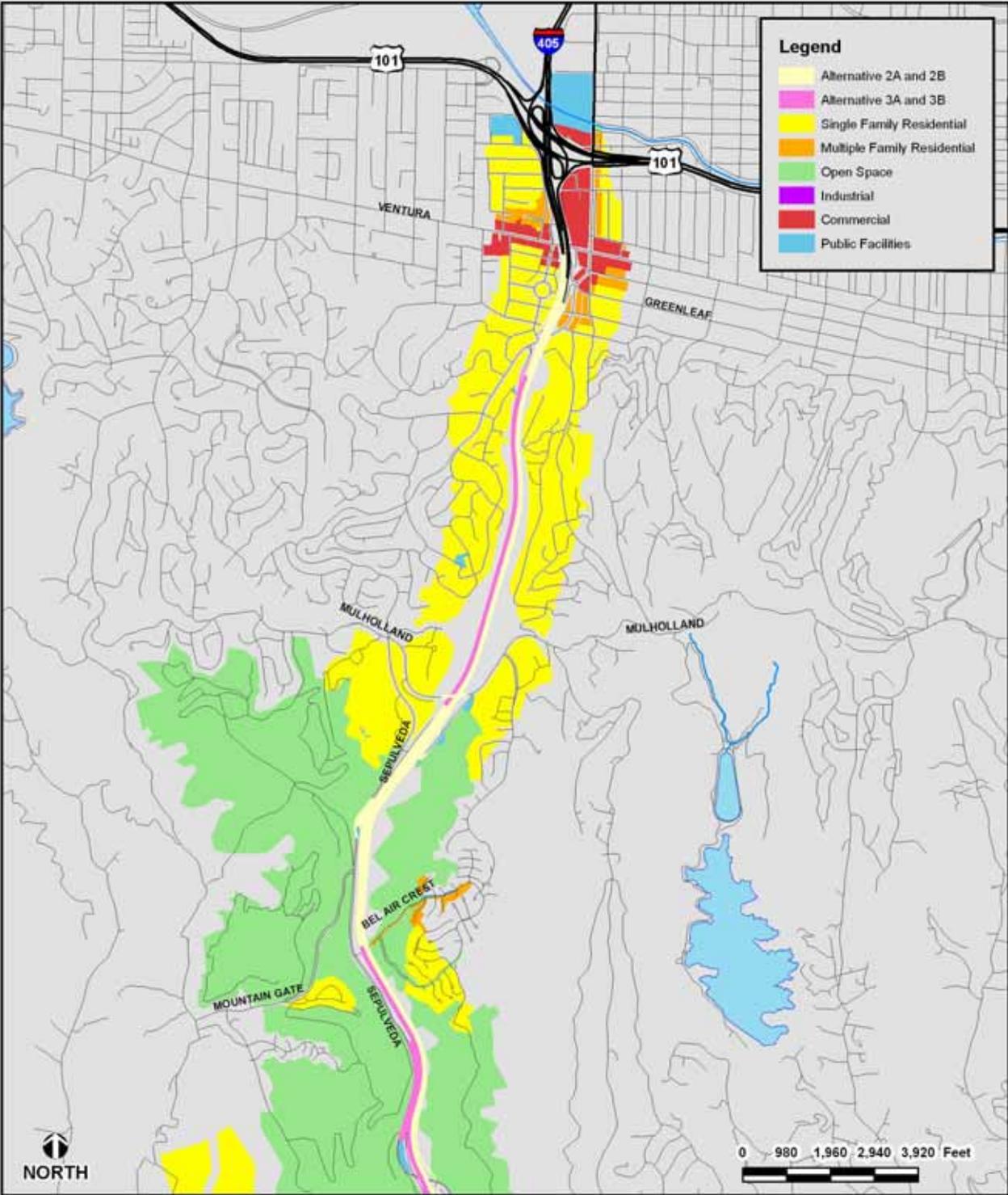


Figure 3.1-2: Land Use Within the Study Area (3 of 3)



Source: City of Los Angeles Planning (various), County of Los Angeles Assessor (2005), Caltrans (2005).

Table 3.1-2 lists proposed and existing projects that appear to be moving towards implementation in the vicinity of the study area. These projects involve land use changes or intensification, which are consistent with the Los Angeles County Regional Transportation Program – 2001 (RTP-2001) demographic forecasts for this part of Los Angeles County. This growth is expected to continue as pressure for new housing increases with the relatively strong job market and economy that Los Angeles County has experienced in recent years. The County of Los Angeles General Plan and Los Angeles County RTP-2001 (RTP-2001, Center for Demographic Research, adopted June 22, 2001) forecast build out of Los Angeles County by 2025.

Table 3.1-2: Development and Redevelopment Projects in the Vicinity of I-405

Project	Location	Description	Status
Steven S. Wise Middle School	15900 and 16100 Mulholland Drive	The proposed project would relocate the existing Stephen S. Wise Middle School from its current temporary location on property owned by the Bel Air Presbyterian Church on Mulholland Drive to a permanent location on the Milken Community High School site, located at 15900 Mulholland Drive between Sepulveda Blvd. and I-405. The proposed project would also include converting an existing nursery/preschool site at 16100 Mulholland Drive to athletic fields to serve both the middle and high school students.	FEIR 1/06
Westside Medical Park	1901, 1925, 1931 & 1933 Bundy Drive, 12333 W. Olympic Blvd.	The proposed project would permit the demolition of four buildings and the construction of three medical office buildings. A total of 3,075 parking spaces will be provided in two parking structures and beneath the three medical office buildings. The project also includes a 6-acre park, which will be open to the public.	Scoping Meeting 10/03
10131 Constellation Blvd.	10131 Constellation Blvd.	The proposed project would develop a total of 483 condominium units in three separate buildings. Two 47-story towers would each contain 194 units. The third building would be a 12-story loft building. The project would include at least 1.7 acres of open space. Approximately 35,000 square feet of existing structures and associated parking would be demolished to allow for the proposed new construction.	FEIR 4/06
2055 Avenue of the Stars Condominiums (on the site of the former St. Regis Hotel)	2055 Avenue of the Stars	The proposed project would construct a high-rise tower/147-unit condominium building with associated amenities on a 3.8-acre site in the C2-2-O zone. The project would include approximately two acres of landscaped open space.	FEIR 4/06
Wilshire Comstock Project	10250 Wilshire Blvd.	The project applicant proposes to develop the vacant project site with 35 condominium units (and 8 accessory maids' rooms) pursuant to the previous Tentative Tract Map approval, which was recorded on October 31, 1979. The high-rise residential building would be 21 stories. The project would develop 52.8% or 13,203 square feet of the existing vacant lot would be developed with the proposed high-rise building. The remaining 47.2 % or 11,814 square feet of the project site would be open space.	FEIR 4/06

Project	Location	Description	Status
Mountain Gate	2050 Stoney Hill Road	Zone Change, General Plan Amendment and Subdivision application for Vesting Tentative Tract to subdivide 449.5 acres into 32 lots, for a sub-division of 29 single-family home. Three lots would be for open space development.	FEIR 2/05
Tower of Wooden Pallets Apartments	15357 W. Magnolia Blvd.	Site Plan Review for a new 98-unit, three-story apartment building.	FEIR 2/05
Harvard-Westlake School Middle School Campus Modernization Project	700, 638 and 474 North Faring Road	Conditional Use to permit the utilization of approximately 4 acres directly adjoining the existing site in addition to the existing approximately 11-acre campus site, construction of two new classroom buildings, expansion of two existing buildings, and the demolition of six buildings. The new and expanded facilities would include a library, classrooms, performing and fine arts facilities, athletic facilities, administrative offices, and a new auditorium.	Unknown
Palazzo Westwood	1001-1029 Tiverton Avenue, 1020-1070 and 1015-1065 Glendon Avenue	Palazzo Westwood is a proposed 528,490 square-foot mixed-use project in Westwood Village which features 350 residential units and 115,000 square feet of ground floor retail. The residential portion is 413,490 square feet. The project is comprised of three parcels: Parcels A (2.724 acres) and C (0.292 acres) on the east side of Glendon and Parcel B (1.234 acres) on the west side of Glendon.	FEIR 8/03
2000 Avenue of the Stars Project	2000 Avenue of the Stars	Major Project Conditional Use Permit and Project Permit Compliance Review to permit the demolition of 678,822 square feet of commercial space (including the Shubert Theatre) located within two, eight-story buildings, to be replaced with the construction of a 15 story building with 719,924 square feet of office, 30,527 square feet of restaurant, 18,318 square feet of retail, and 10,178 square feet of cultural space for a total of 778,947 net square feet of development. The Century Plaza Towers, located on the east side of the block at 2029 and 2049 Century Park East, would not be changed as a result of the project. The existing paved central plaza would be converted to a three-acre landscaped plaza, consisting of a central lawn surrounded by the office towers, restaurants, and retail uses.	FEIR 11/02
Brentwood Project "The Park"	11711 San Vicente Blvd.	The proposed project would demolish all existing structures within the project site and vacate the segment of Gorham Avenue that crosses the site. The project site would be developed with 54,700 square feet of commercial (retail, restaurant, and office) uses, along with public plazas and an underground parking structure that would contain 275 parking spaces.	FEIR 9/01

Source: Los Angeles Department of City Planning (2006).

Consistency with State, Regional and Local Plans and Programs

The Encino-Tarzana, Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass, Brentwood-Pacific Palisades, Westwood, West Los Angeles, and Palms-Mar Vista-Del Rey Community Area Plans include policies and goals that encourage the development of high-occupancy vehicle transit options and alternative transportation options such as telecommuting, bicycle commuting and mass transit commuting.

The goals of the West Los Angeles Transportation Improvement and Mitigation Specific Plan consists of an area that includes all or parts of the Westwood, West Los Angeles, Brentwood-Pacific Palisades, and the Palms-Mar Vista-Del Rey District Plan Areas generally bounded by the City of Beverly Hills/Beverwil Dr./Castle Heights Ave./National Blvd./Hughes Ave. on the east; Sunset Blvd. on the north; the City of Santa Monica and Centinela Ave. on the west; and Venice Blvd. on the south. The goals of the plan are to promote and regulate transportation improvements; promote neighborhood preservation by limiting commuter traffic through residential neighborhoods; promote the development of coordinated and comprehensive transportation plans and programs with other jurisdictions and public agencies; and encourage Caltrans to widen the San Diego Freeway (I-405) for high-occupancy vehicle (HOV) lanes.

The goals of the Ventura/Cahuenga Boulevard Corridor Specific Plan are to assure that there is equilibrium between the transportation infrastructure and land use development. The goals also provide for an effective local circulation system; promote attractive and harmonious site design for 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; and maintain the distinct character of each of the five Specific Plan communities located within its boundaries.

Parks and Recreation

The Section 4(f) Evaluation (see Appendix B) for the proposed project identifies four parks/recreation resources in the vicinity of the proposed project. These resources are the Westwood Recreation Center, the Getty View Trailhead located within Getty View Park, the Skirball Trailhead and the Felicia Mahood Multipurpose Center. For the Section 4(f) Evaluation the study area was determined to be one-quarter mile on either side of I-405 within the project limits.

The Westwood Recreation Center is located along the eastside of northbound I-405 on Sepulveda Blvd., between Wilshire Blvd. to the north and Ohio Ave. to the south. Facility features include barbecue pits, baseball diamonds, basketball courts, children's play area, community room, an indoor gym, and picnic tables. Special features include the Bad News Bears Baseball Diamond/Field, Live Scan (fingerprinting), and Aidan's Place. The Westwood Recreation Center is owned and operated by the City of Los Angeles Department of Recreation and Parks.

The Felicia Mahood Multipurpose Center is located at the West Los Angeles Civic Center on Santa Monica Blvd., just west of I-405, between Corinth Ave. and Purdue Ave., adjacent to the West Los Angeles Library and post office. The facility specifically provides services to adults

aged 60 and older who are the sole providers of care for their grandchildren. The facility provides recreational and educational classes, special events and daily meals to the public using a donation-based fee structure. The center also offers a travel club and sponsors many on-going programs. Facility features include an auditorium, baseball diamond, basketball courts, children's play area, indoor gym, picnic tables, seasonal pool, soccer field, tennis courts, volleyball courts, and concrete stage. The auditorium has a banquet capacity of 200 and an assembly capacity of 300. The auditorium is also used as a community room. The Felicia Mahood Multipurpose Center is owned and operated by the City of Los Angeles Department of Recreation and Parks.

The Santa Monica Mountains National Recreation Area (SMMNRA) was established by congress in 1978 and the Santa Monica Mountains Conservancy (SMMC) was established by the California State Legislature in 1980. Since that time, the SMMC has helped to preserve over 55,000 acres of parkland in both wilderness and urban settings, and improved more than 114 public recreational facilities throughout Southern California. The SMMRNA is considered one of the crown jewels among the National Park Service holdings. The SMMC and Mountains Recreation and Conservation Authority (MRCA) along with the National Park Service, the USDA Forest Service, State Parks, County, City and other local park agencies work together to provide recreational opportunities and cultural activities in the Los Angeles Metropolitan Area and greater surrounding mountain regions.

The Getty View Trailhead is located on the eastside of the Sepulveda Pass near Getty Center Dr. This trailhead offers views and a challenging hike into public open space overlooking Hoag Canyon. Amenities include American Disabilities Act (ADA) accessible picnic benches, parking, trails, and interpretive kiosks. There are six parking spaces and one disabled space for a total of seven located on Sepulveda Blvd. east of I-405. The Skirball Trailhead is another trailhead that leads to a trail overlooking Hoag Canyon. The trailhead is located across the street from the Mulholland Park and Ride along Rimerton Rd. approximately 2,000 feet from the intersection of Rimerton Rd. and Mulholland Blvd. The Getty View Trailhead and Skirball Trailhead are public trails owned and operated by the Santa Monica Mountains Conservancy (SMMC).

Also located within the study area is the Mountain Gate Country Club. Since this facility is not publicly owned, the Section 4(f) Report did not study this facility. This private facility located in the gated Mountain Gate community features two golf courses, six tennis courts, a restaurant, a snack shop, a pro shop, a spa and locker rooms. The Mountain Gate Country Club is owned and operated by the American Golf Corporation.

3.1.3 Impacts to Land Use

Alternative 1

Alternative 1: No Build Alternative, would not result in any changes to existing or proposed land use nor would it conflict with land use plans or planned development in the study area. Alternative 1 would not result in any impacts to land use.

Alternative 1: No Build Alternative, would not result in any changes to the existing configuration of I-405; therefore, it would not result in direct or indirect impacts to parks.

Alternative 2

Due to the built out nature of the area surrounding I-405, except for the designated open space area of the Santa Monica Mountains Conservancy, and the lack of additional ramps proposed for construction as a result of Alternative 2, it is not anticipated that Alternative 2 would result in increased access to developable land along I-405.

Alternative 2 would result in the conversion of approximately 9 residential properties 2 commercial properties to transportation use. Alternative 2 would not result in adverse impacts to developable land or create opportunities for unplanned development and growth and would be consistent with existing Community Plan Policies related to traffic and the use of high-occupancy-vehicle and transit options.

According to the Section 4(f) evaluation prepared for the project, Alternative 2 would remove the parking lot and part of the trail from the Getty View Trailhead and reconstruct the trailhead at the Skirball Trailhead. Approximately 4.0 acres would be affected for the new northbound I-405 on-ramp at the Getty Center Drive interchange, retaining wall, and grading. Approximately 0.3 acres would be affected by re-grading the Skirball Trailhead. Alternative 2 would also require the temporary relocation of the batting cages at the Bad News Bears baseball field within the Westwood Recreation Center, however, the batting cages would be relocated within the park (please refer to Appendix B for more details). The proposed project would not affect the Felicia Mahood Multipurpose Center.

Alternative 3

Alternative 3 would result in the conversion of approximately 36 residential properties and 2 commercial properties and 1 non-profit to transportation use. Alternatives 3 would not result in adverse impacts to developable land or create opportunities for unplanned development and growth and would be consistent with existing Community and Specific Plan policies related to traffic and the use of high-occupancy vehicle and transit options.

Impacts to the Getty View Trailhead, Skirball Trailhead, Bad News Bears baseball field would be the same as in Alternative 2.

3.1.4 Avoidance, Minimization and Mitigation Measures

Prior to and during construction, Caltrans would continue its outreach program by notifying the residents, businesses, and any service providers within the area. Caltrans would inform the surrounding communities about the project construction schedule, relocation arrangements and assistance programs, traffic-affected areas and the Traffic Management Plan, and other relevant project information.

Information gathered through Caltrans' community outreach program would be used to develop the construction traffic control plans and alternate access routes to maintain critical business activities. Caltrans staff would inform the public of its progress in implementing the measures selected through periodic project newsletters sent to businesses, residents, and property owners within close proximity to the project. Staff would be assigned to work directly with the public to provide project information and resolve construction-related problems.

Caltrans staff would contact and interview individual businesses potentially affected by construction activities. Interviews with commercial and industrial businesses would be conducted in order to understand and identify business usage; delivery and shipping patterns; frequented travel routes of customers and clients upon entering and exiting the business establishment; parking requirements; hours of operation; and critical times of the day and year for business activities.

Parcels subject to full acquisition shall be reconfigured or combined with adjacent parcels to allow for development commensurate with previous land uses. Commercial and industrial land uses subject to partial acquisitions should be reconfigured on site in such a manner as to remain in operation. Reconfigurations of remnant properties would need to comply with local codes.

Caltrans Environmental Planning staff notified representatives from the National Park Service, Mountains Recreation and Conservation Authority (MRCA) and the Santa Monica Mountains Conservancy (SMMC) who jointly administer the Santa Monica Mountains National Recreation Area on November 3, 2005. A field meeting was held between Caltrans Environmental Planning staff and a representative of the SMMC, to discuss potential mitigation options on December 8, 2005. A second field meeting was held on April 26, 2006 between members of the Caltrans Project Development Team and SMMC to further review the feasibility of mitigation options. A letter from the Chief Deputy Director of the SMMC, was received on May 3, 2006 and May 22, 2006 with recommended mitigation measures for specific areas within the project limits that are affected by the proposed project. Caltrans provided a letter of response on June 12, 2006 addressing the comments and concerns regarding permanent and temporary impacts on Conservancy-owned parkland. Mitigation would be in the form of an in-lieu fee agreement to the Mountains Recreation and Conservation Authority for the relocation of the seven (7) parking spaces that would be removed and for the modification/realignment of a new trail at the Getty View Trailhead and the new Skirball Trailhead.

Caltrans Environmental Planning staff also initiated coordination with the City of Los Angeles Department of Recreation and Parks on December 27, 2006. A field meeting was held on January 10, 2007 at the Westwood Recreation Center and attended by the City of Los Angeles Department of Recreation and Parks and a representative from Councilmember Weiss' Office.

This meeting was called by Caltrans to discuss potential temporary impacts to the Westwood Recreation Center, which borders northbound I-405 on Sepulveda Blvd. between Ohio and Wilshire Blvd. The batting cages located at the Bad News Bears baseball field in Westwood Park would be temporarily relocated to another area of the park. No other property would be removed at Westwood Park as a result of the build Alternatives. A soundwall along the edge of shoulder of northbound I-405 has been recommended as a traffic noise abatement measure under all build alternatives. As requested by City of LA Recreation and Parks officials, in order to mitigate for the temporary construction impacts the proposed project would have on this Section 4(f) resource, Caltrans will provide for additional lighting at the Bad News Bears Field. Coordination can be expected to continue throughout the public participation process.

3.1.5 Cumulative Impacts

Construction and operation of any of the Caltrans I-405 Transportation Infrastructure Improvement Project build alternatives would result in direct and indirect impacts that could contribute to cumulative effects to resources when combined with other related past, present and reasonably foreseeable future actions. For this analysis of the potential cumulative effects of the I-405 alternatives, the following definition of cumulative impact in the Council on Environmental Quality (CEQ) regulations governing the implementation of the National Environmental Policy Act (NEPA) (40 CFR 1508.7) was used:

“...the impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.”

The analysis of the cumulative effects of the I-405 alternatives also incorporates the suggestions in the CEQ’s handbook titled “Considering Cumulative Effects Under the National Environmental Policy Act” (January 1997), which is intended as an informational document rather than formal agency guidance. In addition, the cumulative effects of the I-405 alternatives were assessed in accordance with the Federal Highway Administration (FHWA) “Position Paper on Secondary and Cumulative Impact Assessment” (August 20, 1992) and additional FHWA guidance: “Questions and Answers Regarding the Consideration of Indirect and Cumulative Impacts in the NEPA Process” (2003). Based on the CEQ and FHWA discussions of cumulative effects, the following principles were applied to the assessment of cumulative effects of the I-405 alternatives:

- (1) Cumulative effects typically are caused by the aggregate effects of past, present, and reasonably foreseeable actions. These are the effects (past, present, and future) of the proposed action on a given resource *and* the effects (past, present, and future), if any, caused by all other related actions that affect the same resource.
- (2) When other related actions are likely to affect a resource that is also affected by the proposed action, it does not matter who (Federal, non-Federal, or private) has taken the related action(s).

- (3) The scope of cumulative effect analyses can usually be limited to reasonable geographic bounds and time periods. These boundaries should extend only so far as the point at which a resource is no longer substantially affected or where the effects are so speculative as to no longer be truly meaningful.
- (4) Cumulative effects can include the effects (past, present, and future) on a given resource caused by similar types of actions (e.g., air emissions from several individual highway projects) and/or the effects (past, present, and future) on a given resource caused by different types of actions (e.g., air emissions from a highway project, a solid waste incinerator, and a mining facility).

Table 3.1-3 lists major transportation projects in the project vicinity. This table also identifies the Lead Agency for each project and the topic areas where it is reasonable to assume that potential cumulative impacts may occur.

Table 3.1-3: Major Transportation Projects in the Project Vicinity

Description of Project Uses	Lead Agency/Project Status	Cumulative Impact
LA-405 AUXILIARY LANE MULHOLLAND DR. TO VENTURA BLVD.		
Add Auxiliary Lane from LA 405 N/B and Mulholland Dr. to Ventura Blvd.	Caltrans	Construction
LA-405 N/B TO S/B 101 CONNECTOR WIDENING		
Widen connector LA 405 N/B to LA101 S/B from Ventura Blvd. to Kester Ave.	Caltrans	Construction
LA-405 SB HOV LANE		
Construct HOV Lane on S/B 405 from Route 101 to Waterford St.	Caltrans	Access, Construction and Wildlife Connectivity
LA-405 SB HOV LANE WATERFORD ST. TO ROUTE 10		
Add an HOV Lane on the SB I-405 from Waterford St. to Route 10.	Caltrans	Noise and Construction
LA-405 NB AND SB HOV LANES FROM RTE 90 TO I-10 LAX EXPANSION		
Add an HOV Lane in both directions of I-405 between Route 90 and I-10.	Caltrans	Noise and Construction
SANTA MONICA BLVD. TRANSIT PARKWAY		
Improve northbound and southbound on-ramp and Santa Monica Boulevard.	Caltrans/ City of Los Angeles	Noise and Construction
SEPULVEDA BOULEVARD REVERSIBLE LANE		
Widen Sepulveda Blvd between Wilshire Blvd. and Mulholland Dr. to install a reversible lane.	Caltrans/ City of Los Angeles	Access, Construction and Wildlife Connectivity

WILSHIRE AND EXPOSITION TRANSIT CORRIDORS		
To implement an innovative transit improvement on Wilshire Boulevard. The Los Angeles County Metropolitan Transportation Authority (Metro) and City of Los Angeles Department of Transportation (LADOT) will initiate the Metro Rapid demonstration program; a new, fast, high-quality bus service for the Westside. The project uses newly-designed buses and station stops, signal priority, frequent/limited stop service, a simple route layout, and an enhanced passenger information system.	LADOT/ MTA	None

A cumulative impact analysis was conducted and it is expected that most related projects in the area would be required to comply with adopted land use plans and zoning requirements. It is also anticipated that related projects would generally be consistent with the overall land use policies and goals of the Los Angeles County General Plan and other area specific plans. Consequently, the proposed project and related development are not expected to result in substantial unplanned changes in the long-term pattern of land use, or substantial unplanned changes in the rate or amount of development. No substantial cumulative land use impacts are anticipated with the implementation of the proposed project.

Environmental parameters such as aesthetics, air quality, biology, cultural resources, geology and soils, hazards and hazardous materials, historic resources, hydrology and water quality, 4(f) resources, and utilities discuss impacts to the alternatives as a whole. Other environmental parameters such as community resources, noise, and traffic discuss impacts to individual alternatives due to the more distinct geographical impact they may have. Cumulative effects of all listed projects, however, both small and large, are considered and documented under each resource section in Chapter 3.

Cumulative Land Use Effects

The first type of cumulative land use impact could potentially arise as construction activities associated with the proposed project and other related projects create temporary nuisance-like indirect effects such as noise, vibration, air pollutant emissions, traffic congestion, and access disruptions. While these effects are generally not considered to be substantially adverse when limited in scope and duration, the additive disruption to sensitive land uses could be considered cumulatively adverse if multiple construction activities coincide within similar geographic areas and/or periods of time. Mitigation measures have been included as a part of the proposed project to minimize or eliminate construction-related effects.

The study area includes the area along I-405 between National Boulevard and Ventura Boulevard. Portions of the Westwood, Brentwood and Sherman Oaks communities are included

in the study area. Most of the land in the study area is built-out. The area between the Getty Center and Bel Air, is designated as open space that is used as part of the Santa Monica Mountains Conservancy or as part of other open space. It is unlikely that this open space would be converted to residential housing. Other types of land uses would not likely change as a result of any of the build alternatives.

General Plan/Redevelopment Plan Consistency

Cumulative development and residential redevelopment are subject to the City of Los Angeles General Plan as well as the more specific Community Plan Areas.

Project Contribution to Cumulative Land Use Effects

All build alternatives are consistent with the City of Los Angeles and six Community Plan Areas with the exception of the Bel Air-Beverly Crest Community Plan because it does not include the widening of the I-405. Although this Community Plan does not support the goal of the widening of the I-405, it does not prevent it from happening in the future. Due to the potential removal of residential units as a result of the build alternatives, this would be inconsistent with planning policies related to the preservation of residential areas. However, this would result in a one-time conversion of land use and would not cause other projects to convert land use to transportation facilities, therefore, the contribution of these alternatives to cumulative land use effects is not considered substantial.

3.2 GROWTH

3.2.1 Regulatory Setting

The Council on Environmental Quality (CEQ) regulations, which implement the National Environmental Policy Act of 1969, requires 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..."

Under NEPA and CEQA, growth inducement is not necessarily considered detrimental, beneficial, or environmentally significant. Typically, the growth inducing potential of a project is considered significant if it fosters growth or a concentration of population in excess of what is assumed in relevant master plans, land use plans, or in projections made by regional planning agencies. Significant growth impacts could be manifested through the provision of infrastructure or service capacity to accommodate growth beyond the levels currently permitted by local or regional plans and policies. In general, growth induced by a project is considered a significant impact if it directly or indirectly affects the ability of agencies to provide needed public services, or if it can be demonstrated that the potential growth significantly affects the environment in some other way.

Growth in the study area is directed by the General Plans for the City and County of Los Angeles. The General Plan is the principal legal and regulatory tool in California for addressing land development and its impacts. As mandated by Government Code Sections 65000 to 66003, each jurisdiction is required to have a General Plan which must include land use, circulation and housing elements, as well as other elements. The goals, objectives, policies and programs of each General Plan element must be both internally consistent and consistent with all other elements of the General Plan. Objectives for population, housing and employment growth must be coordinated with the provision of infrastructure and must ensure that infrastructure is constructed as needed to serve new development. The California Department of Transportation (Caltrans) has no local or county land use planning or approval authority in the study area.

3.2.2 Affected Environment

Information regarding land use was obtained from the I-405 Sepulveda Pass Project Community Impact Assessment, July 2006.

Population and Affected Communities

The City of Los Angeles is located in western Los Angeles County, California. The city's population as of 2004 was estimated at 3,925,999, up 11 percent from 3,485,398 in 1990. The project would affect 16 census tracts in the study area (see Figure 3.3-1: Census Tracts in the Study Area). The population in the study area as of 2000 was estimated at 53,480, up 2.3 percent from 52,256 in 1990. According to forecasts prepared by the Southern California Association of Governments, the population in the City of Los Angeles is expected to increase 9 percent to 4,309,625 by 2030, and the population in the study area is expected to increase 16.7 percent to 58,511 by 2030.

The City of Los Angeles Planning Department lists several Draft Environmental Impact Reports (DEIRs) and Final Environmental Impact Reports (FEIRs) for projects in the vicinity of the proposed project (see Table 3.1-1: Development and Redevelopment Projects in the Vicinity of I-405). These projects include community plan updates, middle school relocation, condominium construction, mixed use developments, zone changes and construction of school buildings. Most of the land in the study area is built-out. The area between the Getty Center and Bel Air, is designated as open space that is used as part of the Santa Monica Mountains Conservancy or as part of other open space. It is unlikely that this open space would be converted to residential housing due to planning and zoning restrictions.

The City of Los Angeles Housing Department is responsible for the preservation and development of low-income housing in the City of Los Angeles. None of the 36 preservation and development projects listed by the City of Los Angeles Housing Department for low-income housing is in the vicinity of the proposed project study area.

The Los Angeles Community Development Commission lists four redevelopment project areas under its jurisdiction. None of the redevelopment projects listed by the LACDC is located in the vicinity of the proposed project study area. The Los Angeles Commercial Realty Association does not list any redevelopment projects in the proposed project study area.

Market Demand

Based on the currently adopted population and employment growth forecasts for the study area, demand for housing and non-residential development is expected to be relatively stable through 2030. As shown in Table 3.2-1: Population and Employment in the Project Area, City of Los Angeles, and County of Los Angeles: 2000-2030, population in the study area is expected to increase by 17 percent to 8,400 people between 2000 and 2030. Employment is expected to increase by 12,800 jobs over the same period. This represents 1.4 percent of the population growth expected in the City of Los Angeles over the same period, and 0.3 percent of the growth expected in the County of Los Angeles. Similarly, employment growth expected in the study area represents 2.9 percent of employment growth expected in the City of Los Angeles and 1.1 percent of the projected growth in the County of Los Angeles.

According to SCAG, employment in the City of Los Angeles totaled 1.8 million jobs as of 2000. This total is expected to increase to 2.22 million (25 percent) by the year 2030. Employment in the study area was estimated at about 50,000 in 2000, with employment forecast to increase to

almost 65,000 by 2030 (please refer to Table 3.2-1: Population and Employment in the Project Study Area, City of Los Angeles, and County of Los Angeles: 2000-2030).

According to the U.S. Census Bureau, employment in the study area is heavily represented by professional services, entertainment/recreation (Westwood Village) and health care and social assistance (i.e. VA Hospital and associated services and the Federal Building). This is in comparison with Downtown Los Angeles, which reported business establishments employing almost 134,000 persons. Employment in Downtown Los Angeles is heavily represented by manufacturing, retail and wholesale trade, and professional services.

Table 3.2-1: Population and Employment in the Project Area

POPULATION AND EMPLOYMENT IN THE PROJECT AREA, CITY OF LOS ANGELES,
AND COUNTY OF LOS ANGELES: 2000 - 2030

	Population		Change		Employment		Change	
	2000	2030	Total	Percent	2000	2030	Total	Percent
Project Area Census Tracts								
141302	5,351	6,235	884	16.5%	5,094	6,223	1,129	22.2%
141400	4,306	5,003	697	16.2%	7,367	8,301	934	12.7%
141500	2,966	3,482	516	17.4%	574	1,239	665	115.9%
141600	3,889	4,590	701	18.0%	72	552	480	666.7%
262200	4,418	5,130	712	16.1%	1,594	2,311	717	45.0%
262301	2,680	3,129	449	16.8%	853	1,335	482	56.5%
262302	2,755	3,251	496	18.0%	477	1,218	741	155.3%
265420	1,765	2,076	311	17.6%	186	426	240	129.0%
265520	4,263	4,988	725	17.0%	4,028	4,782	754	18.7%
267300	5,170	5,982	812	15.7%	4,568	5,136	568	12.4%
267700	1,598	1,881	283	17.7%	8,560	9,267	707	8.3%
267800	2,631	3,069	438	16.6%	4,155	4,488	333	8.0%
271100	3,738	4,332	594	15.9%	728	1,075	347	47.7%
271200	3,939	4,556	617	15.7%	1,027	1,258	231	22.5%
701100	652	807	155	23.8%	12,472	16,953	4,481	35.9%
Total Project Area	50,121	58,511	8,390	16.7%	51,755	64,564	12,809	24.7%
City of Los Angeles	3,711,969	4,309,625	597,656	16.1%	1,781,863	2,223,338	441,475	24.8%
County of Los Angeles	9,580,028	12,221,799	2,641,771	27.6%	4,453,477	5,660,992	1,207,515	27.1%

Source: Southern California Association of Governments.

Balancing the locations of jobs with the location of housing relieves congestion, reduces commute times and trips, encourages the use of alternative transportation and improves air quality. The SCAG 2001 Regional Transportation Plan (RTP) indicates that the study area is balanced. According to the RTP, the job to housing ratio for the City of Los Angeles was 1.41 in 1997. In 2025, the job to housing ratio is projected to fall to 1.16. The RTP does not publish jobs and housing information at the study area level.

3.2.3 Growth Inducing Impacts

The potential for growth inducing effects would be the greatest on undeveloped and unplanned land because these areas generally have limited existing transportation infrastructure. The I-405 Sepulveda Pass Project is a capacity enhancement project along a route that already experiences a constrained level of freeway and non-freeway access. Further, the majority of the study area

fits into two categories: (1) is already developed; or (2) is designated for permanent open space. Additional growth potential is limited and will primarily be in the form of in-fill development or redevelopment of existing uses that are already served by the local and regional transportation system. Construction of any of the proposed build alternatives would not provide new access to any area, and according to the traffic study prepared for this project, is expected to serve the same volume of traffic under all scenarios. In fact, there may be a public perception of reduced access with the previous closure of the Waterford St. on-ramp, the probable closure of the northbound Montana Ave. off-ramp and the potential closure of the southbound Valley Vista Blvd. off-ramp.

Given the constrained level of access already experienced in the study area, development or redevelopment of these parcels will completely be driven by market conditions, economics, and local land use approvals. The I-405 Sepulveda Pass Project is not providing new access to the area, but HOV capacity enhancements through the corridor to reduce existing and future delay, and would not accommodate additional traffic beyond what is currently projected with or without the project. Therefore, it is not expected that the HOV capacity enhancements provided by the Sepulveda Pass project would have any meaningful affect on landowner decisions. The economic attractiveness and location of the study area are the dominating conditions influencing growth, overshadowing freeway improvements.

The location, timing and level of future growth in the study area will also depend on the availability of certain types of infrastructure/services (i.e. water, sanitary sewers, schools, etc.). Plans for critical future infrastructure are addressed by the individual jurisdictions and agencies providing these services to existing and future development, and their availability will affect the location, level and timing of future development regardless of the I-405 Sepulveda Pass Project.

Alternatives 2 and 3 would be consistent with existing Community and Specific Plan policies related to transportation and the use of HOV and transit options. Because the proposed transportation improvements partially accommodate existing development, the proposed project would have no substantial potential for stimulating the location, rate, timing, or amount of growth in the project area.

3.2.4 Avoidance, Minimization and Mitigation Measures

None required.

3.2.5 Cumulative Impacts

Given the mature nature of the local communities, inducement of substantial growth effects has been limited, but serves to maintain or enhance the existing economic vitality of each jurisdiction, particularly with the loss of industrial/manufacturing uses over the last decade. The projects individually and collectively do not create growth impacts.

The proposed alternatives are not anticipated to induce any unplanned growth either regionally or in the local project area, and therefore are not anticipated to contribute to any cumulative

growth impacts. The I-405 freeway, parallel arterial highways, especially Sepulveda Blvd., as well as arterial east-west streets, all experience severe daily congestion. The economic attractiveness of this corridor location remains strong despite these congestion problems. Any area growth is a product of these non-transportation related influences.

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3.3 COMMUNITY IMPACTS

3.3.1 Regulatory Setting

Community Character and Cohesion

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, including the destruction or disruption of human-made resources, community cohesion and the availability of public facilities and services.

Under the California Environmental Quality Act, 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.

Displacements and Relocations

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. Please see Appendix D for a summary of the RAP.

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.). Please see Appendix C for a copy of the Department's Title VI Policy Statement.

Environmental Justice

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 and for 2006, this was \$20,000 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, which can be found in Appendix C of this document.

3.3.2 Affected Environment

Information regarding community impacts was obtained from the I-405 Sepulveda Pass Project Community Impact Assessment, July 2006. The Community Impact Assessment was prepared to evaluate the social, economic, environmental justice, and other possible community impacts associated with the proposed project.

Community Character and Cohesion

As discussed in Section 3.1, seven community plans were analyzed for this study. These Community Plan Areas are the Encino-Tarzana, Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass, Bel Air-Beverly Crest, Brentwood-Pacific Palisades, Westwood, West Los Angeles and Palms-Mar Vista-Del Rey Areas. Each community plan guides local land uses and encourages community participation. In addition to community plans, several specific plans provide planning guidance for communities in the study area.

The Encino-Tarzana and Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass communities are characterized by older single family residential planned developments and strip mall commercial developments. These communities are involved in commercial redevelopment along Ventura Blvd. and scenic parkway preservation along Mulholland Blvd.

The Bel Air-Beverly Crest and Brentwood-Pacific Palisades communities are characterized by large estate single family residences within gated communities, expanses of open space and small amounts of multiple family residential. Both communities limit the amount of commercial land uses present; therefore, neither community has a great deal of commercial land use associated with it.

The Westwood, West Los Angeles and Palms-Mar Vista-Del Rey communities are characterized by a majority of single-family residential interspersed with multiple-family residential. Multiple-family residential in these communities ranges from small duplexes to large complexes and some high rise structures. Commercial land uses consist primarily of strip malls and mini-malls designed to serve local neighborhoods. These communities include most of the industrial land uses in the study area. Industrial land uses in these communities consist of manufacturing, distribution outlets and storage operations.

As shown in Tables 3.3-1, 3.3-2, 3.3-3, the demographic data from the 2000 Census concurs with the communities defined by the City of Los Angeles. Census tracts (Figure 3.3-1: Census Tracts in the Study Area) within the communities affected tend to have similar distributions of racial characteristics, homeownership, families, elderly and poverty levels. However, four census tracts within the communities affected may represent separate smaller communities based on their demographic profiles that represent the larger communities in which they are located.

- Census Tract 1414 in the Encino-Tarzana Community Plan Area is significantly different from Census Tract 1415 in the same community. Census Tract 1415 has a demographic profile similar to that of the communities of Brentwood-Pacific Palisades and Bel Air-Beverly Crest while Census Tract 1414 has a lower household median income, higher percentage of the population below the poverty level, lower percentage of homeowners and lower percentage of family households than Census Tract 1415. As shown in Figure 3.3-1, Census Tract 1414 is closer to U.S. 101 and is separated from Census Tract 1415 by Valley Vista Blvd. It is likely that Census Tract 1414 represents a separate community within the Encino-Tarzana Community Plan Area.
- Census Tract 1413.02 in the Sherman Oaks-Studio City-Toluca Lake Community Plan Area is unlike Census Tract 1416 in the same community. Like Census Tracts 1414 and 1415, Census Tract 1416 has a demographic profile similar to that of the communities of Brentwood-Pacific Palisades and Bel Air-Beverly Crest while Census Tract 1413.02 has a lower household median income, higher percentage of the population below the poverty level, substantially lower percentage of homeowners, much lower percentage of family households, lower median age and lower percentage of elderly people than Census Tract 1416. As shown in Figure 3.3-1, Census Tract 1413.02 is closer to U.S. 101 and is separated from Census Tract 1416 by Valley Vista Boulevard. It is likely that Census Tract 1413.02 represents a separate community within the Sherman Oaks-Studio City-Toluca Lake Community Plan Area.
- Census Tract 2655.20 in the Westwood Community Plan Area is unlike the other two Census Tracts in the same area. Similar to Census Tract 1413.02, Census Tract 2655.20 has a lower household median income, higher percentage of the population below the poverty level, substantially lower percentage of homeowners, much lower percentage of family households, lower median age and lower percentage of elderly people than Census Tracts 2654.10 and 2654.20. As shown in Figure 3.3-1, Census Tract 2655.20 is separated from Census Tracts 2654.10 and 2654.20 by the Los Angeles National Cemetery, the Federal Building and Wilshire Blvd. It is likely that Census Tract 2655.20 represents a separate community within the Westwood Community Plan Area.
- Census Tract 2678 in the West Los Angeles Community Plan Area also has a different demographic profile from the other three Census Tracts in the same area. Census Tract 2678 has a higher percentage of Whites, higher median household income, lower percentage of the population below the poverty level, higher percentage of homeowners, higher median age and higher percentage of elderly people than Census Tracts 2673, 2677 and 2711. As shown in Figure 3.3-1, Census Tract 2678 is separated from Census Tracts 2673, 2677 and 2711 by Sepulveda Blvd. and Exposition Parkway. It is likely that Census Tract 2678 represents a separate community within the West Los Angeles Community Plan Area.

Figure 3.3-1: Census Tracts in the Study Area

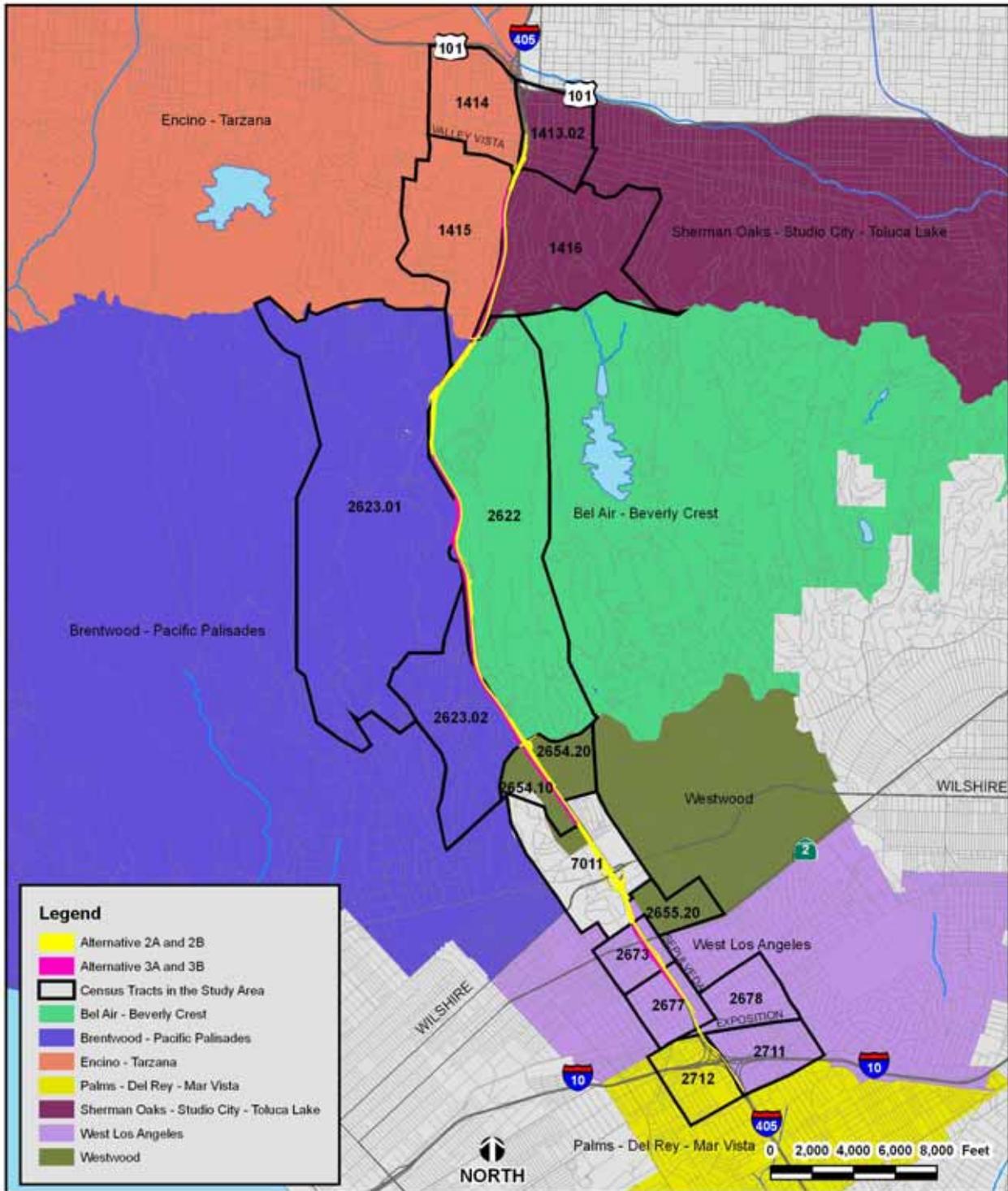


Table 3.3-1: Demographic Variables by City of Los Angeles Community Plan Area

Census Tract	Population	Median Household Income (\$)	Below Poverty Level (%)	Disabled (%)
Encino-Tarzana				
1414	4,286	60,662	11.1	19.4
1415	2,952	153,406	3.8	15.8
Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass				
1413.02	5,325	48,219	9.6	15.9
1416	3,871	115,393	1.8	10.5
Bel Air-Beverly Crest				
2622	4,398	137,129	5.8	12.2
Brentwood-Pacific Palisades				
2623.01	2,670	164,665	6.0	11.6
2623.02	2,742	123,526	3.8	11.9
Westwood				
2654.10	1,334	95,341	5.4	14.6
2654.20	1,756	157,017	3.0	7.3
2655.20	4,243	67,476	9.2	16.6
West Los Angeles				
2673	5,146	35,763	21.2	16.0
2677	1,591	42,692	25.0	12.3
2678	2,619	62,688	10.3	14.9
2711	3,721	48,301	13.9	15.1
Palms-Del Rey-Mar Vista				
2712	3,920	44,730	14.0	13.9
Unincorporated Los Angeles County (Veterans Administration and Federal Building)				
7011	682	42,391	53.7	38.4
Project Area Total				
N/A	51,256	79,983	10.5	14.7
City of Los Angeles				
N/A	3,694,820	36,687	22.1	21.7
County of Los Angeles				
N/A	9,519,338	42,189	17.9	20.4

Source: City of Los Angeles Planning (2006), Census (2000)

As shown in Table 3.3-1, income in the study area is higher than that of the County and of the City. The median income in the study area was \$79,983 according to the 2000 Census. This is about twice the median income for either the city or the county. Also, most of the census tracts in the study area have lower percentages of disabled people than the city and county, although census tract 7011 has a higher percentage of disabled people than the other study area census tracts, the city and the county. Disabled people make up 38.4 percent of Census Tract 7011, compared to 21.7% in the City of Los Angeles and 20.4% in the County of Los Angeles.

Several communities in the study area include neighborhoods that have homeowners associations. According to the Community Associations Institute, a homeowners association or community association builds a sense of community, assists in conflict resolution and provides facilities maintenance. In some cases homeowners association covenants, conditions and

restrictions (CC&Rs), and master deeds provide guidance for homeowners on community unity by establishing standard color schemes and landscaping for the community. Homeowners pay a fee to be part of a homeowners association. These fees can be used to pay for road resurfacing, home painting, landscape maintenance and community facilities maintenance. Homeowners associations in the study area include the Bel-Air Association, Beverly Glen Homeowners Association, Brentwood Community Council, Homeowners of Encino and West Hills Property Owners Association.

The Bel-Air Association has served the community since 1942 and is dedicated to preserving the lifestyle and property values of the renowned residential community. The community of Bel Air is known as an exclusive residential community that includes some of the foothills of the Santa Monica Mountains and borders the north side of UCLA. The Bel-Air Country Club, built in 1927 as part of the original development, showcases the natural beauty of the area while still providing a meeting place for residents. The Spanish-style clubhouse, along with tennis courts and an 18-hole golf course, remain popular today.

A part of the Bel-Air section of Los Angeles is Beverly Glen canyon, which is known to residents as "the Glen." Beverly Glen runs three miles from the top of the canyon at Mulholland Drive to its entry point below at Sunset Boulevard. The *Residents of Beverly Glen* is a non-profit organization whose members include homeowners and renters in the Beverly Glen neighborhood of Los Angeles. Located in the Beverly Glen canyon (nestled between Bel Air and Beverly Hills) the organization serves over 600 households by addressing issues that affect the neighborhood. The Glenite is the Glen's homegrown publication, edited and designed by the Glen's residents. Since its inception in the 1950s, it has kept the community updated on local news, city policies, emergency preparedness, upcoming Glen events, new additions to the Glen family and local buzz about who's back from exotic travels. Recipes, poems, children's artwork, film reviews and more make each Glenite a special and watched for publication. All of these community features enhance the character and cohesiveness of this community.

The Westside community of Brentwood Glen stands out for its deep roots and neighborhood ties. Brentwood Glen was highlighted as a community where the "pride of ownership and an intense neighborhood loyalty are apparent, even just walking down Beloit Street, the main north-south artery of Brentwood Glen." The shady streets and well-kept houses and gardens lend a lazy feel that helps you forget that Sunset Blvd. and the I-405 are close by. The neighborhood consists of 560 residences, mostly single-family homes and a few duplexes, triplexes and apartment buildings. The majority of the lots are approximately 5,000 square feet.

All of the neighborhoods along the I-405 corridor demonstrated a high level of cohesion. Homeowners association meetings are all well attended, communication levels are high, and residents are protective of their close-knit neighborhoods. Brentwood Glen has exhibited a particularly tenacious unity and community character as they were made aware of the potential for property acquisition in their community along Church Lane.

Housing characteristics in the project area are unlike those in the City of Los Angeles as a whole. Vacancy rates are higher in the surrounding City, 4.7 percent versus 3.9 percent in the project area. In total, at the time of the 2000 Census, there were 359 vacant for sale units in the project area and 148 vacant for rent units. The City of Los Angeles had 9,036 vacant for-sale units and 28,529 vacant for-rent units and the County of Los Angeles had 23,874 vacant for-sale units and

56,089 vacant for-rent units. The project area has a lower owner occupancy rate than the surrounding area. Based on 2000 Census data, median home values and rents were higher in the project area compared to the surrounding community.

As shown in Table 3.3-2, most of the census tracts in the study area have approximately the same percentage of family households and a lower percentage of single parent households than the City or the County. However, census tract 7011 has a higher percentage of family households and single parent households than the City or the County. This tract, home of the Veterans Administration facility, also has 100% renters, 0.0% homeowners, 0.0% elderly and 76.0% of the population reside in group quarters.

Table 3.3-2: Demographic Variables by City of Los Angeles Community Plan Area

Census Tract	Home Owners %	Renters %	Family Households %	Single Parent %	Median Age	% Elderly	% of Population in Group Quarters
Encino-Tarzana							
1414	69.6	30.1	62.2	6.9	41.6	18.2	2.1
1415	94.1	5.9	80.7	5.1	46.8	21.4	0.0
Sherman Oaks-Studio City- Toluca Lake-Cahuenga Pass							
1413.02	31.7	68.3	41.1	5.6	34.2	10.4	0.0
1416	93.0	7.0	68.6	3.9	45.6	18.0	0.0
Bel Air-Beverly Crest							
2622	83.7	16.3	67.1	3.0	45.4	20.4	3.1
Brentwood-Pacific Palisades							
2623.01	98.5	1.5	75.7	4.5	48.2	23.0	20.1
2623.02	87.0	13.0	62.5	3.6	45.5	20.8	0.0
Westwood							
2654.10	72.5	27.5	47.4	3.3	41.1	19.1	0.6
2654.20	88.8	11.2	71.9	3.4	44.0	17.7	0.2
2655.20	33.9	66.1	41.2	1.2	35.8	15.8	0.4
West Los Angeles							
2673	12.0	88.0	32.4	3.2	31.1	6.8	2.2
2677	23.2	76.8	40.6	8.6	34.2	8.9	2.0
2678	78.0	22.0	61.7	3.2	40.5	18.2	2.8
2711	57.8	42.2	54.3	6.2	36.0	10.7	0.8
Palms-Del Rey-Mar Vista							
2712	39.4	60.6	47.3	6.1	33.2	11.6	0.1
Unincorporated Los Angeles County (Veterans Administration and Federal Building)							
7011	0.0	100.0	81.1	51.4	48.5	0.0	76.0
Project Area Total							
N/A	55.1	44.9	49.9	4.3	39.6	14.7	2.0
City of Los Angeles							
N/A	40.8	59.2	63.2	10.9	31.6	9.3	2.2
County of Los Angeles							
N/A	50.3	49.7	68.7	10.8	32.0	9.4	1.8

Source: City of Los Angeles Planning (2006), Census (2000)

As shown in Table 3.3-3, the census tracts that make up the Encino-Tarzana, Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass, Bel Air-Beverly Crest, Brentwood-Pacific Palisades, and Westwood communities are more than 75% White. Asian and Hispanic populations make up the second highest concentration of race in these communities. These census tracts have a higher concentration of Whites and a lower concentration of other races than either the City of Los Angeles or the County of Los Angeles. Census tracts located in the West Los Angeles and Westwood Communities have racial densities that are similar to the City of Los Angeles and the County of Los Angeles except that the densities of Whites and Asians are greater in those communities than in either the City or the County. However; the census tract located in Unincorporated Los Angeles County that contains the Veterans Administration and the Federal Building has a higher density of Blacks than either the City or the County. The percentage of Blacks in this census tract is 43.4% compared to 10.9% and 9.5% in the City and County, respectively. Tract 7011 has a higher concentration of a minority population than any other census tract in the study area or the City of Los Angeles and County of Los Angeles.

As shown in Tables 3.3-1, 3.3-2 and 3.3-3, census tract 7011 has a disproportionate share of an environmental justice population. This is due to the high percentage of a minority population, high percentage of single parent families, high percentage of people below the poverty level, high percentage of renters versus homeowners and high percentage of people living in group homes. It is possible that the high percentage of a minority population, high percentage of single parent families, high percentage of people below the poverty level, high percentage of renters versus homeowners and high percentage of people living in group homes in census tract 7011 represents the people living in the Salvation Army - Westwood Transitional Village. The Salvation Army Transitional Villages program targets homeless and veteran families with long-term supportive service needs.

Table 3.3-3: Ethnic Composition by City of Los Angeles Community Plan Area

Census Tract	White %	Black %	Native American %	Asian %	Other %	Hispanic %
Encino-Tarzana						
1414	79.7	2.9	0.2	5.1	42.2	7.9
1415	86.9	0.7	0.1	5.8	2.5	4.0
Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass						
1413.02	74.0	4.8	0.2	7.2	4.2	9.5
1416	87.7	1.2	0.1	4.9	2.3	3.9
Bel Air-Beverly Crest						
2622	83.7	2.2	0.0	6.2	3.2	4.8
Brentwood-Pacific Palisades						
2623.01	76.9	1.8	0.2	10.6	2.1	8.3
2623.02	87.6	0.7	0.1	4.6	3.0	4.0
Westwood						
2654.10	85.6	1.2	0.0	6.4	2.0	4.8
2654.20	83.9	1.5	0.1	7.4	3.0	4.2
2655.20	77.2	2.1	0.1	10.9	5.3	4.4
West Los Angeles						
2673	43.0	3.3	0.2	23.5	5.7	24.3
2677	33.1	2.7	0.1	35.5	4.5	24.1

2678	74.5	1.9	0.1	13.0	4.1	6.3
2711	52.5	3.3	0.2	20.6	4.3	19.3
Palms-Del Rey-Mar Vista						
2712	43.0	4.1	0.1	21.2	3.8	27.7
Unincorporated Los Angeles County (Veterans Administration and Federal Building)						
7011	41.2	43.4	0.3	0.9	2.9	11.3
Project Area Total						
N/A	69.4	2.9	0.2	11.9	4.0	11.7
City of Los Angeles						
N/A	29.7	10.9	0.2	9.9	2.7	46.5
County of Los Angeles						
N/A	31.1	9.5	0.3	11.8	2.7	44.6

Source: City of Los Angeles Planning (2006), Census (2000)

Note: The numbers may add to more than the total population (to more than 100 percent) because individuals may report more than one race.

Displacements and Relocation

Information regarding relocation impacts was obtained from the I-405 Sepulveda Pass Project Draft Relocation Impact Report, November 2006.

The proposed I-405 HOV Sepulveda Pass Project displacement area is located in the City of Los Angeles, County of Los Angeles in the neighborhoods of Brentwood Glen, Bel Air, and Sherman Oaks. The area is surrounded by suburban communities.

The housing stock in the affected area consists mainly of owner-occupied single-family residences in the Brentwood Glen and Sherman Oaks neighborhoods, however, most of the affected residential units would be in the Brentwood Glen neighborhood. The age and condition of the residential properties that may be displaced were built from 1933 to 1976 and their condition range from good to excellent in well established neighborhoods. The single-family homes proposed for acquisition range from 1,147 square feet to 4,613 square feet. The number of bedrooms varies from two to four.

The median price of a single-family home ranges from approximately \$886,000 to \$1,695,000 for 2006 in the study area.

Environmental Justice

Information regarding environmental justice impacts was obtained from the I-405 Sepulveda Pass Project Community Impact Assessment, July 2006. The Community Impact Assessment was prepared to evaluate the social, economic, environmental justice, and other possible community impacts associated with the proposed project.

Demographic, socioeconomic and housing characteristics of the population living in the City of Los Angeles and the project area are shown in Table 3.3-1, 3.3-2 and 3.3-3. As may be noted, the percentages of minority and low-income populations are lower in the project area than in the City of Los Angeles as a whole.

The census tracts that make up the Encino-Tarzana, Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass, Bel Air-Beverly Crest, Brentwood-Pacific Palisades, and Westwood communities are more than 75% White. Asians and Hispanics make up the second highest concentration of race in these communities. The project area census tracts have a higher concentration of Whites and a lower concentration of other races than either the City or County of Los Angeles. Census tracts located in the West Los Angeles and Westwood communities have racial densities that are similar to the City and County of Los Angeles. However, the census tract located in Unincorporated Los Angeles County that contains the Veterans Administration and the Federal Building has a higher density of Blacks than either the City or County. The percentage of Blacks in this census tract is 43.4% compared to 10.9% and 9.5% in the City and County, respectively. Census tract 7011 has a higher concentration of a minority population than any other census tract in the study area or the City and County of Los Angeles.

Two tracts had demographic profiles that indicated the potential presence of environmental justice populations. As shown in Table 3.3-3, census tract 2673 and 2677 located in the West Los Angeles community has a higher density of Asians than either the City or County. The percentage of Asians in census tract 2673 is 23.5% and 35.5 % for census tract 2677. This is greater than the City of Los Angeles (9.9%) and the County of Los Angeles (11.8%). Census tract populations represented within Census Tract 2673 and 2677 may be an environmental justice population.

Census tract 7011 has a higher percentage of a minority population (43.4% Black), higher percentage of people below the poverty level (53.7%), higher percentage of renters (100.0%), higher percentage of single parent families (48.5%) and higher percentage of disabled people (76.0%) than either the city or the county. The entire population in this census tract is housed in The Salvation Army Transitional Village, which provides 40 units (151 beds) of transitional housing for homeless families. The Village also provides comprehensive supportive services including case management, mental health counseling, life skills training, parenting classes, health services, children activities, employment services, child care, housing placement, and follow-up services. The population represented by census tract 7011 is considered to be an environmental justice population.

Also, compared to the City of Los Angeles and the County of Los Angeles, a low percentage of the population is below the poverty level. Approximately 10.5% of the population in the study area was below the poverty level according to the 2000 Census, compared to 22.1% and 17.9% below the poverty level in the City of Los Angeles and the County of Los Angeles, respectively. However, although most of the census tracts had poverty levels that were less than levels indicated for the City and the County, three tracts had poverty levels that were greater. As shown in Table 3.3-1, census tract 2673 and 2677 located in the West Los Angeles community with 22.1% and 25.0% of the population below the poverty level, respectively. Census tract 7011, the Veterans Administration facility, located in the Westwood community shows 53.7% of the population below the poverty level. These tracts potentially represent populations in the study area that may be environmental justice populations.

The proposed HOV project displacement area is located in the communities of Westwood, Brentwood, and Sherman Oaks, in the City of Los Angeles. The majority of the housing stock in the affected area consists of single family residences, mainly owner occupied, built between 1930 and 1970. The residential properties that may be displaced were built from 1933 to 1960

and their condition ranges from good to excellent. The neighborhoods are well established. The houses consist of two to four bedroom single family residences with a median price of approximately \$1,700,000 in 2006 dollars. The non-residential areas within the project limits are comprised of small strip malls, and several freestanding buildings.

3.3.3 Community Impacts

Community Character and Cohesion

Alternative 1: No Build Alternative, does not propose any change to I-405. As such, no structures that would bisect, disrupt or alter the continuity of communities in the study area would be constructed, no residential or non-residential displacement would take place, and no changes to existing access and circulation would take place. Therefore, Alternative 1 would have no impact to community character or cohesion.

Alternative 2 does not propose the construction of any new structure that would bisect, disrupt or alter the continuity of communities in the study area. These alternatives would not change or affect community facilities and the limited residential and non-residential displacees would be relocated within the community. These minor losses would not adversely impact community character or cohesion. Alternatives 2 would include the closure of freeway ramps at Montana Ave. This closure would reduce traffic in the residential areas adjacent to these ramps. This would be a beneficial impact to local area residents. No businesses are located in the vicinity of Montana Ave., so closure would not affect businesses in this area.

Alternative 3 would disrupt and alter the westside community of Brentwood Glen. This community is a part of Brentwood that is bounded by Sunset Blvd., the I-405 and the Veterans Administration that makes this an isolated area and a close-knit community. There is a justifiable perception in the Brentwood Glen neighborhood that if Alternative 3 were selected, the acquisition of approximately 30 properties, including a church along Church Lane, would have an adverse impact on community cohesion. The potential removal of the Village Church further contributes to the potential impact on this community's character and cohesion (see Figure 3.3-2: Parcels Potentially Affected at Brentwood Glen and Bel Air).

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Figure 3.3-2: Parcels Potentially Affected at Brentwood Glen and Bel Air



Temporary project impacts are defined as those that would occur during the construction of the proposed project. These temporary impacts would not occur prior to the construction effort and would no longer be seen once the project were completed and fully operating. Construction activities that could affect business operations would include freeway lane and ramp closures, freeway and local street detours, overcrossing closures, stockpiling of construction equipment and excavated materials, removal of billboards along the freeway shoulders, removal of on- and off-street parking, and closures of local frontage roads. The proposed project could cause disruptions in community circulation during the construction period by temporarily restricting local street access. The closure of freeway ramps, overcrossings, and interchanges during the construction period would result in freeway and local street detours that may increase traffic volumes and restrict neighborhood travel patterns.

Four preliminary locations have also been identified for use as construction staging areas:

- Existing Getty Center Dr. off-ramp area within Caltrans right-of-way along northbound I-405;
- I-405/I-10 interchange area within Caltrans right-of-way;
- Wilshire Blvd. interchange area within the loops of the on/off-ramps along southbound I-405 within Caltrans right-of-way; and

Potential temporary construction-related impacts would include stockpiled materials, parked equipment, temporary buildings, storage tanks, and noise.

Displacements and Relocations

According to the Draft Relocation Impact Report prepared for the proposed project, Alternative 2 would require approximately six single-family residential units (see Figure 3.3-3: Parcels Potentially Affected in Encino at Valley Vista Blvd.) and two commercial properties (see Figure 3.3-4: Commercial Parcels Potentially Affected at Sepulveda Blvd./Ovada Pl.). The two displaced businesses are a Verizon equipment facility (approximately four employees) and Rodeo Realty, Inc. (approximately 25-30 employees).

The on/off hook-ramp design option at Valley Vista would require two single-family residential units (see Appendix I – L1A) in comparison with the six single-family residential units that would be required under the proposed design for the southbound I-405 Valley Vista Blvd. off-ramp under Alternative 2 and 3.

Alternative 3 would require approximately 18 single-family residential units, one duplex, one triplex, one quadruplex, and four apartment buildings (one building has five units, one building has ten units, two buildings have six units each) (approximately 108 occupants total), one non-profit (the Village Church is located in the community of Brentwood Glen), and two commercial properties (see Figure 3.3-2: Commercial Parcels Potentially Affected at Sepulveda Blvd./Ovada Pl.). The two displaced businesses are a Verizon equipment facility (approximately four employees) and Rodeo Realty, Inc. (approximately 25-30 employees).

Figure 3.3-3: Parcels Potentially Affected in Encino at Valley Vista Blvd.

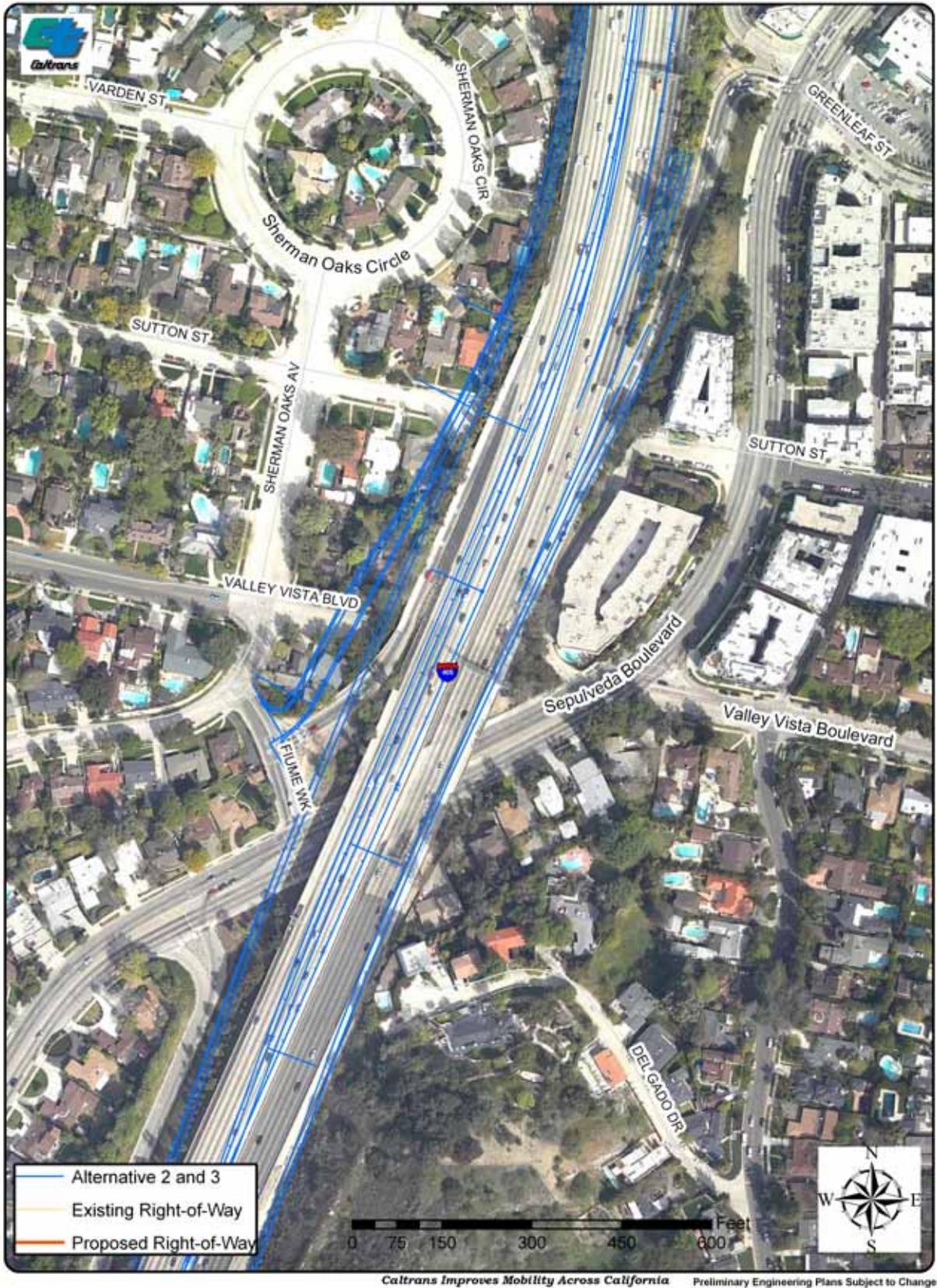


Figure 3.3-4: Commercial Parcels Potentially Affected at Sepulveda Blvd./Ovada Pl.



Map Created by Robert Wang, April 8, 2007
 Division of Environmental Planning
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Caltrans Improves Mobility Across California

Preliminary Engineering Plans Subject to Change

Table 3.3-4: Summary of Potential Property Acquisitions

	Residential		Commercial		Vacant Land		Non-profit		Other	
	Full	Part	Full	Part	Full	Part	Full	Part	Full	Part
Alternative 2	7	39	2	3	0	4	0	0	0	8
Alternative 3	37	41	2	5	0	6	1	0	0	8

This reduction in housing would result in a change to the housing balance. Alternative 2 and 3 would also result in the acquisition of commercial properties. However, these uses are expected to be able to relocate in the area. Thus, no net loss in jobs is expected and because of the small number of residential units that would be acquired as a result of all the build alternatives, there would not be an adverse impact to the jobs/housing balance in the study area.

Based on a comparison of the assessed value of properties being taken and the total taxable assessed value within the City of Los Angeles, the County of Los Angeles, the Los Angeles Unified School District and the Metropolitan Water District of Southern California, the impact on property tax revenues within these jurisdictions would be minimal in comparison to the community as a whole. Also, in terms of potential impacts to sales tax revenues, the two businesses being displaced do not generate substantial retail sales or sales tax revenues. Since all potential displaced businesses are expected to be able to relocate in the immediate vicinity, all build alternatives are not expected to affect sales tax revenues.

Environmental Justice

Under Alternative 1: No Build Alternative, no minority or low-income populations have been identified that would be adversely affected by the proposed project.

Under Alternative 2 and 3, as discussed in Section 3.3.2, the distribution of minority and low-income populations in the project area is lower than the distribution City-wide except for three potential environmental justice populations that may be affected under these alternatives. These populations are represented by census tract 2673, 2677 and 7011 (The Salvation Army Transitional Village, Veterans’ Administration and Hospital). Impacts to minority or low-income populations are assessed based on the comparative effects on these populations in relation to either non-minority or higher income populations of the study area as a whole. A disproportionate impact is determined when the impacts are (1) predominately borne by minority and/or low-income population; or (2) suffered by the minority and/or low-income population appreciably more severe or greater in magnitude than the adverse effect suffered by the non-protected population. No residential, business or commercial structures would be removed from census tract 2673, 2677 or 7011; therefore, it is not anticipated that minority or low-income groups would be disproportionately impacted as a result of Alternative 2 and 3.

3.3.4 Avoidance, Minimization and Mitigation Measures

Community Character and Cohesion

Pedestrian access points to businesses within the construction area would be maintained throughout the construction period. If usual access points were lost, provisions for alternative access to the affected parcels would be made. Appropriate signage would be placed to inform and direct both pedestrian and vehicular traffic to local businesses via alternate routes. Temporary sidewalks, if necessary, would be installed during the construction phase. Disabled access would be maintained during construction where feasible.

Caltrans' staff met with the University of California Los Angeles (UCLA) Government and Community Relations Department on February 5, 2007 to discuss the proposed project and temporary construction impacts related to traffic in the vicinity of the campus. UCLA staff expressed their concern regarding the closure of the Montana off-ramp since many people use this ramp to get to campus as an alternate to using the Wilshire Blvd. off-ramp. Other issues that were raised included the worsening of the parking and traffic situation that already exists in the area. Contact and coordination with UCLA is ongoing should there be any other concerns, and UCLA has been added to a mailing list in order for them to receive new project information as it becomes available.

During construction, Caltrans staff would establish an information field office near the construction site. The field office would serve the following multiple purposes:

- Provide the community and businesses with a physical location where information pertaining to construction can be exchanged;
- Enable Caltrans staff to better understand community/business needs during construction;
- Notify property owners, residences, and businesses of major construction activities;
- Respond to phone inquiries; and
- Coordinate business outreach programs.

Information and field office telephone numbers would be available to provide community members and businesses a means of direct communication regarding construction activities. Caltrans staff would review and forward calls to the appropriate party for action. Community involvement specialists would be available for solving individual problems, handling construction complaints, providing general information, and providing information such as current project schedule, dates for upcoming community meetings, and notice of construction impacts.

A Traffic Management Plan would be developed to maintain access to all businesses near construction activity. For example, mitigation measures to alleviate traffic impacts include: 1) avoiding access points to construction sites on residential streets and posting speed limits of 25 mph along the streets in the vicinity of the construction sites; and 2) preparing specific traffic mitigation plans for each construction site, including detour routes, lane assignments, and vehicular and pedestrian traffic circulation and control.

Displacements and Relocations

- The Draft Relocation Impact Report prepared for the proposed project found that adequate relocation resources exist for all potential displacees under all build alternatives, within the displacement area. The residential replacement neighborhoods studied include Sherman Oaks, Beverly Glen, Bel Air, Westwood, and Brentwood. The small number of displacees allows for possible residential relocation within these areas as well as adequate time for relocation. These relocation areas are comparable in terms of amenities, public utilities, and accessibility to public services, transportation and shopping. The relocation resources are affordable to residential displacees given the use of replacement housing payments. There are no public projects in the area that will displace other families or make additional housing available concurrently with the subject project. The State's relocation program is adequate to successfully relocate all displacees. There are no foreseen special or substantial relocation problems associated with this project. The Last Resort Housing Program payments will be utilized to relocate residential households being displaced, if necessary.
- Relocation assistance and counseling will be provided to displaced persons and businesses in accordance with the Federal Uniform Relocation Assistance and Real Properties Acquisition Policies Act, as amended, to ensure adequate relocation for displaced persons and businesses. All eligible displacees will be eligible for moving expenses. All benefits and services will be provided equitably to all relocatees without regard to race, color, religion, age, national origins and disability as specified under Title VI of the Civil Rights Act of 1964. Refer to Appendix D for more information regarding Relocation Assistance.
- Owners of property to be acquired due to the proposed project will be compensated for the fair market value of the property as well as damages, if any, to the remainder portions of the property in accordance with Federal Uniform Relocation Assistance and Real Properties Acquisition Policies Act, as amended.
- It is anticipated that a time frame of 18 to 24 months will be sufficient to relocate the church, residences and businesses.

Environmental Justice

The distribution of minority and low-income populations in the project area is lower than the distribution City-wide. No minority or low-income groups would be disproportionately impacted by Alternative 2 and 3. Therefore this project is not subject to the provisions of Executive Order 12898.

Caltrans' staff met with the Veterans Administration (VA) on February 13, 2007 to discuss the proposed project and potential impacts to the transportation yard that borders the existing southbound I-405 Wilshire Blvd. off-ramp. The VA has a master plan for the entire property referred to as Capital Assets Realignment for Enhanced Services (CARES). CARES provides a process that aims to reorganize and develop a plan for VA's physical infrastructure to properly plan for the future needs of veterans, and, in turn, to realize improved health care services. Any proposed project must be considered by the CARES master development plan. Currently, there

are no plans for the transportation yard area, however, coordination would be necessary for the use of the VA property.

Caltrans' staff also met with the Salvation Army Westwood Transitional Village on February 5, 2007 and February 23, 2007 to discuss the proposed project and temporary construction-related impacts to the area bordering their property. Their main concern was regarding noise and air quality issues, especially with regards to the outdoor toddler play area that would be adjacent to the proposed northbound I-405 Wilshire off-ramp. However, since the proposed project involves improvements to an existing roadway, avoidance and minimization measures for environmental justice impacts are very limited. A soundwall has been proposed along the northbound I-405 shoulder that borders the Salvation Army Transitional Village as well as the Bessie Pregerson Child Development Center to mitigate noise impacts. Temporary construction-related air quality impacts would be mitigated by adhering to the South Coast Air Quality Management District's rules and regulations and Department Standard Construction Specifications for equipment emission, fugitive dust and noise impacts.

Caltrans' staff also met with the Salvation Army Westwood Transitional Village and the Bessie Pregerson Child Development Center on February 5, 2007 and February 23, 2007 to discuss the proposed project and temporary construction-related impacts to the area bordering their property. Their main concern was regarding noise and air quality issues, especially with regards to the outdoor toddler play area that would be adjacent to the proposed northbound I-405 Wilshire off-ramp.

3.3.5 Cumulative Impacts

Community Character and Cohesion

Implementation of any of the cumulative projects has the potential to result in short-term effects to neighborhoods as a result of construction activities. These activities include grading and excavation, road detouring, and utility construction/relocation. Permanent neighborhood disruption would not occur as a result of the cumulative projects since the development is consistent with the land use patterns of the local jurisdictions. Site-specific effects, such as noise, vibration, traffic, aesthetics, lighting, and air quality have been addressed through the local project review and appropriate minimization measures identified.

The proposed build alternatives each involve roadway construction and would contribute incrementally to the other projects in the vicinity by causing slowing of circulation and restricting some local street access during construction. Freeway ramp closures would cause short-term impacts to local circulation as well. Since the cumulative projects are not anticipated to cause long-term neighborhood disruption, the proposed alternatives are not anticipated to impact community character and cohesion.

Displacements and Relocations

The overriding purpose of most projects in the cumulative study area is to revitalize properties. Residential development has and continues to increase the housing stock within the project area,

providing opportunities for each community plan area to balance jobs and housing consistent with the Housing Elements of their General Plans. Commercial development has and continues to create short-term construction jobs and long-term employment. The provision of additional housing balances the jobs-to-housing ratio within the project area. Given the mature nature of the local communities, inducement of substantial growth effects has been limited, but serves to maintain or enhance the existing economic vitality of each jurisdiction. The cumulative projects do not individually and collectively require right-of-way acquisitions and therefore would not contribute to a cumulative relocation effect.

Environmental Justice

As stated earlier, most of the projects in the cumulative study area were designed to redevelop underutilized or blighted areas, resulting in improvements to cities and neighborhoods where these projects are planned. All of the cumulative projects identified are proposed to maintain/enhance the economic vitality of these communities. The projects do not collectively result in disproportionately high impacts to low-income or minority populations. Some of these projects may have localized effects to neighborhoods, which would be addressed through the City approval process that identifies minimization measures to reduce any such neighborhood impacts. The I-405 Sepulveda Pass Project build alternatives, when considered with other projects in the area, would not contribute to substantial cumulative adverse impacts related to environmental justice.

3.4 UTILITIES/EMERGENCY SERVICES

3.4.1 Regulatory Setting

California Code of Regulations Street and Highways Code Sections 700-711 discuss utility relocation policies and procedures. Public Resources Codes 21083, 21087 and the California Environmental Quality Act Guidelines Section 15126.2(a) require lead agencies to assess the impact of a proposed project by examining alterations in the human use of the land, including public services. Public Utilities Commission General Order 131-D provides guidance for transportation projects that involve relocation of 50kV or higher transmission lines.

3.4.2 Affected Environment

Community Facilities and Services

Community facilities and services located within the study area are shown in Figure 3.4-1: Public Facilities and Services. Community facilities and services include public and private utilities, schools, fire stations, police stations, religious institutions, medical institutions, and parks and recreational facilities.

Public and Private Utilities

The project area contains several public and private utilities, including those owned by Southern California Gas Company, Southern California Edison, SBC Communications, Los Angeles Department of Water and Power, Los Angeles County Sanitation District, Metropolitan Water District, Adelphia, and Time Warner Cable. The types of utility facilities include: utility poles, natural gas pipelines, fuel oil pipelines, water pipelines, sewers, manholes, aerial and underground transmission lines and fire hydrants.

Fire Protection and Emergency Services

The project study area is served by the Los Angeles Fire Department (LAFD). There are no fire stations located within a ¼-mile of the proposed project. The two closest fire stations are Fire Station #37 located at 1090 Veteran Ave and Fire Station #59 located at 11505 W. Olympic Blvd. Fire Station #37 serves Westwood and the Western UCLA Campus while Fire Station #59 services Sawtelle and West Los Angeles. Fire Stations 109, 99, 71, 19, 92, 43 and 62 also serve communities in the Project Study Area, however, they are all located outside the project limits. These stations serve Encino Hills, Beverly Glen, Bel Air/Holmby Hills, Brentwood, Century City, Palms and Mar Vista Communities respectively.

Police Protection Services

The Los Angeles Police Department (LAPD) serves the Project Study Area. The LAPD is divided into eighteen geographic areas referred to as Community Police Stations. These are further subdivided into smaller neighborhood units. There are no police stations within a ¼-mile of the proposed project. The closest police station is the West Los Angeles Community Police

Station, which is located at 1663 Butler Ave. on the west side of I-405. The West Los Angeles Community Police Station serves Bel Air, Benedict Canyon, Beverly Crest, Beverly Glen, Beverlywood, Brentwood, Century City, Cheviot Hills, Crestview, Glen Ridge, Pacific Palisades, Rancho Park, Roscomare Valley, Rustic Canyon, San Vicente, Sawtelle, West Los Angeles and Westwood. Within the Project Study Area, this station serves communities from Santa Monica Blvd. north to Mulholland Dr.

The Pacific Community Police Station serves the southern part of the Project Study Area. This station is located at 12312 Culver Blvd. and serves the communities of Del Rey, Manchester Square, Mar Vista, Oakwood, Palms, Playa Del Rey, Playa Vista, Venice and Westchester. Within the Project Study Area, this station serves communities from south of Santa Monica Blvd. to National Blvd.

Medical Institutions

Hospitals and healthcare facilities located within a ¼-mile of the proposed project include the West Los Angeles Pavilion (1516 Sawtelle Blvd.), Westside Health Center (1950 Sawtelle Blvd.) and the Westside Family YMCA (11311 La Grange Ave.). The West Los Angeles Pavilion is part of the Veterans Affairs (VA) facilities in the vicinity of the proposed project. This facility is part of the VA Greater Los Angeles Healthcare System. It is considered a tertiary care facility that provides long-term care and residence. The Westside Health Care Center belongs to the Motion Picture & Television Fund and provides a full service pharmacy, laboratory services, pulmonary screening, physical therapy and gynecology. The Westside Family YMCA provides daycare, health and safety classes and sports programs to facility members and non-members.

Schools

The project study area is located within the Los Angeles Unified School District. Nora Sterry Elementary (1730 Corinth Ave.) and Webster Middle School (11330 Graham Place) are located within a ¼-mile of the proposed project.

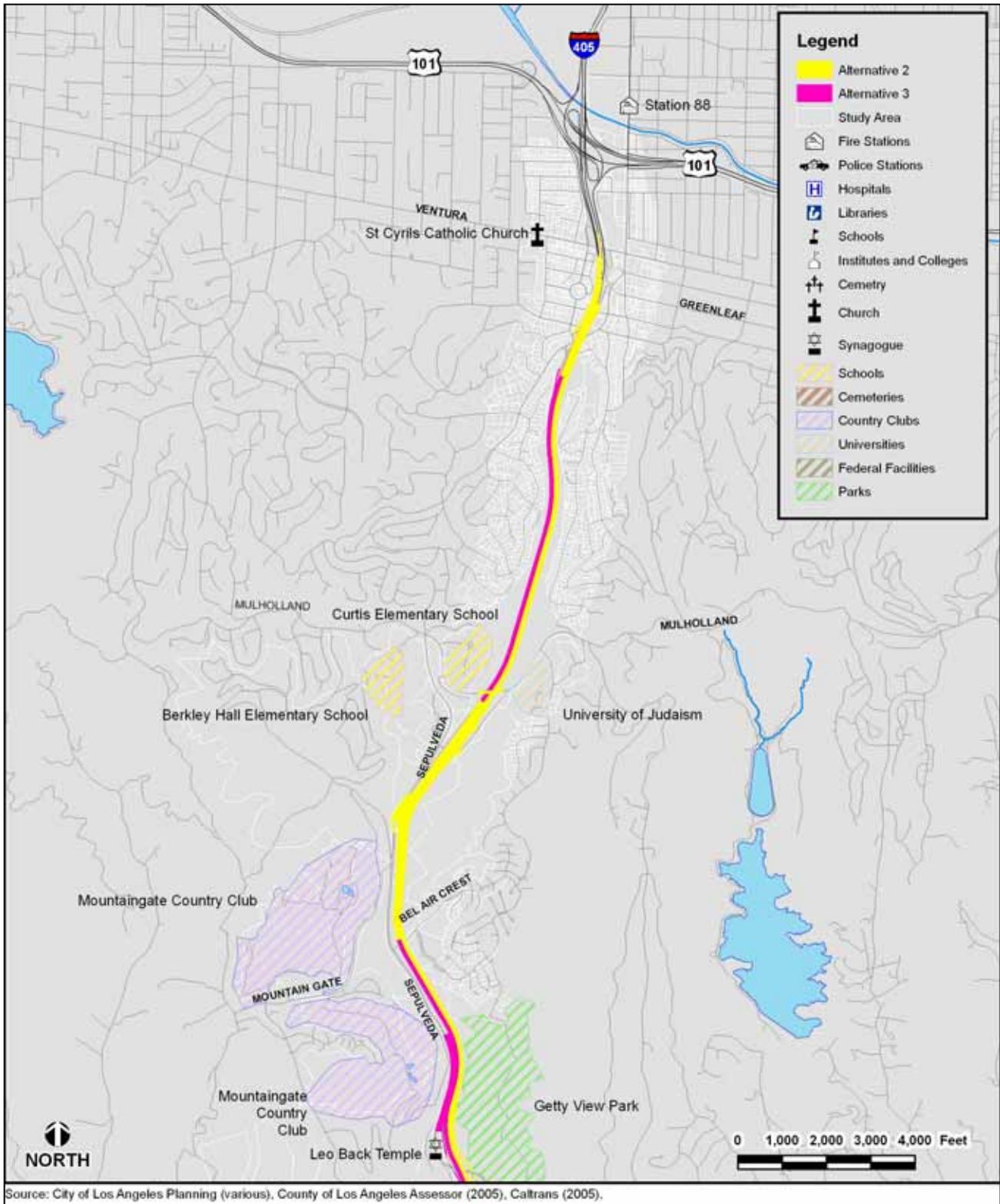
There are four private schools that are located within a ¼-mile of the proposed project:

- Curtis Elementary School (15871 Mulholland Dr.)
- Berkeley Hall Elementary School (16000 Mulholland Dr.)
- Turning Point School (1300 N. Sepulveda Blvd.)
- Windward Middle and High School (11350 Palms Blvd.)

Other institutions that are located within a ¼-mile of the proposed project area include:

- The Japanese Institute of Sawtelle (2110 Corinth Ave.) which is a private institution that offers Japanese language classes and shares space with the West LA Kendo Dojo.
- The University of Judaism (15600 Mulholland Dr.) which offers undergraduate and graduate degrees in liberal arts studies.
- The Bessie Pregerson Childcare Center (1341 S. Sepulveda Blvd.) which is operated by the Salvation Army and provides daycare for 70 children between the ages of 18 months to 5 years.

Figure 3.4-1: Public Facilities and Services in the Vicinity of the Project (1 of 3)



Source: City of Los Angeles Planning (various), County of Los Angeles Assessor (2005), Caltrans (2005).

Figure 3.4-1: Public Facilities and Services in the Vicinity of the Project (2 of 3)

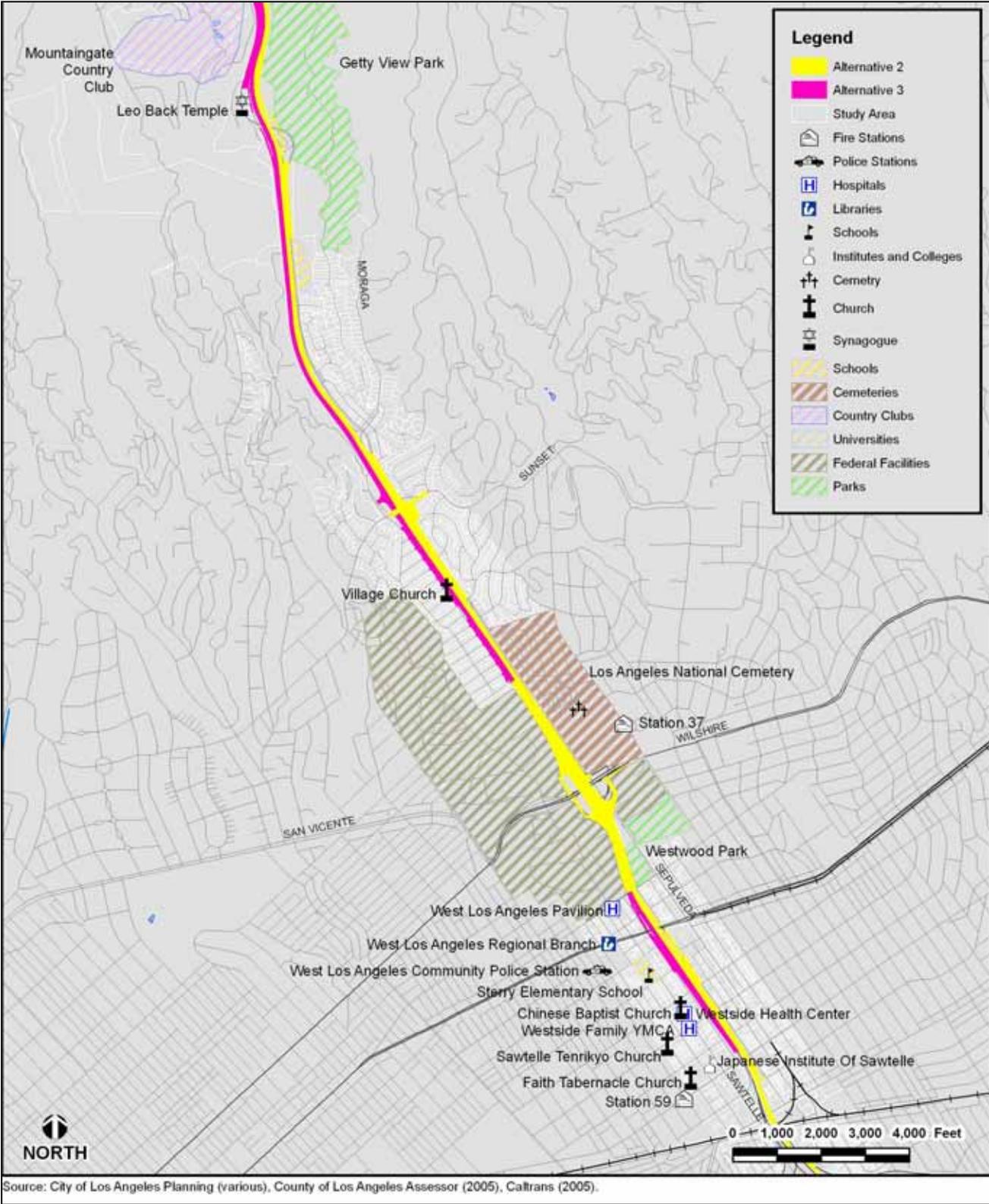
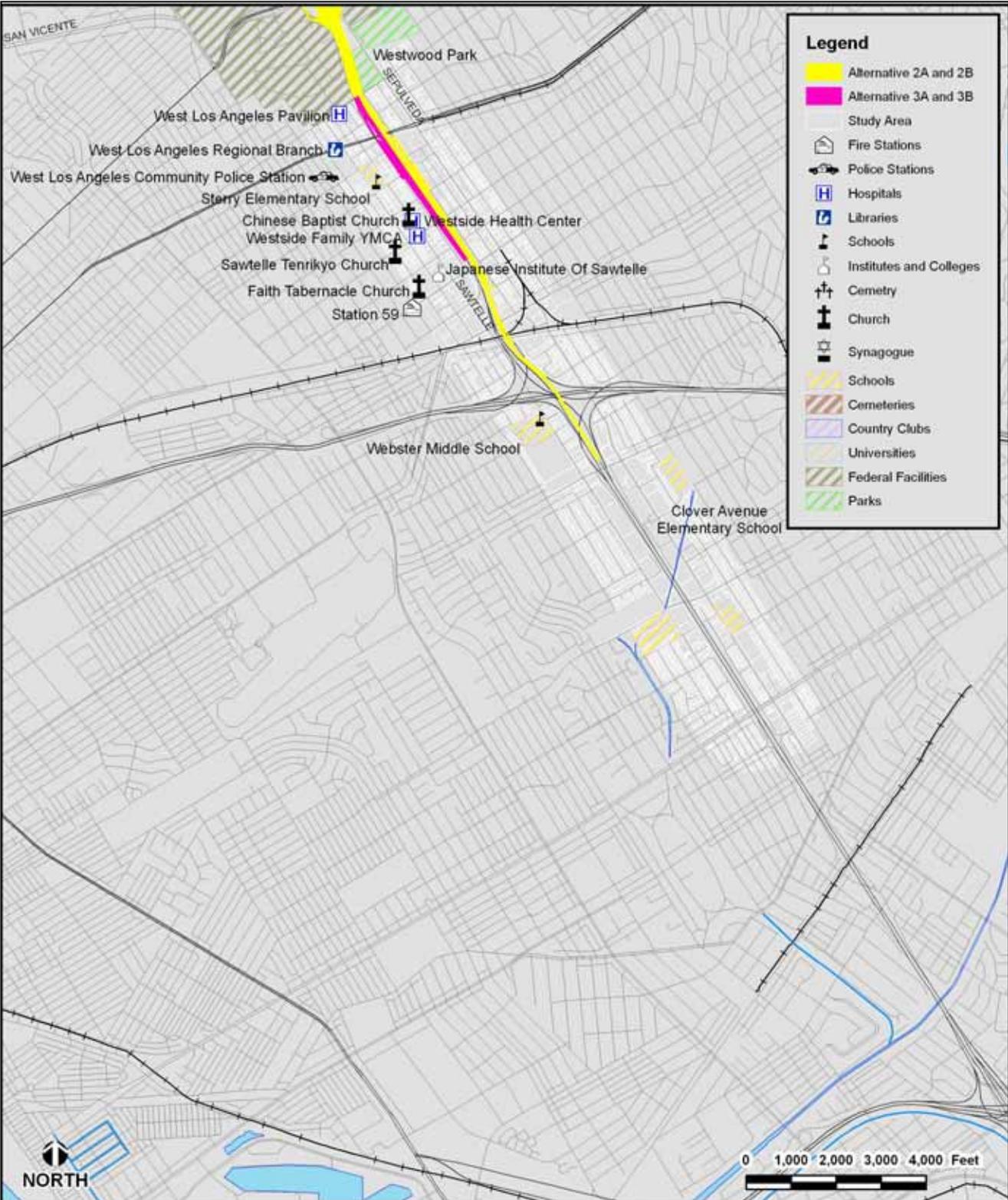


Figure 3.4-1: Public Facilities and Services in the Vicinity of the Project (3 of 3)



3.4.3 Utilities/Emergency Services Impacts

Impacts to public utilities/services are determined based on such factors as noise, air quality, safety, circulation, accessibility, and disruption of operation during both the construction and the operation of the proposed project alternatives. Potential operational impacts to community facilities include property acquisitions affecting community facilities, restricted access to community facilities and services, or impaired use of the facilities.

Alternative 1: No Build Alternative would not result in any change to the existing configuration of I-405; therefore, it would not result in direct or indirect impacts to fire, police or hospital services or schools.

Construction of Alternative 2 and 3 would require the relocation of several public and private utilities within the project area. Most of the utility relocations would occur on Sepulveda Blvd. between Montana Ave. and Church Lane. These alternatives would also require 26 structures to be either widened, replaced, built or removed. Emergency services access delays and access to community services and facilities in the vicinity of these structures would be diminished during construction period. The project would be constructed in two stages. The first stage would involve shoulder widening, ramp widening, structures, retaining walls, and soundwalls along the outside shoulder. The second stage would involve median widening, concrete barrier, and structure support columns in the median shoulder. Both stages may require multiple sub-stages due to the complex nature of work. Constructing the proposed project in segments would minimize impacts to community services by avoiding consecutive ramp closures and traffic congestion during construction.

3.4.4 Avoidance, Minimization and Mitigation Measures

- Utility infrastructure affected by project construction would be relocated before construction, relocated during construction, protected in place, or abandoned. Those utilities that must be relocated as a part of project construction would be relocated in such a manner as to minimize any disruption of service those utilities provide.
- The impact to fire, police and emergency service response times would be minimized by the implementation of a Traffic Management Plan (TMP) that would contain detailed plans of access routes and detours during construction. The TMP should be reviewed and approved by any potentially affected fire or law enforcement agency. Caltrans would maintain contact with the community, police and fire protection services through public outreach during the construction phase.

3.4.5 Cumulative Impacts

Public and Private Utilities

Projects in the cumulative study area collectively could result in adverse impacts on utilities related to increased demand for facilities, requiring new or expansion of facilities, and/or the need to relocate or modify utilities to accommodate proposed development. Build out of the land

uses assumed in the development utilities could require upgrading of existing anticipated demand. Where feasible, appropriate minimization measures have been identified to reduce individual project impacts to utilities either through relocation or upgrading of facilities or payment of in-lieu fees.

Alternative 2 and 3 would require utility relocation during construction. However, since the cumulative projects are not anticipated to adversely impact utilities, the impacts to utilities due to the proposed project are not anticipated to contribute to a cumulative impact. Utility disruption due to freeway widening, and widening and replacement of overcrossings would be minimized through the development and implementation of a Utility Relocation Plan for the I-405 project; therefore, the project's contribution to cumulative effects to utilities would not be adverse.

Fire Protection and Emergency Services

Intensification of land uses associated with the cumulative projects could increase demand for fire and emergency medical services and may affect response times.

Alternative 2 and 3 would involve construction that would contribute to short-term cumulative effects to fire protection and emergency services in delayed response times. The impact would be minimized by implementation of a traffic management plan (TMP) that would contain detailed plans of access routes and detours during construction. The TMP should be reviewed and approved by the County Fire Department and any potentially affected fire or law enforcement agency. Since the cumulative projects are not anticipated to adversely impact Fire Protection/Emergency Services and Law Enforcement, the impacts due to the proposed project are not anticipated to contribute to a cumulative impact.

Law Enforcement

Intensification of land uses associated with the cumulative projects has the potential to increase demand for law enforcement services and may affect response times and increase property values and tax revenue associated with the redevelopment. Intensification of land uses identified in the cumulative projects would serve to provide additional funds to increase law enforcement officers or facilities, offsetting the cost of any increased demand.

Solid Waste Disposal Services

All of the build alternatives would require some level of demolition to accommodate the proposed improvements; therefore, all of the alternatives would create demolition and construction debris. These short-term impacts potentially could be adverse, when considered with the waste disposal needs of the other cumulative projects in the area. Recycling of material either on site or off site would minimize the impacts of the build alternatives; however, these alternatives would not result in long-term cumulative impacts on solid waste disposal because it is a transportation facility and would result in only a minor increase in collection of roadside debris.

The projects in the study area would potentially increase solid waste demand due to intensification of uses and could incrementally reduce capacity within the County of Los

Angeles sanitary landfills. Application of State-mandated recycling requirements for construction and operational activities would reduce the total increase and minimize solid waste.

Schools

Any development has the potential to generate additional students who would need to be accommodated by the local school districts. Currently, payment of State-mandated developer fees are assessed to mitigate potential effects to schools by new development and are considered full mitigation under CEQA. None of the project alternatives would generate demand for schools and, therefore, would not contribute to cumulative impacts to schools. Residential displacement would contribute to a very slight reduction in the need for school expansion.

3.5 TRAFFIC AND TRANSPORTATION / PEDESTRIAN AND BICYCLE FACILITIES

3.5.1 Regulatory Setting

The Federal Highway Administration (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 the detrimental effects on all highway users who share the facility.

California Code of Regulations Streets and Highways Code Sections 890-894.2, the California Bicycle Transportation Act, discusses the importance of a non-motorized transportation system, establishes bikeway specifications and encourages local agency participation in developing improved bikeways. California Code of Regulations Streets and Highways Code Sections 894.6-894.8, the California Pedestrian Safety Act, encourages projects that address pedestrian safety.

Caltrans and the Federal Highway Administration are committed to carrying out the 1990 Americans with Disabilities Act 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.

Evaluation Criteria

Evaluating congestion and vehicular delays

Information available from the Performance Measurement System (PeMS) version 6.2 was used to evaluate the existing level of congestion and total vehicular delays on Interstate 405 (I-405) within the project limits. PeMS is a traffic data collection, processing and analysis tool used by Caltrans to assist traffic engineers in assessing the performance of the freeway system. PeMS extracts information from real-time and historical data and provides a wide variety of information that can be used to evaluate traffic conditions on freeways in urban areas throughout California. In particular, PeMS provides hourly traffic volumes, speed, and vehicular-hours of delay data (the amount of time it takes to travel a freeway during peak hours compared to the time it takes to travel the same distance as 35 mph). This data can be used to evaluate congestion (time periods where average hourly speeds are less than 55 mph) and vehicular delays for selected freeway segments.

Intersections

Traffic conditions at signalized intersections were evaluated using the 2000 HCM operations methodology for signalized intersections, which evaluates capacity in terms of the seconds/vehicle ratio and evaluates Level of Service (LOS) based on controlled delay per vehicle. Controlled delay is defined as the portion of the total delay attributed to the traffic signal

operation including deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

Unsignalized Intersections

For unsignalized intersections, the HCM 2000 methodology for unsignalized intersections was used. With this methodology, LOS is related to the controlled delay for each stop-controlled movement.

Forecasted traffic volumes

In order to forecast the traffic demand on the I-405 Freeway for 2015 (year of project completion) and 2031 (25-year projection), growth factors of 1.157 percent and 1.461 percent, respectively, were applied to the 2005 traffic volumes. These growth factors are based on the projected annual growth rate of 1.47 percent, consistent with SCAG guidelines.

Access Ramps

Existing (2005) and forecasted (2015 and 2031) traffic volumes for freeway access ramps were obtained through a combination of sources, including ramp volume data and turning movement volumes from intersections adjacent to study ramps provided by Caltrans, District 7.

3.5.2 Affected Environment

Information regarding traffic and circulation impacts was obtained from the I-405 Sepulveda Pass Project Traffic Analysis Report, July 2006. The traffic analysis results for the I-405 freeway mainline, access ramps, and study intersections within the project study area are presented in this section.

Existing Freeway System

Within the project study area, which is roughly bounded by I-10 to the south and US-101 to the north, the I-405 generally consists of five lanes in each direction. Just south of the I-405/I-10 interchange, the I-405 narrows to three lanes in each direction, and widens back to five lanes between Pico Boulevard and Olympic Boulevard. There are auxiliary merge lanes north and south of Santa Monica Boulevard, and a northbound auxiliary lane south of Valley Vista Boulevard. The I-405 reduces to three lanes in the northbound direction at the US-101 interchange, with two connector lanes to the US-101. There is a southbound HOV lane in the northern portion of the study area. The southbound HOV lane ends and becomes a mixed-flow lane between Montana Avenue and Constitution Avenue. Existing mainline travel lanes are shown in Figure 3.5-1.

The existing condition analysis considers freeway and roadway corridors as they exist, except for locations that are currently under construction. Santa Monica Boulevard is undergoing significant modifications as part of the Santa Monica Boulevard Transit Parkway Project. Construction of the Santa Monica Boulevard Transit Parkway Project began in March 2003 and roadway construction was completed in October 2006 and landscaping work will continue through summer 2007. The project involved the reconstruction and reconfiguration of 2.5 miles of Santa Monica Boulevard and Little Santa Monica Boulevard into a single roadway with three eastbound and three westbound travel lanes.

The Santa Monica Boulevard Transit Parkway Project included a new street lighting and traffic signal system, a landscaped median, bicycle lanes and bus priority features. This analysis incorporates all ramp and intersection improvements as shown in design plans provided by Caltrans.

Volume and speed data from the Performance Measurement System (PeMS) version 6.2 was used to evaluate the existing level of congestion and total vehicular delays on I-405 within the project limits. For this analysis, the congested period occurs when average speeds fall below 55 miles per hour. Vehicular delay is the additional time spent traveling through each segment due to the reduced free-flow speed. Existing peak hour and Average Annual Daily Traffic (AADT) volumes are shown in Figure 3.5-2.

Northbound Freeway Segments

The study corridor was divided into analysis segments that correspond with the PeMS data limits. This section includes descriptions of northbound segment geometry and traffic characteristics for a typical weekday (without additional delay due to weather, accidents, or other hazards in the roadway).

National Boulevard to Pico/Olympic Boulevard

This 0.8-mile segment begins at National Boulevard, passes under Interstate 10 (I-10), and ends between Pico Boulevard and Olympic Boulevard. The five northbound I-405 mixed-flow lanes reduce to four lanes at the National Boulevard exit, and further reduce to three lanes to pass beneath the I-10 freeway structure. The freeway widens back to four lanes north of the I-10, and has five through lanes at Pico Boulevard. The bottleneck at this segment creates a substantial restriction in flow, but the columns that support the I-10 structure limit the space that is available in this area.

Congestion is typically observed by 6:30 AM, with average speeds dropping below 35 miles per hour by 8:00 AM. Flows improve slightly between 11:00 AM and 3:00 PM, but the facility still carries an average of over 1,800 vehicles per hour per lane during this time. Conditions continue to deteriorate during the afternoon rush, with average speeds down to 20 miles per hour around 6:00 PM. Traffic begins to dissipate by 8:00 PM, with free flow speeds restored by 9:00 PM.

Pico/Olympic Boulevard to Santa Monica Boulevard

This segment includes the 1.1-mile stretch of freeway from just south of Olympic Boulevard to the Santa Monica Boulevard exit. There are five mixed-flow lanes in this area, plus an auxiliary lane that begins at the Pico/Olympic on-ramp and ends at the Santa Monica Boulevard exit.

Congestion is typically observed by 8:00 AM, with average speeds dropping below 35 miles per hour by 9:00 AM. Flows improve slightly between 11:00 AM and 3:00 PM, but the facility still carries an average of about 1,500 vehicles per hour per lane during this time. Conditions continue to deteriorate during the afternoon rush, with average speeds down to 15 miles per hour around 6:00 PM. Traffic begins to dissipate by 8:00 PM, with free flow speeds restored by 9:00 PM.

Santa Monica Boulevard to Wilshire Boulevard

The 0.6-mile segment between Santa Monica Boulevard and Wilshire Boulevard consists of five mixed-flow lanes and an auxiliary lane. About three hundred yards north of the exit ramp to westbound Wilshire Boulevard, the auxiliary lane ends at the exit ramp to eastbound Wilshire Boulevard.

Congestion is typically observed by 8:00 AM, but average speeds remain above 40 miles per hour through the morning rush period. Free-flow speeds are observed between 11:00 AM and 3:00 PM, but conditions deteriorate during the afternoon rush. Average speeds drop below 30 miles per hour around 3:00 PM, and decrease to 15 miles per hour by 6:00 PM. Traffic begins to dissipate by 8:00 PM, with free flow speeds restored by 9:00 PM.

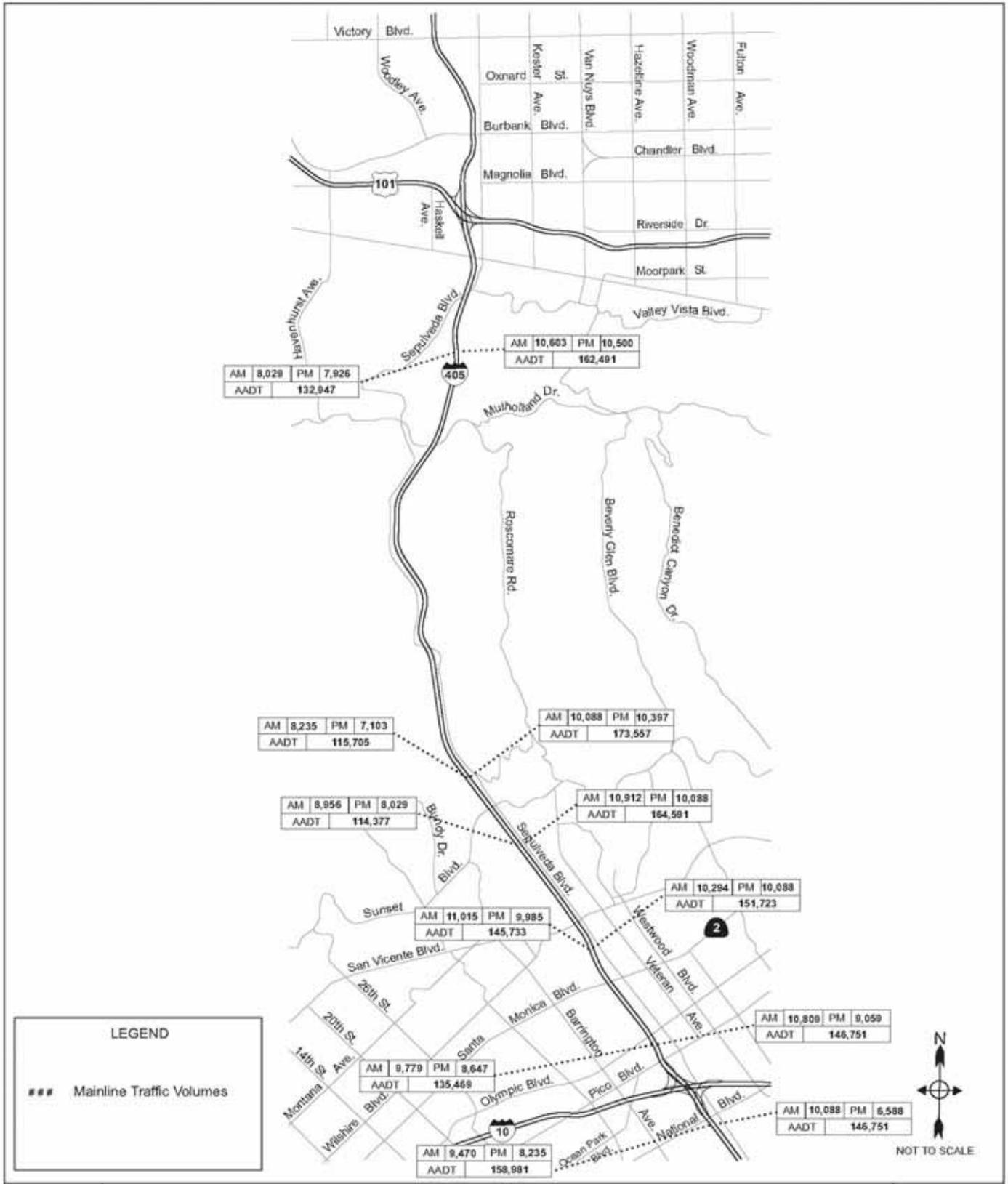
Wilshire Boulevard to Sunset Boulevard

There are five northbound mixed-flow lanes on the 1.0-mile segment of the I-405 between Wilshire Boulevard and Sunset Boulevard. Maximum flow occurs during the 8:00 AM hour, with 1,600 vehicles per hour per lane. Average speeds remain above 45 miles per hour through the morning rush period, with free-flow speeds observed between 11:00 AM and 3:00 PM. Conditions deteriorate during the afternoon rush, with average speeds dropping below 30 miles per hour around 3:00 PM and falling below 20 miles per hour by 5:00 PM. Traffic begins to dissipate by 8:00 PM, with free flow speeds restored by 9:00 PM.

Sunset Boulevard to Moraga Drive

The 0.9-mile segment of the I-405 from Sunset Boulevard to north of Moraga Drive has five northbound mixed-flow lanes. A maximum flow rate of over 2,000 vehicles per lane occurs during the 3:00 PM hour, at the beginning of the afternoon rush period. Conditions deteriorate during the next few hours, with average speeds dropping below 20 miles per hour by 5:00 PM. Traffic begins to dissipate by 8:00 PM, with free flow speeds restored by 9:00 PM.

Figure 3.5-2: Existing Peak Hour and Average Annual Daily Traffic (AADT) Volumes



Source: Traffic Analysis Report, July 2006

Moraga Drive to Getty Center Drive

The 0.9-mile segment of the I-405 from north of Moraga Drive to Getty Center Drive has five northbound mixed-flow lanes. A maximum flow rate of 2,000 vehicles per lane occurs during the 3:00 PM hour, at the beginning of the afternoon rush period. Conditions deteriorate during the next few hours, with average speeds dropping to 20 miles per hour by 5:00 PM. Traffic begins to dissipate by 8:00 PM, with free flow speeds restored by 9:00 PM.

Getty Center Drive to Skirball Center Drive

The 2.3-mile segment of the I-405 from Getty Center Drive to Skirball Center Drive has five northbound mixed-flow lanes. A maximum flow rate of 2,000 vehicles per lane occurs during the 3:00 PM hour, at the beginning of the afternoon rush period. Conditions deteriorate during the next few hours, with average speeds dropping below 25 miles per hour by 5:00 PM. Traffic begins to dissipate by 7:30 PM, with free flow speeds restored by 8:30 PM.

Skirball Center Drive to Valley Vista Boulevard

There are five northbound mixed-flow lanes on the 2.1-mile segment of the I-405 between Skirball Center Drive and Valley Vista Boulevard. Maximum flow occurs during the 3:00 PM hour, and the freeway remains congested until 8:00 PM. Average speeds fall below 30 miles per hour by 4:00 PM, and free flow speeds are restored by 9:00 PM.

Valley Vista Boulevard to Burbank Boulevard

At Valley Vista Boulevard, the freeway consists of three northbound mixed-flow lanes and two auxiliary lanes to the US-101 connector ramps. After the connector lanes branch off of the I-405, they expand into four lanes, with one lane returning to northbound I-405, two lanes connecting to northbound US-101, and one lane connecting to southbound US-101. The I-405 carries three through lanes as it travels beneath the US-101 interchange, with one auxiliary merge lane formed by the connector from southbound US-101. North of the US-101 interchange, the I-405 gains one more lane from the northbound US-101 connector for a total of five northbound through lanes. The northbound I-405 HOV lane begins at Burbank Boulevard.

Southbound Freeway Segments

This section includes descriptions of southbound segment geometry and traffic characteristics for a typical weekday (without additional delay due to weather, accidents, or other hazards in the roadway).

Valley Vista Boulevard to Skirball Center Drive

The 2.1-mile segment between Valley Vista Boulevard and Skirball Center Drive consists of five mixed-flow lanes and one HOV lane. Congestion is typically observed by 6:30 AM, with average speeds on I-405 dropping below 20 miles per hour by 8:00 AM and below 15 miles per hour around 9:00 AM. The average speed in the HOV lane slows to 35 miles per hour around 6:30 AM and drops below 20 miles per hour by 8:00 AM. Traffic dissipates in this area by 11:00

AM, and free flow speeds are achieved on both the mainline and the HOV lane. In the afternoon, the mainline carries flow rates between 1,600 and 1,800 vehicles per lane per hour and the HOV carries a maximum flow rate of over 1,700 vehicles per hour.

Skirball Center Drive to Getty Center Drive

The 2.1-mile segment between Skirball Center Drive and Getty Center Drive consists of four mixed-flow lanes and one HOV lane. Congestion is typically observed by 6:30 AM, with average speeds on the mainline near Getty Center Drive dropping below 25 miles per hour by 7:00 AM and below 20 miles per hour around 9:00 AM. The average speed in the HOV lane drops to 40 miles per hour by 7:00 AM, but usually stays above 35 miles per hour for the morning rush. Traffic dissipates in this area by 11:00 AM, and free flow speeds are achieved on both the mainline and the HOV lane. In the afternoon, the mainline carries an average flow rate of 1,650 vehicles per lane per hour and the HOV carries a max flow rate of over 900 vehicles per hour.

Getty Center Drive to Moraga Drive

The 0.8-mile segment between Getty Center Drive and Moraga Drive contains four mixed-flow lanes and one HOV lane. Congestion is typically observed by 7:00 AM, with average speeds on the mainline dropping to 40 miles per hour by 8:00 AM and to 35 miles per hour around 9:00 AM. The average speed in the HOV lane usually stays above 50 miles per hour throughout the day. In the afternoon, the mainline carries a maximum flow rate of 1,800 vehicles per lane per hour and the HOV carries a max flow rate of about 900 vehicles per hour.

Moraga Drive to Sunset Boulevard

The 0.7-mile segment between Moraga Drive and Sunset Boulevard contains four mixed-flow lanes and one HOV lane. Congestion is typically observed by 7:00 AM, but average speeds on the mainline usually stay above 40 miles per hour during the morning rush period. Free flow speed is usually achieved in the HOV lane throughout the day. In the afternoon, the mainline carries a maximum flow rate of over 2,000 vehicles per lane per hour and the HOV carries a max flow rate of over 1,700 vehicles per hour.

Sunset Boulevard to Wilshire Boulevard

The southbound HOV lane ends half way between Sunset Boulevard and Wilshire Boulevard, and converts to a standard mixed-flow lane. The first half of this 1.1-mile segment consists of four mixed-flow lanes and one HOV lane. The second half consists of five mixed-flow lanes that carry a maximum flow of 1,800 vehicles per lane per hour during the morning rush period. Average speeds are below 40 miles per hour by 10:00 AM, and conditions deteriorate during the afternoon. Average speeds drop below 25 miles per hour by 3:00 PM, and decrease to 15 miles per hour by 4:00 PM. Traffic begins to dissipate by 8:00 PM, with free flow speeds restored by 9:00 PM.

Wilshire Boulevard to Santa Monica Boulevard

The 0.8-mile segment between Wilshire Boulevard and Santa Monica Boulevard consists of five mixed-flow lanes plus one auxiliary lane, and carries a maximum flow of over 1,800 vehicles per lane per hour during the morning rush period. Average speeds drop below 35 miles per hour by 3:00 PM, but the additional capacity provided by the auxiliary lane allows speeds to remain above 40 miles per hour through the rest of the afternoon. Free flow speeds are restored around 8:00 PM.

Santa Monica Boulevard to Pico/Olympic Boulevard

The 1.0-mile segment between Santa Monica Boulevard and the Pico/Olympic Boulevard exit consists of five mixed-flow lanes. There is a 450-foot long auxiliary merge lane from the southbound on-ramp at Santa Monica Boulevard, which practically serve as six mixed-flow lanes through this segment. The maximum flow rate is about 1,950 vehicles per lane per hour during the morning peak. Congestion begins around 2:30 PM, with average speeds falling below 30 miles per hour by 4:00 PM. Traffic begins to dissipate by 7:30 PM, with free flow speeds restored by 8:00 PM.

Pico/Olympic Boulevard to National Boulevard

This 0.8-mile segment begins north of Pico Boulevard, passes under Interstate 10, and ends at National Boulevard. North of Pico Boulevard, the southbound number five lane branches off to I-10 connector, leaving four mixed-flow lanes. The four southbound 405 lanes merge into three lanes to pass beneath the I-10 freeway structure. The freeway widens back to four lanes as the connector from the eastbound I-10 joins the I-405, and gains a fifth lane from the westbound I-10 connector. Congestion at the interchange is particularly heavy in the afternoon, with average speeds on the I-405 mainline dropping below 35 miles per hour from 2:00 PM to 8:00 PM. Traffic starts to dissipate by 8:00 PM, with free flow speeds restored by 9:00 PM.

Truck Trips

In 2004, the I-405 carried an average of fewer than 13,000 trucks per day within the study area, which corresponds to 4.5 percent of the daily vehicle traffic representing truck trips. Approximately half of the truck trips were made by 2-axle trucks, and about one third of the trucks had five or more axles. Annual average daily truck traffic information was compiled by Traffic and Vehicle Data Systems.

HOV Operation Manual Count Data

Tables 3.5-1 and 3.5-2 show the traffic counts from the HOV Operations Manual for the I-405 southbound and northbound lanes in the study area. About 20 to 25 percent of the observed vehicles carried two or more occupants, and about 75 percent of those vehicles used the HOV lane, where available. At Burbank Boulevard, the southbound I-405 consists of four mixed-flow lanes and one HOV lane. At this location, 20 percent of the capacity is dedicated to HOV and

about 20 percent of the traffic used the HOV lane. This suggests that an HOV lane can be expected to carry volume proportional to adjacent lanes during periods of heavy congestion and that an HOV lane is not expected to significantly reduce the capacity of the roadway.

Table 3.5-1: Southbound I-405 HOV Operations Manual Count Data

Location of Count		Peak Hour	Percentage of Vehicles With 2+ Occupants	Percentage of Vehicles Using HOV Lane
Description	Post Mile			
Southbound I-405 at Palms	28.52	AM	10.1%	N/A
Southbound I-405 at Skirball	36.72	AM	20.1%	16.4%
Southbound I-405 at Burbank	40.28	AM	26.8%	19.7%

Source: Caltrans, District 7

Notes: N/A – no carpool lane available at count location

Table 3.5-2: Northbound I-405 HOV Operations Manual Count Data

Location of Count		Peak Hour	Percentage of Vehicles With 2+ Occupants	Percentage of Vehicles Using HOV Lane
Description	Post Mile			
Northbound I-405 at Palms	28.51	PM	23.4%	N/A
Northbound I-405 at Skirball	36.72	AM	9.2%	N/A
Northbound I-405 at Burbank	40.27	PM	17.9%	11.9%

Source: Caltrans, District 7

Notes: N/A – no carpool lane available at count location

Access Ramps

A conventional level-of-service (LOS) analysis of the merge and diverge areas where ramps and connectors join the I-405 was not performed, since recurrent congestion (LOS F) is common during the peak traffic periods. Rather, the traffic analysis was focused on determining whether or not the existing and proposed ramp configurations are consistent with current Caltrans design standards under forecasted traffic conditions. In addition, the impact of the closure of existing ramps would have on traffic operation at ramps located immediately upstream or downstream was evaluated for the build alternatives.

According to the California Highway Design Manual, the theoretical capacity of a single entrance or exit ramp is 1,500 vehicles per hour. For new construction, where design year estimated peak hour volumes exceed 1,500 vehicles per hour (veh/hr), a two-lane ramp should be provided. For this analysis, an effective capacity of 900 (veh/hr) is used for metered on-ramps. Table 3.5-3 shows the current morning and afternoon peak-hour volumes on 20 of the existing northbound on- and off-ramp locations within the project limits. The northbound on-ramp from eastbound Sunset Boulevard is the only location that currently carries volumes that exceed the theoretical capacity. Additional capacity may be required at this location in the future if queuing issues arise from traffic growth.

Table 3.5-3: Year 2005 Northbound Ramp Peak Hour Volumes

Post Mile	Ramp Description	Ramp Lanes	Capacity (veh/hr)	Morning AM Volume	Afternoon PM Volume
28.90	NB Off To National Blvd.	1	1,500	793	702
30.17	NB On From Olympic Blvd/Tennessee	2	1,800	1,007	986
30.68	NB Off To Santa Monica Blvd.	2	3,000	2,128	1,744
31.01	NB On From Santa Monica Blvd.	2	1,800	795	1,137
31.43	SEG NB Off To EB Wilshire Blvd.	2	3,000	1,681	1,019
31.43	SEG NB Off To WB Wilshire Blvd.	1	1,500	856	626
31.63	SEG NB On From EB Wilshire Blvd.	1	900	583	608
31.64	SEG NB On From WB Wilshire Blvd.	1	900	658	720
32.38	NB Off To Montana Ave.	1	1,500	551	304
32.81	NB Off To Sunset Blvd.	2	3,000	1,145	373
32.99	NB On From EB Sunset Blvd.	1	900	1,014	875
33.30	NB Off To Moraga Drive	2	3,000	309	98
33.47	NB On From Moraga Drive	2	1,800	314	784
34.55	NB Off To Getty Center Drive	1	1,500	93	64
34.73	NB On From Getty Center Drive	2	1,800	476	558
36.69	NB Off to Mulholland/Rimerton	1	1,500	504	469
36.99	NB On from Mulholland/Rimerton	2	1,800	246	405
38.63	NB Off To Ventura Blvd/Greenleaf St	1	1,500	422	486
38.77	NB On From Greenleaf St	2	1,800	559	1,027
16.72	US-101 NB Off to Sepulveda Blvd	1	1,500	672	429

Source: Traffic Analysis Report, July 2006

Note: P.M. – post mile; NB – northbound; SB – southbound; SEG – segment

Locations and volumes highlighted in **bold** type indicate ramps where demand exceeds capacity.

The purpose for the ramp data analysis was to validate the safety issues with stop-and-go traffic associated with vehicle weaving. The ramp data shows that certain ramps have low capacity volumes and there have been discussions regarding the closure of these ramps in order to reduce vehicle weaving. The build alternatives would have minimal effects on the redistribution of traffic to adjacent ramps and the Traffic Analysis Report concludes that overall safety and operation would be improved which would meet the purpose and need of the proposed project.

Southbound AM and PM peak hour ramp volumes are listed in Table 3.5-4. Of the twenty existing southbound ramps analyzed, only the on-ramp from Santa Monica Boulevard and the on-ramp from eastbound Wilshire Boulevard currently carry peak volumes that exceed the established theoretical capacity of 900 vehicles per lane per hour. In a queuing analysis of the existing ramps, all locations were found to have adequate storage for current volumes.

Table 3.5-4: Year 2005 Southbound Ramp Peak Hour Volumes

Post Mile	Ramp Description	Ramp Lanes	Capacity (veh/hr)	Morning AM Volume	Afternoon PM Volume
28.89	SB On from National Blvd	2	1,800	623	755
30.14	SB Off to Olympic/Pico	1	1,500	1,080	488
30.74	SB On from Santa Monica Blvd	2	1,800	1,887	1,848
31.03	SB Off to Santa Monica Blvd	2	3,000	1,553	1,052
31.38	SB On from EB Wilshire Blvd	1	900	934	729
31.48	SB Off to EB Wilshire Blvd	1	1,500	780	604
31.65	SB On from WB Wilshire Blvd	2	1,800	1,123	1,185
31.73	SB Off to WB Wilshire Blvd	1	1,500	903	693
32.90	SB On from EB Sunset Blvd	2	1,800	421	262
33.04	SB On from Church/Sunset Blvd	2	1,800	703	519
33.11	SB Off to Church/Sunset Blvd	2	3,000	1,340	1,249
34.65	SB On from Getty Center Dr	2	1,800	611	244
35.00	SB Off to Getty Center Dr	1	1,500	99	111
36.50	SB On from Skirball Center Dr	2	1,800	1,118	337
36.86	SB Off to Skirball Center Dr	1	1,500	338	518
38.22	SB On from Valley Vista/Sepulveda Blvd	2	1,800	1,459	441
38.61	SB Off to Valley Vista Blvd	1	1,500	160	333
39.09	SB On from Ventura Blvd	2	1,800	805	348
39.09	US-101 SB Off to Ventura Blvd	1	1,500	176	401
40.59	SB Off to Burbank Blvd	1	1,500	1,279	927

Source: Traffic Analysis Report, July 2006

Notes: P.M. – post mile; NB – northbound; SB – southbound; SEG – segment

Locations and volumes highlighted in **bold** type indicate ramps where demand exceeds theoretical capacity.

Level of Service Analysis

Intersections

Level of Service (LOS) for signalized intersections is defined in terms of delay, which is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometrics, traffic and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during ideal conditions: the absence of traffic control, the absence of geometric delay, the absence of any incidents and when there are no other vehicles on the road. Only the portion of total delay attributed to the control facility is quantified. This delay is called *control delay*. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Table 3.5-5 shows the relationship between controlled delay per vehicle and LOS for intersections with traffic signals.

Table 3.5-5: Level of Service for Intersections with Traffic Signals

Level of Service	Description of Traffic Conditions	Control Delay (sec/veh)
A	Insignificant delays: no approach phase is fully utilized and no vehicle waits longer than one red indication.	≤ 10
B	Minimal delays: an occasional approach phase is fully utilized. Drivers begin to feel restricted.	> 10 – 20
C	Acceptable delays: major approach phase may become fully utilized. Most drivers feel somewhat restricted.	> 20 – 35
D	Tolerable delays: drivers may wait through more than one red indication. Queues may develop but dissipate rapidly, without excessive delays.	> 35 – 55
E	Significant delays: volumes approaching capacity. Vehicles may wait through several cycles and long vehicle queues form upstream.	> 55 – 80
F	Excessive delays: represents conditions at capacity, with extremely long delays. Queues may block upstream intersections.	> 80

Source: Highway Capacity Manual, Transportation Research Board, 2000.

The LOS for a two-way-stop-control (TWSC) intersection is determined by the computed or measured control delay and is defined for each minor movement. LOS is not defined for the intersection as a whole. Table 3.5-6 shows the relationship between control delay per vehicle and LOS for intersections without traffic signals.

Table 3.5-6: Level of Service for Intersections without Traffic Signals

Level of Service	Description of Traffic Conditions	Control Delay (sec/veh)
A	No delay for stop-controlled approaches	0 – 10
B	Operations with minor delay	> 10 – 15
C	Operations with moderate delays	> 15 – 25
D	Operations with some delays	> 25 – 35
E	Operations with high delays and long queues	> 35 – 50
F	Operation with extreme congestion, with very high delays and long queues unacceptable to most drivers	> 50

Source: Highway Capacity Manual, Transportation Research Board, 2000.

The intersections of Santa Monica Boulevard with Sepulveda Boulevard, Veteran Avenue, and Westwood Boulevard are currently under construction. At these locations (study intersections #8, #9, and #10) the geometry shown in the design plans is used for the existing analysis. Construction of these intersections is scheduled for completion by early 2007.

A level of service (LOS) analysis at the project intersections was performed using Year 2005 turning movement volumes. The results of the LOS analysis are summarized in Table 3.5-7. Thirteen locations are at LOS F during one or both peak periods.

Table 3.5-7: Year 2005 Level of Service Summary

Intersection		Control	Morning AM Peak		Afternoon PM Peak	
			Delay (s/veh)	LOS	Delay (s/veh)	LOS
1	National Blvd & NB 405 Off-ramp	Signalized	18.6	B	16.3	B
2	National Blvd & Sepulveda Blvd	Signalized	33.4	C	45.1	D
3	Pico Blvd & Sepulveda Blvd	Signalized	52.3	D	136.6	F
4	NB 405 Tennessee On-Ramp & Cotner Ave	Unsignalized	65.0	F	19.6	C
5	Olympic Blvd & Cotner Ave	Signalized	10.5	B	15.4	B
6	Olympic Blvd & Sepulveda Blvd	Signalized	50.6	D	92.9	F
7	Santa Monica Blvd & Cotner Ave	Signalized	92.6	F	51.3	D
8	Santa Monica Blvd & Sepulveda Blvd	Signalized	100.6	F	104.2	F
9	Santa Monica Blvd & Veteran Ave	Signalized	25.8	C	28.7	C
10	Santa Monica Blvd & Westwood Blvd	Signalized	32.6	C	34.4	C
11	Wilshire Blvd & Sepulveda Blvd	Signalized	105.3	F	133.6	F
12	Wilshire Blvd & Veteran Ave	Signalized	65.9	E	120.5	F
13	Wilshire Blvd & Westwood Blvd	Signalized	40.7	D	45.4	D
14	Montana Off-ramp & Sepulveda Blvd	Signalized	21.8	C	58.0	E
15	Montana Ave & Sepulveda Blvd	Signalized	32.4	C	39.7	D
16	Montana Ave & Veteran Ave	Signalized	22.4	C	25.3	C
17	Sunset Blvd & NB 405 Off-ramp	Signalized	24.7	C	10.7	B
18	Sunset Blvd & Veteran Ave	Signalized	61.1	E	31.0	C
19	Moraga On/Off-ramps & Sepulveda Blvd	Signalized	76.5	E	40.5	D
20	NB 405 Getty Ctr Off-ramp & Sepulveda Blvd	Signalized	4.8	A	4.4	A
21	NB 405 Getty Ctr On-ramp & Sepulveda Blvd	Unsignalized	51.0	F	0.4	A
22	Skirball Center Dr & Mulholland Dr	Signalized	N/A	N/A	N/A	N/A
23	Skirball Center Dr & NB 405 On/Off-ramps	Signalized	9.4	A	9.0	A
24	Valley Vista Blvd & Sepulveda Blvd	Signalized	54.9	D	31.4	C
25	Greenleaf On/Off-ramps & Sepulveda Blvd	Signalized	73.6	E	49.9	D
26	Ventura Blvd & Sepulveda Blvd	Signalized	128.5	F	61.5	E
27	NB 101 On-ramp & Sepulveda Blvd	Unsignalized	0.4	A	8.1	A
28	NB 101 Off-ramp & N Sepulveda Blvd	Signalized	16.8	B	14.6	B
29	Magnolia Blvd & N Sepulveda Blvd	Signalized	16.5	B	64.5	E
30	Burbank Blvd & N Sepulveda Blvd	Signalized	157.1	F	272.0	F
31	Burbank Blvd & NB 405 On/Off-ramps	Signalized	13.9	B	53.7	D
32	Burbank Blvd & SB 405 On/Off-ramps	Signalized	58.3	E	52.4	D
33(a)	NB 101 On/Off-ramps & Haskell Ave	Unsignalized	16.4	C	13.5	B
33(b)	SB 101 Off-ramp & Haskell Ave	Unsignalized	9.4	A	8.6	A
34(a)	Ventura Blvd & Haskell Ave (North)	Signalized	14.7	B	9.7	A
34(b)	Ventura Blvd & Haskell Ave (South)	Signalized	13.0	B	4.0	A
35	Ventura Blvd & Orion Ave	Unsignalized	N/A	N/A	N/A	N/A
36	Ventura Blvd & SB 405 On/Off-ramps	Signalized	25.9	C	19.4	B
37	Fiume Walk & Sherman Oak Ave	Unsignalized	33.0	D	11.7	B

Intersection		Control	Morning AM Peak		Afternoon PM Peak	
			Delay (s/veh)	LOS	Delay (s/veh)	LOS
38	Fiume Walk & SB 405 Off-ramp	Unsignalized	2.8	A	5.0	A
39	Fiume Walk & N Sepulveda Blvd	Signalized	38.2	D	11.0	B
40	SB 405 On-ramp & N Sepulveda Blvd	Signalized	33.7	C	16.8	B
41	Skirball Center Dr & N Sepulveda Blvd	Signalized	146.1	F	123.1	F
42	Skirball Center Dr & SB 405 On/Off-ramps	Signalized	26.1	C	59.2	E
43	SB 405 Getty On/Off-ramps & Sepulveda Blvd	Signalized	16.3	B	16.6	B
44	SB 405 On/Off-ramps & Church Lane	Signalized	33.2	C	38.7	D
45	Sunset Blvd & Church Lane	Signalized	30.3	C	38.0	D
46	Wilshire Blvd & Federal Ave	Signalized	110.7	F	136.4	F
47	Santa Monica Blvd & SB 405 On/Off-ramps	Signalized	40.0	D	30.2	C
48	Santa Monica Blvd & Sawtelle Blvd	Signalized	52.0	D	554.2	F
49	Olympic Blvd & Sawtelle Blvd	Signalized	30.8	C	76.6	E
50	SB 405 Tennessee Off-ramp & Sawtelle Blvd	Signalized	29.8	C	45.4	D
51	Pico Blvd & Sawtelle Blvd	Signalized	29.4	C	72.6	E
52	National Blvd & Sawtelle Blvd	Signalized	64.6	E	71.0	E
53	National Blvd & SB 405 On-ramp	Signalized	6.8	A	6.7	A
54	Sepulveda Way & Sepulveda Blvd	Unsignalized	0.8	A	5.8	A

Source: Traffic Analysis Report, July 2006

Notes: Level of service (LOS) values based on HCM 2000 methodology.

N/A: Intersections screened from analysis.

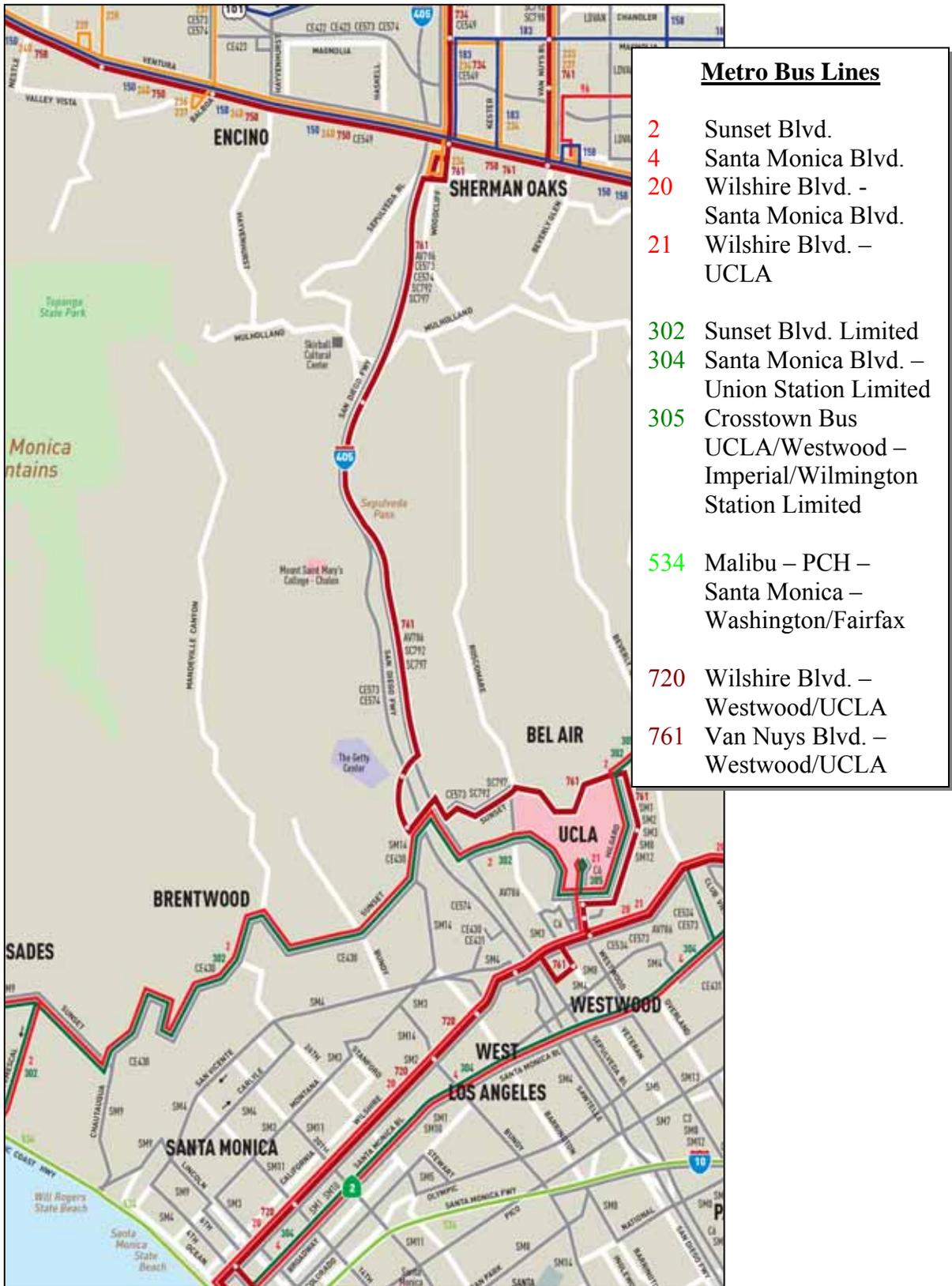
Parking

There is a parking lot that contains 7 parking spaces at the Getty View Trailhead, which is owned and operated by the Santa Monica Mountains Conservancy located near the Sepulveda Blvd. undercrossing. The Federal Building has a parking lot area that contains approximately 1,220 parking spaces at the southeast corner of Wilshire Blvd. and Sepulveda Blvd.

Transit

Several bus lines provide service along the I-405 HOV study area through the Sepulveda Pass connecting cities south of Bel Air to cities north of Sherman Oaks; Metro, LADOT, Antelope Valley Transit, and Santa Clarita Transit (see Figure 3.5-3: Map of Bus Lines in the Project Area). The Metro is operated by the Los Angeles County Metropolitan Transportation Authority (MTA) - the largest regional transportation agency that provides transit services within Los Angeles County.

Figure 3.5-3: Map of Bus Lines in the Project Area



Source: MTA

The LADOT Commuter Express is operated by the City of Los Angeles Department of Transportation (LADOT) and connects the City of Los Angeles to surrounding cities. The Antelope Valley Transit Bus connects the cities of Lancaster and Palmdale to Los Angeles County. The Santa Clarita Transit provides service between Century City and Santa Clarita. These bus lines also stop at the Skirball Center Park and Ride, a Los Angeles County Park and Ride facility located on 2350 Skirball Center Drive.

Metro and Big Blue Bus lines travel east to west across the I-405. The MTA operates several Metro bus lines along Sunset Blvd, Wilshire Blvd, and Santa Monica Blvd. Santa Monica Municipal Bus Lines operates the Santa Monica's Big Blue Bus that connects surrounding cities to the City of Santa Monica. The Big Blue Bus service travels on Wilshire Blvd, Santa Monica Blvd, Olympic Blvd, Pico Blvd, and National Blvd.

Pedestrian and Bicycle Access

Bicycle facilities are designated into three classifications:

Class I Bike Paths are special pathway facilities for the exclusive use of *bicycles* which are separated from motor vehicle facilities by space or a physical barrier. A bike path may be located on a portion of a street or highway right-of-way or in a special right-of-way not related to a motor vehicle facility; it may be grade separated or have street crossings at designated locations. It is identified with "Bike Route" signs and also may have pavement markings.

Class II Bike Lanes are lanes on the paved area of a road for preferential use by *bicycles*. It is usually located along the edge of the paved area or between the parking lane and the first motor vehicle travel lane. It is identified as "Bike Lane" or "Bike Route" guide-signing, special-lane lines, and other pavement markings. *Bicycles* have exclusive use of a bike lane for longitudinal travel, but must share the facility with motor vehicles and pedestrians crossing it.

Class III Bike Routes are streets identified as a *bicycle* facility by "Bike Route" guide signing only. There are no special lane markings; *bicycle* traffic shares the roadway with motor vehicles.

A *Class III* Bike Route runs along Sepulveda Blvd from I-10 to Skirball Center Dr. A *Class II* Bike Lane continues from Skirball Center Dr to south of Ventura Blvd.

The City of Los Angeles plans to install *Class II* Bike Lanes from Bel Air Crest Road to Skirball Center Dr. as part of the Sepulveda Blvd Reversible Lane, Bike Lane and Intersection Improvement Project. This project would add a northbound bike lane and a wider southbound shoulder. A 6-foot wide bike lane and shoulder would require the construction of a retaining wall on the west side of Skirball Center Dr. and on the east side of a segment of Sepulveda Blvd.

An 8-foot wide paved sidewalk would be provided along eastbound Wilshire Blvd. near the federal building. A 5-foot wide sidewalk would be provided on the Sunset Blvd. Overcrossing, Skirball Center Drive Overcrossing, Mulholland Drive Overcrossing, and at other various locations. 4 foot wide) shoulders would also be provided on these three overcrossings that could be jointly used as a bicycle route.

3.5.3 Traffic and Transportation/Pedestrian and Bicycle Facilities Impacts

Alternative 1: No Build

Alternative 1 is the No Build Alternative. In the Alternative 1 condition, it is assumed that all existing conditions and facilities would remain unchanged. The current construction of the Santa Monica Boulevard Transit Parkway Project has been assumed in place and is carried forward in the Alternative 1 scenario. Analysis results for the I-405 freeway mainline, access ramps, and study intersections within the project study area for the horizon years of 2015 and 2031 are presented in this section. Traffic volume forecasts came from existing traffic count data using growth factors.

Freeways

The number of travel lanes along I-405 would remain the same as existing in the Alternative 1 (No Build) condition. Traffic volumes are forecast to increase by 1.47% per year, or 15.7% from the base year of 2005 to year 2015, and 46.1% from 2005 to year 2031. Forecast volumes on the I-405 for the horizon years of 2015 and 2031 are shown in Figures 3.5-4 and 3.5-5. Without additional capacity, the increase in volume due to ambient growth alone is expected to extend the congested period in both directions, to begin earlier in the day and extend later into the evening. Vehicles traveling during the congested period would experience increased delay, with longer travel times between the same origin and destination. Without measures to increase freeway capacity or reduce vehicle trips, conditions throughout the corridor would continue to deteriorate in the future. For Alternative 1: No Build, the study corridor is forecast to have 27,800 vehicle-hours of delay per day in the year 2015. This will increase to 59,430 vehicle-hours in the year 2031.

The methodology described in the traffic report was used to estimate the daily increase in vehicular delay that would be experienced in the horizon years due to ambient growth. These values, which are summarized in Table 3.5-8, serve as a baseline from which to compare the build alternatives, and do not represent actual delay.

Table 3.5-8: Alternative 1 (No Build) Horizon Year Increase in Vehicular Delay

I-405 Freeway Segment	Increase in Daily Vehicular Delay Over Year 2005 Values (veh-hours)	
	Year 2015	Year 2031
Northbound Mainline	6,330	18,800
Southbound Mainline	5,170	24,120
Southbound HOV Lane	128	338

Source: Traffic Analysis Report, July 2006

Northbound and southbound AM and PM peak hour ramp volumes forecast for Alternative 1 (No Build) for year 2015 and 2031 are listed in Tables 3.5-9, 3.5-10 and also in Tables 3.5-12 and 3.5-13 in comparison with Alternative 2 and 3.

If no changes are made to the current system, the northbound off-ramp to Santa Monica Boulevard, northbound on-ramp from westbound Wilshire Boulevard, northbound on-ramp from eastbound Sunset Boulevard, southbound off-ramp to Olympic/Pico Boulevard, southbound on-ramp from Santa Monica Boulevard, southbound on-ramp from eastbound Wilshire Boulevard, southbound on-ramp at Valley Vista/Sepulveda Boulevard, and the southbound off-ramp to Burbank Boulevard are forecast to carry volumes that exceed capacity during one or both peak periods. Additional capacity may be required at these locations in the future if queuing issues arise due to ambient traffic growth. A preliminary queuing analysis of the Year 2031 conditions for this scenario found the northbound off-ramp to eastbound Wilshire Boulevard to be a potential location for capacity issues.

Table 3.5-9: Alternative 1 (No Build) Year 2015 & 2031 Northbound Ramp Peak Hour Volumes

P.M.	Ramp Description	Ramp Lanes	Capacity (veh/hr)	Year 2015		Year 2031	
				AM Volume	PM Volume	AM Volume	PM Volume
28.90	NB Off To National Blvd.	1	1,500	918	812	1,159	1,026
30.17	NB On From Olympic Blvd/Tennessee	2	1,800	1,165	1,141	1,471	1,441
30.68	NB Off To Santa Monica Blvd.	2	3,000	2,462	2,018	3,109	2,548
31.01	NB On From Santa Monica Blvd.	3	2,700	920	1,316	1,161	1,661
31.43	SEG NB Off To EB Wilshire Blvd.	2	3,000	1,945	1,179	2,456	1,489
31.43	SEG NB Off To WB Wilshire Blvd.	1	1,500	990	724	1,251	915
31.63	SEG NB On From EB Wilshire Blvd.	1	900	675	703	852	888
31.64	SEG NB On From WB Wilshire Blvd.	1	900	761	833	961	1,052
32.38	NB Off To Montana Ave.	1	1,500	637	352	804	444
32.81	NB Off To Sunset Blvd.	2	3,000	1,325	432	1,673	546
32.99	NB On From EB Sunset Blvd.	1	900	1,173	1,012	1,481	1,278
33.30	NB Off To Moraga Drive	2	3,000	358	113	452	143
33.47	NB On From Moraga Drive	2	1,800	363	907	459	1,145
34.55	NB Off To Getty Center Drive	1	1,500	108	74	136	94
34.73	NB On From Getty Center Drive	2	1,800	551	645	695	815
36.69	NB Off to Mulholland/Rimerton	1	1,500	583	543	736	685
36.99	NB On from Mulholland/Rimerton	2	1,800	285	469	359	592
38.63	NB Off To Ventura Blvd/Greenleaf St	1	1,500	488	562	617	710
38.77	NB On From Greenleaf St	2	1,800	647	1,188	817	1,500
16.72	US-101 NB Off to Sepulveda Blvd	1	1,500	778	496	672	429

Source: Traffic Analysis Report, July 2006

Notes: P.M. – post mile; NB – northbound; SB – southbound; SEG – segment

Locations and volumes highlighted in **bold** type indicate ramps where demand exceeds theoretical capacity.

Table 3.5-10: Alternative 1 (No Build) Year 2015 & 2031 Southbound Ramp Peak Hour Volumes

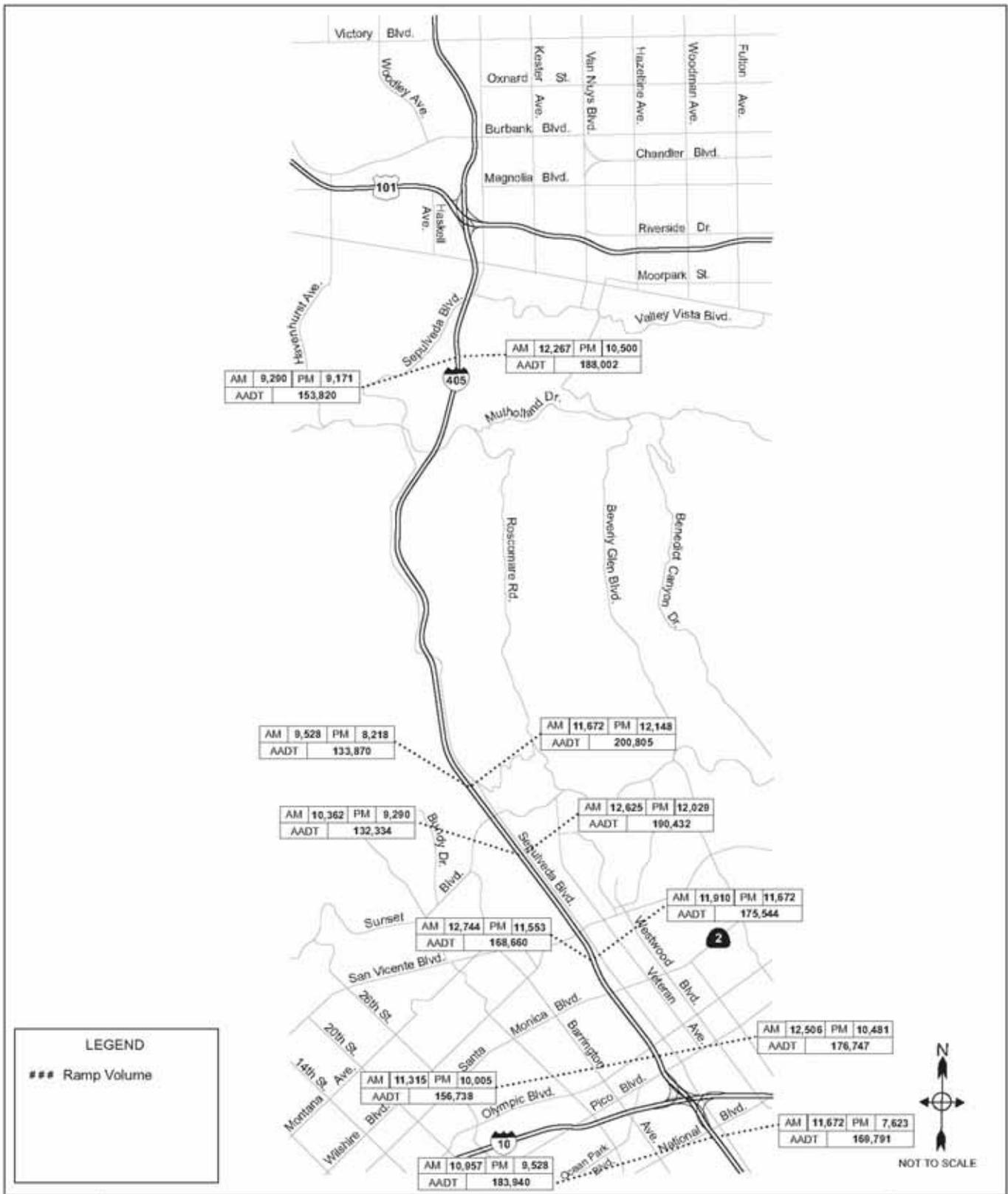
P.M.	Ramp Description	Ramp Lanes	Capacity (veh/hr)	Year 2015		Year 2031	
				AM Volume	PM Volume	AM Volume	PM Volume
28.89	SB On from National Blvd	2	1,800	721	873	910	1,102
30.14	SB Off to Olympic/Pico	1	1,500	1,249	564	1,577	712
30.74	SB On from Santa Monica Blvd	2	1,800	2,183	2,138	2,757	2,700
31.03	SB Off to Santa Monica Blvd	2	3,000	1,797	1,217	2,269	1,537
31.38	SB On from EB Wilshire Blvd	1	900	1,081	843	1,365	1,065
31.48	SB Off to EB Wilshire Blvd	1	1,500	902	699	1,140	882
31.65	SB On from WB Wilshire Blvd	2	1,800	1,299	1,371	1,641	1,731
31.73	SB Off to WB Wilshire Blvd	1	1,500	1,045	802	1,319	1,012
32.90	SB On from EB Sunset Blvd	2	1,800	487	303	615	383
33.04	SB On from Church/Sunset Blvd	2	1,800	813	601	1,027	759
33.11	SB Off to Church/Sunset Blvd	2	3,000	1,550	1,445	1,957	1,825
34.65	SB On from Getty Center Dr	2	1,800	707	282	893	356
35.00	SB Off to Getty Center Dr	1	1,500	114	128	144	162
36.50	SB On from Skirball Center Dr	2	1,800	1,294	390	1,633	492
36.86	SB Off to Skirball Center Dr	1	1,500	391	599	494	757
38.22	SB On from Valley Vista/Sepulveda Blvd	2	1,800	1,688	510	2,132	644
38.61	SB Off to Valley Vista Blvd	1	1,500	185	385	234	487
39.09	SB On from Ventura Blvd	2	1,800	931	403	1,176	508
39.09	US-101 SB Off to Ventura Blvd	1	1,500	204	464	258	586
40.59	SB Off to Burbank Blvd	1	1,500	1,480	1,072	1,615	1,171

Source: Traffic Analysis Report, July 2006

Notes: P.M. – post mile; NB – northbound; SB – southbound; SEG – segment

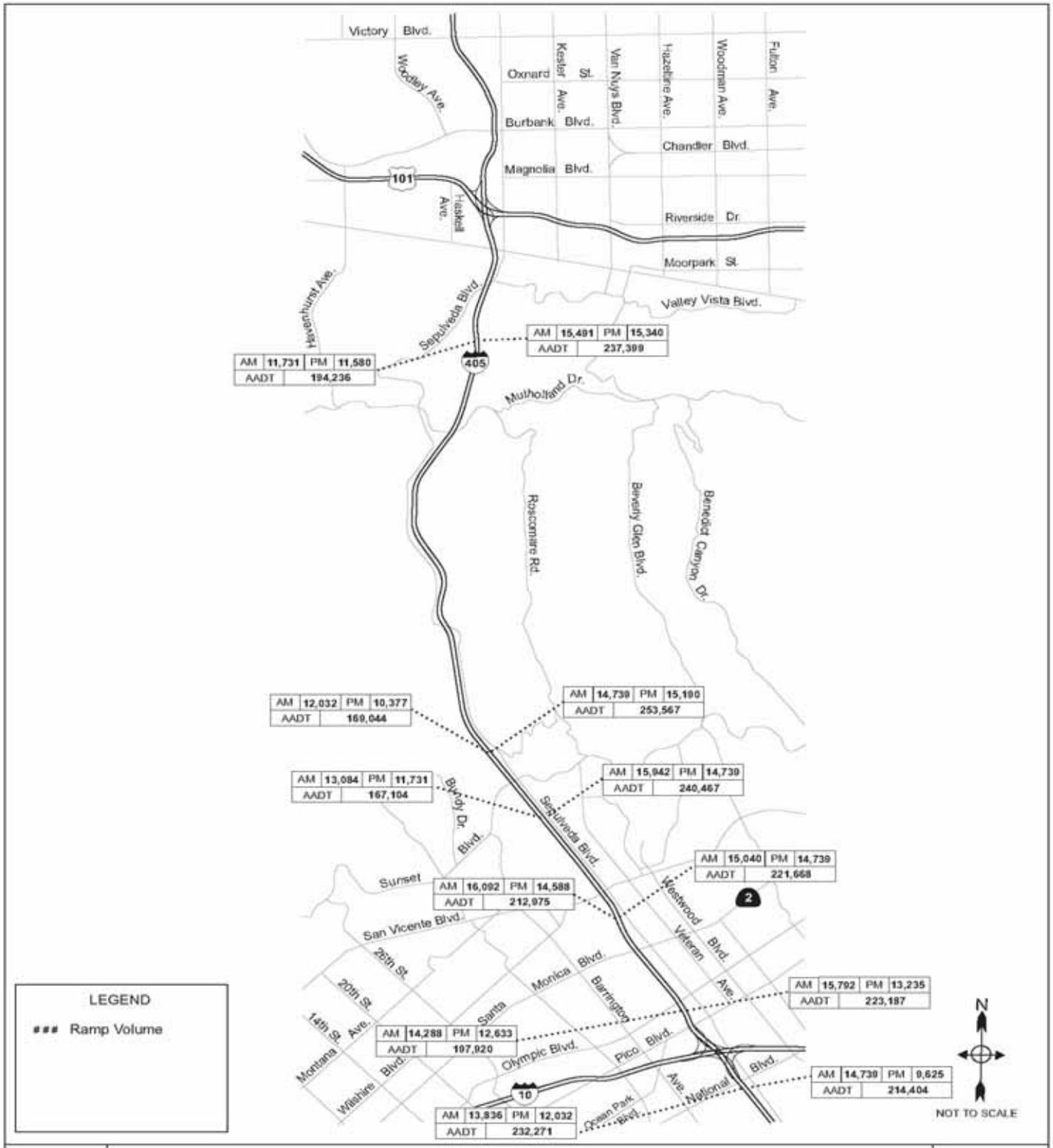
Locations and volumes highlighted in **bold** type indicate ramps where demand exceeds theoretical capacity.

Figure 3.5-4. Forecast Volumes on the I-405 for the Horizon Year of 2015



Source: Traffic Analysis Report, July 2006

Figure 3.5-5. Forecast Volumes on the I-405 for the Horizon Year of 2031



Intersections

An LOS analysis for 54 project study area intersections was performed using forecast years 2015 and 2031 turning movement volumes. Table 3.5-11 shows years 2015 and 2031 morning and afternoon peak-hour intersection volumes. For year 2015, during one or both peak periods, 24 locations are forecast to perform at LOS F. For year 2031, during one or both peak periods due to ambient growth, 41 locations are forecast to perform at LOS F.

Table 3.5-11: Alternative 1 (No Build) Year 2015 & 2031 Intersection Level of Service Summary

Intersection		Control	Year 2015				Year 2031			
			AM Peak		PM Peak		AM Peak		PM Peak	
			Delay (s/veh)	LOS						
1	National Blvd & NB 405 Off-ramp	S	19.7	B	18.0	B	24.5	C	46.1	D
2	National Blvd & Sepulveda Blvd	S	58.8	E	70.7	E	151.2	F	152.5	F
3	Pico Blvd & Sepulveda Blvd	S	93.6	F	201.0	F	189.2	F	349.0	F
4	NB 405 Tennessee On-Ramp & Cotner Ave	U	111.1	F	33.9	D	213.4	F	93.0	F
5	Olympic Blvd & Cotner Ave	S	14.5	B	22.9	C	45.7	D	75.3	E
6	Olympic Blvd & Sepulveda Blvd	S	91.9	F	158.9	F	205.6	F	306.0	F
7	Santa Monica Blvd & Cotner Ave	S	150.1	F	84.2	F	282.6	F	181.7	F
8	Santa Monica Blvd & Sepulveda Blvd	S	155.1	F	163.9	F	302.1	F	300.7	F
9	Santa Monica Blvd & Veteran Ave	S	28.9	C	34.4	C	57.6	E	75.3	E
10	Santa Monica Blvd & Westwood Blvd	S	45.0	D	54.8	D	153.1	F	148.4	F
11	Wilshire Blvd & Sepulveda Blvd	S	220.0	F	205.8	F	350.4	F	381.6	F
12	Wilshire Blvd & Veteran Ave	S	111.9	F	163.0	F	275.8	F	326.6	F
13	Wilshire Blvd & Westwood Blvd	S	51.5	D	73.4	E	181.6	F	225.1	F
14	Montana Off-ramp & Sepulveda Blvd	S	38.5	D	120.6	F	83.7	F	255.7	F
15	Montana Ave & Sepulveda Blvd	S	49.0	D	70.3	E	92.1	F	179.0	F
16	Montana Ave & Veteran Ave	S	36.0	D	34.2	C	121.1	F	112.6	F
17	Sunset Blvd & NB 405 Off-ramp	S	44.7	D	11.1	B	103.5	F	13.0	B
18	Sunset Blvd & Veteran Ave	S	103.8	F	48.1	D	195.8	F	126.3	F
19	Moraga On/Off-ramps & Sepulveda Blvd	S	123.0	F	50.8	D	232.8	F	84.1	F
20	NB 405 Getty Ctr Off-ramp & Sepulveda Blvd	S	7.3	A	8.0	A	51.5	D	68.0	E
21	NB 405 Getty Ctr On-ramp & Sepulveda Blvd	U	600.5	F	0.8	A	601.4	F	1.2	A
22	Skirball Center Dr & Mulholland Dr	S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
23	Skirball Center Dr & NB 405 On/Off-ramps	S	10.5	B	10.2	B	18.3	B	19.5	B
24	Valley Vista Blvd & Sepulveda Blvd	S	78.0	E	74.0	E	163.5	F	164.6	F
25	Greenleaf On/Off-ramps & Sepulveda Blvd	S	135.3	F	85.3	F	264.7	F	185.2	F
26	Ventura Blvd & Sepulveda Blvd	S	189.0	F	100.2	F	321.0	F	204.2	F
27	NB 101 On-ramp & Sepulveda Blvd	U	0.4	A	23.5	C	0.5	A	95.3	F
28	NB 101 Off-ramp & N Sepulveda Blvd	S	22.7	C	28.2	C	68.3	E	94.7	F
29	Magnolia Blvd & N Sepulveda Blvd	S	19.6	B	125.2	F	32.0	C	255.8	F
30	Burbank Blvd & N Sepulveda Blvd	S	225.6	F	383.8	F	392.2	F	598.6	F
31	Burbank Blvd & NB 405 On/Off-ramps	S	21.0	C	101.6	F	85.3	F	234.1	F
32	Burbank Blvd & SB 405 On/Off-ramps	S	103.7	F	77.8	E	197.4	F	203.1	F

Intersection		Control	Year 2015				Year 2031			
			AM Peak		PM Peak		AM Peak		PM Peak	
			Delay (s/veh)	LOS						
33(a)	NB 101 On/Off-ramps & Haskell Ave	U	25.3	D	17.3	C	77.0	F	43.8	E
33(b)	SB 101 Off-ramp & Haskell Ave	U	9.4	A	8.1	A	10.6	B	8.5	A
34(a)	Ventura Blvd & Haskell Ave (North)	S	18.4	B	16.3	B	35.8	D	25.1	C
34(b)	Ventura Blvd & Haskell Ave (South)	S	12.9	B	4.9	A	27.8	C	8.4	A
35	Ventura Blvd & Orion Ave	U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
36	Ventura Blvd & SB 405 On/Off-ramps	S	44.3	D	30.3	C	73.4	E	95.8	F
37	Fiume Walk & Sherman Oak Ave	U	68.9	F	14.1	B	176.5	F	26.5	D
38	Fiume Walk & SB 405 Off-ramp	U	3.4	A	5.7	A	6.1	A	8.2	A
39	Fiume Walk & N Sepulveda Blvd	S	51.2	D	11.8	B	115.1	F	16.2	B
40	SB 405 On-ramp & N Sepulveda Blvd	S	58.2	E	17.7	B	107.7	F	22.8	C
41	Skirball Center Dr & N Sepulveda Blvd	S	229.3	F	151.0	F	412.0	F	312.9	F
42	Skirball Center Dr & SB 405 On/Off-ramps	S	25.5	C	65.6	E	26.5	C	71.8	E
43	SB 405 Getty On/Off-ramps & Sepulveda Blvd	S	16.3	B	16.5	B	36.3	D	18.2	B
44	SB 405 On/Off-ramps & Church Lane	S	48.6	D	49.2	D	105.9	F	134.1	F
45	Sunset Blvd & Church Lane	S	33.8	C	50.8	D	53.6	D	111.9	F
46	Wilshire Blvd & Federal Ave	S	184.8	F	215.5	F	354.8	F	372.6	F
47	Santa Monica Blvd & SB 405 On/Off-ramps	S	71.7	E	46.5	D	182.9	F	106.5	F
48	Santa Monica Blvd & Sawtelle Blvd	S	89.1	F	739.1	F	188.1	F	994.6	F
49	Olympic Blvd & Sawtelle Blvd	S	49.3	D	116.3	F	122.3	F	223.8	F
50	SB 405 Tennessee Off-ramp & Sawtelle Blvd	S	35.7	D	73.7	E	100.0	F	142.2	F
51	Pico Blvd & Sawtelle Blvd	S	46.0	D	105.0	F	117.5	F	212.2	F
52	National Blvd & Sawtelle Blvd	S	110.6	F	94.3	F	155.9	F	172.0	F
53	National Blvd & SB 405 On-ramp	S	8.2	A	8.6	A	16.7	B	34.3	C
54	Sepulveda Way & Sepulveda Blvd	U	1.7	A	9.0	A	2.2	A	27.0	D

Source: Traffic Analysis Report, July 2006

Notes: S – Signalized; U – Unsignalized; N/A – Intersection screened from analysis, no impact. DNE – Due to the removal of a freeway ramp, there is no longer an intersection at this location. Level of service (LOS) values based on HCM 2000 methodology.

Alternative 2 – Northbound HOV Lane

Freeways

In Alternative 2, the existing facility would be widened to add one standard northbound HOV lane. The number of lanes in each freeway segment for this alternative is noted in Figure 3.5-1. Current freeway design standards would be provided for northbound I-405 within the project limits except through the I-405/I-10 interchange. Most of the freeway widening would occur along the eastside of I-405, with some segment widening along the westside of the freeway.

For this analysis, it is assumed that the addition of the northbound HOV lane would not affect forecast mainline volumes, and the volumes shown in Figures 3.5-3 and 3.5-4 apply for all of the build alternatives. A freeway facility is neither an origin nor a destination, as it does not produce nor attract trips. The freeway provides a route from one location to another, but it does not change the number of daily trips that need to be made from point A to point B. If it is assumed that trips are pulled off of adjacent routes, the analysis would require regional modeling that is beyond the scope of this study. For the purpose of this analysis, it is assumed that the travel demand is independent of the freeway capacity.

The HOV lane is expected to carry volumes proportional to the adjacent mixed-flow lanes, with a maximum capacity of 1,700 vehicles per hour. The Alternative 2 improvements would increase capacity in the northbound direction only, and would not affect the southbound roadway, so there would be no change in vehicular delay between Alternative 1 and Alternative 2 for the southbound direction.

The northbound capacity increase provided in Alternative 2 results in a reduction of 14,860 vehicle-hours of delay for the year 2015 and 16,060 vehicle-hours of delay for the year 2031, compared with No Build conditions.

Ramps and Connectors

To accommodate the freeway widening and geometrical improvements included in the Alternative 2 design, some of the access ramps within the study corridor would need to be relocated or removed.

Alternative 2 improvements increase capacity in the northbound direction only. Northbound peak hour volumes were forecast for years 2015 and 2031 and ramps that would experience a change in capacity in comparison to Alternative 1 (No Build) are listed in Tables 3.5-12 and 3.5-13. In a queuing analysis for this scenario, all ramp facilities were found to be adequate for the forecast year 2015 conditions. However, for forecast year 2031, the northbound off-ramp to Santa Monica Blvd, northbound off-ramp to westbound Wilshire Boulevard and the northbound on-ramp from westbound Wilshire Blvd. Street were found to be potential locations for capacity issues in the year 2031. The ramp volumes at all other locations are the same as in Alternative 1 (No Build) and the capacity issues are not related to the HOV Lane project. These capacity issues are due to ambient traffic growth alone, and are not a result of the HOV Lane project. Further improvements to accommodate ramp capacity would require additional right-of-way, which would conflict with community opinion.

Table 3.5-12: Alternative 2: Year 2015 Northbound Ramp Peak Hour Volumes

P.M.	Ramp Description	Ramp Lanes	Capacity (veh/hr)	Alternative 1: No Build		Alternative 2	
				AM Volume	PM Volume	AM Volume	PM Volume
28.90	NB Off To National Blvd.	1	1,500	918	812	918	812
30.17	NB On From Olympic Blvd/Tennessee	2	1,800	1,165	1,141	1,165	1,141
30.68	NB Off To Santa Monica Blvd.	2	3,000	2,462	2,018	2,462	2,018
31.01	NB On From Santa Monica Blvd.	3	2,700	920	1,316	920	1,316
31.43	SEG NB Off To EB Wilshire Blvd.	2	3,000	1,945	1,179	2,136	1,284
31.43	SEG NB Off To WB Wilshire Blvd.	1	1,500	990	724	1,245	865
31.63	SEG NB On From EB Wilshire Blvd.	1	900	675	703	675	703
31.64	SEG NB On From WB Wilshire Blvd.	1	900	761	833	761	833
32.38	NB Off To Montana Ave.	1	1,500	637	352	Closed	Closed
32.81	NB Off To Sunset Blvd.	2	3,000	1,325	432	1,516	538
32.99	NB On From EB Sunset Blvd.	1	900	1,173	1,012	1,173	1,012
33.30	NB Off To Moraga Drive	2	3,000	358	113	358	113
33.47	NB On From Moraga Drive	2	1,800	363	907	363	907
34.55	NB Off To Getty Center Drive	1	1,500	108	74	551	645
34.73	NB On From Getty Center Drive	2	1,800	551	645	108	74
36.69	NB Off to Mulholland/Rimerton	1	1,500	583	543	583	543
36.99	NB On from Mulholland/Rimerton	2	1,800	285	469	285	469
38.63	NB Off To Ventura Blvd/Greenleaf St	1	1,500	488	562	488	562
38.77	NB On From Greenleaf St	2	1,800	647	1,188	647	1,188
16.72	US-101 NB Off to Sepulveda Blvd	1	1,500	778	496	1,032	791

Source: Traffic Analysis Report, July 2006

Notes: P.M. – post mile; NB – northbound; SB – southbound; SEG – segment

Table 3.5-13: Alternative 2: Year 2031 Northbound Ramp Peak Hour Volumes

P.M.	Ramp Description	Ramp Lanes	Capacity (veh/hr)	Alternative 1: No Build		Alternative 2	
				AM Volume	PM Volume	AM Volume	PM Volume
28.90	NB Off To National Blvd.	1	1,500	1,159	1,026	1,159	1,026
30.17	NB On From Olympic Blvd/Tennessee	2	1,800	1,471	1,441	1,471	1,441
30.68	NB Off To Santa Monica Blvd.	2	3,000	3,109	2,548	3,109	2,548
31.01	NB On From Santa Monica Blvd.	3	2,700	1,161	1,661	1,161	1,661
31.43	SEG NB Off To EB Wilshire Blvd.	2	3,000	2,456	1,489	2,697	1,622
31.43	SEG NB Off To WB Wilshire Blvd.	1	1,500	1,251	915	1,573	1,093
31.63	SEG NB On From EB Wilshire Blvd.	1	900	852	888	852	888
31.64	SEG NB On From WB Wilshire Blvd.	1	900	961	1,052	961	1,052
32.38	NB Off To Montana Ave.	1	1,500	804	444	Closed	Closed
32.81	NB Off To Sunset Blvd.	2	3,000	1,673	546	1,914	679

P.M.	Ramp Description	Ramp Lanes	Capacity (veh/hr)	Alternative 1: No Build		Alternative 2	
				AM Volume	PM Volume	AM Volume	PM Volume
32.99	NB On From EB Sunset Blvd.	1	900	1,481	1,278	1,481	1,278
33.30	NB Off To Moraga Drive	2	3,000	452	143	452	143
33.47	NB On From Moraga Drive	2	1,800	459	1,145	459	1,145
34.55	NB Off To Getty Center Drive	1	1,500	136	94	136	94
34.73	NB On From Getty Center Drive	2	1,800	695	815	695	815
36.69	NB Off to Mulholland/Rimerton	1	1,500	736	685	736	685
36.99	NB On from Mulholland/Rimerton	2	1,800	359	592	359	592
38.63	NB Off To Ventura Blvd/Greenleaf St	1	1,500	617	710	617	710
38.77	NB On From Greenleaf St	2	1,800	817	1,500	817	1,500
16.72	US-101 NB Off to Sepulveda Blvd	1	1,500	672	429	1,303	999

Source: Traffic Analysis Report, July 2006

Notes: P.M. – post mile; NB – northbound; SB – southbound; SEG – segment

Locations and volumes highlighted in **bold** type indicate ramps where demand exceeds theoretical capacity.

Intersections

The ramp closures and proposed modifications associated with Alternative 2 result in changes to intersection geometry at various locations and are listed in Table 3.5-14.

Table 3.5-14: Alternative 2: Modifications to Intersection Geometry

Ramp Modification	Corresponding Study Intersection Modification
Northbound I-405 off-ramp to Montana Avenue removed	With the off-ramp removed, there would no longer be an intersection at this location. Only the northbound and southbound through lanes on Sepulveda Boulevard would remain.
Northbound interchange improvements at Sunset Boulevard	The interchange improvements at this location include the addition of a second northbound right-turn lane, a third eastbound through lane, and a second eastbound right- turn lane.
Northbound interchange improvements at Getty Center Drive	The T-intersections formed by the northbound off-ramp and on-ramp with Sepulveda Boulevard would be replaced with a standard diamond interchange to form a single four-legged intersection. Intersection 20 would be removed, and intersection 21 would be signalized and reconfigured with one northbound through lane, one northbound through-right lane, one southbound left-turn lane, two southbound through lanes, one eastbound left-turn lane, and one eastbound right-turn lane. (Sepulveda Boulevard is considered to be north and south legs, and the northbound off-ramp is the west leg.)
Southbound Skirball Center Drive interchange improvements	The southbound on- and off-ramps to Skirball/Mulholland would be removed and replaced with hook ramps that connect directly to Sepulveda Boulevard. Intersection #42 would become the intersection of the new ramps with Sepulveda Boulevard, and consists of one northbound through lane, one northbound through right lane, one southbound left-turn lane, two southbound through lanes, one westbound left-turn lane, and one westbound right-turn lane. (Sepulveda Boulevard is the north and south legs, and the southbound off-ramp is the east leg.)

Source: Traffic Analysis Report, July 2006

Parking

There is a parking lot that contains 7 parking spaces at the Getty View Trailhead, which is located near the Sepulveda Blvd. undercrossing. These parking spaces would be removed and relocated near the reconstructed Getty View Trailhead due to the reconfiguration of the Getty Center interchange.

The Federal Building has a parking lot area that contains approximately 1,220 parking spaces at the southeast corner of Wilshire Blvd. and Sepulveda Blvd. A permit from the Federal Land Agency would be needed for an aerial highway easement and a portion of the federal parking lot area. Approximately 30 parking spaces would be removed to accommodate the new Wilshire Blvd. interchange.

Transit

Transit service may be interrupted intermittently during construction or moved during construction. However, bus stops will be restored after construction and some may possibly be relocated to a different location due to configuration changes associated with the proposed project. The bus stop located between the northbound I-405 on/off-ramps at Skirball Center Drive would be relocated to a local street.

Pedestrian and Bicycle Access

An 8-foot wide sidewalk would be provided along eastbound Wilshire Blvd. near the Federal Building. A 5-foot sidewalk would be provided on the Sunset Blvd. overcrossing, Skirball Center Drive overcrossing, Mulholland Drive overcrossing, and at other various locations within the project limits. 4-foot shoulders would be provided on these three overcrossings which could be jointly used as a bicycle lane. All pedestrian and bicycle access would be maintained throughout construction.

Alternative 3 – Add a Standard Northbound HOV Lane and Standardize Southbound HOV Lane, Mixed-Flow Lanes, Median and Shoulder

Freeways

In this alternative, the existing facility would be widened to add one standard northbound HOV lane and to standardize the non-standard southbound HOV lane, five mixed-flow lanes, median, and shoulder. Current freeway design standards would be provided for the northbound and southbound I-405 within the project limits, except through the I-405/I-10 interchange. It would provide for a 12-foot half median, 12-foot HOV lane, 4-foot HOV buffer, five 12-foot mixed-flow lanes, and a 10-foot outside shoulder in each direction of travel. I-405 would be widened along the eastside similar to Alternative 2, and along most of the westside throughout the project limits. Changes below are exclusive to Alternative 3:

- Closure of the southbound on-ramp from eastbound Sunset Boulevard. In conjunction with this ramp closure, the ramp intersection located immediately north of the Sunset Boulevard/Church Lane intersection would be reconfigured so that the existing “pork chop”-shaped island would be eliminated and the middle lane at the northbound approach would be changed from a through lane to a shared through/right-turn lane.
- Approximately 2,300 feet of Sepulveda Boulevard would be realigned along the westside of I-405 north of the Getty Center/I-405 interchange due to the proposed widening along the westside of I-405.
- Most of Church Lane between approximately Chenault Street and Kiel Street would be realigned to the west to facilitate the I-405 southbound widening.

The proposed improvements associated with Alternative 3 do not affect forecast mainline volumes, and the volumes shown in Figures 3.5-4 and 3.5-5 apply to this alternative as well. The reduction in vehicular delay compared to the Alternative 1: No Build condition is summarized in Table 3.5-15.

Table 3.5-15: Alternative 3: Decrease in Daily Vehicular Delay Compared to Alternative 1 (No Build)

I-405 Freeway Segment	Decrease in Daily Vehicular Delay Compared to Alternative 1 (No Build)	
	(veh-hours)	
	Year 2015	Year 2031
Northbound Mainline	14,860	16,060
Southbound Mainline	420	80
Southbound HOV Lane	40	50

Source: Traffic Analysis Report, July 2006

Ramps and Connectors

In order to accommodate freeway widening and geometrical improvements, some of the access ramps within the study corridor would need to be relocated or removed. Refer to the Alternative 2 section on Ramps and Connectors which explains the common features associated with the widening and geometrical improvements necessary.

Alternative 3 improvements increase capacity in both the northbound and southbound direction. Northbound AM and PM peak hour ramp volumes forecast for year 2015 and 2031 would be the same as Alternative 2 since Alternative 2 improvements increase capacity in the northbound direction only. Please refer to Tables 3.5-12 and 3.5-13 for northbound AM and PM peak hour ramp volumes forecast for year 2015 and 2031. Southbound AM and PM peak hour volumes were forecast for years 2015 and 2031 and the only change in comparison to Alternative 2 would be associated with the proposed closure of the southbound on-ramp from eastbound Sunset Boulevard. As a result, traffic would be redistributed to the Sunset Boulevard/Church Lane on-ramp.

Intersections

The ramp closures and modifications associated with Alternative 3 result in changes to intersection geometry at various locations. These closures and modifications would be the same as Alternative 2. Please refer to Alternative 2A section under Intersections and all corresponding tables.

Parking

Parking impacts at the Getty View Trailhead and the Federal Building would be the same as Alternative 2.

Transit

Transit service impacts would be the same as Alternative 2.

Pedestrian and Bicycle Access

Pedestrian and bicycle access impacts would be the same as Alternative 2.

Impacts Associated with the Closure of the Southbound Valley Vista Off-ramp Design Option

The existing southbound Valley Vista Blvd. on/off-ramps combined with the northbound Sepulveda Blvd. on/off-ramps, constitute a full-service interchange. This closure would require approval from the FHWA office in Washington D.C., which strongly discourages elimination of individual ramps from a full-service interchange. The City of Los Angeles Department of Transportation would also need to provide consent to the closure of this off-ramp.

The southbound I-405 exit to Valley Vista Boulevard would be closed as part of this project as a design option. Currently, this off-ramp forms a T-intersection with Fiume Walk, and provides access to Sepulveda Boulevard and Sherman Oaks Avenue. This closure would require approval from the FHWA office in Washington D.C., which strongly discourages elimination of individual ramps from a full-service interchange. The existing southbound Valley Vista Blvd. on/off-ramps combined with the northbound Sepulveda Blvd. on/off-ramps, constitute a full-service interchange. The City of Los Angeles Department of Transportation would also need to provide consent to the closure of this off-ramp.

An engineering analysis and freeway operations analysis were conducted and the southbound I-405 Valley Vista off-ramp was recommended to remain open for the following reasons:

- The Valley Vista off-ramp is the first exit that can be used by southbound I-405 traffic south of the I-405/US-101 interchange and traffic connecting from westbound US-101. The next exit available to these motorists on I-405 would be the heavily used Skirball Center Drive off-ramp located 2 miles to the south;
- The Ventura Blvd. off-ramp can only be used by traffic connecting from eastbound US-101;
- The Valley Vista off-ramp AADT is projected to reach 7855 in 2030 with a peak hour of 1178. Year 2002 AADT for this off-ramp was 5700.
- Operation studies currently underway view Sepulveda Blvd. as a viable alternative for motorists bypassing I-405 in the event of heavy congestion or emergency situations, which are frequent on this route. Closure of the Valley Vista off-ramp would preclude its use from

Northbound and southbound peak hour volumes were forecast for years 2015 and 2031 and ramps that would experience a change in capacity are listed in Tables 3.5-16 and 3.5-17, which includes the analysis of the closure of the southbound I-405 off-ramp to Valley Vista Boulevard via Fiume Walk and southbound I-405 on-ramp from Valley Vista/Sepulveda Blvd. The southbound off-ramp at Burbank Boulevard would experience increased volumes due to the redistribution associated with this closure option.

Table 3.5-16: Year 2015 Southbound Ramp Peak Hour Volumes with the Closure of Southbound I-405 On/Off-ramps at Valley Vista Boulevard

P.M.	Ramp Description	Ramp Lanes	Capacity (veh/hr)	Alternative 2		Alternative 2 w/ Closure of Valley Vista	
				AM Volume	PM Volume	AM Volume	PM Volume
38.22	SB On from Valley Vista/Sepulveda Blvd	1	1,500	1,688	510	N/A	N/A
38.61	SB Off to Fiume Walk/Sepulveda Blvd (Valley Vista Blvd)	1	1,500	185	385	N/A	N/A
39.09	US-101 SB On from Ventura Blvd	1	1,500	931	403	931	403
39.09	US-101 SB Off to Ventura Blvd	1	1,500	204	464	389	849
40.59	SB Off to Burbank Blvd	1	1,500	1,480	1,072	1,541	1,200

Source: Traffic Analysis Report, July 2006

Notes: P.M. – post mile; SB – southbound

Locations and volumes highlighted in **bold** type indicate ramps where demand exceeds theoretical capacity.

Table 3.5-17: Year 2031 Southbound Ramp Peak Hour Volumes with the Closure of Southbound I-405 On/Off-ramps at Valley Vista Boulevard

P.M.	Ramp Description	Ramp Lanes	Capacity (veh/hr)	Alternative 2		Alternative 2 w/ Closure of Valley Vista	
				AM Volume	PM Volume	AM Volume	PM Volume
38.22	SB On from Valley Vista/Sepulveda Blvd	1	1,500	2,132	644	N/A	N/A
38.61	SB Off to Fiume Walk/Sepulveda Blvd (Valley Vista Blvd)	1	1,500	234	487	N/A	N/A
39.09	US-101 SB On from Ventura Blvd	1	1,500	1,176	508	1,176	509
39.09	US-101 SB Off to Ventura Blvd	1	1,500	258	586	491	1,072
40.59	SB Off to Burbank Blvd	1	1,500	1,615	1,171	1,946	1,516

Source: Traffic Analysis Report, July 2006

Notes: P.M. – post mile; SB – southbound

Locations and volumes highlighted in **bold** type indicate ramps where demand exceeds theoretical capacity.

Alternative 2: Level of Service Analysis – Year 2015 and 2031 with the Closure of Southbound I-405 Off-Ramp at Valley Vista Boulevard

A level of service (LOS) analysis at the project intersections was performed using forecast year 2015 and 2031 turning movement volumes. Locations where the average delay per vehicle with the closure of the southbound I-405 on/off-ramps at Valley Vista Boulevard peak hour changes from the Alternative 2 condition are summarized in Tables 3.5-18 and 3.5-19. The removal of the southbound I-405 exit to Valley Vista/Sepulveda Boulevard would cause traffic to be redistributed through a highly congested area, and create impacts at intersection #24, #25, #26, #28, #29, #30, #31, #32, and #36.

Table 3.5-18: Comparison of Alternative 2 with and without the Closure of the Southbound Valley Vista Boulevard On/Off-ramps Year 2015 AM Peak Hour LOS

Intersection		Control	ALT 2		Alt 2 with Closure of Valley Vista		Change in Delay
			Delay (s/veh)	LOS	Delay (s/veh)	LOS	
24	Valley Vista Blvd & Sepulveda Blvd	S	78.0	E	82.0	F	4.0
25	Greenleaf On/Off-ramps & Sepulveda Blvd	S	135.3	F	149.1	F	13.8
26	Ventura Blvd & Sepulveda Blvd	S	189.0	F	208.1	F	19.1
28	NB 101 Off-ramp & N Sepulveda Blvd	S	22.7	C	83.0	F	60.3
29	Magnolia Blvd & N Sepulveda Blvd	S	19.6	B	32.3	C	12.7
30	Burbank Blvd & N Sepulveda Blvd	S	225.6	F	399.3	F	173.7
31	Burbank Blvd & NB 405 On/Off-ramps	S	21.0	C	85.1	F	64.1
32	Burbank Blvd & SB 405 On/Off-ramps	S	103.7	F	201.1	F	97.4
36	Ventura Blvd & SB 405 On/Off-ramps	S	44.3	D	45.9	D	1.6

Source: Traffic Analysis Report, July 2006
Notes: S – Signalized

Table 3.5-19: Comparison of Alternative 2 with and without the Closure of the Southbound Valley Vista Boulevard On/Off-ramps Year 2015 PM Peak Hour LOS

Intersection		Control	ALT 2		Alt 2 with Closure of Valley Vista		Change in Delay
			Delay (s/veh)	LOS	Delay (s/veh)	LOS	
24	Valley Vista Blvd & Sepulveda Blvd	S	74.0	E	55.7	E	-18.3
25	Greenleaf On/Off-ramps & Sepulveda Blvd	S	85.3	F	80.1	F	-5.2
26	Ventura Blvd & Sepulveda Blvd	S	100.2	F	94.5	F	-5.7
28	NB 101 Off-ramp & N Sepulveda Blvd	S	28.2	C	48.4	D	20.2
29	Magnolia Blvd & N Sepulveda Blvd	S	125.2	F	122.2	F	-3.0
30	Burbank Blvd & N Sepulveda Blvd	S	383.8	F	396.1	F	12.3
31	Burbank Blvd & NB 405 On/Off-ramps	S	101.6	F	100.9	F	-0.7
32	Burbank Blvd & SB 405 On/Off-ramps	S	77.8	E	84.8	F	7.0
36	Ventura Blvd & SB 405 On/Off-ramps	S	30.3	C	34.5	C	4.2

Source: Traffic Analysis Report, July 2006
Notes: S – Signalized

Locations where the average delay per vehicle with the closure of the southbound Valley Vista Boulevard on/off-ramps peak hour changes in the year 2031 from the Alternative 2 condition are summarized in Tables 3.5-20 and 3.5-21. The removal of the southbound I-405 exit to Valley Vista/Sepulveda Boulevard would cause traffic to be redistributed through a highly congested area, and create impacts at intersection #24, #25, #26, #28, #29, #30, #31, #32, and #36.

Table 3.5-20: Comparison of Alternative 2 with and without the Closure of the Southbound I-405 Valley Vista Boulevard On/Off-ramps Year 2031 AM Peak Hour LOS

Intersection		Control	ALT 2		Alt 2 with Closure of Valley Vista		Change in Delay
			Delay (s/veh)	LOS	Delay (s/veh)	LOS	
24	Valley Vista Blvd & Sepulveda Blvd	S	163.5	F	179.8	F	16.3
25	Greenleaf On/Off-ramps & Sepulveda Blvd	S	264.7	F	283.9	F	19.2
26	Ventura Blvd & Sepulveda Blvd	S	321.0	F	346.8	F	25.8
28	NB 101 Off-ramp & N Sepulveda Blvd	S	68.3	E	83.0	F	14.7
29	Magnolia Blvd & N Sepulveda Blvd	S	32.0	C	32.3	C	0.3
30	Burbank Blvd & N Sepulveda Blvd	S	392.2	F	399.3	F	7.1
31	Burbank Blvd & NB 405 On/Off-ramps	S	85.3	F	85.1	F	-0.2
32	Burbank Blvd & SB 405 On/Off-ramps	S	197.4	F	201.1	F	3.7
36	Ventura Blvd & SB 405 On/Off-ramps	S	74.4	E	82.0	F	7.6

Source: Traffic Analysis Report, July 2006

Notes: S – Signalized

Table 3.5-21: Comparison of Alternative 2 with and without the Closure of the Southbound I-405 Valley Vista Boulevard On/Off-ramps Year 2031 PM Peak Hour LOS

Intersection		Control	ALT 2		Alt 2 with Closure of Valley Vista		Change in Delay
			Delay (s/veh)	LOS	Delay (s/veh)	LOS	
24	Valley Vista Blvd & Sepulveda Blvd	S	164.6	F	137.8	F	-26.8
25	Greenleaf On/Off-ramps & Sepulveda Blvd	S	185.2	F	176.1	F	-9.1
26	Ventura Blvd & Sepulveda Blvd	S	204.2	F	205.6	F	1.4
27	NB 101 On-ramp & Sepulveda Blvd	S	95.3	F	90.7	F	-4.6
28	NB 101 Off-ramp & N Sepulveda Blvd	S	94.7	F	123.2	F	28.5
29	Magnolia Blvd & N Sepulveda Blvd	S	255.8	F	249.6	F	-6.2
30	Burbank Blvd & N Sepulveda Blvd	S	598.6	F	619.9	F	21.3
31	Burbank Blvd & NB 405 On/Off-ramps	S	234.1	F	239.0	F	4.9
32	Burbank Blvd & SB 405 On/Off-ramps	S	203.1	F	210.6	F	7.5
36	Ventura Blvd & SB 405 On/Off-ramps	S	95.8	F	85.7	F	-10.1

Source: Traffic Analysis Report, July 2006

Notes: S – Signalized

Traffic Impacts Related to Construction Activities for All Build Alternatives

Similar projects have been constructed along I-405 and other freeways within the Los Angeles metropolitan area in the recent past and it is believed that this project would have similar impacts.

The construction of Alternative 2 would primarily affect the northbound I-405, except where major improvements would be made along both sides of the I-405, such as in the vicinity of the Wilshire Boulevard and Sunset Boulevard interchanges and the Valley Vista Boulevard off-ramp. The construction of Alternative 3 is expected to have an effect in both directions of travel. Construction of the planned improvements would require the narrowing of traffic lanes and loss of shoulder areas for a period of 4 to 5 years, thereby reducing the effective capacity of the freeway segments and/or ramps where construction would be taking place. This would result in overall traffic delays increasing by as much as 10 percent or more during peak traffic periods.

The impact of traffic delays would be particularly inconvenient when construction first starts, due to heightened driver interest 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 would usually become accustomed to driving through a construction zone, so the amount of traffic delays caused by construction would decrease accordingly.

3.5.4 Avoidance, Minimization, and Mitigation Measures

- Implement an effective Traffic Management Plan that would include detailed construction staging plans and analysis of how traffic would be affected during construction;
- Construction phasing plans would emphasize traffic operations and traffic safety;
- Maintain the number of existing traffic lanes on the freeway and busy ramps during peak traffic periods;
- Construct the improvements at the Wilshire Boulevard, Sunset Boulevard, and Getty Center Drive interchanges prior to closing the Montana Avenue off-ramp and the Moraga Drive on/off-ramps;
- Construct the new southbound Skirball Center Drive/Sepulveda Boulevard on/off-ramps prior to closing the existing ramps;
- Coordinate with MTA to provide rerouting information, including operating schedules, to public users at least one week in advance to minimize impacts;
- Obtain a permit from the Federal Land Agency for an aerial highway easement and a portion of the federal parking lost area at the southeast corner of Wilshire Blvd. and Sepulveda Blvd. Caltrans would replace the loss of parking spaces in adjacent land belonging to Caltrans;
- Coordinate with the Santa Monica Mountains Conservancy for impacts to parking at the Getty View Trailhead (refer to the Section 4(f) Evaluation for more detailed mitigation for this Section 4(f) resource); and
- Coordinate with the City of Los Angeles to adjust signal timing.

3.5.5 Cumulative Impacts

The cumulative study area includes the I-405 mainline, ramps, intersections of ramp terminals with local streets, and intersections within one local street of the I-405 freeway. This study area was analyzed in the Traffic Analysis Report for the project alternatives and includes the freeway mainline in the vicinity of the proposed project. Therefore, cumulative traffic and transportation effects are the same as the project effects detailed below.

The project alternative effects described in the Traffic Analysis Report include the cumulative condition and therefore represent the cumulative contribution as well as the project effects to traffic and transportation.

Alternative 1: No Build, would not directly contribute to cumulative effects to traffic and transportation/pedestrian and bicycle facilities. However, by not providing for future transportation needs and predicted growth in traffic volumes, Alternative 1 would contribute to an indirect adverse cumulative effect on traffic and transportation.

Implementation of Alternative 2 and 3 would reduce traffic congestion through this segment of I-405. Alternative 2 and 3 would not generate traffic but rather facilitate the redistribution of existing and future traffic to a proposed enhanced-capacity regional facility. Impacts are a result of regional traffic growth and are not directly attributable to project implementation.

Minimization measures are required to reduce construction-related traffic and transportation effects (for all alternatives), impacts to intersections and ramp meters. Even with minimization measures applied, several of the study area intersections would still remain impacted under all of the project alternatives.

3.6 VISUAL/AESTHETICS

3.6.1 *Regulatory Setting*

NEPA, as amended 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 FHWA 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, 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 2100[b]).

The Caltrans I-405 Visual Impact Assessment, February 27, 2007, used the Visual Quality Analysis (VQA) according to the criteria set for The Visual Impact Assessment for Highway Projects (USDOT, FHWA c. 1979).

3.6.2 *Affected Environment*

Project Setting

The regional landscape establishes the general visual environment of the project, but the specific visual environment upon which this assessment will focus is confined to the identified landscape and project viewshed.

Landscape Units

A landscape unit is a portion of the regional landscape and can be thought of as an outdoor room that exhibits a distinct visual character. A landscape unit will often correspond to a place or district that is commonly known among local viewers. The project study area is characterized in three distinct landscape units.

The southern portion from Olympic Blvd. to approximately Sunset Blvd. is primarily urban in nature. This area consists entirely of residential and commercial uses and also includes the City of Los Angeles Department of Parks and Recreation – Westwood Recreation Center (Bad News Bears Field), the Los Angeles National Cemetery, federal office building, the Veterans Administration (VA) Center, and the Getty Center. Visual resources include urban landscaping and corridor views of mountains and urban skyline.

The middle portion extends from Moraga Dr. to approximately Mulholland Dr. This portion of the project study area (roughly a third of the length of the project area) is less densely developed and has a more rural character. Approximately a third of the length of the project area (Sepulveda Pass) is designated as open space which is part of the Santa Monica Mountains National Recreation Area. The area between the Getty Center and Bel Air, is designated as open space which is part of the Santa Monica Mountains National Recreation Area. The Santa Monica

Mountains Conservancy owns and operates a couple of trailheads in the project study area at Getty Center Drive and Skirball Center Drive. Developments in the area include a Metropolitan Water District control plant, The Skirball Cultural Center, and Milken Community High School as well as several residences that occupy the hillsides near Mulholland Drive. Views in this area are dominated by surrounding hillsides and natural vegetation.

The northern portion extends from Mulholland Drive to the US-101 interchange and includes expansive views of the San Fernando Valley and single family residential homes along the hillsides. As you approach Ventura Blvd., the area is dominated by commercial development.

Project Viewshed

A viewshed is a subset of a landscape unit and is comprised of all the surface area visible from an observer's viewpoint. The limits of a viewshed are defined as the visual limits of the views located from the proposed project. The viewshed also includes the locations of viewers likely to be affected by visual changes brought about by project features. Viewer groups and viewer responses are discussed in more detail in the following sections.

Within the southern portion of the study area, the project viewshed from the freeway includes views of the mountains and urban skyline. The southern portion of the study area is more densely developed and the freeway is at a higher elevation, expanding one's view of adjacent land uses (mainly commercial), the Bad News Bears Field, the Los Angeles National Cemetery and residences on the hillside.

Within the middle portion of the study area, the project viewshed expands to the surrounding hillsides because of limited development. The project may be viewed from the Skirball Cultural Center, Sepulveda Blvd., Milken Community High School, and residences on the hillside.

Within the northern portion, the viewshed expands to the San Fernando Valley and hillsides. The project may be viewed from Ventura Blvd. and residences on the hillside.

EXISTING VISUAL RESOURCES AND VIEWER RESPONSE

This section discusses the visual character and quality of visual resources at various locations along the I-405 corridor project study area.

Viewpoint #1 – I-405 Between Santa Monica Blvd. and Wilshire Blvd.

The I-405 freeway runs parallel to Sepulveda Blvd. through this portion of the project study area. The Bad News Bears Field (see Figure 3.6-1: Existing View and Figure 3.6-2: Proposed View with Soundwall), and the Salvation Army Westwood Transitional Village and Bessie Pregerson Child Development Center (see Figure 3.6-3: Existing View and Figure 3.6-4: Proposed View with Soundwall and Proposed Wilshire Blvd. off-ramp) are also located along the east side of the I-405 along Sepulveda Blvd.

Figure 3.6-1: Viewpoint 1 (Existing) – Bad News Bears Field Facing West Towards I-405



Source: Visual Impact Assessment, February 2007

Figure 3.6-2: Viewpoint 1 (Proposed) – Bad News Bears Field Facing West Towards I-405 with Soundwall Atop a Retaining Wall



Source: Visual Impact Assessment, February 2007

Figure 3.6-3: Viewpoint 1 (Existing) – The Salvation Army Westwood Transitional Village and Bessie Pregerson Child Development Center



Source: Visual Impact Assessment, February 2007

Figure 3.6-4: Viewpoint 1 (Proposed) – The Salvation Army Westwood Transitional Village and Bessie Pregerson Child Development Center with Proposed Soundwall



Source: Visual Impact Assessment, February 2007

Viewpoint #2 – Wilshire Blvd. Interchange

The Wilshire Blvd. and Sepulveda Blvd. interchange area is located in Westwood, just southwest of the University of California, Los Angeles (UCLA). This intersection supports a large volume of vehicular traffic. Resources in the area include views of the mountains and urban skyline.

The I-405 freeway and on/off-ramps are elevated through this segment with Sepulveda Blvd. and Wilshire Blvd. crossing under the freeway. Freeway landscaping and landscaping around the Caltrans Maintenance facility and federal office buildings (southeast quadrant) includes large, mature trees, shrubs, and grass. Views from the I-405 include the mountains in the distance to the north and high-rise office towers to the south. Views along Wilshire Blvd. include high-rise buildings to the east and the I-405 overcrossing to the west. The visual environment at the interchange is highly urbanized and primarily utilitarian. The area adjacent to the Los Angeles National Cemetery (northeast quadrant), however, which has large, well-kept trees and open grass lawns creates a serene setting which provides some relief from the area's urban look (see Figure 3.6-5: Existing View and Figure 3.6-6: Proposed View with new Wilshire Blvd. On/Off-ramps).

The Veterans Administration (VA) Center (northwest and southwest quadrant) is located adjacent to the existing southbound I-405 Wilshire Blvd. off-ramp to westbound Wilshire Blvd. This off-ramp would be reconfigured and shifted to the west up to 62 feet, which would require a sliver of land from the VA Center's transportation yard/storage area to accommodate the realignment of the I-405 southbound Wilshire Blvd. off ramp. The VA transportation yard/storage area is located in an urban setting with an immediate viewshed from the existing storage facility. Storage sheds and cargo bins currently occupy the area (see Figure 3.6-7: Existing View and Figure 3.6-8: Proposed View with new southbound I-405 Wilshire Blvd. off-ramp).

Figure 3.6-5: Viewpoint 2 (Existing) – Federal Parking Lot Facing West Toward N/B I-405



Source: Visual Impact Assessment, February 2007

Figure 3.6-6: Viewpoint 2 (Proposed) – Federal Parking Lot Facing West Toward N/B I-405 with Reconstructed On/Off-ramps at Wilshire Blvd.



Source: Visual Impact Assessment, February 2007

Figure 3.6-7: Viewpoint 2 (Existing) – Veterans Administration Transportation Yard/Storage Area Facing East Towards S/B I-405



Source: Visual Impact Assessment, February 2007

Figure 3.6-8: Viewpoint 2 (Proposed) – Veterans Administration Transportation Yard/Storage Area Facing East Towards Realigned S/B I-405 Off-ramp



Source: Visual Impact Assessment, February 2007

Viewpoint #3 – I-405 Sunset Blvd. Interchange

This area has been selected for evaluation since the Sunset Boulevard overcrossing would be reconstructed and widened to accommodate freeway widening and enhanced traffic operations at this interchange. Within this particular area the roadway is located in an urban setting with a broad viewshed. There are many lighting structures, some sidewalks and mature vegetation on both sides on the overcrossing (see Figure 3.6-9: Existing View and Figure 3.6-10: Proposed View with new Sunset Blvd. Overcrossing).

Figure 3.6-9: Viewpoint 3 (Existing) – Sunset Blvd. Overcrossing Facing West



Source: Visual Impact Assessment, February 2007

Figure 3.6-10: Viewpoint 3 (Proposed) – Sunset Blvd. Overcrossing Facing West



Source: Visual Impact Assessment, February 2007

Viewpoint #4 – I-405 between Moraga Drive and Skirball Center Drive

The southern part of this viewpoint segment is located in Brentwood and is bordered by residential uses to the west and commercial uses to the east. Resources in the area include occasional mountain views, large, mature trees, and views of the Getty Center. The I-405 represents the eastern edge of the Brentwood-Pacific Palisades Community Plan area and is designated as a scenic freeway within that plan. The commercial areas bordering Sepulveda Blvd., Ovada Place and Moraga Drive are well-kept with mature trees and landscaping (see Figure 3.6-11: Existing View and Figure 3.6-12: Proposed View with Soundwall).

This segment of I-405 is surrounded by open space. The I-405 passes through a small canyon towards Mulholland Drive. The west side of the freeway edges the foot of the hillside that supports facilities for the Metropolitan Water District (MWD) of Southern California. East of the I-405 freeway is open space consisting of hillsides with scattered residential uses.

As one travels north, the I-405 becomes more rural and mountainous as it cuts through the terrain. Vegetation covering most of the hillsides consists of mostly mixed chaparral, with some ruderal (disturbance adapted) roadside vegetation occurring along the freeway perimeter. Also in close proximity to this portion of the project site is the Getty View Trailhead.

Viewpoint #5 – I-405 at the Skirball Center Drive Overcrossing

Skirball Center Drive crosses over the I-405 freeway. This viewpoint segment of the project includes the improved grounds around the Skirball Cultural Center, a Caltrans Park and Ride facility, Milken Community High School and the surrounding sidewalks, street trees and other ornamental landscaping that create a consistent and unified look.

The western end of Skirball Center Drive leads to the southern entrance of the Skirball Cultural Center. The Cultural Center, a museum dedicated to displaying the culture and heritage of the Jewish people, occupies the area west of Sepulveda Blvd. The center is visible to commuters on the freeway. Milken Community High School and the park and ride facility occupy the area east of the I-405. The Cultural Center, high school and park and ride facility are well integrated into the surrounding hillside environment. Within this segment of the I-405, views include the surrounding hillsides, Sepulveda Blvd., the Cultural Center, high school, and park and ride facility. This segment of Sepulveda Blvd. is also designated as a local scenic highway in the Brentwood-Pacific Palisades Community Plan.

The existing overcrossing has an open view with hills in the distance. Currently, the roadway contains two 10-foot wide lanes in each direction and a 10-foot left-turn lane with no shoulders (see Figure 3.6-13: Existing View, Figure 3.6-14: Existing Cross-Section and Figure 3.6-15: Proposed Cross-Section). There is a small pedestrian crosswalk and fence on the north side of the overpass with a barrier separating it from the traveled way. Overhead utilities can be seen in the distance and there are light structures on each side of the overpass. Located just southeast of the overpass, near the existing pedestrian crosswalk, is the Skirball Trailhead.

Figure 3.6-11: Viewpoint 4 (Existing) – Northbound I-405 Towards Getty Center Drive



Source: Visual Impact Assessment, February 2007

Figure 3.6-12: Viewpoint 4 (Proposed) – N/B I-405 Towards Getty Center Drive



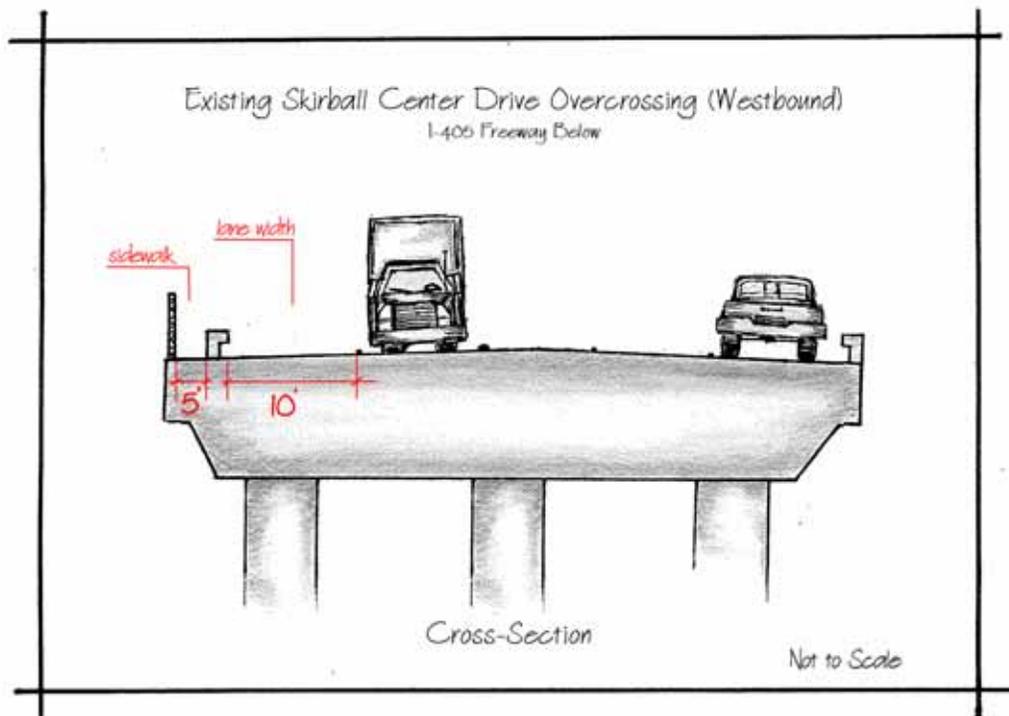
Source: Visual Impact Assessment, February 2007

Figure 3.6-13: Viewpoint 5 (Existing) – Skirball Center Drive Overcrossing Facing West



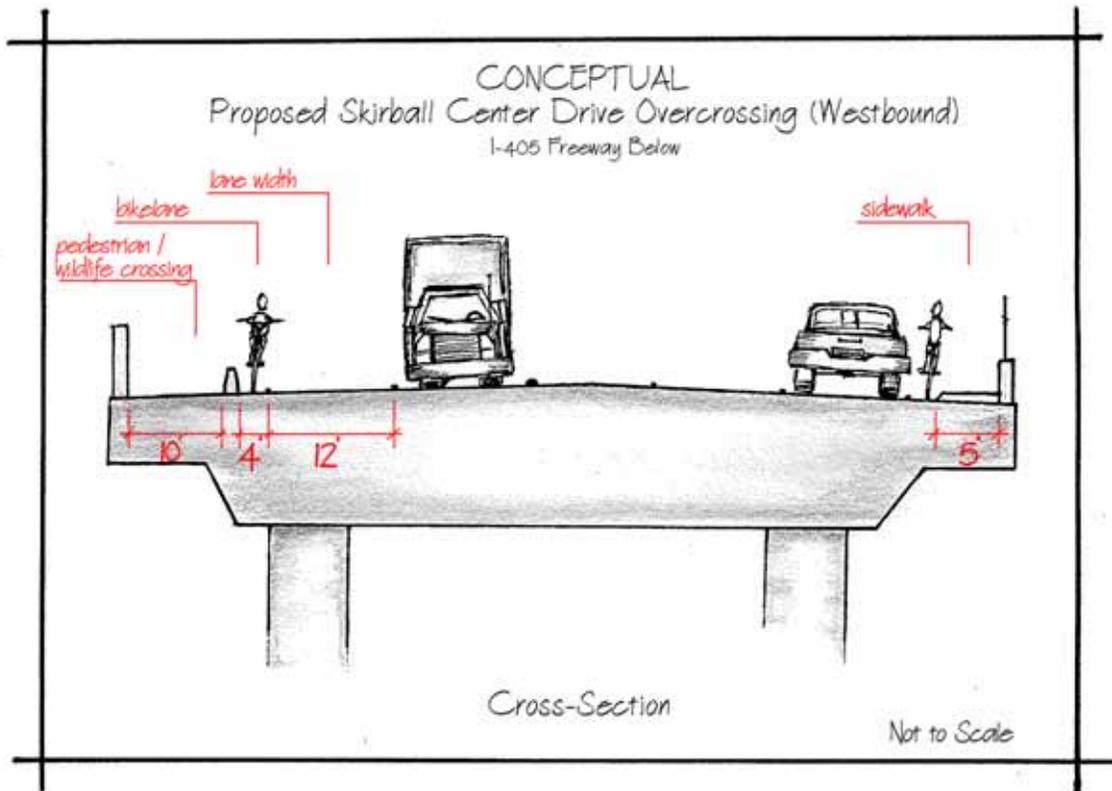
Source: Visual Impact Assessment, February 2007

Figure 3.6-14: Viewpoint 5 (Existing) – Skirball Center Drive Overcrossing Cross-Section



Source: Visual Impact Assessment, February 2007

Figure 3.6-15: Viewpoint 5 (Proposed) – Skirball Center Drive Overcrossing Cross-Section

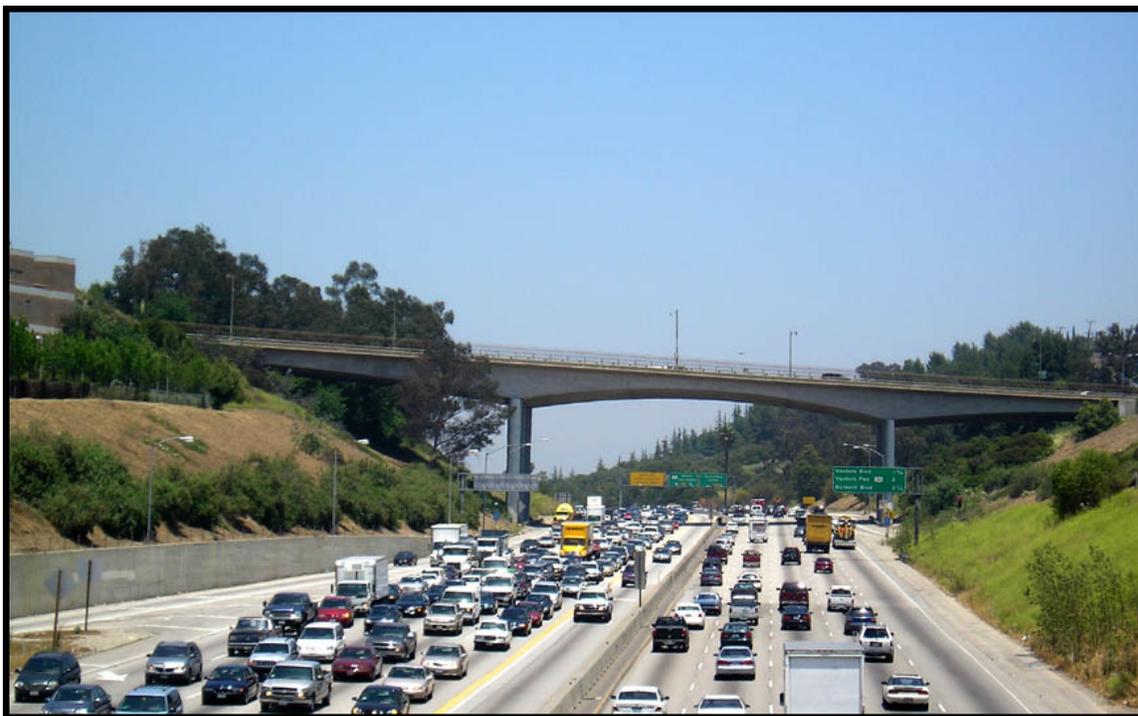


Source: Visual Impact Assessment, February 2007

Viewpoint #6 – I-405 at the Mulholland Drive Overcrossing

The Mulholland Drive Overcrossing spans a deep gorge through which I-405 passes and was previously evaluated and found eligible for listing in the National Register of Historic Places under Criterion C. The 1959 bridge was found eligible in the area of transportation and engineering and is classified as being an important example of type, period, and style. In addition to being a significant engineering and construction achievement, this bridge exemplifies the minimalist or modernist aesthetics of the period (see Figure 3.6-16: Existing View). Vegetation surrounds the bridge in the immediate, intermediate and distant views. Signage and lighting can also be seen by motorists.

Figure 3.6-16: Viewpoint 6 (Existing) – Mulholland Drive Overcrossing Facing North



Source: Visual Impact Assessment, February 2007

3.6.3 *Visual/Aesthetics Impacts*

VIEWER GROUPS, VIEWER EXPOSURE AND VIEWER SENSITIVITY

The study corridor contains four viewer groups: motorists, residents, pedestrians and recreationists. This section describes the viewer groups, exposures to views, viewer activity and viewer awareness. For each viewer group, the predicted response to visual change is described in relationship to viewer exposure and viewer sensitivity.

Viewer Exposure

Viewer exposure is typically assessed by the number of people exposed to the resource change, their location in relationship to the changes, and the duration or frequency at which they area exposed to existing views. The duration of exposure to the visual environment is inversely proportionate to travel speed. At low travel speed, duration of exposure is longer that at high travel speed. Stationary viewers like residents would have a high level of exposure to the visual environment. High viewer exposure heightens the importance of early consideration of design, art, and architecture and their roles in managing the visual resource effects of a project.

Viewer Sensitivity

Viewer sensitivity is defined both as the viewers' concern for scenic quality and the viewers' response to change in the visual resources that make up that view. Viewer sensitivity is

influenced directly by viewer activity and awareness, and indirectly by local values and goals. Visual changes can heighten viewer awareness and local values may confer visual significance on landscape components and areas that would otherwise appear unexceptional. Even when the existing appearance of a project site is uninspiring, a community may still object to projects that fall short of its visual goals.

Viewer Groups

Motorist Viewer Group

The motorist viewer group consists of commuters, local residents, and travelers using I-405, Sepulveda Blvd. and connecting streets. A motorist's awareness of surrounding views varies based on travel speed, purpose of the drive, and the scenic quality of surrounding views. Frequent traveling through the area, commuters are primarily focused on the commute and the task of navigating through traffic. Commuters usually consider views as a secondary focus. Commuters and residents gain familiarity with surrounding views through repetitive exposure. Unlike local residents, commuters do not have the same sense of ownership and awareness of views because they do not reside within that environment and only pass through it. Travelers have less familiarity with existing views, yet, because they are generally traveling at a slower pace, they tend to focus on the visual environment.

Resident Viewer Group

The resident viewer group includes people who may have views of the project area from their homes or place of business or employment. Residents have a high level of exposure to the visual environment and high visual awareness. Unlike motorists, residents are stationary and usually have more time to take in their surrounding views, and at a fairly leisurely pace. They observe the visual environment on a daily basis and for an extended period of time. They become very familiar with the local environment and may take ownership of it. Residents are highly sensitive to visual changes, particularly if the changes occur within close proximity to their homes or include displacement or nearby residences and/or important visual features.

Pedestrian Viewer Group

Similar to residents, pedestrians have a high level of exposure to the visual environment and a high level of visual awareness. It is anticipated that a majority of the pedestrian traffic is comprised of people who are local in the area: employees, residents or students. This viewer group may have some sense of ownership over the existing environment. Pedestrians tend to be more aware of the visual environment because of their immediate and tangible experience of moving through it. Pedestrians are normally traveling at slow speeds and therefore have more opportunity to view the surrounding area. Even for those pedestrians whose primary purpose is to travel from point A to point B, their slower travel speed and tangible physical experience of the surrounding environment causes them to be highly sensitive to visual changes.

Recreationist Viewer Group

Recreationists include individuals from various areas and residents using or visiting a regional resource such as museum, park or nature trail. Although the recreationists' exposure to the visual environment is limited to periodic experiences of limited duration, they tend to have high expectations of what the condition of the visual environment should be, and exhibit a high level of visual awareness. For many in this group, the primary focus of their activity is to leisurely enjoy a visually attractive resource. Even for those whose primary purpose is to exercise, the expectation is that the surrounding environment should be pleasant and enjoyable. The recreationist viewer group can become somewhat familiar with the visual environment and surrounding resources depending on frequency of use and may have some sense of ownership over that environment. However, this would be more likely for residents who frequent a local park versus recreationists from various areas using a regional resource. Because of their limited and periodic exposure, but high level of visual awareness, the recreationist viewer group is anticipated to be moderately sensitive to visual quality changes.

VISUAL IMPACT ASSESSMENT

The visual impact assessment is determined by assessing the change in visual resources in terms of visual character and change in visual quality due to the project and predicting viewer response to that change. The first step in determining visual resource change is to assess the compatibility of the proposed project with the visual character of the existing landscape. The second step is to compare the visual quality of the existing resources with the projected visual quality after the project is constructed. The resulting level of visual impact is determined by combining the severity of the resource change with the degree of viewer sensitivity.

Analysis of potential project impacts included a review of relevant policy documents to determine whether the proposed project would be consistent with applicable policies or standards. Evaluation of impacts consisted of reviewing proposed project changes in relationship to the existing visual environment, affected scenic resources, visual effect on users, and consistency with established aesthetic policies. Table 3.6-1 provides a definition of visual impact levels.

The following discussion focuses on the individual segments of the overall project in order to address the unique visual environment at each location where improvements would be constructed. For the most part, the motorist viewer group along I-405 is anticipated to be regular commuters and residents whose travels have become routine, with their awareness of the surrounding environment being limited to the drive itself. The Sepulveda Pass corridor is fairly congested making the task of navigating through traffic more demanding. This viewer group's awareness of the visual environment is further reduced as they focus on navigating from point A to point B. The motorist viewer group is expected to be moderately sensitive to visual changes.

Table 3.6-1: Visual Impact Levels

Low	Minor adverse change to the existing visual resource, with low viewer response to change in the visual environment. May or may not require mitigation.
Moderate	Moderate adverse changes to the existing visual resource with moderate viewer response. Impact can be mitigated within five years using conventional practices.
Moderately High	Moderate adverse change to the existing resource with high viewer response or high adverse change to the existing visual resource with moderate viewer response. Extraordinary mitigation practices may be required. Landscape treatment required will generally take longer than five years to mitigate.
High	A high level of adverse change to the existing visual resource or a high level of viewer response to change such that architectural design and landscape treatment cannot mitigate the impacts. Viewer response level is high. An alternative project design may be required to avoid highly adverse impacts.

Source: Visual Impact Assessment, February 2007

Table 3.6-2 shows the affected viewer groups and viewer sensitivity at each location of the proposed improvements.

Table 3.6-2: Viewer Groups

Viewpoint #	Description	Viewer Group	Viewer Sensitivity
Viewpoint #1	Bad News Bears Park Westwood Transitional Village Bessie Pregerson Child Development Center	Recreationists Pedestrians Motorists	Moderate High Low
Viewpoint #2	Wilshire Blvd. Interchange	Motorists Pedestrians	Moderate High
Viewpoint #3	Sunset Blvd. Interchange	Motorists Pedestrians	Moderate Moderate
Viewpoint #4	Getty Center Area	Motorists Recreationists	Moderate High
Viewpoint #5	Skriball Center Drive Overcrossing	Motorists Recreationists Pedestrians	Moderate Moderate Moderate
Viewpoint #6	Mulholland Drive Overcrossing	Motorists Residents	Moderate Moderate

Source: Visual Impact Assessment, February 2007

Viewpoint 1 – I-405 between Santa Monica Blvd. and Wilshire Blvd.

The proposed project would construct a soundwall atop a retaining wall along state right-of-way adjacent to the Bad News Bears Field to accommodate the I-405 widening. Highway landscaping, including several mature trees would be removed and other trees would be blocked from public view from the park side perspective.

The primary viewer group within this segment of the proposed project includes motorists and recreationists. The proposed project changes would change the existing character along the freeway with a new soundwall atop a retaining wall. This would affect local community views from the park. The proposed project in this section does not include additional lighting, however, new lighting is proposed at the Bad News Bears Field. The addition of this new light source is not expected to greatly affect the existing light environment.

The proposed project changes would have a moderate effect on the existing visual quality of this project segment. The motorists' viewer response is anticipated to be moderate and the overall impact is expected to be moderate.

Viewpoint 2 – I-405 at Wilshire Blvd.

The proposed improvements at Wilshire Blvd. would have a limited effect on the integrity of the existing visual environment. A portion of the federal office building parking lot, consisting of several mature trees would be removed to accommodate the new northbound off-ramp to eastbound Wilshire Blvd. Utilities along the sidewalk would also be relocated. The removal of additional landscaping near the intersection of Wilshire Blvd. and Sepulveda Blvd. would have a minimal effect on the aesthetic character of the off-ramp since a substantial amount of vegetation would still remain. The proposed Wilshire Blvd. interchange improvements would not affect the physical or aesthetic setting of the Los Angeles National Cemetery.

The proposed project would add a northbound HOV lane and improve the Wilshire Blvd. interchange. This improvement would acquire new right-of-way for the northbound off-ramp and southbound off-ramp to Wilshire Blvd. Construction activities would include reconstruction of ramps and removal of portions of the federal building parking lot and Veterans Administration Center's transportation yard/storage area. A storage shed and cargo bins would need to be relocated. Some highway landscaping would be removed and replanted.

The primary viewer group within this segment of the proposed project includes motorists and pedestrians, with motorists representing a larger proportion of the viewers. The proposed improvements would have a minor effect on the existing visual quality and would primarily result in an enhanced roadway appearance. The lack of scenic quality to surrounding views and the modest nature of the visual changes would have a limited affect on viewer groups. The motorist viewer group is moderately sensitive to visual changes and is expected to demonstrate a limited response to the proposed changes. The pedestrian viewer group is somewhat more sensitive; however this viewer group is expected to demonstrate only a moderate response to the visual changes. The proposed changes would not affect the visual environment within or adjacent to the cemetery and therefore would not affect pedestrians using this resource. The

combination of visual quality change and viewer response is anticipated to be low. The overall visual impact would be low.

Viewpoint 3 – I-405 at Sunset Blvd

The proposed project would widen the Sunset Blvd. overcrossing to accommodate an additional eastbound lane. Other improvements in this area include the reconfiguration of the Church Lane and Sunset Blvd. intersection.

The widening is anticipated to result in a positive visual impact by improving the visibility of the lanes and creating a new, fresh look to the roadway. The proposed project changes would not affect local views. Additional lighting is anticipated since the Sunset Blvd. overcrossing would be widened, however, the new lights would be consistent with the existing light environment and are not expected to affect nearby residences.

The proposed improvements would have a minor effect on the existing visual quality and would primarily result in an enhanced roadway appearance. Motorists are the primary viewer group within this segment of the proposed project, with some pedestrian viewers also present at this location. No residential viewer groups are present at this location. Potential residential viewer groups in the neighborhoods within this segment of Sunset Blvd are oriented away from the proposed project corridor and do not have views of the roadway. The motorist viewer group is moderately sensitive to visual quality changes and the pedestrian viewer group is highly sensitive. However, the visual quality change would be low and viewer group response is expected to be low for both viewer groups. The overall visual impact is anticipated to be low.

Viewpoint 4 – I-405 between Moraga Drive and Skirball Center Drive

The northbound freeway widening and the new northbound Getty Center on-ramp from Sepulveda Blvd. would require the removal of the Getty View Trailhead, ruderal and native vegetation that includes large mature trees. These improvements would cover areas that are currently undeveloped. The new on-ramp would also include additional lighting. New construction would change the character of the undeveloped area. Vegetation removal, grading, and the removal of the Getty View Trailhead and parking lot would not have a major affect on the overall visual character and aesthetic quality of the canyon. The proposed project changes would not affect views of the surrounding hillsides or create an objectionable view from a limited number of residential units located over 300 feet away. The improvements would not affect designated scenic resources or conflict with aesthetic policies regulating scenic highways or specific plan areas. Revegetation is anticipated to establish itself within five years, eventually blending into the more rural character of this segment of the project.

The addition of light sources would be consistent with new light standards that would add a minimal amount of new lighting that would have a modest effect in relationship to existing light sources along the freeway.

The viewer groups within this segment of the proposed project include motorists and recreationists. Although cyclists, hikers, and other recreationists frequent this stretch of the project due to the proximity of the Getty View Trailhead, motorists are the primary viewer group. Motorists and recreationists are moderately sensitive to visual quality changes. The

proposed project changes would have a moderate to high effect on the existing visual quality. The overall visual impact and viewer response of both recreationists and motorists is anticipated to be moderate.

Viewpoint 5 – I-405 at Skirball Center Drive

The proposed project would replace and widen the Skirball Center Dr. overcrossing to accommodate the I-405 freeway widening. A shared pedestrian/wildlife path and bike lanes would be provided as a part of the project. The bike lanes and shoulders would be approximately 16 feet in width on the south side of the overpass and 6 feet wide on the north side of the overpass. The southeast side of the overpass would temporarily affect a portion of the Skirball Trailhead for the construction of a retaining wall to support the widened structure.

The proposed improvements would change the existing visual character along Skirball Center Dr., but would not be out of character with the existing visual environment along I-405, which functions primarily as a transportation corridor and would not have an impact on the overall aesthetic environment or views of the hillsides. The scenic nature of the corridor would not be substantially affected, as the improvements would have a minor effect on the overall visual character of surrounding hillsides and abundant vegetation. New lighting on the overpass would have a minimal effect in the relationship to existing light sources surrounding the area including the Skirball Cultural Center and the Caltrans park and ride facility.

The proposed project changes would not affect views of the surrounding hillsides or create an objectionable view from surrounding residential areas. None of the proposed construction would block or alter existing views. A limited number of residential units are located across the freeway and to the west. The proposed project changes would not affect views of the surrounding hillsides or create an objectionable view from a limited number of residential units located over 300 feet away. Changes along the roadway would be considered in the background of a view-frame and not discernable from the surrounding environment.

The addition of light sources would be consistent with new light standards that would add a minimal amount of new lighting that would have a modest effect in relationship to existing light sources along the freeway.

The primary viewer groups within this segment of the project are motorists, recreationists and residents. The proposed project would have a minor effect on the existing visual quality and most of these changes would be temporary in nature. The motorist viewer group is considered to be moderately sensitive to changes in the visual environment, residents are highly sensitive, and recreationists are moderately sensitive. The resident viewer group is viewing the project from across the I-405 freeway and would see the project changes from a distance. This would cause them to be less aware of the project changes and would lower their sensitivity. The recreationist viewer group includes visitors to the Skirball Cultural Center and Skirball Trailhead and may have higher expectations of the surrounding visual environment, although visitors have less familiarity with the specific details of the existing visual environment. The combination of visual quality change and viewer response and overall visual impact is expected to be moderate.

Viewpoint 6 – I-405 at Mulholland Drive

The Mulholland Drive Overcrossing is eligible for listing in the National Register of Historic Places and the proposed project has the potential to adversely effect the Mulholland Drive Overcrossing under all of the build alternatives. All build alternatives propose to remove and replace the bridge in order to accommodate the I-405 freeway widening.

The primary viewer group within this segment is motorists. There are residential neighborhoods located north of I-405, however, the residences are oriented away from the proposed project corridor and do not have views of the freeway. The proposed project changes would have a moderate effect on the existing visual quality. Motorists are moderately sensitive to changes in visual quality. The combination of visual quality change and viewer response is anticipated to be moderate and would make the overall visual impact moderate.

A Finding of Effect was prepared and concurrence was received from the State Historic Preservation Officer on October 18, 2006 for the I-405 Sepulveda Pass Project (see Appendix E). It was determined that the proposed project would have an adverse affect on the Mulholland Drive overcrossing. A draft Memorandum of Agreement (MOA) will be submitted to the Federal Highway Administration (FHWA) and the State Historic Preservation Officer after sufficient design work has been completed for the Division of Environmental Planning to ascertain impacts and consider mitigation and design for the Mulholland Bridge. Once FHWA and SHPO agree on the terms and conditions, the MOA will be executed by FHWA and Caltrans will concur.

The historic overcrossing would be replaced with a bridge design in coordination with FHWA and SHPO, that would not disrupt or alter existing views or scenic views. The proposed replacement would not substantially degrade the overall visual character or quality of the surrounding hillsides or residential neighborhoods.

CONSTRUCTION-RELATED VISUAL IMPACTS

Construction activities would be similar throughout the project corridor; however, different components are proposed at various locations that have a unique affect on the visual environment at that location. Overall, visual impacts associated with the project include removal of vegetation, grading and excavation, new soundwalls and retaining walls, fencing, and roadway signage and lighting. The visual effects of these changes would be temporary and minor and would not affect scenic resources, overall character of the surrounding environment, or the visual quality of the project corridor.

3.6.4 Avoidance, Minimization and Mitigation Measures

The following design requirements in cooperation with the concurrence with the District Landscape Architect should be considered to help minimize, reduce, or mitigate impacts related to incompatibility with the existing visual character along I-405:

- Design walls to be visually compatible with the surrounding community (community identification). Use architectural detailing such as pilasters, wall caps, interesting block patterns, color and materials to match the existing color palette of the surrounding area. This detailing would be used to add visual interest and reduce the apparent height of the walls;
- Type of imprint to mimic a stone or rock-type look can also be done on walls in areas where there are mountain views, as long as Caltrans' safety standards are met for these types of walls;
- Aesthetic treatments and decorative railing/fencing on bridges and overcrossings are recommended to bring out matching elements of the community or character of the surrounding area;
- Slope paving or vegetation at undercrossings should be enhanced with texture to deter graffiti where appropriate;
- Consideration of color and materials for the retaining wall along hillsides in order to ensure compatibility with the landscape;
- New light standards would add a low level of new lighting that would have a modest effect in the relationship to existing light sources surrounding the area. The proposed lighting would use lamps and light shields to minimize impacts on nocturnal animal species and limit spill-over lighting to surrounding areas during and after construction;
- All new street lighting to be installed are in accordance with lighting specifications using the lowest level of illumination/brightness to meet safety needs while minimizing glare;
- Native vegetation should be planted in disturbed areas where space allows. Coordination would be required between the District Landscape Architect and District Environmental Branch throughout project design to select appropriate vegetation replacement; and
- Non-native (ornamental) vegetation would be planted in disturbed areas where space allows.

3.6.5 Cumulative Impacts

Potential cumulative visual impacts could occur when other projects, in combination with the proposed project, cumulatively contribute to the degradation or deterioration of the visual setting (e.g., projects that substantially damage important visual resources, such as obstructing scenic vistas or views and/or ridgelines, or that result in substantial shade/shadow or glare effects on shadow-sensitive uses).

The study area for the cumulative visual impact analysis would consist of the general area in the immediate vicinity of the project right-of-way as well as those areas that can be viewed from, or have views of, the proposed project. Major development and transportation projects in the area (see Tables 3.1-1 and 3.1-2) include a number of development/redevelopment projects that are proposed in the vicinity of the project area, however, none appear to have the potential to substantially adversely affect visual resources. Since the proposed project alternatives do not result in a substantial deterioration of visual resources and the resource study area is dominated by similar urban and transportation infrastructure, the project alternatives would not contribute to a substantial cumulative impact.

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3.7 HISTORIC CULTURAL RESOURCES

3.7.1 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) among the Advisory Council, FHWA, State Historic Preservation Officer (SHPO), and Caltrans was put into effect for Caltrans projects, both state and local, with FHWA involvement. The PA governs the implementation of the Federal-aid Highway Program in California in accordance with 36 CFR 800.14(b).

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. Section 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 Historic Landmarks.

3.7.2 Affected Environment

An Historic Property Survey Report for the I-405 Northbound HOV Lane Widening Project was prepared in May 2006.

The Area for Potential Effects (APE) was established as the area for direct effects for archaeological resources and the area of both direct and indirect impacts for historical resources. Forty resources within the APE required formal evaluation. None of the 40 properties evaluated have been previously determined eligible for the National Register of Historic Places (NRHP).

One resource was previously evaluated and found eligible for listing in the NRHP. The Mulholland Drive Overcrossing over I-405 (Bridge # 53-0739) was determined eligible in the State Historic Bridge Inventory Update (2006), *Concrete Box Girder Bridges, April 2004*. The 1959 bridge was found eligible under Criterion C, in the area of transportation and engineering. Criterion C is classified as being an important example of type, period, and style.

The Mulholland Drive Overcrossing spans a deep gorge through which I-405 passes. It was completed in 1959 and spans 235 feet. It has one of the longest box girder spans in the western United States and was not surpassed until 1969. Due to the size of this bridge and the height above the gorge, contractors used fill from excavation elsewhere on the freeway construction site to level the gorge until it reached a height of approximately 12 feet below the soffit of the bridge. This allowed construction vehicles to access the site. The fill was removed upon completion of the bridge leaving the bridge deck approximately 85 feet above the freeway. In addition to being a significant engineering and construction achievement, this bridge exemplifies the minimalist or modernist aesthetics of the period.

The curved box girder structure has a depth at mid-span of slightly less than 3% of the span length, an unusually low ratio which contributes to the bridge's graceful and dramatic appearance. The encasement of the columns during a Caltrans 1996 seismic retrofit project has diminished the bridge's integrity of design somewhat, but the bridge appears to have retained sufficient integrity to be eligible for the National Register listing under Criterion C. Additionally, this bridge is considered an historical resource for the purpose of CEQA compliance.

3.7.3 Impacts to Historic Cultural Resources

The proposed project has the potential to adversely effect the Mulholland Drive Overcrossing under all of the build alternatives. All proposed plans call for the removal and replacement of the bridge in order to accommodate the new HOV lane.

Concurrence was received on the Finding of Effect from the State Historic Preservation Officer on October 18, 2006 for the I-405 Sepulveda Pass Project (see Appendix E). It was determined that the proposed project would have an adverse effect on the Mulholland Drive overcrossing.

3.7.4 Avoidance, Minimization and Mitigation Measures

A draft Memorandum of Agreement (MOA) will be submitted to the Federal Highway Administration (FHWA) and the State Historic Preservation Officer after sufficient design work has been completed for the Division of Environmental Planning to ascertain impacts and consider mitigation for the Mulholland Bridge. Once FHWA and SHPO agree on the terms and conditions, the MOA will be executed by FHWA and Caltrans will concur.

3.7.5 Cumulative Impacts

Adverse effects on historic resources are defined in 36 CFR 800.5 and are generally determined based on how the approved design plans, once implemented, would impact the integrity of the resource. Consequently, adverse effects on historic structures are assessed based on the finished or constructed characteristics of the project; hence, for this analysis, the cumulative effects are assessed under the operational phase of the respective projects. The I-405 Sepulveda Pass Project is subject to an MOA with the State Historic Preservation Officer to resolve adverse effects.

Alteration of the Mulholland Drive Overcrossing would constitute an adverse effect on the historic resource. The Mulholland Drive Overcrossing would not maintain its historic integrity and would likely no longer be eligible for listing in the NRHP.

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3.8 ARCHAEOLOGICAL RESOURCES

3.8.1 Regulatory Setting

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) among the Advisory Council, FHWA, State Historic Preservation Officer (SHPO), and Caltrans went into effect for Caltrans projects, both state and local, with FHWA involvement. The PA takes the place of the Advisory Council's regulations, 36 CFR 800, streamlining the Section 106 process and delegating certain responsibilities to Caltrans.

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 Caltrans to inventory state-owned structures in its rights-of-way.

3.8.2 Affected Environment

An archeological review was conducted on November 7, 2001 and March 1, 2006 for the proposed project. This review was based on a records search at the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System at the California State University in Fullerton, and on a field survey.

A total of thirteen studies have been conducted within or near the project area. From these studies, one prehistoric resource was identified within the study area (i.e. within one-half mile radius of the project). The findings of the study as well as the current investigation revealed that no archaeological resources have been recorded within the area of the proposed project.

3.8.3 Impacts to Archaeological Resources

The area surveyed represents the Area of Potential Effects of the proposed project and no archaeological resources were found during the surveys. Based on research and investigation it is highly unlikely that construction within the APE would encounter any archaeological resources. There are no anticipated temporary or permanent impacts to archaeological resources as a result of the proposed project activities.

3.8.4 Avoidance, Minimization and Mitigation Measures

There are no anticipated impacts to archaeological resources as a result of the proposed project activities. However, if cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area would 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) who will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains should contact Gary Inversion, *District 7, Historic Resource Coordinator* so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

3.8.5 Cumulative Impacts

The projects in the study area are primarily redevelopment projects on existing, disturbed parcels; therefore, the potential for cumulative impacts to known cultural resources is minimal. There is the potential to encounter unknown cultural resources during construction and appropriate minimization measures have been identified for each project to address unknown cultural resources.

Physical Environment

3.9 WATERWAYS AND HYDROLOGIC SYSTEMS

3.9.1 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 100-year 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 100-year floodplain.”

3.9.2 Affected Environment

Information regarding hydrology and floodplains was obtained from the Location Hydraulic Study, May 8, 2006.

At the north end of the project there is an existing storm drain that collects water from various catch basins and transports and discharges the water to the Los Angeles River. At the south end of the proposed project, the Sepulveda Channel collects water from various catch basins and transports it to Ballona Creek. The water then travels from Ballona Creek to the Marina Del Rey Harbor.

Under Section 303(d) of the 1972 Clean Water Act, states, territories and authorized tribes are required to develop a list of water quality limited segments. These waters on the list do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology. The law requires that these jurisdictions establish priority rankings for water on the lists and develop action plans, referred to as Total Maximum Daily Loads (TMDL), to improve water quality.

According to list 303(d), the closest listed water bodies of concern are (1) The Los Angeles River within Hydrologic Unit: 405.12. There are two different traces of high priority pollutants: trash and ammonia; (2) The Ballona Creek within Hydrologic Unit: 405.13. This water body has many different traces of pollutants, however, high priority pollutants are: chlordane, enteric

viruses, chem A, trash, high coliform count, PCBs, DDT, and dieldrin; and (3) Marina Del Rey Harbor within Hydrologic Unit: 405.13. This water body also has many different traces of pollutants, however, high priority pollutants are: DDT, fish consumption advisory, PCBs, clordane, and high coliform count.

The proposed project location is currently designated by the Federal Emergency Management Agency (FEMA) as a “C” flood zone meaning an area of minimal flooding. Any water discharge due to a new development would require permits from the appropriate agencies. Discharges from the proposed project modification should also comply with the “Caltrans National Pollutant Discharge Elimination System (NPDES) permit regulation.”

3.9.3 Impacts to Waterways and Hydrologic Systems

The proposed project would not encroach on any 100-year floodplain, however, there would be an impact to an existing storm drain located at the north end of the project that collects water from various catch basins and transports and discharges it to the Los Angeles River.

The risk associated with the proposed project is low since the proposed project would not encroach on a floodplain or any regulated floodway. The proposed project would not support probable incompatible floodplain development.

Increasing the size of the freeway facility would result in minimal paving of permeable land. The increase in freeway pavement would result in water draining into freeway storm drains instead of city storm drains and is not anticipated to effect groundwater recharge in the study area.

The effluents from the proposed project location would not further impair or adversely affect the concentration of contaminants from the water bodies located in the project area. The drainage water would eventually be discharged into the Pacific Ocean and the project would be designed to comply with “best management practice” protocols.

3.9.4 Avoidance, Minimization, and Mitigation Measures

A Construction Storm Water Pollution Prevention Plan (SWPPP) would be prepared prior to the start of construction to ensure compliance with existing NPDES permits. The SWPPP would identify potential sources of pollutants, describe erosion and sediment controls, contain non-storm water provisions, describe post-construction storm water management, describe waste management activities, include a maintenance and inspection component, include a list of contractors, incorporate other storm water related plans if applicable, and would list the name of the preparer.

3.9.5 Cumulative Impacts

The cumulative study area is mostly built out or designated as open space; therefore, the conversion of vacant land to developed land is not considerable. Redevelopment of an area with substantial hardscape would not substantially increase existing peak storm flows. That is, most changes to the natural environment and, subsequently, changes to hydrology and floodplains have already occurred in the affected communities.

Recent regulations require certain categories of redevelopment projects to implement best management practices (BMPs) to reduce storm water runoff and treat it before its discharge to receiving waters or the storm drain system. These regulations benefit hydrology of an area by reducing peak storm flows. Therefore, development/redevelopment within the cumulative study area is not anticipated to substantially impact hydrology and floodplains.

Alternatives 2 and 3 would result in minimal paving of permeable land and would therefore increase runoff from the facility itself. However, the I-405 corridor is located within a developed area, and the widening would not affect large amounts of undeveloped land. The conversion of developed land to freeway and reuse or landscaping of remnant parcels would result in similar or reduced peak storm flows for the area. In addition, these alternatives would be subject to Caltrans requirements for water quality treatment, which may include detention. Drainage facilities would be upgraded on an as-needed basis to prevent localized flooding. Therefore, the build alternatives' contribution to cumulative hydrology and floodplains impacts would not be substantial.

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3.10 WATER QUALITY AND STORM WATER RUN-OFF

3.10.1 Regulatory Setting

Section 401 of the Clean Water Act, the primary federal law regulating water quality, requires water quality certification from the state board or regional board when a project (1) requires a federal license or permit—Section 404 is the most common federal permit for Caltrans' projects—and (2) will cause discharge into waters of the United States. Section 402 of the Clean Water Act establishes the National Pollutant Discharge Elimination System permit system for the discharge of any pollutant (except dredge or fill material) into waters of the United States. To ensure compliance with Section 402, the State Water Resources Control Board has developed and issued a National Pollutant Discharge Elimination System, Statewide Storm Water Permit, to regulate storm water discharges from all of Caltrans' right of way, properties and facilities. The permit regulates both storm and non-storm water discharges during and after construction.

In addition, the State Water Resources Control Board issues the Statewide Permit for all of Caltrans' construction activities, of 0.4 hectare (1 acre) or greater. The Board also issues permits for a number of smaller projects that are part of a common plan of development with the total area exceeding 0.4 hectares (1 acres), or projects that have the potential to significantly impair water quality. Caltrans' projects subject to the Statewide Storm Water Permit require a Storm Water Pollution Prevention Plan, while other projects, smaller than 0.4 hectares, require a Water Pollution Control Program.

The California Environmental Protection Agency has delegated administration of the federal National Pollutant Discharge Elimination System program to the State Water Resources Control Board and nine regional boards. This project is located within the jurisdiction of the State Water Resources Control Board and the Los Angeles Regional Water Quality Control Board (RWQCB).

Subject to Caltrans review and approval, the contractor prepares both the Storm Water Pollution Prevention Plan and the Water Pollution Control Program. The Water Pollution Control Program and Storm Water Pollution Prevention Plan identify construction activities that may cause pollutants in storm water and measures to control these pollutants. Because neither the Water Pollution Control Program nor the Storm Water Pollution Prevention Plan is prepared at this time, the following discussion focuses on anticipated pollution sources or activities that may cause pollutants in the storm water discharges.

Additional laws regulating water quality include the Porter-Cologne Water Quality Act, Safe Drinking Water Act, and Pollution Prevention Act. State water quality laws are codified in the California Water Code, Health and Safety Code and Fish and Game Code Section 5650-5656.

3.10.2 Affected Environment

Information regarding water quality and storm water run-off was obtained from the Storm Water Data Report, May 2005.

The project is located within the Los Angeles River Watershed. The receiving waters within the project limits include Los Angeles River and Ballona Creek with their respective tributaries. The distance to the Los Angeles River is approximately 1.5 miles to the northeast and 4.5 miles to Ballona Creek to the south. However, the Sepulveda Channel, which runs along I-405, is a major tributary to the Ballona Creek Watershed. Additionally, there are several reservoirs in the general vicinity of the Sepulveda Pass area. The Stone Canyon Reservoir is located to the east of I-405 in the Santa Monica Mountains, 13 miles northwest of downtown Los Angeles. This reservoir provides water to 400,000 people in Pacific Palisades, the Santa Monica Mountains, and West Los Angeles. The Encino Reservoir is located west of I-405 within the Santa Monica Mountains in the City of Encino. The Sepulveda Dam Recreation Area is located north of the I-405/US-101 interchange.

In the northern portion of the project near National Boulevard (PM 28.9), an existing storm drain collects water from various catch basins. The collected water is transported and discharged to the Los Angeles River. At the southern end of the project near Burbank Boulevard (PM 40.4), the Sepulveda Channel runs along the westside of I-405. The Sepulveda Channel collects water from various catch basins and transports the water to Ballona Creek. From Ballona Creek the water is then transported and eventually discharges the water to the Marina Del Rey Harbor.

According to the California RWQCB list of 303(d) of impaired water bodies, high priority pollutants in the Los Angeles River are trash and ammonia. High priority pollutants in Ballona Creek are chlordane, enteric viruses, chem A, trash, high coliform count, PCB's, DDT, and dieldrin. The Marina Del Rey Harbor has many different traces of pollutants; however, the high priority pollutants are DDT, fish consumption advisory, PCB's, chlordane, and high coliform count.

3.10.3 Impacts to Water Quality and Storm Water Runoff

The proposed project has the potential to affect water resources both from increased storm water runoff associated with construction activities and from runoff associated with the widening and operation of the highway system. The estimated change to the impervious areas resulting from this project is 5.8 hectares (14.3 acres). The total disturbed soil area calculated is 49.1 hectares (121.3 acres) for Alternative 2 and 72.2 hectares (178.5 acres) for Alternative 3. The total disturbed soil area was calculated by taking the total area of the median work, total area for ramp realignments and the widening of the outside shoulders which included the re-grading of slopes due to the widening and areas affected by construction activities. The proposed project would not further impair the 303(d) listed water bodies.

Construction

Construction of the proposed alternatives could affect water quality: 1) from construction activities; 2) through storm water discharges from the construction area along I-405; and 3) by reducing the groundwater recharge during construction. Since construction of the proposed project would be undertaken in accordance with the applicable National Pollutant Discharge Elimination System (NPDES) permits, impacts would be minimal and adverse impacts to water quality are not anticipated.

Operation

During highway operation, roadway surfaces will contribute to pollution of water resources through the collection and subsequent wash off of dirt, pollutants, and trash. The proposed project would result in adverse impacts to storm water runoff due to freeway operations. The RWQCB is responsible for controlling the discharge of pollution in storm water runoff.

3.10.4 Avoidance, Minimization, and Mitigation Measures

- The proposed project would be subject to the NPDES permitting processes that contain standard provisions intended to provide a required level of storm water pollution prevention.
- A Construction Storm Water Pollution Prevention Plan (SWPPP) would be prepared prior to the start of construction to ensure compliance with existing NPDES permits. The SWPPP would identify potential sources of pollutants, describe erosion and sediment controls, contain non-storm water provisions, describe post-construction storm water management, describe waste management activities, include a maintenance and inspection component, include a list of contractors, incorporate other storm water related plans if applicable, and would list the name of the preparer.
- Caltrans would conduct additional inspections or analysis if required by the RWQCB, inspect construction sites prior to anticipated storm events and after actual events in order to identify areas contributing to storm water discharge pollutants in order to evaluate the adequacy of the control measures identified in the SWPPP, certify annually that construction is in compliance with the applicable NPDES permit and SWPPP, and retain the monitoring records for at least three years following completion of construction.
- The Storm Water Data Report for this project includes treatment Best Management Practices (BMPs), design BMPs, and temporary construction BMPs to prevent sediment and other pollutants from entering the storm drain system. Six treatment BMPs (i.e. Infiltration Trench, Retention Basin, and Bio Swales) are proposed for incorporation into the project (see Figure 3.10-1: Proposed Storm Water Treatment BMP Locations). Type selection and final location of the proposed devices would be determined during final design.
- Caltrans would obtain necessary permits pursuant to Sections 401 and 404 of the Clean Water Act, as well as California Fish and Game Code 1601. The resource agencies that issue these permits often impose additional avoidance, minimization, and mitigation measures as part of the conditions of the permits. Caltrans shall comply with all permit conditions.

3.10.5 Cumulative Impacts

The cumulative study area is mostly built out or designated as open space; therefore, the conversion of vacant land to developed land is not considerable. Redevelopment of an area with substantial hardscape would not substantially increase existing peak storm flows. However, changes in land use may contribute additional sources of pollutants.

Recent regulations require certain categories of redevelopment projects to implement best management practices (BMPs) to reduce storm water runoff and treat it before its discharge to receiving waters or the storm drain system. These regulations are designed not only to prevent adverse water quality impacts as a result of new development/redevelopment, but to improve existing water quality in each affected watershed. Minimization measures are required to address pollutants associated with a particular land use and to prevent further degradation of waters within the watershed. With these measures in place, future development/redevelopment within the cumulative study area is not anticipated to substantially impact water quality.

Alternative 2 and 3 would increase the surface area of the freeway and would therefore increase runoff from the facility itself, which would act to concentrate the amount of pollutants in this runoff. The conversion of developed land to freeway may result in additional sources of pollutants. These alternatives would be subject to Caltrans requirements for construction BMPs and operational design pollution prevention, mitigation, treatment, and maintenance BMPs to address pollutants of concern. With the minimization measures listed in Section 3.10.4, the build alternatives' contribution to cumulative water quality effects would not be substantial.

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3.11 GEOLOGY/SOILS/SEISMIC/TOPOGRAPHY

3.11.1 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. Caltrans’ Office of Earthquake Engineering is responsible for assessing the seismic hazard for Caltrans’ 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.

40 CFR 1508.14 requires that, when economic or social and natural or physical environmental effects are interrelated, the environmental document shall discuss all these effects on the human environment.

3.11.2 Affected Environment

Information regarding geology/soils/seismic/paleontology/topography was obtained from a Preliminary Geotechnical Investigation Report, dated April 2000 and a reevaluation of the project from an updated memo dated April 2006.

Geologic Setting

Regionally, the proposed project site is located within the Los Angeles Basin, which is situated in the Peninsular Ranges and Transverse Ranges Province. Structurally, the Los Angeles Basin is relatively simple and is characterized by relatively flat-lying, late Quaternary strata. The Los Angeles basin is divided into four distinct structural blocks separated by major faults or flexures. The existing freeway lies in the northwestern block, which includes portions of the San Fernando Valley and the Santa Monica Mountains. The project is located within three main geologic units. The southern portion of the site consists of surficial sediments, the middle portion is mostly Santa Monica Slate, and the northern portion consists mainly of Monterey Formation.

Seismicity

A fault is considered by the State of California to be active if geologic evidence indicates that movement on the fault has occurred in the last 11,000 years, and potentially active if movement has occurred in the last 2 million years.

The project is located in a seismically active area. The geologic processes that have caused earthquakes in the past can be expected to continue. Seismic events, which are likely to produce

the greatest bedrock accelerations, could be a moderate event on the Whittier-Elsinore Fault Zone (WEFZ) and/or a large event on a distant active fault.

There is no geological information that indicates an active fault in the project area. The nearest known active fault under Alquist-Priolo Earthquake Fault Zoning Act is the Newport-Inglewood Earthquake Fault Zone, which is located 2.7 miles east of the southern end of the project area.

The Benedict Canyon fault crosses the existing freeway within the project limits. A study done by Lindvall, Richter and Associates in 1987 concluded that the fault had not sustained slippage in the past 5,000 to 10,000 years. This conclusion was based on observed undisturbed soil horizons that overlay the fault trace as exposed in dozer excavations for the construction of the Getty Museum Complex. The estimated age of the unfaulted soils is said to be as old as 9,000 years, and possibly much older, concluding that the minimum age of the latest faulting approached 10,000 years.

Inferred traces of the Hollywood Fault is within the project limits. Recent investigations (J. Dolan, 1997) have suggested that this fault is active over certain portions of its length. At the present time pursuant to the Alquist-Priolo Earthquake Fault Zoning Act, this fault has not been zoned.

Ground Shaking

Ground shaking is the primary cause of structural damage during an earthquake; it is considered to be the most likely damage-producing earthquake phenomenon related to this project. Magnitude, duration and vibration frequency will vary greatly, depending on the fault and its distance from the project.

The potential of differential settlement resulting from severe earthquake shaking along the proposed fill slopes is present. The potential for ground rupture is very small and is not to be considered to be a substantial hazard for this project.

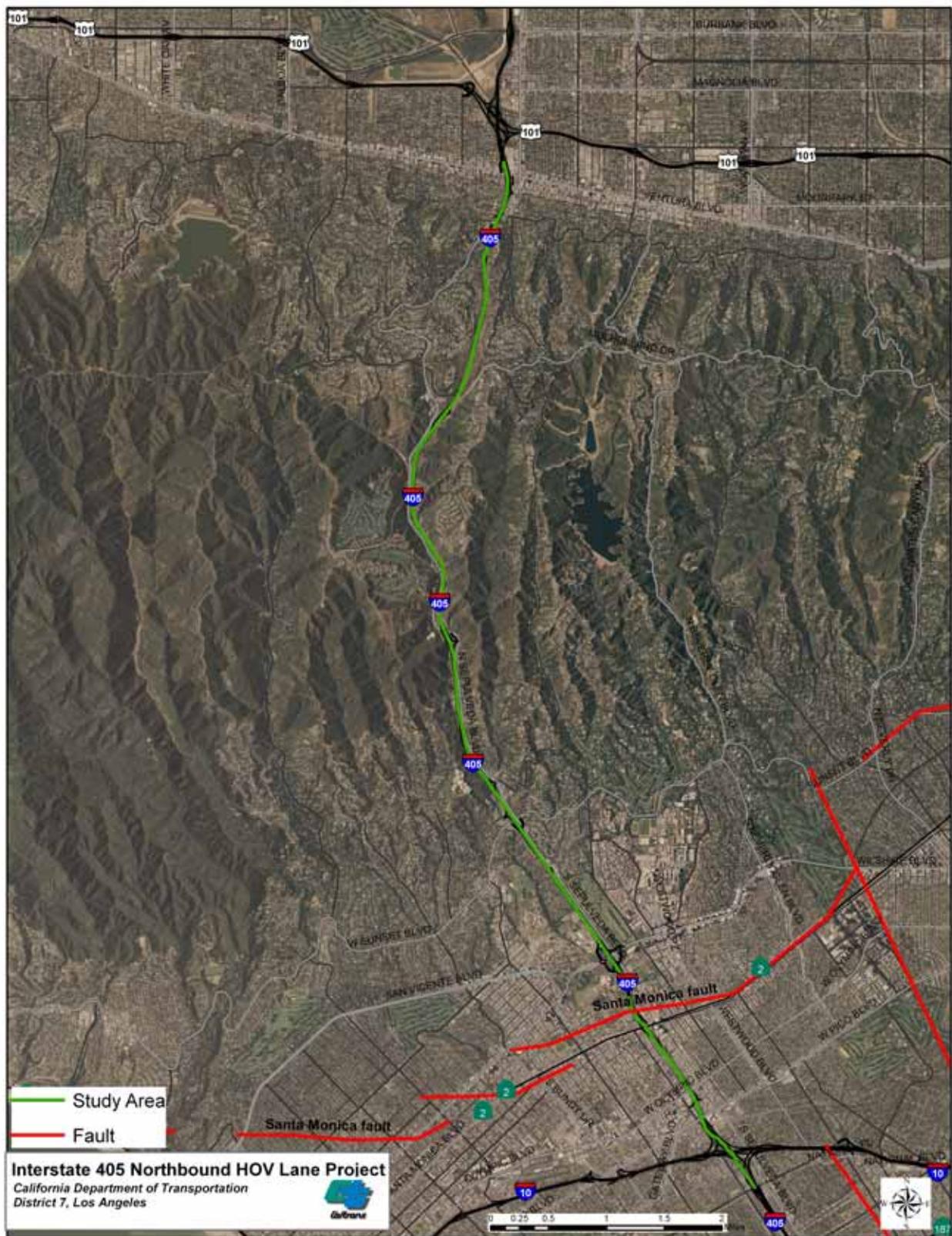
Ground Rupture

An analysis of fault rupture hazard for a particular fault requires that the fault be located exactly, and it's approximate potential for rupture to be known. The closest well-defined fault trace under the auspices of the Alquist-Priolo Earthquake Fault Zone is the Newport-Inglewood fault, 2.7 miles east of the project.

Slope Stability

Several areas in the project area would require fill slopes where the freeway would be widened. Fill slopes would be constructed according to Caltrans Standard Specifications to ensure stability.

Figure 3.11-1: Aerial of Faults in the Project Area



U.S. Geological Survey and California Geological Survey, 2006, Quaternary fault and fold database for the United States, accessed January 30 2006, from USGS web site: <http://earthquakes.usgs.gov/regional/qfaults/>.
 Map Created by Robert Wang, 12-20-06
 Division of Environmental Planning

Liquefaction and Groundwater

The potential for liquefaction exists when fine silts and sands sit just below the water table. The water can also be perched ground water. Liquefaction has been documented to affect soils to about 50 feet deep during prolonged periods of ground shaking.

The last two major regional earthquakes that occurred were the 1971 San Fernando quake with a magnitude 6.62 and the 1994 Northridge quake with a magnitude 6.7. Neither quake produced liquefaction within the project area limits. Based on a regional study conducted by the U.S. Geological Survey (1985), the relative liquefaction susceptibility along the project is considered to be very low.

Groundwater was not encountered in the majority of the borings drilled during the 1950's for the bridge structures located within the project limits. However, groundwater was encountered during the 1950's drilling for the Route 405/2 Separation Undercrossing at a depth of 36 ft below the ground surface and during the drilling of Sepulveda Boulevard Undercrossing (Bridge No. 53-695). However, the Sepulveda Boulevard memorandum did not provide the depth to groundwater.

Groundwater levels vary beneath the project area (refer to 3.12-1: Initial Site Assessment Location Map for geographical reference to Segment A through D). The California Department of Water Resources Groundwater Level Data indicate wells located to the north, west, and south of the project site have a groundwater level at least 24 feet to greater than 90 feet below the ground surface. Therefore, it is not anticipated that groundwater will significantly impact project development. However, localized groundwater or seepage conditions may develop where none previously existed. In particular, groundwater or seepage may occur during periods of rainfall through the Santa Monica Mountain section of Route 405.

Table 3.11-1: Approximate Groundwater Levels

Segment	Approximate Groundwater Levels (feet bgs)
A	70 to 73
B	26 to 60
C	50 to 90
D	24 to 30

Source: Supplemental ISA, June 2006

3.11.3 Impacts

The existing freeway is not located within the confines of an Alquist-Priolo Earthquake Fault Zone and is not located over a previous well-defined fault trace of the Hollywood system. Based on the review of several geologic/seismologic reports, the potential for ground rupture is very small and is not considered to be a hazard for this project.

All build alternatives would require minor changes to the topography immediately adjacent to the freeway as fill slopes and retaining walls are modified and overcrossings are constructed. No unique geologic or physical features are present in the project area.

3.11.4 Avoidance, Minimization and Mitigation Measures

- Widening the existing structures and constructing new retaining walls would require additional subsurface exploration for potential liquefaction from Santa Monica Boulevard to Wilshire Boulevard (post miles 30.73 to 32.1).
- To mitigate against liquefaction, new piles required for structural support would be placed to a depth below the zones of potential liquefaction to protect structures from this hazard. Because the area could experience earthquakes with ground movement, the structures and the highway would be built to withstand these movements utilizing the latest technology and design details.
- Insufficiently compacted native material in the immediate area of construction would be removed and re-compacted to 90 percent in cut areas and replaced with an imported sub-base in structural sections. In fill areas above natural ground, the natural material would be removed until dense material is reached and replaced as a compacted fill.
- It is recommended that fill slopes be treated immediately after construction with planting, hydroseeding or paving to reduce erosion.

3.11.5 Cumulative Impacts

The cumulative study area for geology/soils/seismic/topography impacts is the maximum footprint of all the project alternatives.

Ground shaking, landslides, liquefaction and other soils, seismic, and topographical constraints pose a potential hazard for all development/redevelopment projects in Southern California. However, these effects are evaluated on a site-specific basis and potential impacts are minimized via site-specific design features. Measures such as adherence to geotechnical consultant recommendations regarding soil preparation, earthquake structure design, and grading methods would minimize potential effects for each project and therefore do not result in substantial cumulative effects.

All build alternatives would have the potential to result in geology/soils/seismic/topography effects because of the degree of excavation and structural design involved. However, it is not anticipated that these effects would cumulatively contribute to other projects' effects.

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3.12 HAZARDOUS WASTE/MATERIALS

3.12.1 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 & 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.

3.12.2 Affected Environment

The Sepulveda Pass Project extends from the Los Angeles basin, across the eastern Santa Monica Mountains (Sepulveda Pass), and into the San Fernando Valley along approximately 16.5 kilometers (10.25 miles) of Interstate 405 in the City of Los Angeles. Depending on the specific location, Caltrans’ Right-of-way may contain unimproved land, shoulders (paved and unpaved), paved lanes, and median. Additionally, properties that would be acquired or properties that would be partially or temporarily acquired for accommodating the proposed

roadway improvement include all or part of 124 parcels of private, state, or federal property. These properties include vacant land, residential, commercial facilities (office/retail buildings), and federal facilities.

An Initial Site Assessment (ISA) was prepared in January 2001 and a Supplemental ISA was prepared in June 2006. Properties were evaluated and classified as high, moderate, or low with regard to the potential for detrimental impacts during construction activities for the proposed project. The project was divided into four segments: Segments A to D (see Figure 3.12-1). Segment A runs from 0.3 mile south of I-10 (near National Boulevard) to Santa Monica Boulevard; Segment B runs from Santa Monica Boulevard to Sunset Boulevard; Segment C runs from Sunset Boulevard to Sepulveda Boulevard; and Segment D runs from Sepulveda Boulevard to Greenleaf Street.

The Mission Canyon Landfill (MCL) was located in Segment D of the project area. The MCL is a closed landfill that was operated by the Los Angeles County Sanitation District as a permitted solid waste disposal site. The MCL is generally located immediately west of Sepulveda Blvd., approximately 3 miles north of Sunset Blvd. and approximately 1.5 miles south of Mulholland Drive. The MCL was listed for an investigation started by the Environmental Protection Agency (EPA) in 1979. A preliminary assessment was performed by the EPA in 1988, and the property was issued a “no further action” status in 1988. An energy company (GSF Energy) that converts landfill gas to energy operates at the landfill at the address of 1901 North Sepulveda Blvd.

The MCL is also currently occupied by the Mountain Gate County Club and landscaped open spaces. The Mountain Gate Residential community surrounds portions of the MCL.

Results of the Supplemental Initial Site Assessment found:

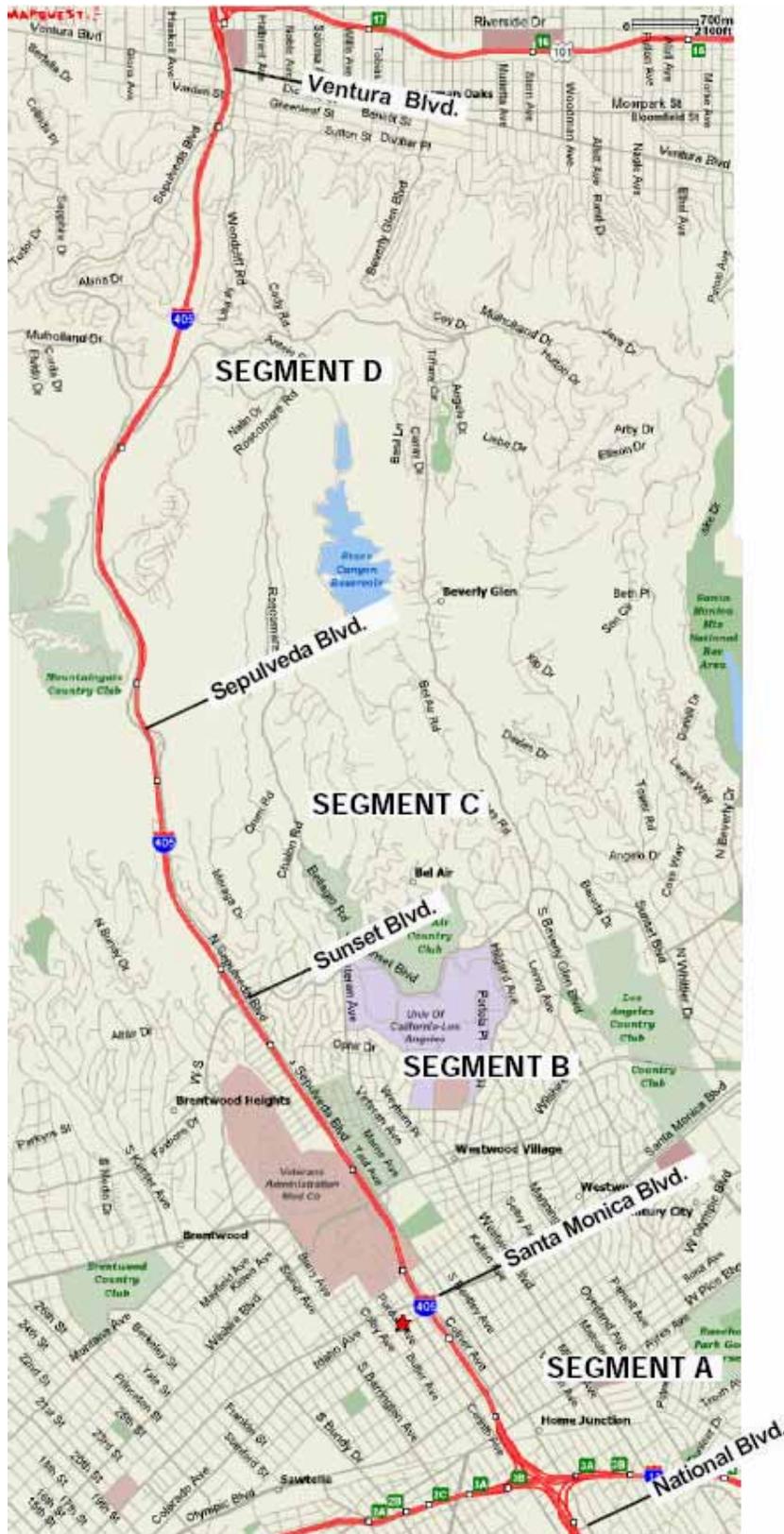
- One of three historic gas stations along Church Lane;
- An historical storage of potentially hazardous materials;
- A Richfield Oil Company property next to the west side of I-405;
- An underground storage tank at the Verizon property (formerly GTE, proposed right-of-way property);
- A dry cleaner; and
- Aerially deposited lead along portions of I-405 where project construction activities may disturb or affect the unpaved shoulders.

3.12.3 Impacts

Alternative 1 (No Build)

There would be no direct impacts associated with hazardous wastes/materials under Alternative 1: No Build.

Figure 3.12-1: Initial Site Assessment Location Map



Source: S-ISA, June 2006

Alternative 2 and 3

Impacts associated with all build alternatives are similar and as a result, properties were evaluated and classified as high, moderate, or low with regard to the potential for detrimental impact during construction and acquisition activities under all build alternatives for the project. Properties categorized as high or moderate risk were evaluated based on the information obtained and the likelihood that hazardous materials might: affect soil and/or groundwater likely to be disturbed during construction; use a permanent/temporary easement; or be acquired as Caltrans right-of-way. Table 3.12-1 shows the properties of concern.

3.12.4 Avoidance, Minimization and Mitigation Measures

Based on the results of the Supplemental Initial Site Assessment, a project-specific site investigation has been initiated for the following hazardous wastes/materials concerns:

- Perform a subsurface investigation beneath the residence at the corner of Cashmere Street and Sepulveda Boulevard (11326 Cashmere Street, the current location of Church Lane) to assess the soil and groundwater for petroleum hydrocarbons because a gasoline station used to sit on this property. This site is one of three historic gasoline station sites along Church Lane.
- Perform a subsurface investigation beneath the residence at the corner of Burnham Avenue and Sepulveda Boulevard (11327 Burnham Street, the current location of Church Lane) to assess the soil and groundwater for petroleum hydrocarbons because a gasoline station used to sit on this property. This site is one of three historic gasoline station sites along Church Lane.
- Perform a subsurface investigation beneath the residence at the corner of Bolas Street and Sepulveda Boulevard (11326 Bolas Street, the current location of Church Lane) to assess the soil and groundwater for petroleum hydrocarbons because a gasoline station used to sit on this property. This site is one of three historic gasoline station sites along Church Lane.
- Perform a subsurface investigation within the proposed permanent easement (PE) and temporary construction easement (TCE) adjacent to the Veterans Administration storage area property on the west side of I-405 to assess the soil and groundwater for petroleum hydrocarbons and volatile organic compounds due to current and historical storage of potentially hazardous materials.
- Perform a subsurface investigation within the proposed PE and TCE next to the Richfield Oil Company property on the west side of I-405 to assess the soil and groundwater for petroleum hydrocarbons and volatile organic compounds due to current and historic oil exploration, production, and storage.
- The underground storage tank at the Verizon property (formerly GTE, proposed right-of-way property) at 598 Sepulveda Boulevard should be properly closed by removal, in accordance

with local regulations. A subsurface investigation should be performed to assess the soil and groundwater for petroleum hydrocarbons and volatile organic compounds.

- Perform a subsurface investigation within the proposed PE and TCE next to the dry cleaner at 641 North Sepulveda Boulevard to assess the soil and groundwater for volatile organic compounds.
- If apparent soil contamination is discovered during project construction activities (indicated by odors, staining, or field screening instruments), construction activities should stop at such locations and the soil should be sampled and analyzed at a state certified laboratory to determine the type(s) and concentration(s) of contaminants that may be present; special handling or disposal requirements for the soil may be necessary.
- Aerially deposited lead surveys should be performed along portions of I-405 where project construction activities may disturb or affect the unpaved shoulders.
- Before demolition, significant renovation or retrofitting of buildings or freeway structures in the project area, asbestos-containing material and lead-based paint surveys should be conducted by a state certified asbestos consultant. If asbestos-containing materials or lead-based paints are detected, these materials must be removed by a licensed contractor before demolition or retrofit activities.

3.12.5 Cumulative Impacts

Each project that involves demolition or renovation of structures, excavation of soil, or removal of groundwater has the potential to encounter hazardous waste/materials. Regulations are in place to address handling, transport, and disposal of these substances. Hazardous building materials (e.g., asbestos and lead-based paint) are phased out and are no longer used for new development/redevelopment projects, but may be present in older building structures.

Technological improvements have reduced tank spills, and increased education and enforcement has reduced improper disposal of hazardous waste/materials within Los Angeles County. For these reasons, it is anticipated that future projects within the study area would involve less exposure to hazardous waste/materials than is currently experienced.

All of the build alternatives involve disturbance of the existing project area; therefore, they all have the potential to contact hazardous waste/materials. The greater the amount of demolition/renovation and excavation, the greater the potential to contact these substances. Minimization measures are required to address hazardous building materials, contaminated soils, contaminated groundwater, and unknown substances. All of the alternatives would involve cleanup of hazardous waste as part of the acquisition process or as it is encountered, resulting in a beneficial impact to the local community. With mitigation to address use, transport, and disposal of hazardous waste/materials, the project alternatives' contribution to cumulative hazardous waste/materials effects would not be substantial.

Table 3.12-1: Identified Properties of Concern

Property Name/Address	Site Operations – Reason for Risk	Data Source ¹	Risk Class ²	Proposed R/W, PE and/or TCE/Adjacent	Alternative
Segment A					
No Potential Impacts					
Segment B					
Residence 11326 Cashmere Street Los Angeles	Site of a former gasoline station	H	M	R/W	2 and 3
Residence 11327 Burnham Street Los Angeles	Site of a former gasoline station	H	M	R/W	2 and 3
Residence 11326 Bolas Street Los Angeles	Site of a former gasoline station	H	M	R/W	2 and 3
VA Storage Area South of Constitution Avenue Los Angeles	Several storage areas of unknown materials	R, H	M	Adjacent	2 and 3
Richfield Oil Company 123 West Hadley Los Angeles	Oil company with oil wells and oil storage facilities.	R, D, H	M	Adjacent	2 and 3
Segment C					
Dry Cleaner 641 N Sepulveda Boulevard Brentwood	Facility is on the RCRA Generator	D	M	PE and/or TCE	2 and 3
Verizon (former GTE) 598 N Sepulveda Boulevard Brentwood	The facility is a former LUST case and currently contains 1 6,000-gallon diesel UST	R, D	M	R/W	2 and 3
Segment D					
No Facilities of Concern					

Source: S-ISA, June 2006

Notes: R/W – Right of Way, PE – Permanent Easement, TCE – Temporary Construction Easement

LUST – Leaking Underground Storage Tank

¹Indicates primary information sources for listing: R = Reconnaissance, D = Database, H = Historical Documentation

²Risk Class H = High, M = Moderate, L = Low

3.13 AIR QUALITY

3.13.1 Regulatory Setting

The Clean Air Act (CAA) 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 (NO₂), ozone (O₃), particulate matter (PM), lead (Pb), and sulfur dioxide (SO₂).

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 (SIP) 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 (NO₂), ozone (O₃), and particulate matter (PM). California is in attainment for the other criteria pollutants.

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 of 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 PM₁₀ hot-spot analyses to be performed for projects of air quality concern (POAQC). Qualitative hot-spot analyses would be done for these projects before appropriate methods and modeling guidance are available and quantitative PM_{2.5} and PM₁₀ hot-spot analyses are required under 40 CFR 93.123(b)(4). In addition, through the final rule, the Environmental Protection Agency (EPA) determined that projects not identified in 40 CFR 93.123(b)(1) as POAQC have also met statutory requirements without any further hot-spot analyses (40 CFR 93.116(a)).

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 usually at least 20 years. 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 metropolitan planning organization and the appropriate federal agencies, such as the Federal Highway Administration and the Federal Transit Administration, make the determination that the Regional Transportation Plans is in conformity with the State Implementation Plan for achieving the goals of the Clean Air Act. For the Southern California region, the metropolitan planning

organization is the Southern California Association of Governments (SCAG), which includes Los Angeles, Orange, San Bernardino, Riverside, Ventura and Imperial counties.

Otherwise, the projects in the Regional Transportation Plan must be modified until conformity is attained. If the design and scope of the proposed transportation project are the same as described in the Regional Transportation Plan, 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 any of the criteria pollutants. 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 project creates a known CO, or a particulate matter violation is located in the project vicinity, the project must include measures to reduce or eliminate the existing violation(s) as well.

Project Inclusion in Approved RTP and RTIP

The proposed project is included in the 2006 RTIP and referenced in the Regional Transportation 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 # - LA0B408
- Air Basin - SCAB
- Model # - L472
- Program Code - PLN40
- Route - 405
- Begin Post Mile - 28.8
- End Post Mile - 39.0
- Description - In Los Angeles from Route 10 to Route 101. Widen for HOV lane and modify ramps, add new westbound onramp at Sunset and HOV ingress/egress at Santa Monica Boulevard (EA 12030; PPNO 0851G; SAFETLU #1302, 1934).

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.

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 RTIP was released in June 2006

and was formally approved by SCAG on July 27, 2006. The 2006 RTIP was approved by the federal agencies on October 2, 2006.

The design, concept and scope of the project has not changed substantially and the project will not interfere with the timely implementation of transportation control measures from the State Implementation Plan (SIP). The essential role of the SIP in the regional analysis is documented in this section. A comprehensive analysis of potential air pollutants has concluded that the proposed project does not pose any substantial operational impact on the ambient air quality in the project vicinity.

3.13.2 Affected Environment

General Meteorology

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. That cell 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 Fahrenheit 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 toward sea. Local canyons alter wind direction, 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 hinder the dispersion of pollutants. Inversions may be either ground based or elevated. Grounds-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 locally at 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.

Air quality at any site depends 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 (NO_x) emissions, and approximately 76 percent of carbon monoxide (CO) emissions.

The South Coast Air Quality Management District has divided the South Coast Air Basin into 38 air-monitoring areas, with a designated ambient air monitoring station representing each area:

- The south end of the project is in the area represented by measurements made at the West Los Angeles-Veterans Administration Hospital monitoring station. The West Los Angeles (LA) station is near the intersection of Wilshire Boulevard and Sawtelle Boulevard in the City of Santa Monica, less than 1 mile northwest of the I-405 and Santa Monica Boulevard interchange. The pollutants measured at the West LA station include ozone, carbon monoxide, nitrogen dioxide.
- The next nearest station is the LA-Westchester Parkway station about 5.5 miles southwest. PM₁₀ monitoring data are available; however, data for the last three years are not completed.
- Complete monitoring data was measured at the LA-Main Street for PM₁₀ and PM_{2.5}. This monitoring station is about 11 miles west of the project site.
- The north end of the project is represented by measurements made at the Reseda monitoring station, located about 4.5 miles northwest of the I-405/US-101 interchange. The pollutants measured at the Reseda station include ozone, carbon monoxide, nitrogen dioxide, and PM_{2.5}.

Attainment Status

The proposed project is located in the South Coast Air Basin (SCAB). This air basin is classified as non-attainment for Carbon Monoxide (CO) as well as for Particulate Matter less than 10 microns in diameter (PM₁₀) at the state as well as the federal level.

The South Coast Air Quality Management District (SCAQMD) and SCAG, in coordination with local governments and the private sector, have developed the Air Quality Management Plan (AQMP) for the air basin. The AQMP is the most important air management document for the basin because it provides the blueprint for meeting state and federal ambient air quality standards. The AQMP for the basin is included in the State Implementation Plan (SIP) which is the document that demonstrates compliance with the Federal Clean Air Act (FCAA). The 2003 AQMP is the current approved air plan. The plan was adopted locally on August 1, 2003, by the governing board of the SCAQMD. CARB adopted the plan as part of the California State Implementation Plan on October 23, 2003. The EPA adopted the mobile source emission budgets on March 25, 2004. The PM₁₀ attainment plan received final approval on November 5, 2005 with an effective date of December 14, 2005. The EPA has not approved the ozone or CO attainment plans to date. For federal purposes, the 1997 AQMP with the 1999 amendments is the currently applicable Ozone attainment plan. The CO attainment plan in the 1997 AQMP was approved by the EPA but only on an interim basis through 1998. Therefore, the basin does not have a federally approved CO attainment plan.

The Environmental Protection Agency previously designated the South Coast Air Basin as an extreme non-attainment area for 1-hour ozone. The federal 1-hour ozone standard was revoked by the U.S. EPA on June 15, 2005 and replaced/superseded by the 8-hour average ozone standard to be achieved by November 15, 2010. The basin is also designated as serious non-attainment for PM₁₀ and carbon monoxide. On October 17, 2006, the Federal Register codified

EPA's decision revoking the annual PM₁₀ standard. The action left the 24-hour average PM₁₀ standard in place. Over the past decade, the basin has experienced only a handful of days with 24-hour average PM₁₀ concentrations exceeding the standard. The federal PM₁₀ standard is in non-attainment; however, the SCAQMD will open discussions with EPA about the possibility of redesignating the basin to attainment. For carbon monoxide, the deadline was to be December 31, 2000, but the basin was granted an extension. The South Coast Air Basin has not had more than one violation of the federal carbon monoxide standard in the past two years. Therefore, the South Coast Air Basin has met the criteria for carbon monoxide attainment. However, South Coast Air Basin is still formally designated as a non-attainment area for carbon monoxide until the Environmental Protection Agency re-designates the basin as an attainment area.

The goal of a State Implementation Plan is to secure an attainment designation for the criteria pollutant at a future year. If a pollutant is above National Ambient Air Quality Standards level, it is in non-attainment. Of the six criteria pollutants, two are in attainment: lead and sulfur dioxide. The remaining pollutants have their respective State Implementation Plan to address attainment for future years. Table 3.13-1 lists the non-attainment designations per state and federal (National Ambient Air Quality Standards) standards.

Criteria Pollutants

Since the passage of the Federal Clean Air Act 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 (O₃), carbon monoxide (CO), particulate matter (PM₁₀ and PM_{2.5}), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and lead (Pb). Table 3.13-2 shows the primary standards for these pollutants.

Table 3.13-1: Attainment Status of Criteria Pollutants in the SCAB

Pollutant	Federal	State
O ₃ 1-hour	N/A*	Non-attainment
O ₃ 8-hour	Severe-17 Non-attainment (Year 2021)	Non-attainment
PM ₁₀	Serious Non-attainment (Year 2006)	Non-attainment
PM _{2.5}	Non-attainment (Year 2015)	Non-attainment
CO	Serious Non-attainment (Year 2000)	Non-attainment
NO ₂	Attainment/Maintenance (Year 1995)	Attainment

Source: CARB (www.arb.ca.gov/desig/desig.htm).

*The Federal 1-hour Ozone (O₃) 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.

*EPA changed the PM_{2.5} 24-hour standard from 65 to 35 µg/m³ with an effective date of December 2006. Until new area designations become effective early 2010 based on the new standard, the project-level conformity determination must still consider the 1997 PM_{2.5} standards because these are the standards upon which the current PM_{2.5} nonattainment designations were based.

Table 3.13-2: State and Federal Criteria Air Pollutant Standards, Effects and Sources

Pollutant	Averaging Time	State Standard	Federal Standard	Health and Atmospheric Effects	Typical Sources
Ozone (O ₃) ²	1 hour 8 hours	0.09 <u>ppm</u> 0.070 <u>ppm</u>	--- ⁴ 0.08 <u>ppm</u>	High concentrations irritate lungs. Long-term exposure may cause lung tissue damage. Long-term exposure damages plant materials and reduces crop productivity. Precursor organic compounds include a number of known toxic air contaminants.	Low-altitude ozone is almost entirely formed from reactive organic gases (ROG) and nitrogen oxides (NOx) in the presence of sunlight and heat. Major sources include motor vehicles and other mobile sources, solvent evaporation, and industrial and other combustion processes. Biologically-produced ROG may also contribute.
Carbon Monoxide (CO)	1 hour 8 hours 8 hours (Lake Tahoe)	9.0 <u>ppm</u> ¹ 20 <u>ppm</u> 6 <u>ppm</u>	9 <u>ppm</u> 35 <u>ppm</u> ---	Asphyxiant. CO interferes with the transfer of oxygen to the blood and deprives sensitive tissues of oxygen.	Combustion sources, especially gasoline-powered engines and motor vehicles. CO is the traditional signature pollutant for on-road mobile sources at the local and neighborhood scale.
Respirable Particulate Matter (PM ₁₀) ²	24 hours Annual	50 <u>µg/m³</u> 20 <u>µg/m³</u>	150 <u>µg/m³</u> ---	Irritates eyes and respiratory tract. Decreases lung capacity. Associated with increased cancer and mortality. Contributes to haze and reduced visibility. Includes some toxic air contaminants. Many aerosol and solid compounds are part of PM ₁₀ .	Dust- and fume-producing industrial and agricultural operations; combustion smoke; atmospheric chemical reactions; construction and other dust-producing activities; unpaved road dust and re-entrained paved road dust; natural sources (wind-blown dust, ocean spray).
Fine Particulate Matter (PM _{2.5}) ²	24 hours Annual	--- 12 <u>µg/m³</u>	35 <u>µg/m³</u> 15 <u>µg/m³</u>	Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and produces surface soiling. Most diesel exhaust particulate matter – considered a toxic air contaminant – is in the PM _{2.5} size range. Many aerosol and solid compounds are part of PM _{2.5} .	Combustion including motor vehicles, other mobile sources, and industrial activities; residential and agricultural burning; also formed through atmospheric chemical (including photochemical) reactions involving other pollutants including NOx, sulfur oxides (SOx), ammonia, and ROG.
Nitrogen Dioxide (NO ₂)	1 hour Annual	0.25 <u>ppm</u> ---	--- 0.053 <u>ppm</u>	Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown. Contributes to acid rain.	Motor vehicles and other mobile sources; refineries; industrial operations.
Sulfur Dioxide (SO ₂)	1 hour 3 hours 24 hours Annual	0.25 <u>ppm</u> --- 0.04 <u>ppm</u> ---	--- 0.5 <u>ppm</u> 0.14 <u>ppm</u> 0.030 <u>ppm</u>	Irritates respiratory tract; injures lung tissue. Can yellow plant leaves. Destructive to marble, iron, steel. Contributes to acid rain. Limits visibility.	Fuel combustion (especially coal and high-sulfur oil), chemical plants, sulfur recovery plants, metal processing.
Lead (Pb) ³	Monthly Quarterly	1.5 <u>µg/m³</u> ---	--- 1.5 <u>µg/m³</u>	Disturbs gastrointestinal system. Causes anemia, kidney disease, and neuromuscular and neurological dysfunction. Also considered a toxic air contaminant.	Primary: lead-based industrial process like battery production and smelters. Past: lead paint, leaded gasoline. Moderate to high levels of aerially deposited lead from gasoline may still be present in soils along major roads, and can be a problem if large amounts of soil are disturbed.
Sulfate	24 hours	25 <u>µg/m³</u>	---	Premature mortality and respiratory effects. Contributes to acid rain. Some toxic air contaminants attach to sulfate aerosol particles.	Industrial processes, refineries and oil fields, mines, natural sources like volcanic areas, salt-covered dry lakes, and large sulfide rock areas.
Hydrogen Sulfide (H ₂ S)	1 hour	0.03 <u>ppm</u>	---	Colorless, flammable, poisonous. Respiratory irritant. Neurological damage and premature death. Headache, nausea.	Industrial processes such as: refineries and oil fields, asphalt plants, livestock operations, sewage treatment plants, and mines. Some natural sources like volcanic areas and hot springs.

Pollutant	Averaging Time	State Standard	Federal Standard	Health and Atmospheric Effects	Typical Sources
Visibility Reducing Particles (VRP)	8 hours	Visibility of 10 miles or more (Tahoe: 30 miles) at relative humidity less than 70%	---	Reduces visibility. Produces haze. NOTE: not related to the Regional Haze program under the Federal Clean Air Act, which is oriented primarily toward visibility issues in National Parks and other "Class I" areas.	See particulate matter above.
Vinyl Chloride ²	24 hours	0.01 ppm	---	Neurological effects, liver damage, cancer. Also considered a toxic air contaminant.	Industrial processes

Notes: ppm = parts per million; µg/m³ = micrograms per cubic meter

Updated: 4/2/2007

1 Rounding to an integer value is not allowed for the State 1-hour CO standard. A violation occurs at or above 9.05 ppm.

2 Annual PM₁₀ NAAQS revoked October 2006; was 50 µg/m³. 24-hr. PM_{2.5} NAAQS tightened October 2006; was 65 µg/m³.

3 The ARB has identified lead, vinyl chloride, and the particulate matter fraction of diesel exhaust as toxic air contaminants. Diesel exhaust particulate matter is part of PM₁₀ and, in larger proportion, PM_{2.5}. Both the ARB and U.S. EPA have identified various organic compounds that are precursors to ozone and PM_{2.5} as toxic air contaminants. There is no threshold level of exposure for adverse health effect determined for toxic air contaminants, and control measures may apply at ambient concentrations below any criteria levels specified for these pollutants or the general categories of pollutants to which they belong.

4 12/22/2006 Federal court decision may affect applicability of Federal 1-hour ozone standard. Prior to 6/2005, the 1-hour standard was 0.12 ppm. Case is still in litigation.

Greenhouse Gases and Climate Change:

Carbon dioxide and similar "greenhouse gases" are not considered "pollutants" under the Federal Clean Air Act by U.S. EPA, and are not subject to current national ambient air quality standards. A Supreme Court decision on 4/2/2007 may change that position, but further litigation will most likely occur before the situation is settled. EPA is active in the climate change arena. For more information, see: <http://yosemite.epa.gov/oar/globalwarming.nsf/content/index.html>.

Carbon dioxide and similar "greenhouse gases" are not criteria pollutants under the California Clean Air Act, and ambient air quality standards have not been set. They are, however, regulated by the California Air Resources Board (ARB) based on legislation and Governor's executive orders. Carbon dioxide emission reduction measures adopted to date are in litigation. For more information on ARB's climate change program see: <http://www.arb.ca.gov/cc/cc.htm>.

There are a number of greenhouse gases, of varying potency. Since carbon dioxide (CO₂) is the most prevalent greenhouse gas, most "GHG" analyses express greenhouse gas emissions in terms of "CO₂ equivalent." CO₂ emissions themselves are closely related to fuel consumption.

Sources:

- California Air Resources Board Ambient Air Quality Standards chart (<http://www.arb.ca.gov/aqs/aaqs2.pdf>)
- Sonoma-Marín Area Rail Transit Draft EIR Air Pollutant Standards and Effects table, November 2005, page 3-52.
- U.S. EPA and California Air Resources Board air toxics websites, 05/17/2006
- U.S. EPA Final Rulemaking (Federal Register, 17 October 2006, 71 FR 61144)
- DC Circuit Court decision, South Coast AQMD v. EPA; opinion at the Court's web site accessed 4/2/2007: <http://pacer.cadc.uscourts.gov/docs/common/opinions/200612/04-1200a.pdf>
- Supreme Court decision, Mass. v. EPA; slip opinion at the Court's web site accessed 4/2/2007: <http://www.supremecourt.us/opinions/06pdf/05-1120.pdf>

3.13.3 Impacts

Regional Analysis Contingency and Finding

The proposed project is included in the Southern California Association of Governments 2006 Regional Transportation Improvement Program (RTIP). The project is listed in Section II of Volume II of the 2006 RTIP, state highway section, Los Angeles County. A flowchart from the Transportation Project-Level Carbon Monoxide Protocol (UCD-ITS-RR-97-21), known as Figure 1 New Project Requirements, was used to determine the regional conformity requirements for the proposed project. The questions in the flowchart cited are followed by a response, which would determine the next question:

- Q: *Is this project exempt from all emissions analyses?*
A: **No**, the proposed project does not appear in Table 1. It is not exempt from all emissions analyses.
- Q: *Is project exempt from regional emissions analyses?*
A: **No**, the project is not listed in Table 2 and is not exempt from regional analyses.
- Q: *Is the project locally defined as regionally significant?*
A: **Yes**, projects not listed in Table 1 nor 2 of the Protocol are usually considered regionally significant unless otherwise stipulated via interagency consultation. The project is considered as regionally significant.
- Q: *Is the project in a federal attainment area?*
A: **No**, the Basin is in non-attainment for CO per federal designation.
- Q: *Is there a currently conforming RTP and TIP?*
A: **Yes**, the most recently FHWA approved Plan and TIP is the 2004 Regional Transportation Plan and the 2006 Regional Transportation Improvement Program.

Carbon Monoxide Hot Spot Analysis

The scope required for local analysis is summarized in Section 4, Local Analysis, Figure 3, entitled Local CO Analysis, of the Transportation Project-Level Carbon Monoxide Protocol. This flowchart is used to determine the type of CO analysis required for the proposed project. Below is a step by step explanation of the flowchart. Each level cited is followed by a response, which would determine the next applicable level of the flowchart for the proposed project. The flowchart begins at Level 1:

- Q: *Level 1. Is the project in a CO non-attainment area?*
A: **Yes**, the Basin is currently classified as non-attainment for CO.
- Q: *Level 2. Is the project in an area with an approved CO attainment or maintenance plan?*
A: **No**, while the 2003 SCAQMD Air Quality Management Plan contains a CO attainment plan, the plan has not yet been approved by the EPA. The 1997 SCAQMD Air Quality Management Plan had a CO attainment plan which was approved by the EPA. However, this was only an interim approval that expired in 1998. Therefore, at the present time there is no approved CO attainment or maintenance plan for the South Coast Air Basin. Therefore, the flow chart is continued to Level 3.
- Q: *Level 3. Is the project in an area with a submitted CO attainment or maintenance plan?*
A: **Yes**, the Basin has a submitted CO attainment plan.
- Q: *Level 3. Was the analysis in the attainment plan performed in sufficient detail to establish CO concentrations as a result of micro-scale modeling?*
A: **Yes**, the analysis does establish CO concentrations as a result of micro-scale modeling. The results of the modeling are presented in Chapter 4 of Appendix V of the 2003 AQMP.

Q: *Level 3. Can CO concentrations in the area affected by the project under review be expected to be lower than at those locations specifically modeled in the attainment plan? (see Section 4.3.2)*

A: **No**, CO concentrations at the controlled intersections most affected by the project would be expected to be more than those modeled in the attainment plan.

The lowest emission rates for CO typically occur at cruising speeds where freeway driving occurs. As cars accelerate from an idle position cruise position CO emission rates for CO increase. This usually occurs in the vicinity of controlled intersections. Therefore, CO concentrations are the highest near controlled intersections due to idling during queuing. CO concentrations along the mainline I-405 would be expected to lower than near this intersection.

The Traffic Analysis Report prepared for the project presented peak hour traffic volumes within the project area connecting to the Northbound I-405. The traffic data indicated that controlled intersection with the greatest traffic volume that is affected by the project would be the intersection of Wilshire Boulevard and Sepulveda Boulevard. Table 3.13-3 represents the 2031 peak hour traffic volumes.

Table 3.13-3: Year 2031 Wilshire Blvd./Sepulveda Blvd. Intersection Peak Hour Traffic Volumes (AM/PM)

Intersection	West Link	East Link	North Link	South Link	Total
Wilshire/Sepulveda	5,185 / 6,745	5,251 / 5,224	1,319 / 1,636	1,610 / 764	13,564 / 14,369

Source: Peak traffic volumes obtained from the Traffic Analysis Report, July 2006

Table 3.13-4 represents the traffic volumes for the four intersections modeled in the CO Attainment Plan.

Table 3.13-4: Approach Traffic Volumes at Intersections Modeled in CO Attainment Demonstration

Peak Hour Traffic Volumes (AM / PM)					
Intersection	West Link	East Link	North Link	South Link	Total
Wilshire-Veteran	4,951 / 2,069	1,830 / 3,317	721 / 1,400	560 / 933	8,062 / 7,719
Sunset-Highland	1,417 / 1,764	1,342 / 1,540	2,304 / 1,832	1,551 / 2,238	6,614 / 7,374
La Cienega-Century	2,540 / 2,243	1,890 / 2,728	1,384 / 2,029	821 / 1,674	6,635 / 8,674
Long Beach-Imperial	1,217 / 2,020	1,760 / 1,400	479 / 944	756 / 1,150	4,212 / 5,514

Note: The traffic count only included mainline. Does not include left and right turn movements

Source: Final 2003 AQMP Appendix V. Modeling and Attainment Demonstration, SCAQMD.

The traffic volumes shown in Tables 3.13-3 and 3.13-4 indicate that the intersections modeled in the attainment plan have substantially less traffic count than at the proposed project site (left and right turns were not included in the comparison). If left and right

turns were included, the traffic count at the four intersections would be an additional 500-1000+ vehicles at peak hour. The emission variables in the attainment plan model and the proposed project have been assumed as equal. The site variable, number of vehicle lanes, in the attainment plan consists of 4x4 intersection, except at Long Beach-Imperial, which is a 3x3 intersection. The Wilshire-Sepulveda intersection is a 4x3 intersection. Based on the comparison in the above table, the proposed project is expected to bear a carbon monoxide impact substantially greater than the four intersections modeled in the attainment plan. Therefore, the flow chart is continued to Level 4.

Q: *Level 4. Perform a screening analysis considering project location, nearby receptors, traffic volumes, LOS and air quality condition for current and future year.*

A: Level 4 contains screening methodology described in Appendix A of the Protocol. However, it was noted on the Caltrans' Air Quality website "Do not use Appendix A of the CO Protocol" as Appendix A was developed using EMFAC7F methodology. Instead, the analyst should perform instead modeling using CALINE4 as outlined in Appendix B. Thus, the flow chart is continued to Level 5.

Q: *Level 5. Perform a detailed analysis.*

A: CO protocol modeling was performed utilizing the CALINE4 computer model. CALINE4 is a fourth generation line source air quality model developed by the California Department of Transportation ("CALINE4," Report No. FHWA/CA/TL-84/15, June 1989). Worst case meteorology was assessed. Specifically, a late afternoon winter period with a ground-based inversion was considered. The wind speed, stability class, sigma theta, and temperature data used for the modeling are those recommended in the "Development of Worst Case Meteorology Criteria," (California Department of Transportation, June 1989). A mixing height of 1,000 meters was used as recommended in the CALINE4 Manual.

Composite emission factors utilized with the CALINE4 computer model came from EMFAC2002 based on the methodology described on Caltrans' air quality website. The peak hour traffic data used in the CALINE4 CO computer modeling were obtained from the traffic study prepared by IBI Group, September 2006.

Eight hour carbon monoxide levels were projected using Caltrans methodology described in their "Air Quality Technical Analysis Notes." The method essentially uses a persistence factor that is multiplied by the 1-hour emission projections. The projected 8-hour ambient concentration is then added to the product. The persistence factor can be estimated using the 10 highest non-overlapping ratio of 8-hour to 1-hour from the last three years of carbon monoxide monitoring data. For the project area, a persistence factor of 0.71 was estimated. The data and results of the CALINE4 modeling are also provided in the appendix. (The CALINE4 CO emission results shown in the appendix do not include the ambient background CO levels.)

The Wilshire-Sepulveda intersection has been identified as the intersection with the greatest peak-hour traffic volume affected by the project. Alternative 2 and 3 had the same traffic projections for this intersection as well as the highest delay times (most congestion). This intersection operates at LOS F or worse and has the potential to exceed

of the National Ambient Air Quality Standards. While this intersection is not the only one to meet the above criteria, it represents the worst-case scenario in terms of CO concentration. If the CO modeling shows that the CO emission at this location will meet the NAAQS, then emissions at all other intersections in the project area will also meet the standards. At the Wilshire-Sepulveda intersection, a receptor was set at each of the four corners about 10 feet from edge of the road. The highest concentrations at this intersection are reported in Table 3.13-5 below.

The ambient (background) concentration levels for CO were derived from per the “Transportation Project-Level Carbon Monoxide Protocol.” The nearest location is West LA, and the second highest concentrations per the CO Protocol were used. Background CO levels for future years linearly interpolated using the CO emission data contained in the 2007 AQMP. As a result, the existing ambient CO concentrations for 2005 are projected to be 6.0 ppm for 1-hour levels, and 2.0 ppm for 8-hour levels. The 2015 and 2031 CO concentrations include the ambient concentrations of 3.42 and 2.5 ppm for 1-hour levels, and 1.1 and 0.9 ppm for 8-hour levels for 2015 and 2031, respectively.

The results of the CALINE4 CO modeling are summarized in 3.13-5. The CO modeling results are shown for the projected future 1-hour and 8-hour CO concentration levels. The pollutant levels are expressed in parts per million (ppm). The carbon monoxide levels reported in Table 3.13-5 are composites of the background levels of carbon monoxide coming into the area plus those generated by the local roadways.

Table 3.13-5: Worst Case Projections of Carbon Monoxide (CO) Concentrations (ppm)

Receptor Location	2005		2015				2031			
	Existing		No Project		With Project		No Project		With Project	
	1-hour	8-hour	1-hour	8-hour	1-hour	8-hour	1-hour	8-hour	1-hour	8-hour
Wilshire/ Sepulveda	16.9	9.9	8.3	4.7	8.3	4.7	4.3	2.2	4.3	2.2
NAAQS:	35ppm	9ppm	35ppm	9ppm	35ppm	9ppm	35ppm	9ppm	35ppm	9ppm
No. of Exceedances	0	1	0	0	0	0	0	0	0	0

NOTE: The existing CO concentrations include the ambient concentrations of 6.0 ppm for the 1-hour average, and 2.0 ppm for the 8-hour average. The 2015 and 2031 CO concentrations include the ambient concentrations of 3.2 and 2.5 ppm for the 1-hour average, and 1.1 and 0.9 ppm for the 8-hour average for 2015 and 2031, respectively.

The results in Table 3.13-5 indicate that the existing CO concentration levels are projected to comply with the 1-hour NAAQS of 35 ppm, but exceed the 8-hour standard of 9 ppm. The future CO concentration levels for 2015 and 2031 with and without project will be in compliance with the 1-hour and 8-hour NAAQS. The project is not projected to increase CO concentration levels at this intersection. Because the future concentrations are projected to be below the air quality standards, the project will not result in a significant local air quality impact.

Table 3.13-5 shows that CO concentrations in 2015 and 2031 will be significantly lower than the existing CO levels. This is mainly due to the anticipated decrease in the future vehicular emission rates and background concentration levels. In general, the background

CO concentration and the vehicular air pollutant emission factors are projected to decrease steadily in the future years due to newer, cleaner-running vehicles. While the local traffic volumes are projected to increase in the future, this is more than offset by the decrease of background levels and lower emission factors.

Q: *Level 5. Are impacts acceptable?*

A: **Yes**, the project is satisfactory, and no further analysis is needed.

Conclusion

In answering affirmative to all questions in level five of the CO Protocol Local Analysis Flowchart, the project has sufficiently addressed the CO impact and no further analysis is needed.

PM₁₀ and PM_{2.5} Hot Spot Analysis

In March of 2006, the Transportation Conformity Rule was updated to include regulations for performing qualitative analysis of PM₁₀ and PM_{2.5} Hotspot impacts. Only projects that are considered “Projects of Air Quality Concern” (POAQC) are required to perform a hot-spot analysis. In the South Coast Air Basin, it is the Southern California Association of Governments (SCAG) Transportation Conformity Working Group (TCWG), acting to fulfill the interagency consultation requirements of the Conformity Rule, that makes the determination whether the project is or is not a POAQC. In accordance with the procedures set forth by the SCAG TCWG, the project was submitted for consideration of determination; and the project was discussed at the September 2006 monthly TCWG meeting as well as subsequent subgroup meetings. The project was determined to not be a POAQC because the project would not result in any increase in the number of diesel trucks that would utilize the facility.

Fugitive Dust

PM₁₀ emissions from site clearance/grading operations during a peak construction day are based on assumptions and past experience on similar sized projects. The SCAQMD estimates that each acre of graded surface creates about 26.4 pounds of PM₁₀ per day during the construction phase of the project, and 21.8 pounds of PM₁₀ per hour from dirt/debris pushing per dozer/scrapper. The entire site is not expected to be under construction at one time. It is assumed that up to three acres of land would be under construction or exposed on any one day. It is also assumed that at least one dozer/scrapper would be used eight hours per day, together with other equipment. Therefore, a maximum of 254 pounds of PM₁₀ per day would be generated from soil disturbance without mitigation during the construction phase. This level of dust emission would exceed the SCAQMD threshold of 150 pounds of PM₁₀ per day during construction.

Ambient Air Quality Standards (AAQS)

PM_{2.5} non-attainment and maintenance areas are required to attain and maintain two standards:

- 24-hour standard: 65.0 micrograms per cubic meter (mg/m³)
- Annual standard: 15.0 mg/m³

The current 24-hour standard is based on a 3-year average of the 98th percentile of 24-hour PM_{2.5} concentrations; the current annual standard is based on a 3-year average of annual mean PM_{2.5} concentrations. A PM_{2.5} qualitative hotspot analysis must consider both standards unless it is determined for a given area that meeting the controlling standard would ensure that Clean Air Act requirements are met for both standards. The interagency consultation process should be used to discuss how the PM_{2.5} qualitative hotspot analysis meets statutory and regulatory requirements for both PM_{2.5} standards, depending on the factors that are evaluated for a given project.

Naturally Occurring Asbestos (NOA)

Although not required for project-level air quality analysis, Caltrans District 7 includes a discussion pertaining to naturally occurring asbestos, limited to that topic in the *Memorandum Addressing Naturally Occurring Asbestos in CEQA Documents* released by the Governor's Office of Planning and Research. Discussions relating to any other types of asbestos are provided in Caltrans hazardous waste or other environmental reports.

The purpose of the discussion is to establish the impact of NOA entrainment during construction. The two common sets of NOA are the serpentine and ultramafic rocks. The project is located in Los Angeles County, which is among the counties listed as containing serpentine and ultramafic rock. However, only the Catalina Island portion of Los Angeles County has been found to contain such rock; hence, it is not found in the project area. Therefore, no potential impacts from naturally occurring asbestos (NOA) during project construction would occur.

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.¹ As a result, the EPA concluded that no further motor vehicle emissions standards or fuel standards were necessary to further control Mobile Source Air Toxics. 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 Mobile Source Air Toxics.

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.

Additional efforts are being undertaken by the California Air Resources Board (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 than 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 overshadow 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. Projected diesel PM emission levels for 2010 and 2020 show that 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.

The analysis shows that in 2015 and 2031 Mobile Source Air Toxics emissions in the project area may be somewhat lower than no project conditions. The Southern California Association of

¹ 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 for FHWA projects between 2000 and 2020 even with a 64 percent increase in Vehicle Miles Traveled (VMT), as documented in the FHWA Memorandum: Interim Guidance on Air Toxics Analysis in NEPA Documents, February 3, 2006.

Governments sensitivity analysis indicates that emissions are slightly higher with the project alternatives than no-build conditions due to projected increases in traffic. The project in 2015 and 2031 would not result in an increase in Mobile Source Air Toxics emissions compared to the existing conditions for all speeds. Because of the congestion relief provided by the project, Mobile Source Air Toxics emissions in 2015 and 2031 would likely be somewhat lower with the project than without. Lower emission resulting from increased average speed with the project compared to no-build conditions would likely result in a slight decrease in Mobile Source Air Toxics emissions with the project compared to no-build conditions.

Unavailable Information for Project Specific MSAT Impact Analysis

The Air Quality Assessment 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.) Available technical tools did not enable the prediction of 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 steps, 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 years) 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 is 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 rats and laryngeal tumors in 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 as they pertain to roadways. The Health Effects Institute, a non-profit organization funded by EPA, FHWA, and industry, has done a 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.

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."

MSAT Emissions in the Project Area

As discussed above there are several uncertainties that do not allow quantitative estimates of health effects from MSAT emissions in the project area. However, one can examine MSAT emissions in the project area and estimate the relative impacts of MSAT emissions under different scenarios. MSAT emissions from vehicles traveling on northbound I-405 through the project area were estimated using the methodology prepared for Caltrans by the UC Davis-Caltrans Air Quality Project ("Estimating Mobile Source Air Toxics Emissions: A Step-By-Step Project Analysis Methodology" December, 2006). The three primary steps to the methodology are: (1) deriving emission factors, (2) determining the traffic data, and (3) using the emission factors and traffic data to calculate the emissions.

The emission factors are the amount of MSAT emissions from a composite vehicle per distance traveled at a specified speed for exhaust emissions (i.e., tailpipe emissions), and per travel time for evaporative emissions (i.e., emissions from evaporating fuel). Separate emission factors are calculated for diesel and non-diesel vehicles. The traffic data required to calculate MSAT emissions under the UC Davis methodology includes traffic volume, distance traveled, speed, and percentage of trucks for the two periods, peak and off-peak. The peak and off-peak periods are grouped by similar average speeds. The peak period is the time that the highway is congested and the off-peak period is all other times. Vehicle miles traveled (VMT) and travel time are calculated from the traffic volumes, speed, and travel distance. The total MSAT emissions are calculated using the emission factors calculated in the first step and the traffic data calculated in the second step.

The EMFAC2007 model was run using the procedures described in the UC Davis Methodology for the Los Angeles County portion of the SCAB. Composite emission factors for particulate matter exhaust from diesel vehicles, total organic gas (TOG) exhaust emissions for diesel and non-diesel vehicles, and evaporative TOG emissions for non-diesel vehicles in operation were extracted from this data using the UC Davis spreadsheet. The emission factors for Diesel Particulate Matter are taken directly from the EMFAC2007 output. Emission factors for the other MSATs are estimated by multiplying the TOG emission factors by Speciation Factors. The Speciation Factors represent the fraction of TOG emissions of each MSAT. This results in an estimate of emissions for each of the MSATs; Diesel PM, Benzene, 1,3-Butadiene, Acetaldehyde, Acrolein, and Formaldehyde, per mile of travel for diesel and non-diesel vehicles (exhaust emissions) and per minute traveled for non-diesel vehicles (evaporative emissions). Due to the differences in diesel fuel and gasoline, diesel vehicles do not have considerable evaporative emissions.

Under the UC Davis Methodology, daily traffic volumes are split between peak and off-peak hours, and emissions are calculated for each of these periods using average travel speeds for each period. This procedure was followed for each segment between interchanges. That is, emissions were calculated for each segment of the northbound I-405 between interchanges using the UC Davis methodology and then summed to estimate the total MSAT emissions from the project. In addition, for the With Project scenarios, emissions were calculated separately for vehicles in the HOV lanes, as estimates of vehicle speeds in the HOV lanes are different in the HOV lanes and virtually no diesel vehicles utilize the HOV lanes. Estimates of peak period and off-peak period traffic volumes and speeds were derived from data provided by Caltrans.

Table 3.13-6 represents the total MSAT emissions from traffic on I-405 for five scenarios: Existing Conditions (2005), Year 2015 (opening year) under No Build and With Project conditions, and Year 2031 (Horizon Year) under the No Build and With Project conditions. The emissions are presented in grams per day of each pollutant for each scenario.

Table 3.13-6: Total Northbound I-405 MSAT Emissions

	MSAT Emissions (grams/day)					
	Diesel PM	Benzene	1,3-Butadiene	Acetaldehyde	Acrolein	Formaldehyde
Year 2005 Emissions						
Existing	11,120	13,282	2,577	3,357	587	10,694
Year 2015 Emissions						
No Build	6,895	5,372	973	1,529	224	4,662
With Project	7,378	5,061	957	1,466	220	4,514
Year 2031 Emissions						
No Build	3,544	3,717	556	1,004	128	2,998
With Project	3,433	2,982	479	704	112	2,271

Source: Air Quality Assessment, April 2007

Emissions for all six MSATs are projected to decrease considerably over existing conditions. Diesel PM is projected to experience the smallest decrease of 33.7%. The other MSATs are projected to decrease by between 56% and 63%. These emission reductions correlate with reduced MSAT concentrations in the project area, which result in reduced MSAT exposures and corresponding health effects.

Emissions of Diesel PM are projected to increase by 7.0% With Project conditions compared to the No Build conditions in 2015. This is due to the emission factors for Diesel PM having a minimum at 40 miles per hour. Diesel PM emissions are higher for vehicle speeds higher or lower than this speed. The projected average peak hour speeds under the No Build conditions are approximately 40 miles per hour. The project would result in higher speeds, which would cause an increase in Diesel PM emissions. However, this condition would only occur temporarily and by 2031 Diesel PM emissions would be less with the project than without the project.

The California Air Resources Board (CARB) has found that diesel particulate matter (PM) poses the greatest cancer risks among all identified air toxics. Diesel trucks contribute more than 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. All of the reduction measures are not reflected in the EMFAC2007 emission factors used in the analysis above. Therefore, future DPM emissions would be expected to be reduced even more than indicated above.

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 overshadow its cancer risks. Thus, while diesel exhaust may pose potential cancer risks, 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.

Construction Equipment Exhaust Emissions

Construction activities associated with the build alternatives of the proposed project would be temporary and would last the duration of project construction. A qualitative construction emissions analysis has concluded that Project construction would not create adverse pollutant emissions. 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 of carbon monoxide, nitrogen oxide, Reactive Organic Gases, and PM₁₀. Stationary or mobile-powered onsite construction equipment would include trucks, tractors, signal boards, excavators, backhoes, concrete saws, crushing and/or processing equipment, graders, trenchers, pavers and other paving equipment. Based on the low number of daily work trips required for project construction, construction worker trips are not anticipated to contribute substantially to traffic flow on local roadways.

Section 93.122(d)(2) of the EPA Transportation Conformity Rule requires that in PM₁₀ 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 PM₁₀ emission analysis. The 2003 PM₁₀ SIP/AQMP emissions budgets for SCAB include the construction and unpaved-road emissions. The 2006 RTIP PM₁₀ regional emissions analysis includes the construction and unpaved road emissions for conformity finding.

3.13.4 Avoidance, Minimization, and Mitigation Measures

Operational Mitigation Measures

None Required.

Construction Related Emissions

During the demolition phase, some asphalt concrete pavement and curbs and gutters would be removed. 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 per state emission regulations and standard construction practices. After construction of the project is complete, all construction-related impacts would end. Short-term construction PM₁₀ emissions would be further reduced with the implementation of required dust suppression measures outlined within Southern California Air Quality Management District (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. With the implementation of these measures during project construction, it is not anticipated that this project would violate state or federal air quality standards or contribute to the existing air quality violation in the air basin.

Mitigation of PM₁₀ during construction

The approved 2003 Particulate Matter SIP contains provisions calling for mitigation of PM₁₀ emissions during construction. Pursuant to 40CFR 93.117, Caltrans, the project sponsor, is required to stipulate to include, in its final plans, specification, and estimates, control measures that will limit the emission of PM₁₀ during construction. Such control plans must be contained in an applicable SIP.

The PM₁₀ emissions is a composite of geologic and aerosol variety. The primary concern during construction is to mitigate geologic PM₁₀ that occurs from earth movement such as grading. The agency that sponsored the PM₁₀ SIP is SCAQMD with concurrence from the California Air Resource Board. SCAQMD has established Rule 403 that addresses the mitigation for PM₁₀ 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, PM₁₀ is a subset of total suspended particulates. The SCAQMD CEQA Air Quality Handbook (April 1993) states that 50% of total particulate matter suspended comprise of PM₁₀. Hence, in mitigating for fugitive dust, emissions of geologic PM₁₀ are reduced.

SCAG requires that at least one best available control measure be implemented for each source of fugitive dust. In addition, Rule 403 requires activities defined as “large operations” to notify the SCAQMD by submitting Form 403N, implement the Rule 403 Table 2 and 3 control actions, and maintain records of control measure implementation. Rule 403 defines large operation as: “any active operations on property which contains in excess of 50 acres of disturbed surface area; or any earth moving operation which exceeds a daily earth moving or throughput volume of 3,850 cubic meters (5,000 cubic yards) three times during the most recent 365 day period.” In

summary, prior to construction, Rule 403 entails the implementation of best available fugitive dust control measures during active operations capable of generating dust.

3.13.5 Cumulative Impacts

Air quality impacts are inherently cumulative since the traffic forecasts are consistent with build-out assumptions that are consistent with adopted demographic forecasts. Consequently, air quality conditions incorporate regional growth. The only exception to this is for construction-related impacts. The project alternatives would improve movement, increase capacity, and improve overall traffic operation in the general vicinity, thereby lowering the concentration of pollutants emitted by the motor vehicles. Consequently, with the transportation improvements proposed and the secondary improvement in vehicular movement, no cumulative adverse regional or local air quality impacts are anticipated.

Implementation of any of the projects in the study area has the potential to result in short-term impacts to air quality associated with construction activity (i.e., CO, NO_x, ROC, and PM₁₀) and some have the potential for long-term effects on air quality due to new vehicle trips, or use, storage, and transport of hazardous substances. The short-term effects are minimized through compliance with SCAQMD rules and regulations during construction. The long-term effects are minimized through mitigation specific to each project. The I-405 Sepulveda Pass Project is listed in 2006 RTIP (Project ID No. LA0B408) and therefore conforms to the SIP.

Alternative 1 (No Build) would not involve construction; therefore, would not contribute to cumulative effects to air quality impacts. There would be no short-term construction effects or long-term operation effects associated with this alternative.

The Build Alternatives' contribution to cumulative air quality effects is not considered adverse because the Build Alternatives are not anticipated to exceed the 1-hour or 8-hour CO standards. The Build Alternatives would not contribute to cumulative effects on quality or toxic air emissions, since the alternatives are not expected to cause a substantial increase of toxic air constituents.

Implementation of any of the Build Alternatives could contribute to cumulative hazardous air pollutants relating to the demolition of asbestos-containing material (ACM). Compliance with SCAQMD Rules and Regulations for demolition of buildings containing ACM would minimize the potential effects.

3.14 NOISE

3.14.1 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 impacts. The intent of these laws is to promote the general welfare and to foster a healthy environment.

Per the Caltrans *Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects, October 1998*, 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.

For highway transportation projects with FHWA 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) with exterior frequent human use. Table 3.14-1 lists the noise abatement criteria.

Table 3.14-1: Noise Abatement Criteria

Activity Category	NAC, Hourly A- Weighted Noise Level, dBA L _{eq} (h)	Description of Activity Category
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

Source: 23 CFR Part 772, 2001

3.14.2 Affected Environment

Information regarding noise was obtained from the I-405 Noise Study Report dated July 2006.

Land Use and Sensitive Areas

The surrounding noise receptors to I-405 in the proposed project area include single and multiple-family residential areas, commercial areas, hotel, motel, schools, a hospital, a temple and a park. The area is highly urbanized and densely developed. The terrain within the project area varies from valleys to flatlands to mountainous. Existing peak-hour noise levels along the project alignment range from 52 to 79 dBA.

A Best Western Motel is located within the project limits in the southwest quadrant of I-405 and Santa Monica Boulevard. This motel has an outside area of frequent human use (swimming pool) that is surrounded by a three-story motel building. Hotel Angeleno is located in the northwest quadrant of I-405 and Sunset Boulevard. This hotel also has an outside area of frequent human use (swimming pool) that is located directly behind the hotel building at the ground-floor level.

Three schools lie in the project limits: Milken Community High School, Curtis School, and the University of Judaism. Milken Community High School sits along the southbound side of I-405 between Skirball Center Drive and Mulholland Drive. Curtis School sits just north of Mulholland Drive along southbound I-405. The University of Judaism sits along northbound I-405 between Skirball Center Drive and Mulholland Drive.

Westwood Park which is part of the City of Los Angeles, Department of Parks and Recreation is located in the northeast quadrant of I-405 and Ohio Avenue along northbound I-405. There are open grass areas and playing fields.

There is one commercial development that has an outside eating area (Big Tommy's – a fast food restaurant) on the northwest corner of I-405 and Pico Boulevard.

The Leo Baeck Temple exists within the project limits along northbound I-405 north of Bel Terrace Place. The Temple has an exterior area of frequent human use. The Veterans Hospital also lies within the project limits. It is located along southbound I-405 between Santa Monica Boulevard and Wilshire Boulevard.

Existing Traffic Noise

Noise in the project area is dominated by traffic on I-405, and numerous soundwalls already exist along I-405 within the project limits. The northbound side of the freeway has four soundwalls: from Cashmere Street to Bronwood Avenue; from Sunset Boulevard to Acanto Street; from the Moraga Drive on-ramp to Bel Terrace Place; and from south of the Sepulveda Boulevard undercrossing to north of Sutton Street. The southbound side of the freeway also has four existing soundwalls: from the Santa Monica on-ramp between Santa Monica Boulevard and Nebraska Avenue; from Waterford Street to Kiel Street; from Del Gado Drive to Valley Vista Boulevard; and from Valley Vista Boulevard to Dickens Street.

Five more soundwalls are now under construction as part of two other projects in the area. The first two soundwalls are part of the Caltrans HOV project from SR-90 to I-10, and the last three are part of the Route 10/405 Separation Widening to Burnham/Sunset Boulevard project: from edge of shoulder from National Boulevard to Ivy Place on the southbound I-405; from I-10 westbound connector to I-405 northbound connector; from southbound I-405 from north of Olympic Boulevard to Nebraska Avenue; from Massachusetts Avenue to north of Ohio Avenue; and from edge of shoulder near Waterford Street on southbound I-405.

The measuring and modeling results from this study indicated that existing traffic noise levels for adjacent residential areas typically range between 52 and 79 dBA-Leq(h). Thirteen 24-hour noise readings were taken at Sites #A through #M to determine the noisiest hour in various sections within the project limits. The following table shows the noisiest hour based on the 24-hour noise readings and the locations (see Appendix G to reference locations).

Table 3.14-2: 24-Hour Noise Readings

Site	Location	Noisiest Hour
A	National Blvd to Santa Monica Blvd.	5:33 am and 6:33 am
B	I-405/I-10 interchange	12:08pm and 1:08pm
C	I-10 and Santa Monica Blvd.	24-hour noise measurements were not conducted since there was construction activity.
D	Santa Monica and Wilshire Blvd.	5:21 a.m. to 6:21 a.m.
E & F	Wilshire Blvd. to Sunset Blvd.	5:26 a.m. and 6:26 a.m. (southbound) 5:37 a.m. and 6:37 a.m. (northbound)
G	Sunset Blvd. to Moraga Drive	6:47 a.m. to 7:47 a.m.
H	Moraga Drive to Getty Center Drive	6:21 a.m. and 7:21 a.m.
I	Getty Center Drive and Bel Air Crest	5:04 a.m. and 6:04 a.m.
J, K & L	Bel Air Crest to Ventura Boulevard	4:58 a.m. and 5:58 a.m. 11:06 a.m. and 12:06 p.m. 6:26 a.m. and 7:26 a.m.
M	Sepulveda Blvd. and Ventura Blvd.	3:28 p.m. and 4:28 p.m.

Source: I-405 Noise Study Report, July 2006

3.14.3 Noise Impacts

The traffic noise analysis that was conducted evaluated sound level readings, traffic counts and pertinent field data such as traffic-flow speed and topography. The traffic noise analysis indicates that the residential areas, temple and park within the project area would be impacted after project completion under all alternatives [i.e. the noise level will approach or exceed FHWA Noise Abatement Criteria (NAC)]. NAC's are shown in Table 3.14-1. Only acoustically feasible and reasonable noise barriers are recommended as part of a project. Noise abatement is not normally considered reasonable for commercial and parking lot areas. This project would not cause a substantial noise increase (i.e. 12 dBA).

Since traffic noise impacts have been identified, noise abatement has been considered for the affected receivers. As stated in 23CFR772 and TNAP, noise abatement has only been

considered where noise impacts are predicted and where frequent human use occurs and where a lowered noise level would be of benefit. For all affected receptors, noise abatement has been evaluated for acoustical feasibility (noise reduction of 5 dBA or more) and preliminary reasonableness (cost-effectiveness).

Based on the studies conducted, Caltrans and FHWA intend to incorporate noise abatement measures for the proposed project in the form of soundwalls at the edge of shoulder and private properties in order to attenuate traffic noise in the affected areas. Layouts L-1 through L-47 found in Appendix G show proposed soundwall locations for all build alternatives 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, three schools, a temple, a church, a hospital and a park. Tables 3.14-3, 3.14-4, and 3.14-5 show proposed noise barrier heights, locations, limits, and insertion losses.

Predicted increases in traffic noise under design-year (2025) conditions relative to existing worst-hour conditions are in the range of 1-2 dBA. These increases are attributed to the addition of the proposed HOV lane and the predicted increase in traffic volumes.

The Department's *Traffic Noise Analysis Protocol* (TNAP) sets forth the criteria for determining when an abatement measure is reasonable and feasible. Feasibility of noise abatement is basically an engineering issue. 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 preliminary reasonableness determination is basically a cost-benefit analysis. If the construction cost of a soundwall is less than the reasonable allowable cost, the barrier is considered to be reasonable from a cost perspective. The reasonable allowance factors include absolute noise level, build versus existing noise level conditions, noise reduction and whether the development pre-dates 1978. The overall reasonableness includes other factors such as design issues, environmental impacts, public input, input from local agencies, social and technological.

For proposed barrier locations outside of Caltrans right-of-way, all (100%) of the affected property owners must be supportive of the proposed barrier, the location, and the material to be used for construction. Additionally, a permanent easement must be secured for all (100%) of the affected properties to construct and maintain the barrier.

Table 3.14-3: Northbound Alternative 2 and 3 – Noise Analysis Summary (Page 1 of 3)

Site #	Location	Existing Noise Level	Predicted Worst-Hour Noise Level	Soundwall # & Location		Predicted Noise Levels for the Year 2030					Minimum 5 dBA Reduction
						Barrier Height Alternatives					
						[8'] 2.4m	[10'] 3.0m	[12'] 3.6m	[14'] 4.2m	[16'] 4.8m	
A3	Sepulveda Blvd (S. end)	66.5	69.0	101	ES R/W	64 69	63 69	63 69	62 69	- 69	Yes
A4	Sepulveda Blvd (N. end)	62.6	64.9	No Impact							
B	Pickford St	68.1	70.0	102*	ES R/W	66 70	65 70	65 70	64 70	- 70	Yes
B1	Richland Ave	67.2	68.9	102*	ES R/W	64 69	63 69	63 69	62 69	- 69	Yes
D2	Westwood Recreation Center	68.8	71.8	103	ES R/W	69 72	68 72	67 72	66 71	- 70	Yes
D3	Sepulveda Blvd	75.4	81.1	103	ES R/W	69 75	68 74	67 74	66 71	- 70	Yes
D5	Sepulveda Blvd. (BP Child Care Ctr)	69.0	73.0	103	ES R/W	68.0 -	67.0 -	67.0 -	66.0 -	- -	Yes
F	Thurston Ave	75.9	78.8	104	ES R/W	79 79	79 79	78 78	78 78	- 78	No
F1	Bentley Ave	60.6	67.3	104	ES R/W	66 67	65 67	64 66	63 66	- 65	Yes
F2	Sepulveda Blvd	71.0	76.6	104	ES R/W	73 74	72 73	71 72	70 71	- 71	Yes
F3	Dalkeith Ave	66.1	74.4	104	ES R/W	72 78	71 78	69 78	68 78	- 78	Yes
F4	Thurston Ave	65.8	72.8	104	ES R/W	78 78	78 78	78 78	78 78	- 78	No
F5	Sepulveda Blvd	67.9	74.9	104 + 105	ES R/W	71 74	71 73	69 71	68 70	- 70	Yes
F6	Bronwood St	61.9	66.7	104	ES R/W	64 66	64 66	63 65	62 65	- 64	Yes
F7	Sunset Blvd	58.0	62.4	No Impact							

Notes: Soundwall heights that provide a minimum 5 dBA noise reduction are highlighted in **bold**.

- ES – Edge of Shoulder
- R/W – Right of Way
- PPL – Private Property Line
- * – Soundwall currently under construction
- – Noise contribution from Sepulveda Blvd.

Table 3.14-3: Northbound Alternative 2 and 3 – Noise Analysis Summary (Page 2 of 3)

Site #	Location	Existing Noise Level	Predicted Worst-Hour Noise Level	Soundwall # & Location		Predicted Noise Levels for the Year 2030					Minimum 5 dBA Reduction
						Barrier Height Alternatives					
						[8'] 2.4m	[10'] 3.0m	[12'] 3.6m	[14'] 4.2m	[16'] 4.8m	
G	Thurston Ave	68.5♦	74.0	106	ES R/W	71 74	70 74	68 74	67 74	- 76	Yes
G1	Thurston Cir	65.8♦	71.0	-	ES R/W	71 71	70 71	70 71	68 71	- 74	No
G2	Acanto Pl	66.9♦	69.0	106	ES R/W	66 69	65 69	64 69	63 69	- 72	Yes
G5	Thurston Cir	63.8♦	67.0	-	ES R/W PPL	68 69	67 69	67 69	66 69	- 69	Soundwall not feasible on private property
H	Acanto Pl	66.5♦	66.7	-	ES R/W	66 67	65 67	65 67	64 67	- 67	No
H1	Acanto Pl	60.8♦	67.7	107A + 107B	ES R/W	63 66	62 66	61 66	60 65	- 65	Yes
H2	Casiano Rd	64.3♦	67.8	107B	ES R/W	66 68	64 68	63 68	62 68	- 67	Yes
H3	Sepulveda Blvd	69.2♦	69.5	107B	ES R/W	66 70	65 70	64 70	64 70	- 69	Yes
H4	Leo Baeck Temple	70.2♦	72.1	107B	ES R/W	70 72	69 72	68 72	66 72	- 72	Yes
I	Rembridge Ct	68.4♦	70.0	108	ES R/W PPL	70 70 60	70 69 58	70 69 57	70 68 55	- 68 54	Yes
J4	Univ of Judaism	55.3	56.9	No Impact							
K	Briarwood St	78.5	80.3	112	ES R/W PPL	80 78 72	80 78 68	80 77 66	80 76 65	- 75 64	Yes
K1	Scadlock Ln	69.5	73.5	104 + 105	ES R/W PPL	74 74 74	74 73 73	74 73 73	74 73 71	- 72 69	Yes

Notes: Soundwall heights that provide a minimum 5 dBA noise reduction are highlighted in **bold**.

- ES – Edge of Shoulder
- R/W – Right of Way
- PPL – Private Property Line
- Not feasible due to design constraints/standards
- * Soundwall currently under construction
- ♦ Noise contribution from Sepulveda Blvd.

Table 3.14-3: Northbound Alternative 2 and 3 – Noise Analysis Summary (Page 3 of 3)

Site #	Location	Existing Noise Level	Predicted Worst-Hour Noise Level	Soundwall # & Location		Predicted Noise Levels for the Year 2030					Minimum 5 dBA Reduction
						Barrier Height Alternatives					
						[8'] 2.4m	[10'] 3.0m	[12'] 3.6m	[14'] 4.2m	[16'] 4.8m	
K2	Scadlock Ln	62.9	64.9	No Impact							
K3	Moon Ridge	69.6	71.7	110	ES R/W PPL	72 72 62	72 72 61	72 72 60	72 72 59	- 72 58	Yes
K4	Scadlock Ln	67.0	69.2	111	ES R/W PPL	69 66 65	69 64 64	69 64 64	69 63 64	- 62 63	Yes
K5	Briarwood St	69.9	72.5	112	ES R/W PPL	73 73 64	73 72 63	73 72 62	73 72 61	- 72 60	Yes
K6	Del Gado Dr	70.5	71.4	113	ES R/W PPL	71 71 70	71 71 69	71 71 68	71 71 66	- 71 65	Yes
K7	Sepulveda Blvd	67.8	65.5	114	ES R/W	63 66	62 66	62 66	61 66	- 66	Yes
K8	2 nd floor Modeled site	-	68.0	114	ES R/W	66 68	64 68	64 68	63 68	- 68	Yes
K9	Modeled site	-	73.6	-	ES R/W	67 67	67 67	67 67	67 67	- 67	No

Notes: Soundwall heights that provide a minimum 5 dBA noise reduction are highlighted in **bold**.

- ES – Edge of Shoulder
- R/W – Right of Way
- PPL – Private Property Line
- Not feasible due to design constraints/standards
- * Soundwall currently under construction
- ♦ Noise contribution from Sepulveda Blvd.

Table 3.14-4: Southbound Alternative 2 – Noise Analysis Summary (Page 1 of 4)

Site #	Location	Existing Noise Level	Predicted Worst-Hour Noise Level	Soundwall # & Location		Predicted Noise Levels for the Year 2030					Minimum 5 dBA Reduction	
						Barrier Height Alternatives						
						[8'] 2.4m	[10'] 3.0m	[12'] 3.6m	[14'] 4.2m	[16'] 4.8m		
A	Ivy Place	66.7	66.7	201* + 202	ES R/W	64 64	62 63	61 62	60 61	- 60	Yes	
A1	Sardis Ave	72.3	75.2	201*	ES R/W	67 75	66 73	65 72	65 70	- 68	Yes	
A2	Brookhaven Ave	67.9	70.8	202	ES R/W	68 69	66 67	65 67	64 66	- 65	Yes	
B2	Sawtelle Blvd	73.0	70.3	203	ES R/W	63 70	62 70	62 70	62 70	- 70	Yes	
B3	Sawtelle Blvd	69.5	65.9	203	ES R/W	61 66	61 66	60 66	60 66	- 66	Yes	
B4	Pico Blvd	68.3	63.1	No Impact								
C1	Mississippi Ave	67.5	69.7	204*	ES R/W	68 69	68 68	66 66	64 65	- 65	Yes	
C2	Modeled Site	-	72.3	204*	ES R/W	69 68	68 67	67 66	65 65	- 64	Yes	
C3	Beloit Ave	68.9	71.9	204*	ES R/W	68 70	67 68	66 67	65 66	- 65	Yes	
C4	Beloit Ave	67.1	68.6	204*	ES R/W	66 69	65 68	64 67	63 66	- 64	Yes	
C5	Beloit Ave	65.8	66.9	205	ES R/W	64 67	64 67	63 67	62 67	- 67	Yes	
D	Beloit Ave	65.8	67.1	205 + 206*	ES R/W	65 67	64 67	63 66	62 65	- 65	Yes	
D1	Beloit Ave	63.1	68.5	206*	ES R/W	67 69	66 69	65 69	64 67	- 67	Yes	
D4	Veterans Hospital	61.0	64.9	No Impact								
E	Albata St	66.7	68.9	-	ES R/W	69 69	69 69	69 69	66 66	- 65	No	

Notes: Soundwall heights that provide a minimum 5 dBA noise reduction are highlighted in **bold**.

ES – Edge of Shoulder

R/W – Right of Way

PPL – Private Property Line

- Not feasible due to design constraints/standards

* Soundwall currently under construction

+ This reading was taken for modeling purposes only

Table 3.14-4: Southbound Alternative 2 – Noise Analysis Summary (Page 2 of 4)

Site #	Location	Existing Noise Level	Predicted Worst-Hour Noise Level	Soundwall # & Location		Predicted Noise Levels for the Year 2030					Minimum 5 dBA Reduction
						Barrier Height Alternatives					
						[8'] 2.4m	[10'] 3.0m	[12'] 3.6m	[14'] 4.2m	[16'] 4.8m	
E1	Waterford St	66.2	71.5	208* + 209*	ES R/W	74 72	72 71	71 69	69 68	- 67	Yes
E1A	Modeled Site	-	68.3	-	ES R/W	68 68	68 68	68 68	67 67	- 66	No
E2	Burnham St	68.0	70.4	-	ES R/W	70 70	70 70	70 70	67 67	- 66	No
E2A	Modeled Site	-	67.0	-	ES R/W	67 67	67 67	67 67	65 65	- 64	No
E2B	Modeled site	-	66.5	-	ES R/W	67 67	67 67	67 67	64 64	- 63	No
E3	Cashmere St	67.0	70.8	-	ES R/W	71 71	71 71	71 71	68 71	- 71	No
E3A	Modeled Site	-	65.8	-	ES R/W	66 66	66 66	66 66	63 66	- 66	No
E4	Elderwood St	65.9	69.2	-	ES R/W	69 69	69 69	69 69	67 69	- 69	No
E4A	Modeled site	-	66.7	-	ES R/W	67 67	67 67	67 67	64 67	- 67	No
E5	Church Ln	70.7	73.2	-	ES R/W	73 73	72 73	70 73	69 73	- 73	No
E5A	Modeled site	-	67.1	-	ES R/W	67 67	67 67	65 67	64 65	- 64	No
E6	Kiel St	69.7	71.6	-	ES R/W	72 72	70 72	69 70	68 69	- 68	No
G3	Hotel Angeleno	67.1	69.3	-	ES R/W	68 69	67 69	67 69	66 69	- 69	No
G4	Church Ln	73.6	74.6	-	ES R/W	75 75	75 75	75 75	74 75	- 75	No
J	Royal Woods Dr	67.8	67.8	211	ES R/W	66 68	65 68	64 68	63 68	- 68	Yes

Notes: Soundwall heights that provide a minimum 5 dBA noise reduction are highlighted in **bold**.

- ES – Edge of Shoulder
- R/W – Right of Way
- PPL – Private Property Line
- Not feasible due to design constraints/standards
- * Soundwall currently under construction
- + This reading was taken for modeling purposes only

Table 3.14-4: Southbound Alternative 2 – Noise Analysis Summary (Page 3 of 4)

Site #	Location	Existing Noise Level	Predicted Worst-Hour Noise Level	Soundwall # & Location		Predicted Noise Levels for the Year 2030					Minimum 5 dBA Reduction
						Barrier Height Alternatives					
						[8'] 2.4m	[10'] 3.0m	[12'] 3.6m	[14'] 4.2m	[16'] 4.8m	
J1	Milken High School (outside)	69.8+	71.1+	No Impact							
J2	Milken High School (inside)	43.4	44.7	No Impact							
J3A	Curtis Middle School (outside)	61.7	64.2	No Impact							
J3B	Curtis Middle School (inside)	42.6	45.1	No Impact							
J5	Castlewood Dr	51.5	55.0	No Impact							
J6	Castlewood Dr	69.9	71.7	-	ES R/W	72 72	72 72	72 72	72 72	- 71	No
J7	Crownridge Dr	63.6	66.1	-	ES R/W	66 66	66 66	66 66	65 66	- 66	No
J7A	Royal Woods Dr	64.9	67.5	-	ES R/W	67 68	67 68	66 67	66 67	- 67	No
J8	Crownridge Dr	56.1	58.7	No Impact							
J9	Royal Woods Dr	64.7	66.5	211	ES R/W	64 67	63 67	63 67	62 67	- 67	Yes
J9A	Royal Ridge Rd	62.4	64.4	No Impact							
J10	Royal Ridge Rd	62.2	64.5	No Impact							
J11	Royal Ridge Rd	62.9	65.4	No Impact							
J12	Royal Woods Pl	60.5	63.0	No Impact							
J13	Woodfield Pl	60.8	62.9	No Impact							

Notes: Soundwall heights that provide a minimum 5 dBA noise reduction are highlighted in **bold**.
 ES – Edge of Shoulder
 R/W – Right of Way
 PPL – Private Property Line
 - Not feasible due to design constraints/standards
 * Soundwall currently under construction
 + This reading was taken for modeling purposes only

Table 3.14-4: Southbound Alternative 2 – Noise Analysis Summary (Page 4 of 4)

Site #	Location	Existing Noise Level	Predicted Worst-Hour Noise Level	Soundwall # & Location		Predicted Noise Levels for the Year 2030					Minimum 5 dBA Reduction
						Barrier Height Alternatives					
						[8'] 2.4m	[10'] 3.0m	[12'] 3.6m	[14'] 4.2m	[16'] 4.8m	
J14	Woodcrest Dr	65.1	67.2	211	ES R/W	64 67	64 66	63 66	62 65	- 63	Yes
L	Woodcrest Dr	62.4	62.4	No Impact							
L1	Del Gado Dr	63.1	63.7	No Impact							
L2	Sepulveda Blvd	61.0	63.7	No Impact							
M	Sutton St	67.1	74.9	213	ES R/W	69 -	67 -	65 -	64 -	- -	Yes
M1	Valley Vista Blvd	64.2	71.5	213	ES R/W	62 -	60 -	59 -	58 -	- -	Yes
M2	Greenleaf St	63.9	70.1	213	ES R/W	66 -	65 -	65 -	64 -	- -	Yes
M3	Modeled Site	-	70.1	212 + 213	ES R/W	64 -	62 -	61 -	61 -	- -	Yes

Notes: Soundwall heights that provide a minimum 5 dBA noise reduction are highlighted in **bold**.

- ES – Edge of Shoulder
- R/W – Right of Way
- PPL – Private Property Line
- Not feasible due to design constraints/standards
- * Soundwall currently under construction
- + This reading was taken for modeling purposes only

Table 3.14-5: Southbound Alternative 3 – Noise Analysis Summary (Page 1 of 4)

Site #	Location	Existing Noise Level	Predicted Worst-Hour Noise Level	Soundwall # & Location		Predicted Noise Levels for the Year 2030					Minimum 5 dBA Reduction	
						Barrier Height Alternatives						
						[8'] 2.4m	[10'] 3.0m	[12'] 3.6m	[14'] 4.2m	[16'] 4.8m		
A	Ivy Place	66.7	66.7	201* + 202	ES R/W	64 64	62 63	61 62	60 61	- 60	Yes	
A1	Sardis Ave	72.3	75.2	201*	ES R/W	67 75	66 73	65 72	65 70	- 68	Yes	
A2	Brookhaven Ave	67.9	70.8	202	ES R/W	68 69	66 67	65 67	64 66	- 65	Yes	
B2	Sawtelle Blvd	73.0	70.3	203	ES R/W	63 70	62 70	62 70	62 70	- 70	Yes	
B3	Sawtelle Blvd	69.5	65.9	203	ES R/W	61 66	61 66	60 66	60 66	- 66	Yes	
B4	Pico Blvd	68.3	63.1	No Impact								
C1	Mississippi Ave	67.5	72.4	204*	ES R/W	69 71	68 70	66 68	65 67	- 67	Yes	
C2	Modeled Site	-	72.4	204*	ES R/W	68 68	66 67	65 66	64 65	- 64	Yes	
C3	Beloit Ave	68.9	71.9	204*	ES R/W	68 70	67 68	66 67	65 66	- 65	Yes	
C4	Beloit Ave	67.1	70.4	204*	ES R/W	67 70	65 69	64 68	64 67	- 65	Yes	
C5	Beloit Ave	65.8	66.9	205	ES R/W	64 67	64 67	63 67	62 67	- 67	Yes	
D	Beloit Ave	65.8	67.1	205 + 206*	ES R/W	65 67	64 67	63 66	62 65	- 65	Yes	
D1	Beloit Ave	63.1	68.5	206*	ES R/W	67 69	66 69	65 69	64 67	- 67	Yes	
D4	Veterans Hospital	61.0	64.9	No Impact								
E	Albata St	66.7	73.8	207	ES R/W	70 69	67 69	66 69	65 71	- 70	Yes	

Notes: Soundwall heights that provide a minimum 5 dBA noise reduction are highlighted in **bold**.

- ES – Edge of Shoulder
- R/W – Right of Way
- PPL – Private Property Line
- Not feasible due to design constraints/standards
- * Soundwall currently under construction
- ♦ Noise contribution from Sepulveda Blvd.

Table 3.14-5: Southbound Alternative 3 – Noise Analysis Summary (Page 2 of 4)

Site #	Location	Existing Noise Level	Predicted Worst-Hour Noise Level	Soundwall # & Location		Predicted Noise Levels for the Year 2030					Minimum 5 dBA Reduction
						Barrier Height Alternatives					
						[8'] 2.4m	[10'] 3.0m	[12'] 3.6m	[14'] 4.2m	[16'] 4.8m	
E1	Waterford St	66.2	77.4	207	ES R/W	72 74	69 73	68 71	67 70	- 69	Yes
E1A	Modeled Site	-	72.1	207	ES R/W	69 72	68 72	66 72	65 71	- 70	Yes
E2	Burnham St	68.0	77.6	207	ES R/W	72 78	69 78	68 78	67 75	- 74	Yes
E2A	Modeled Site	-	72.1	207	ES R/W	68 72	67 72	65 72	64 70	- 69	Yes
E2B	Modeled site	-	71.8	207	ES R/W	68 72	66 72	64 72	64 69	- 68	Yes
E3	Cashmere St	67.0	74.9	207	ES R/W	69 75	68 75	67 75	66 75	- 75	Yes
E3A	Modeled Site	-	69.4	207	ES R/W	67 69	65 69	63 69	63 69	- 66	Yes
E4	Elderwood St	65.9	72.5	207	ES R/W	67 73	66 73	65 73	65 73	- 73	Yes
E4A	Modeled site	-	71.7	207	ES R/W	68 72	67 72	64 72	64 72	- 72	Yes
E5	Church Ln	70.7	76.1	207	ES R/W	69 76	68 76	67 76	66 76	- 76	Yes
E5A	Modeled site	-	72.3	207	ES R/W	68 72	67 72	65 72	64 70	- 69	Yes
E6	Kiel St	69.7	78.0	207	ES R/W	72 78	69 78	68 76	67 75	- 74	Yes
G3	Hotel Angeleno	67.1	69.6	-	ES R/W	68 69	67 69	67 69	66 69	- 69	No
G4	Church Ln	73.6	75.5	-	ES R/W	75 75	75 75	75 75	74 75	- 75	No
J	Royal Woods Dr	67.8	68.0	209	ES R/W	66 68	65 68	64 68	63 68	- 68	Yes

Notes: Soundwall heights that provide a minimum 5 dBA noise reduction are highlighted in **bold**.

- ES – Edge of Shoulder
- R/W – Right of Way
- PPL – Private Property Line
- Not feasible due to design constraints/standards
- * Soundwall currently under construction
- Noise contribution from Sepulveda Blvd.

Table 3.14-5: Southbound Alternative 3 – Noise Analysis Summary (Page 3 of 4)

Site #	Location	Existing Noise Level	Predicted Worst-Hour Noise Level	Soundwall # & Location		Predicted Noise Levels for the Year 2030					Minimum 5 dBA Reduction
						Barrier Height Alternatives					
						[8'] 2.4m	[10'] 3.0m	[12'] 3.6m	[14'] 4.2m	[16'] 4.8m	
J1	Milken High School (outside)	-	-	No Impact							
J2	Milken High School (inside)	43.4	45.0	No Impact							
J3A	Curtis Middle School (outside)	61.7	64.2	No Impact							
J3B	Curtis Middle School (inside)	42.6	45.1	No Impact							
J5	Castlewood Dr	51.5	55.0	No Impact							
J6	Castlewood Dr	69.9	71.9	-	ES R/W	72 72	72 72	72 72	72 72	- 71	No
J7	Crownridge Dr	63.6	66.1	-	ES R/W	66 66	66 66	66 66	65 66	- 66	No
J7A	Royal Woods Dr	64.9	67.5	-	ES R/W	67 68	67 68	66 67	66 67	- 67	No
J8	Crownridge Dr	56.1	58.7	No Impact							
J9	Royal Woods Dr	64.7	66.5	209	ES R/W	64 67	63 67	63 67	62 67	- 67	Yes
J9A	Royal Ridge Rd	62.4	64.6	No Impact							
J10	Royal Ridge Rd	62.2	65.8	No Impact							
J11	Royal Ridge Rd	62.9	65.4	No Impact							
J12	Royal Woods Pl	60.5	63.0	No Impact							
J13	Woodfield Pl	60.8	62.9	No Impact							

Notes: Soundwall heights that provide a minimum 5 dBA noise reduction are highlighted in **bold**.

- ES – Edge of Shoulder
- R/W – Right of Way
- PPL – Private Property Line
- Not feasible due to design constraints/standards
- * Soundwall currently under construction
- ♦ Noise contribution from Sepulveda Blvd.

Table 3.14-5: Southbound Alternative 3 – Noise Analysis Summary (Page 4 of 4)

Site #	Location	Existing Noise Level	Predicted Worst-Hour Noise Level	Soundwall # & Location		Predicted Noise Levels for the Year 2030					Minimum 5 dBA Reduction
						Barrier Height Alternatives					
						[8'] 2.4m	[10'] 3.0m	[12'] 3.6m	[14'] 4.2m	[16'] 4.8m	
J14	Woodcrest Dr	65.1	67.2	209	ES R/W	64 67	64 66	63 66	62 65	- 63	Yes
L	Woodcrest Dr	62.4	62.4	No Impact							
L1	Del Gado Dr	63.1	64.4	No Impact							
L2	Sepulveda Blvd	61.0	63.7	No Impact							
M	Sutton St	67.1	74.9	211	ES R/W	69 -	67 -	65 -	64 -	- -	Yes
M1	Valley Vista Blvd	64.2	71.5	211	ES R/W	62 -	60 -	59 -	58 -	- -	Yes
M2	Greenleaf St	63.9	70.1	211	ES R/W	66 -	65 -	65 -	64 -	- -	Yes
M3	Modeled Site	-	70.1	210 + 211	ES R/W	64 -	62 -	61 -	61 -	- -	Yes

Notes: Soundwall heights that provide a minimum 5 dBA noise reduction are highlighted in **bold**.

- ES – Edge of Shoulder
- R/W – Right of Way
- PPL – Private Property Line
- Not feasible due to design constraints/standards
- * Soundwall currently under construction
- ♦ Noise contribution from Sepulveda Blvd.

Noise Impacts under Alternative 2

Predicted increases in traffic noise under design-year (2031) conditions relative to existing worst-hour conditions are generally in the range of 1-2 dBA. These increases are attributed to the addition of the proposed HOV lane and the predicted increase in traffic volumes.

Tables 3.14-3 and 3.14-4 and Layouts L-1 through L-47 for Alternative 2 show the locations where predicted traffic noise levels approach/exceed the Noise Abatement Criteria of 67 dBA- $L_{eq}(h)$ for Activity Category B.

Residential Areas

All affected residential areas have been considered for noise abatement and are represented by Sites #A3 through #K9 along northbound I-405 and Sites #A through #M3 along southbound I-405. However, for sites #E, #E2, #E3, #E4, #E5 and #E6 that are behind an existing soundwall, it was determined that additional noise abatement was not feasible. There the existing soundwall varies in height from 8 feet to 11 feet.

The results of TNM 2.5 modeling indicated that vertically extending the height of this existing soundwall to 14 feet would not reduce noise levels by 5 decibels. Additionally, a freeway traffic noise investigation was completed for this area (between Waterford Street and Sunset Boulevard) along southbound I-405 in September 2001 to determine if a higher soundwall would provide benefit to the affected residences at the first story as well as the second story. However, it was determined that increasing the height of the soundwall to the maximum of 14 feet would not be feasible (would not reduce noise level by a minimum of 5-dBA). The future predicted worst-hour noise levels, soundwall locations and residential areas considered for abatement are listed on Tables 3.14-3 and 3.14-4 and are shown in Layouts L-1 through L-47.

Hotels/Motels

The Best Western Motel, located in the southwest corner of I-405 and Santa Monica Boulevard, has an outdoor swimming pool that is surrounded by 3-story buildings from all sides, and therefore, it is shielded by the structure.

Hotel Angeleno (Site #G3) was determined to have freeway noise impacts due to the proposed project. Since traffic noise impacts have been identified at this location, noise abatement measures have been considered, however, noise abatement in the form of a soundwall is not acoustically feasible at any location for this site.

Schools

There are three schools within the project limits. Curtis School (Site #J3A and #J3B), which is located north of Mulholland Drive overcrossing along southbound I-405, was not determined to have freeway traffic noise impacts due to the proposed project. The University of Judaism (Site #J4), which is located north of Skirball Center Drive along northbound I-405, was also determined to have no freeway traffic noise impact due to the proposed project. Milken Community High School (Site #J2-inside classroom) is located north of Skirball Center Drive along southbound I-405. Freeway traffic noise impacts were not predicted inside the classroom.

Parks

There is one park (Site #D2) located within the project limits. The Westwood Recreation Center is under the jurisdiction of the City of Los Angeles, Department of Los Angeles Parks and Recreation. There is an area of frequent human use and it was determined to have traffic noise impacts. Because there will be traffic noise impacts [future predicted noise level of 72 dBA-Leq (h)] at this location, a soundwall along the edge of shoulder on northbound I-405 has been recommended as part of Alternative 2.

Playgrounds

There is one playground (Site #D5) located within the project limits. This outdoor toddler play area is a part of The Salvation Army Bessie Pregerson Child Development Center that is located on the east side of the I-405 between Wilshire Blvd. and Ohio Ave. The playground is an exterior frequent human use area where the future predicted noise level was calculated to be 73 dBA-Leq(h) which would exceed the NAC of 67 dBA-Leq(h) criteria for Activity Category B. Since there will be freeway traffic noise impacts at this site, noise abatement has been considered and a soundwall along the edge of shoulder is recommended as a traffic noise abatement measure under Alternative 2.

Churches/Temples

The Leo Baeck Temple (Site #H4) is located about 1,340 meters (4,400 feet) north of Moraga Drive along northbound Interstate 405. There is an exterior frequent human use area where the future predicted noise level was calculated to be 72 dBA-Leq(h) which would exceed the NAC of 67 dBA-Leq(h) criteria for Activity Category B. Since there will be a freeway traffic noise impacts at this site, noise abatement has been considered and a soundwall along the edge of shoulder is recommended as a traffic noise abatement measure under Alternative 2.

Hospitals

The Veterans Administrations Hospital (Site #D4), located between Sunset Boulevard and Santa Monica Boulevard along the southbound Interstate 405, lies within the project limits. The future predicted noise level under Alternative 2 at the hospital is 65 dBA-Leq(h). Since there is no freeway traffic noise impact due to the freeway improvement project at Site #D4, noise abatement has not been considered.

Commercial Developments

There is one commercial development that has an outside eating area (Big Tommy's (Site #B4) – a fast food restaurant) on the northwest corner of I-405 and Pico Blvd. A 10-minute traffic noise reading was taken at this site, however, since Sawtelle Blvd. and Pico Blvd. (local streets) were the predominant noise sources, freeway traffic noise impacts are not predicted at this site.

Noise Impacts under Alternative 3

Predicted increases in traffic noise under design-year (2031) conditions relative to existing worst-hour conditions are generally in the range of 1-2 dBA. These increases are attributed to the addition of the proposed HOV lane and the predicted increase in traffic volumes. Tables 3.14-4 and 3.14-5 and Layouts L-1 through L-47 for Alternative 3 show the locations where predicted traffic noise levels approach/exceed the Noise Abatement Criteria of 67 dBA- $L_{eq}(h)$ for Activity Category B and 52 dBA- $L_{eq}(h)$ for Activity Category E.

Noise impacts under Alternative 3 are the same as Alternative 2 with the exception of additional impacts to residential areas located along southbound I-405. Please refer to *Noise Impacts under Alternative 2* for a discussion of impacts to sensitive land uses such as residences, hotel/motel, park, and temple that have been identified as being affected by freeway traffic noise associated with the proposed project.

Residential Areas

All affected residential areas have been considered for noise abatement and are represented by Sites #A3 through #K9 along northbound I-405 and Sites #A through #M3 along southbound I-405. The future predicted worst-hour noise levels, soundwall locations, and residential areas considered for abatement are listed on Tables 3.14-4 and 3.14-5 and shown in Layouts L-1 through L-47 found in Appendix G.

Construction Noise Impacts

During the construction phases of the project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. 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.

3.14.4 Avoidance, Minimization and Mitigation Measures

Alternative 2

Northbound I-405

Soundwall 101 was determined to reduce noise levels by 5-7 decibels for the area represented by Site #A3. Soundwall 102 also provides noise attenuation for residences represented by Sites #B and #B1 near the I-405/I-10 interchange. This soundwall is currently under construction as a part of another project. Soundwall 103 has been recommended to provide a 5-15 dBA noise reduction for the park owned by the City of Los Angeles, represented by Site #D2, the residential area represented by Site #D3, and the Bessie Pregerson Child Development Center outdoor toddler play area represented by Site #D5.

Soundwall 104 has been recommended along the edge of shoulder from south of Cashmere Street to the Sunset Blvd. off-ramp. The proposed project would remove the existing soundwall in order to accommodate the widening for the HOV lane. It was determined that this soundwall would provide a 5-7 dBA noise attenuation for the areas represented by Sites #F1, #F2, and #F3. Soundwall 105 (in conjunction with Soundwall 104) has been recommended to provide sufficient noise reduction for the residential area represented by Sites #F5 and #F6.

In order to provide the minimum noise reduction for the area represented by Sites #G, #G1, #G2, #G5, and #H1 Soundwall 106 (along the mainline) would have to be either 12 feet or 14 feet in height. It must be noted that the proposed soundwall 107A (and part of SW 107B) would physically block the view from the freeway to the commercial properties along Sepulveda Boulevard between Acanto Place and Moraga Drive. Therefore, the opinions of the affected property owners (i.e. the owners of the affected residences represented by Site #G2 and #H1 and the owners of adjacent commercial properties) must be considered before making a final noise abatement decision. Soundwall 107B has been recommended along the edge of shoulder to provide a 5-7 dBA noise reduction to the residential area represented by Sites #H1 through #H4.

The recommended Soundwalls 108 through 113 would provide 5-16 dBA noise attenuation for the areas represented by Sites #I through #K6 (please see Appendix G: Attachments 14 and 15, and 19 to 21). Because of the topography and the location of receivers with respect to the freeway, the only acoustically feasible location for these soundwalls is outside Caltrans Right of Way, on the private property line. However, after considering the topography, the soundwalls along the private property line may not be physically feasible (constructible). Therefore, a detailed analysis would be necessary for these areas to determine if these soundwalls are constructible. Soundwall 113 is proposed for construction at the same elevation as the existing wooden dock. The wooden dock, approximately 20 feet above the freeway, is supported on wood posts. Soundwall 114 has been recommended along the edge of shoulder (overlapping the existing soundwall) to provide the minimum noise reduction for the area represented by Site #K7 and #K8. Soundwall 114 would physically block the view from the freeway to the commercial properties along Sepulveda Boulevard just south of Ventura Boulevard. Therefore, the opinions of the affected property owners (i.e. the owners of the affected residences represented by Site #K7 and the owners of adjacent commercial properties) must be considered before making a final noise abatement decision.

Southbound I-405

Soundwalls 201 and 202 together were determined to provide a 5-10 dBA noise attenuation for the areas represented by Sites #A, #A1 and #A2. Soundwall 201 is currently under construction as part of another project. Soundwall 203 has been recommended along the edge of shoulder to provide noise attenuation for the area represented by Sites #B2 and #B3. Soundwall 204 has been determined to provide noise attenuation for the area represented by Sites #C1 through #C4. This soundwall is currently under construction as part of another project. Soundwall 205 would provide a 5 dBA noise reduction to the area represented by Site #C5, however, this soundwall would block the view of commercial properties along Santa Monica Blvd. Therefore, the opinions of the affected property owners (i.e. owners of the affected residences represented by Sites #C5 and #D and the owners of adjacent commercial properties) must be considered before making a final noise abatement decision. Soundwall 206 would provide a 5 dBA noise reduction to the area represented by Site #D and #D1, and is currently under construction as part of another project.

Soundwall 207 has been recommended to provide a 5-7 dBA noise reduction for the areas represented by Sites #EE1 and #EE4. Soundwall 207 would provide an extension to Soundwall 208 in order to provide benefit to the end receivers. Soundwalls 208 and 209 are currently under construction as part of another project. Soundwall 211 has been determined to provide noise attenuation for the area represented by Sites #J, #J9 and #J14 (the Royal Woods neighborhood in Sherman Oaks). Soundwalls 212 and 213 have been determined to provide noise attenuation for the area represented by Sites #M, #M1, #M2 and #M3. The proposed project would also require the removal of existing soundwalls from Del Gado Drive to Valley Vista Blvd. and from Valley Vista Blvd. to Dickens St. in order to accommodate the widening for the HOV lane.

The total length of the recommended barriers under Alternative 2 is 32,610 feet. Calculations based on preliminary design data indicate that the recommended barriers would reduce future noise levels from 5 to 16 decibels (dBA) for approximately 425 residences. The total reasonable cost allowance for the recommended soundwalls is \$20,964,000 in 2006 dollars.

Alternative 3

All proposed soundwalls on northbound I-405 for Alternative 3 would be the same as Alternative 2.

The only difference in the recommended soundwalls for southbound I-405 would be for the area represented by Sites #C1 through #C4. A soundwall has been recommended to provide noise attenuation for this area, however, there is a soundwall currently under construction as part of another project for this area. Under Alternative 3, this soundwall would have to be removed and replaced by recommended SW-204 to accommodate the proposed widening of southbound I-405.

The total length of the recommended barriers under Alternative 3 is 39,897 feet. Calculations based on preliminary design data indicate that the recommended barriers would reduce future noise levels from 5 to 16 decibels for approximately 576 residences. The total reasonable cost allowance for the recommended soundwalls is \$28,660,000 in 2006 dollars.

For those receivers where the future predicted noise levels with the project are above 75 dBA – Leq(h) for which there is no available feasible and reasonable solution, unusual and extraordinary abatement measures need to be considered on a case by case basis according to the Protocol. For these areas, interior noise measurements need to be taken with consent of homeowners to determine if there is any noise impact. If it is determined that the interior noise levels approach (within 1 dBA of) or exceed the Noise Abatement Criteria of 52 dBA – Leq(h), then further studies will need to be performed in order to determine which (if any) interior noise abatement measures (i.e. air conditioning, caulking, double pane windows, etc.) would provide the minimum required acoustical benefit (a 5 dBA noise reduction) at a reasonable cost.

Table 3.14-6: Summary of Recommended Barriers for Alternatives 2 & 3

Soundwall #	Receptor #	# of Benefited Residences	Reasonable Cost Allowance	
			\$ Per Residence	\$ Per Soundwall
Northbound – Proposed Soundwalls				
101	A3	34	46,000	1,564,000
102	B & B1	Wall Under Construction		
103	D2 & D3	26	50,000	1,300,000
104 + 105	F1 thru F5	42	52,000	2,184,000
106 + 107A + 107B	G thru H4	77	52,000	4,004,000
108	I	8	42,000	336,000
109	K1 & K2	30	52,000	1,560,000
110 + 111	K3 & K4	6	52,000	312,000
112 + 113	K, K5 & K6	20	56,000	1,120,000
114	K7 & K8	12	44,000	528,000
Southbound – Proposed Soundwalls				
202	A2	14	48,000	672,000
203	B2 & B3	40	48,000	1,920,000
204 + 205	C1 thru C5	92	48,000	4,416,000
205	C5	24	44,000	1,056,000
207	EE1 & EE4	5	48,000	240,000
207	EE1, EE4, E1 thru E6	88	52,000	4,576,000
209	J, J7A, J9 & J14	53	44,000	2,332,000
210 + 211	M, M1 & M2	34	54,000	1,836,000
211	J, J7A, J9 & J14	53	44,000	2,332,000
212 + 213	M, M1 & M2	34	54,000	1,836,000

Notes: Recommended Barriers for Alternative 3 are highlighted in bold.

Construction Abatement Measures

Construction noise is regulated by Caltrans standard specifications, Section 7-1.01I, Sound Control Requirements. These requirements state that noise levels generated during construction shall comply with applicable local, state, and federal regulations.

Noise due to project construction would be intermittent and the intensity of it would vary. The degree of construction noise impacts may vary for different areas of the project site and depending on the construction activities. Long-term noise exposure descriptors are difficult to quantify due to the intermittent nature of construction noise.

Table 3.14-7 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 50 feet. Noise produced by construction equipment would be reduced over distance at a rate of about 6 dBA per doubling of distance. Normally, construction noise levels should not exceed 86 dBA (Lmax) at a distance of 50 feet.

Table 3.14-7. 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

The following measures should be implemented in order to minimize noise and vibration disturbances at sensitive receptors during periods of construction:

Equipment Noise Control

- Where practical, feasible and reasonable, proposed soundwalls shall be constructed in the beginning of the project as a means of minimizing any impact on the sensitive receptors.
- Use newer equipment with improved noise muffling and ensure that all equipment items have the manufacturers' recommended noise abatement measures, such as mufflers, engine enclosures, and engine vibration isolators intact and operational. Newer equipment will generally be quieter in operation than older equipment. All construction equipment should be inspected at periodic intervals to ensure proper maintenance and presence of noise control devices (e.g., mufflers and shrouding, etc.).
- Sealed and lubricated tracks for crawler mounted equipment will lessen the sound radiated from the track assembly resulting from metal to soil and metal to metal contact. Contractors and site engineers and inspectors should ensure that the tracks are kept in excellent condition by periodic maintenance and lubrication.
- General noise control technology can have substantially quieter construction equipment when manufacturers apply the state of the art technology to new equipment or repair old equipment to maintain original equipment noise levels.

- Use construction methods or equipment that will provide the lowest level of noise and ground vibration impact such as alternative low noise pile installation methods.
- Turn off idling equipment.
- Efficient rerouting of trucks and control of traffic activity on construction site will reduce noise due to vehicle idling, gear shifting and accelerating under load. Rerouting trucks does not reduce noise levels but transfers noise to other areas that are less sensitive to noise.
- Time scheduling of activities should be implemented to minimize noise impact on exposed areas. Local activity patterns and surrounding land uses must be considered in establishing site curfews. However, limiting working hours can decrease productivity. Sequencing the use of equipment with relatively low noise levels versus equipment with relatively high noise levels during noise sensitive periods is an effective noise control measure.
- Equipment location should be as far from noise sensitive land use areas as possible. The contractor should substitute quieter equipment or use quieter construction processes at or near noise sensitive areas.
- Inspect and remove trucks with faulty and/or modified muffler systems.

A combination of abatement/mitigation techniques with equipment noise control and administrative measures can be selected to provide the most effective means to minimize effects of the construction activity. Application of these abatement/mitigation measures will reduce construction related noise impacts; however, a temporary increase in noise and vibration over the existing ambient levels may still occur.

3.14.5 Cumulative Impacts

Implementation of the projects in the cumulative study area would result in cumulative short-term noise effects to sensitive land uses during construction. Short-term noise impacts are localized and temporary and can be controlled through compliance with local noise ordinances. Implementation of the projects in the study area would contribute to cumulative operational stationary-source and off-site traffic noise impacts. Measures to reduce the impacts were included in the environmental documentation associated with the major projects in the study area.

Implementation of the build alternatives would contribute to cumulative short-term/construction noise effects. All of the build alternatives would involve the addition of an HOV lane that would contribute to long-term operational noise effects. Inclusion of noise barriers in the project design would reduce the project's noise effects and minimize the project's contribution to the cumulative noise impacts in the study area, however, some noise levels would continue to exceed Federal and State standards.

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3.15 ENERGY

3.15.1 Regulatory Setting

Under the CEQA Guidelines, Energy Conservation, EIRs are required to include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy.

NEPA (42 USC Part 4332) requires the identification of all potentially significant impacts to the environment, including energy impacts.

The California Department of Transportation Director's Policy 0-1-2003, Energy Efficiency and Conservation, states that the Department incorporates energy efficiency and conservation measures into its services and products, and implements strategies to improve the performance of transportation facilities, and promote sustainable transportation and lower vehicular emissions.

3.15.2 Affected Environment

Energy consumption associated with vehicular movement is almost entirely confined to the consumption of fossil fuel (gasoline and diesel). According to the Southern California Association of Government's (SCAG) 1998 Regional Transportation Plan, in the six-county SCAG region, an estimated 5.5 billion gallons of gasoline and 530 million gallons of diesel fuel were consumed annually in 1990. By the year 2020, these figures are estimated to grow to 7.7 billion gallons of gasoline and 740 million gallons of diesel fuel per year.

3.15.3 Impacts

Construction of any of the build alternatives would entail a one-time energy expenditure to manufacture building materials, prepare the surface, and construct the roadway and facilities. This expenditure is balanced by the improved system efficiency over the design life of the project.

While renewable natural resources such as lumber would be used in the construction of the project, there would not be an increase in the rate of consumption in the region. Non-renewable resources such as fossil fuels would be used during construction and also used by motorists following construction of the project. However, this use would not cause a substantial depletion in the supplies of these resources.

3.15.4 Avoidance, Minimization and Mitigation Measures

None Required.

3.15.5 Cumulative Impacts

Implementation of the projects in the study area would result in a cumulative effect on the consumption of non-renewable natural resources (i.e. lumber for construction, fossil fuels [gasoline and diesel] used for equipment operation and vehicle trips to and from construction sites).

Considering a number of projects in the study area are redevelopment projects, it is anticipated that modern energy-conserving fixtures, appliances, etc. would replace inefficient equipment, lessening the use of non-renewable energy sources on-site. The projects are also anticipated to stimulate the local economy and may result in a net increase in vehicular trips over existing conditions, particularly the shopping areas. Therefore, implementation of the projects in the study area has the potential for increasing demand for energy on energy sources.

The build alternatives would contribute to the cumulative short-term impacts since it would require the expenditure of energy resources to construct the proposed project. This expenditure would be offset by the energy savings associated with reduced congestion as result of improvements to the I-405 freeway and local intersections.

Biological Environment

3.16 WETLANDS AND OTHER WATERS OF THE UNITED STATES

3.16.1 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 other 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 CDFG 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.

3.16.2 Affected Environment

Information regarding wetlands and other waters of the U.S. was obtained from the Water Quality Report, May 9, 2005, and the Natural Environment Study, July 2006, prepared for the proposed project.

Surveys conducted for the proposed project did not identify the presence of jurisdictional wetlands within the project footprint. Several blue-lined intermittent streams are mapped flowing from the canyons along Sepulveda Pass adjacent to the freeway. These marked drainages are likely to fall under the jurisdiction of the U.S. Army Corps of Engineers, under Section 404 of the Federal Clean Water Act, the Los Angeles Regional Water Quality Control Board, under Section 401 of the Federal Clean Water Act and the California Department of Fish and Game, under Section 1600 of the Fish and Game Code as “Waters of the U.S.” and/or “Waters of the State.”

Additionally, some components of the project, particularly the new on-ramp at the Sepulveda Blvd. undercrossing adjacent to Getty Center Drive, is likely to affect an unmarked jurisdictional drainage. Further investigation to determine the actual jurisdictional areas affected by this project would be conducted as design details become available during project development.

3.16.3 Impacts

The proposed project would modify several drainage inlets that run beneath the I-405 which would require regulatory agency permits because they convey flows in drainages considered to be Waters of the U.S. Based on a review of the preliminary design plans, as many as four locations have been identified that may result in potential impacts to jurisdictional waters, such as riparian zones. Preliminary estimates currently indicate that as much as 0.63 acres of jurisdictional area may be affected by this project. These impacts occur primarily through the need to relocate existing drainage inlets due to the widening of the freeway (see Figure 3.10-1: Proposed Storm Water Treatment BMP Locations for drainage impact sites). The proximity of the freeway to these affected areas has caused these areas to be relatively disturbed. As a result, impacts as a result of the project are expected to be relatively minor. Coordination with the regulatory agencies will be initiated once further details of the project design become available. It is anticipated that a total of three regulatory agency permits would be necessary for work to relocate the drainages affected by the proposed project.

3.16.4 Avoidance, Minimization and Mitigation Measures

As the design of the project is developed further and the extent of the widening is better defined, studies to determine impacts to jurisdictional drainage areas should be conducted. Although sensitive wildlife species were not identified during the surveys to date, additional follow-up surveys are recommended, prior to construction, to evaluate new project information that becomes available through project development, as well as any new biological information that becomes available as a result of other studies.

The following permits would be required prior to construction: Clean Water Act Section 404 Permit from the U.S. Army Corps of Engineers for anticipated impacts to Waters of the U.S.; a Clean Water Act Section 401 Water Quality Certification from the Los Angeles Regional Water Quality Control Board for anticipated impacts to Waters of the U.S.; and a Streambed Alteration Agreement under Section 1600 of the California Department of Fish and Game Code for the drainage modifications in the project area.

3.16.5 Cumulative Impacts

The study area is mostly built-out, however, there may be isolated wetlands, and the improved flood control channels may be subject to U.S. Army Corps of Engineers (ACOE), California Department of Fish and Game (CDFG) and the Regional Water Quality Control Board's jurisdiction.

Direct impacts on urban wetlands and other waters of the U.S. could occur from development/redevelopment projects in the study area. Existing regulatory requirements, however, ensure that implementation of these projects would not result in cumulative effects on wetlands and other waters of the U.S. Regulatory requirements for wetlands include avoidance and minimization of impacts and "no net loss" policies imposed by the Corps and CDFG. Regulatory requirements concerning non-wetland waters of the U.S. require avoidance and minimization of impacts through Section 404 of the Clean Water Act which has a "no net loss" of wetlands provision. It requires that wetlands lost due to a Section 404-permitted project be replaced at a minimum 1:1 ratio.

Indirect impacts of the cumulative projects, including increases in peak storm flows, wetland inundation, and water quality degradation, can also affect waters of the U.S. Project hydrology is subject to review and minimization measures of the local jurisdiction to prevent downstream flooding. Federal regulations require reduction in pollutant discharges to the "maximum extent practicable." Within Los Angeles County, development/redevelopment projects are subject to stringent requirements with respect to storm water and dry weather discharges. With regulatory minimization measures in place, cumulative effects to waters of the U.S. would not be adverse.

The build alternatives would not impact any wetlands as documented in the Natural Environment Study, however, they may result in direct and indirect effects to non-wetland waters of the U.S. Additionally, the surface area of the freeway would be expanded and increased runoff from the

facility itself would occur. The build alternatives would be subject to Caltrans requirements for construction BMPs and operational design pollution prevention, treatment, and maintenance BMPs to address pollutants of concern. Drainage facilities would be upgraded on an as-needed basis to prevent localized flooding; BMPs would be required during construction to minimized impacts to jurisdictional drainages. In summary, with minimization measures, the contribution of these alternatives to cumulative effects on wetlands and other waters of the U.S. are not considered adverse.

3.17 NATURAL COMMUNITIES

3.17.1 Regulatory Setting

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.

One of the consequences of habitat loss is diminished connectivity of habitats, which results in fragmentation that limits the natural movement of wildlife to support their life-cycle requirements. Consequently, the animals in a given area experience physical isolation and eventual extirpation. Fragmentation of habitat by highways occurs when animals avoid the area of the road, are unable to cross the road, or are killed on the road. Known as the "barrier effect," this phenomenon has impacts on the fauna from individual to species-population levels.

Habitat areas that have been designated as critical habitat under the Federal Endangered Species Act are discussed in the Threatened and Endangered Species Section 3.20. Wetlands and other waters are also discussed in Section 3.16.

3.17.2 Affected Environment

A Wildlife Corridor Assessment, October 17, 2006 was prepared to assess the biological resources within and adjacent to the project limits.

The Santa Monica Mountains National Recreation Area (SMMNRA) was established by congress in 1978 and the Santa Monica Mountains Conservancy (SMMC) was established by the California State Legislature in 1980. Since that time, the SMMC has helped to preserve over 55,000 acres of parkland in both wilderness and urban settings, and improved more than 114 public recreational facilities throughout Southern California. The SMMRNA is considered one of the crown jewels among the National Park Service holdings.

SMMNRA is the nation's best example of a mainland Mediterranean ecosystem. There are only five large-scale Mediterranean ecosystems in the world. The gravest threat to wildlife populations and ecosystem health to the SMMNRA stems from habitat fragmentation and the resultant insularization, largely due to residential and commercial development along the parks' boundaries and within the park. The entire range is bounded and crisscrossed by roads and freeways. The main portion of the Santa Monica Mountains lying west of I-405 has received considerable attention from researchers and preservationists, but a large portion of the range lies east of the I-405. This area is densely settled with housing extending up canyons and ridges, and even along the crest of the range. But it also contains substantial open spaces that have been preserved, although they are poorly connected to each other and to the core area. If these natural areas are to maintain their biodiversity, they need to be connected by wildlife corridors to each

other and to the larger core areas to the west (see Figure 3.17-1: Santa Monica Mountains Conservancy Parklands and Wildlife Corridors in the Sepulveda Pass Area).

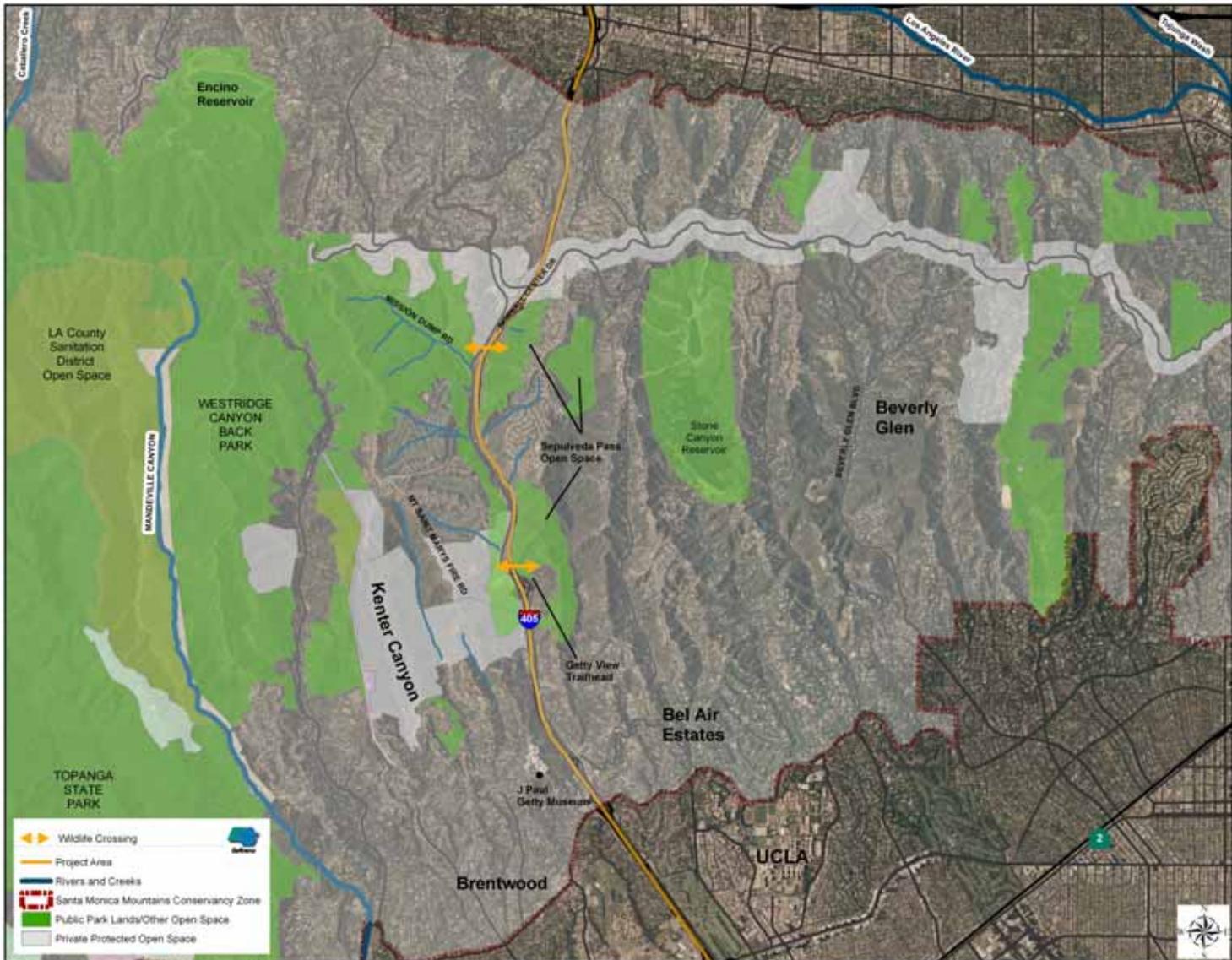
Habitat fragmentation is the leading factor causing concern about the maintenance of healthy wildlife populations. Wildlife corridors maintain connectivity between natural landscapes and play an important role in linking reserves and reducing the effects of fragmentation. While corridors are not reserves themselves, they can be viewed as a means to effectively increase reserve size. To some wide-ranging animals such as bobcat, coyote, mountain lion, and mule deer, even a relatively large isolated reserve may not be capable of sustaining populations. However, by allowing these and other species to disperse to and move between reserves via wildlife corridors, these animals have more space to utilize and are more likely to maintain stable populations. If there is a decline or absence of these top predators within an ecosystem, mesopredators – such as gray fox, raccoon, striped-skunk, domestic cat, and Virginia opossum – experience local population explosions or “release”. An increased habitat fragmentation diminishes coyote and especially bobcat populations, causing mesopredators to become overabundant. Understanding their potential negative effects on an unbalanced ecosystem is important as they can cause rapid extinctions of birds that nest in these fragments leading to further complications within the ecosystem.

Several sources have identified three locations along the I-405 to be wildlife crossing points. One notable resource was a Masters thesis prepared in 2001 by Jeffrey Roth titled, “Wildlife Corridors Across the 405 Freeway in the Sepulveda Pass, Los Angeles, California.” In addition, Caltrans has been in coordination with the Santa Monica Mountains Conservancy and the National Park Service, which are two agencies that actively exercise oversight in creating an interlinked system within the eastern Santa Monicas.

Patches of wilderness that are regularly used by wildlife persist on both sides of the I-405 freeway. In a few small areas bordering the freeway at certain bottlenecked locations, wildlife manage to move back and forth across the freeway at certain intersections. These tend to be some of the more mobile and intrepid animals such as deer, coyotes and rodents. The Wildlife Corridor Assessment focused on some of these types of wildlife species as target species that are keystone or umbrella species within the Santa Monica Mountains ecosystem. These target species are coyote, gray fox, bobcat, mule deer, raccoon, skunk, opossum, badger and quail.

Through field meetings between Caltrans Design and Environmental Planning staff and a representative of the SMMC, three wildlife crossing locations were identified in the project area. These are the Sepulveda Boulevard Undercrossing (near the Getty View Trailhead), the Bel Air Crest Road Undercrossing and the Skirball Center Drive Overcrossing. These locations are believed to provide an important link between the wildlife habitat on the east and west sides of the I-405 freeway over the Santa Monica Mountains, due to the practically impassable multi-lane freeway.

Figure 3.17-1: Santa Monica Mountains Conservancy Parklands and Wildlife Corridors in the Sepulveda Pass Area



Data: National Park Service GIS Clearinghouse, 1993
 Air Photo- USDA NAIP 2005

Sepulveda Blvd. Underpass and I-405 (at the Getty View Trailhead)

South of the midway point through the pass, Sepulveda Blvd. weaves beneath the freeway in an “S” turn and traverses from the westside of the freeway to the east side. Sepulveda Blvd. is four lanes in this location. Through the underpass, the freeway is supported by columns along the edge of the road. Dirt embankments beyond the columns extend the width of the underpass and rise to within a few feet of the bridge soffit before creating a ledge several feet wide (see Figure 3.17-2: Columns and Embankments Underneath I-405 at Sepulveda Blvd.).

Wildlife habitat on the eastern side of this underpass is ideal and connects to Sepulveda Ridge and Moraga Canyon. Immediately east of the underpass on the north side is the Getty View Trail parking area. Seven parking stalls are provided, an interpretive sign, and a trail leads to the top of Sepulveda Ridge. On the western side of the underpass is the Metropolitan Water District (MWD) facility that is surrounded by chaparral habitat. To the immediate northwest of the MWD is an access road to the defunct Mountain Gate Landfill. West of this area lies undeveloped Bundy Canyon and Kenter Ridge. Further northwest and up the ridge is the Mountain Gate community and golf course. These regions connect this area to the greater portions of the Santa Monica Mountains National Recreation Area.

To reach Sepulveda Underpass, wildlife would filter through Mandeville Canyon, and then use Kenter Ridge, Bundy Canyon, and Mt. Saint Mary’s Fire Road area to reach the underpass. If wildlife were coming from the north and around Mandeville Canyon, then the route would include Mission Canyon. Animals either filter through Mountain Gate along the golf courses and landscaping, or circumvent it via Canyonback Ridge, on the slope west of Mountain Gate and east of Mandeville Canyon. It is also possible for wildlife to circumvent Mountain Gate to the east, using the undeveloped hillsides and landscaping between the community and the freeway, and bypassing the Bel Air Crest underpass. On the eastside of the underpass, Sepulveda Ridge extends down to Sepulveda Blvd. The boulevard is the only obstacle for wildlife on the eastside of the underpass.

Directly beneath the Sepulveda underpass, on both the north and south embankments, are several trails frequented by wildlife. Past studies have identified multiple sets of deer tracks that were observed on nearly every visit. Tracks of coyote, fox and raccoon were also observed on a few occasions. Most tracks were observed heading east. As on many major thoroughfares for wildlife, deer tracks dominated. Deer numbers may be denser than other species. And because deer are heavier and have hooves, their tracks register better in any medium. It appears that wildlife can approach this underpass from several directions and then disperse in several directions after crossing underneath.

The area also has a few distinct game trails. West of the underpass are two trails, one on each side of the Metropolitan Water District facility that descends to the southbound on-ramp. All trails on this hill converge to a single trail that comes straight down, almost like a staircase, from the right-hand side of the graded hill to where it meets the on-ramp. From there, it is presumed that deer walk along the on-ramp and then cross through the underpasses on the south side. The other distinct trail follows a small seep on the north side of the Metropolitan Water District facility driveway. From there, animals likely take the shortest path and cut across the empty Metropolitan Water District lot, bounded by a split rail fence, to the corner of the lot, cross the off-ramp, and cross under the freeway on the northern embankment.

Figure 3.17-2: Columns and Embankments Underneath I-405 at Sepulveda Blvd.



Source: Wildlife Corridor Assessment, October 17, 2006

Based on their width, lines and pockmarked appearance, the trails under the freeway appear to be created by deer. On the northern side, the top of the embankment is only about 2 feet from the bridge soffit. This precludes deer from walking there. The main trail crosses the embankment along the middle of the slope. As it nears the eastern side, the trail branches into two main routes, with the more heavily used one leading to the edge of Sepulveda Blvd. and the Getty View Trail parking lot. From there, many paths lead up the hillside.

The southern embankment shows a different pattern. There is more clearance between the bridge soffit and the top of the embankment. The main trail follows the outside edge of the ledge at the top embankment, allowing cautious animals to see down the slope and ahead on the ledge for the greatest visual security. A less used trail forks down from the main trail and crosses mid-slope. As the main trail approaches the eastern side of the underpass, it forks into two branches. One heads down toward Sepulveda Blvd. to a point where animals could cross to the Getty View Trail parking area; the other continues through the northbound on-ramp easement land to various access points from Sepulveda Ridge.

Bel Air Crest Underpass

The underpass extends from the eastside of Sepulveda Blvd. and leads to the gated community of Bel Air Crest. This entrance supports all of the traffic for the upscale homes within the complex. The community entrance is fenced and landscaped. West of the underpass is a hillside of varying degrees of landscaping that leads up to Mountain Gate community and its access road.

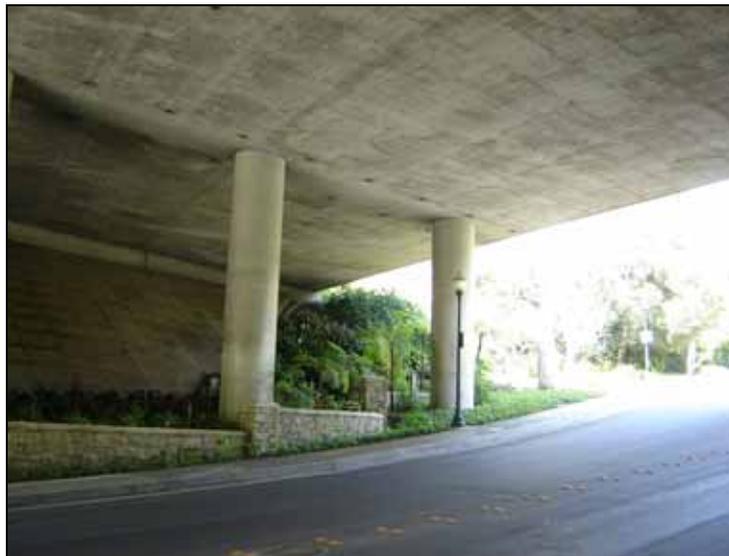
Before the community's development, this may have been a vital connection between the western and eastern portions of the range. The land occupied by Bel Air Crest previously was the site of the most significant western drainage of Sepulveda Ridge and probably served as a major conduit for wildlife. Despite development, not all wildlife connections have been severed here.

The underpass and the surrounding hillsides are some of the most modified of any in the study area. The hillside across Sepulveda Blvd. and west of the underpass has the Mountain Gate access road crossing it. The hillside is heavily landscaped with evergreen pines and is laced with game trails. Because the landscaping is old, many parts have begun to revert to the types of vegetation that grow wild in the vicinity.

The area directly beneath the underpass is occupied by the Bel Air Crest access road. The embankments differ from those of the Sepulveda underpass in that they are concrete, but retain the shape of sloping up from the caissons to a ledge about 3 feet beneath the freeway (see Figure 3.17-3: Columns and Embankments Underneath I-405 at Bel Air Crest Road). The southern ledge is about 12-feet wide, and the one on the north side is only about 4-feet wide. Immediately east of the underpass is the Bel Air Crest guard house, and beyond that is the gated entry. The entire area around the guard house is landscaped with flowers and shrubbery. Beyond the gate is the Bel Air Crest community.

The Bel Air Crest community dominates the ridgetop with houses and is composed of roads and landscaping closer to the freeway and the main entrance. The Sepulveda Pass Trail area is adjacent to the main gate and main access road and lies immediately to the north. To the immediate south of the main gate, the slope paralleling the freeway is dominated by community roads and landscaping for several hundred yards until it reaches the undeveloped portions of Sepulveda Ridge. The housing of the community is restricted to the higher elevations along the top of the ridge, so there is essentially a buffer zone of landscaping and roads between the houses and the freeway.

Figure 3.17-3: Columns and Embankment Underneath I-405 at Bel Air Crest Road



Source: Wildlife Corridor Assessment, October 17, 2006

Skirball Center Drive Overpass

The Skirball Center Drive overpass extends from the east side of Sepulveda Blvd. across the freeway. West of the overpass are some vertical concrete wall embankments and landscaping from the Skirball Center. Directly east and adjoining the overpass is the Sepulveda Pass Trail area. Further east and at the top of the ridge is North Casiano Drive, which is lined with homes.

While the Skirball Center Drive overpass possesses several attributes that make it a promising point for wildlife to cross the freeway, a few characteristics hinder that. The overpass itself is very short, at only 280 feet (see Figure 3.17-4: Skirball Center Drive Overpass). However, the length of the entire crossing includes the overpass, the additional width of the southbound off-ramp and on-ramp, and Sepulveda Blvd.

High traffic flows around the overpass inhibit wildlife movement and the on/off-ramp are the busiest of any in the study area. These are the on/off-ramp of choice for many residents who live within or near the Sepulveda Pass area. The overpass absorbs all of the traffic transitioning between the freeway and Mulholland Drive, and between the freeway and the valley portion of Sepulveda Blvd. Additionally, this overpass supports more foot traffic than any other. Many people employed in the service sector and construction trades use the bus stop at the on-ramp.

Despite these factors, through field meetings between Caltrans Design and Environmental Planning staff and a representative of the SMMC, it was further confirmed that through providing enhancements at this location, wildlife connectivity would be improved.

Figure 3.17-4: Skirball Center Drive Overpass (Looking West)



Source: Wildlife Corridor Assessment, October 17, 2006

3.17.3 Impacts to Wildlife Corridors

Sepulveda Blvd. Underpass and I-405 (at the Getty View Trailhead)

A new northbound on-ramp proposed at Sepulveda Blvd. and I-405, adjacent to the Getty View Trailhead, has the potential to impact wildlife that currently cross through the underpass towards the trailhead area and beyond. The new on-ramp could impede or impact wildlife attempting to cross the new lanes of the on-ramp. Additionally, new retaining walls necessary to construct the on-ramp may also impede wildlife crossing in this area.

Bel Air Crest Underpass

The I-405 bridge deck would be widened as a part of the HOV lane additions at this location. However, the widening of the bridge should not preclude wildlife from continuing their use of the underpass as a crossing point.

Skirball Center Drive Overpass

The Skirball Center Drive overpass would be replaced with a wider bridge that would affect the existing trailhead for the undeveloped Sepulveda Trail area, located just east of the overpass next to the existing pedestrian crosswalk. The trail winds down the steep slope into a riparian canyon just east of I-405. This area is a documented wildlife crossing area. In the first and nearest canyon is a perennial spring that serves as a vital resource for wildlife. As a part of this project, the slope would be regraded to accommodate the widening of the freeway as well as the new overpass. Construction would temporarily hinder wildlife crossing at Skirball Center Drive Overpass.

The Sepulveda Trail area is an ideal “stepping stone” habitat. The concept and role that habitat patches of stepping stones may play in increasing wildlife connectivity is of particular relevance in this area. In areas where development has already occurred and is irreversible and has precluded the establishment of continuous corridors, then stepping stones may provide the only feasible alternative for maintaining connectivity. Species that would be able to utilize stepping stones would be relatively mobile, tolerant of disturbed landscapes, and capable of moving through them, although not necessarily being able to persist in them. In this manner, species could move from patch to patch, seeking shelter in each stepping stone where resources are sufficient to allow species’ persistence.

3.17.4 Avoidance, Minimization and Mitigation Measures

When designing wildlife corridors and crossings, it is important to choose target species carefully to assure that the health of the overall ecosystem is maintained while the negative effects that certain species, such as mesopredators, can have on native wildlife populations are minimized. Further research and wildlife monitoring is recommended to better understand the movement patterns of all species within the study area. By determining appropriate target

species, wildlife crossings would be designed to encourage the movement of beneficial species and limit the movement of mesopredators to the extent that the ecosystem remains intact and healthy wildlife populations are sustained. Mitigation and minimization measures that would provide improvements to the three wildlife crossing locations identified in the project area are listed below. If considered appropriate, another location south of Skirball Center Dr. would be identified and pursued.

Sepulveda Blvd. Underpass and I-405 (at the Getty View Trailhead)

Because of project impacts to wildlife movement, the following mitigation measures are proposed to minimize the impact of the new on-ramp (see Figure 3.17-5):

- An appropriate sized culvert would be created underneath the proposed on-ramp to funnel wildlife from the underpass area to the more natural areas of Sepulveda Ridge. It is proposed to put the new culvert near the existing trailhead parking area due to geometrics of the new on-ramp as well as existing wildlife movement patterns. (Engineering feasibility (i.e. topography constraints) and cost influenced the design of this minimization measure. More favorable crossing conditions could be developed if these limitations were not a factor.)
- The Santa Monica Mountains Conservancy and Caltrans Environmental Planning and Design staff would collaborate to create the design of the culvert so that existing wildlife that roams in this area would be able to successfully reach habitat on either side of the new on-ramp.
- The abutment slope of the Sepulveda Blvd. overcrossing would be regraded to maximize the potential for wildlife to cross it.
- Re-plant new and existing Caltrans areas for use as “stepping stones” for wildlife. Some of these areas are the southbound off-ramp gore area, abutment slope of the Sepulveda Blvd. overcrossing down to the wildlife culvert, and the southbound off-ramp and on-ramp right-of-way areas. Appropriate native vegetation would include a mixture of trees, shrubs and ground cover. The density would be appropriate for wildlife to maneuver in, but not too dense or too sparse. The Landscape Architecture department and the Division of Environmental Planning (in coordination with the Santa Monica Mountains Conservancy) would work together to create the appropriate re-vegetation plan suitable for the area.
- The right-of-way fence under I-405 at the Sepulveda Blvd. overcrossing would be removed so that wildlife can cross Sepulveda at this location without restriction. It is also recommended to move or even remove additional fencing at the on- and off-ramps on both the northbound and southbound sides if deemed feasible by Caltrans to funnel the wildlife onto the stepping stones and eventually to the wildlife culvert under the new on-ramp. Consultation with the SMMC on the exact location of these fence modifications should take place during the later design phase of the project.
- Appropriate signs should be placed along Sepulveda Blvd. to warn motorists of the potential for wildlife to cross the roadway in that area. There should be a warning sign on the northbound and southbound sides of Sepulveda Blvd. Consultation with the City of Los Angeles Department of Transportation would be necessary to erect this sign.
- All new street lights to be installed would be in coordination with the City of Los Angeles Bureau of Street Lighting and in accordance with the lighting specifications using the lowest level of illumination/brightness to meet safety needs while minimizing glare. The lights would be equipped with shields to direct light and minimize spill-over and would use metal halide lamps for better color rendering;

Figure 3.17-5: Proposed Wildlife Mitigation at the Getty View Trailhead Area



Bel Air Crest Underpass

- The re-grading of the abutment slopes would be done in a manner that is consistent with the existing slopes.
- The vegetation planted on the new abutment slopes should consist of native species in a varied assortment of trees, shrubs and ground cover.
- Right-of-way fencing should be placed in a manner that is not restrictive for wildlife to access natural areas adjacent to Caltrans property, wherever feasible.
- The profile of the access road would be lowered in order to maintain and preserve the slope where existing wildlife access trails from the underpass that lead to natural areas to the north and south.

Skirball Center Drive Overpass

Modifications to the Skirball Center Drive overpass would affect the existing trailhead for the Skirball Trailhead. The trailhead is currently located just east of the overpass next to the existing pedestrian crosswalk. The following mitigation measures are proposed and illustrated in Figure 3.17-6:

- Caltrans right-of-way fencing would be removed along the northbound side of Sepulveda Blvd. from approximately 70 feet south of the intersection of Sepulveda Blvd. and Skirball Center Drive.
- The island area south of Skirball Center Drive, east of Sepulveda and west of I-405 would be replanted with native vegetation in a mixture of ground cover, shrubs and possibly trees that are preferable for wildlife habitat. All concrete from the existing on-ramp would be removed. This island would serve as a stepping stone area. A perimeter fence should be constructed to funnel the wildlife to the overpass. To help the funnel effect, the fencing should be placed directing wildlife toward the bridge structure. Caltrans would continue to consult with the Santa Monica Mountains Conservancy during the later design stages of the project to finalize optimal plans for this funneling effect.
- The new overpass would include a minimum 10-foot wide travel path on the south side of the bridge to accommodate wildlife movement. This path would function as a wildlife conduit (nighttime hours) as well as a pedestrian sidewalk. The south side of the path would have a minimum 5-foot high continuous, solid wall. This wall would extend beyond any travel lanes (including ramps) so that wildlife views are blocked to the freeway traffic below. The north side of the travel path would have a continuous 3-foot high concrete wall/curb extending from a point 20 feet east of the Sepulveda northbound street lane to the eastern end of the bridge structure to separate the travel path from the roadway. (Engineering feasibility (e.g. compliance with Americans with Disabilities Act standards) and cost influenced the design of this minimization measure. More favorable crossing conditions could be developed if these limitations were not a factor.)
- All new street lights to be installed would be in coordination with the City of Los Angeles Bureau of Street Lighting and in accordance with the lighting specifications using the lowest level of illumination/brightness to meet safety needs while minimizing glare. The lights would be equipped with shields to direct light and minimize spill-over and would use metal halide lamps for better color rendering;

- The existing trailhead slope would be regraded, filled and re-vegetated to accommodate the widening of the bridge structure and freeway;
- During construction, lighting would be kept to a minimum during the night so as not to impede wildlife.
- Possible improvements to fencing to limit wildlife access to the highway will be considered during final design.
- A monitoring plan (prior to and during construction) and success criteria (post-construction) of the proposed mitigation measures will be established in conjunction with the Los Angeles Department of Transportation.

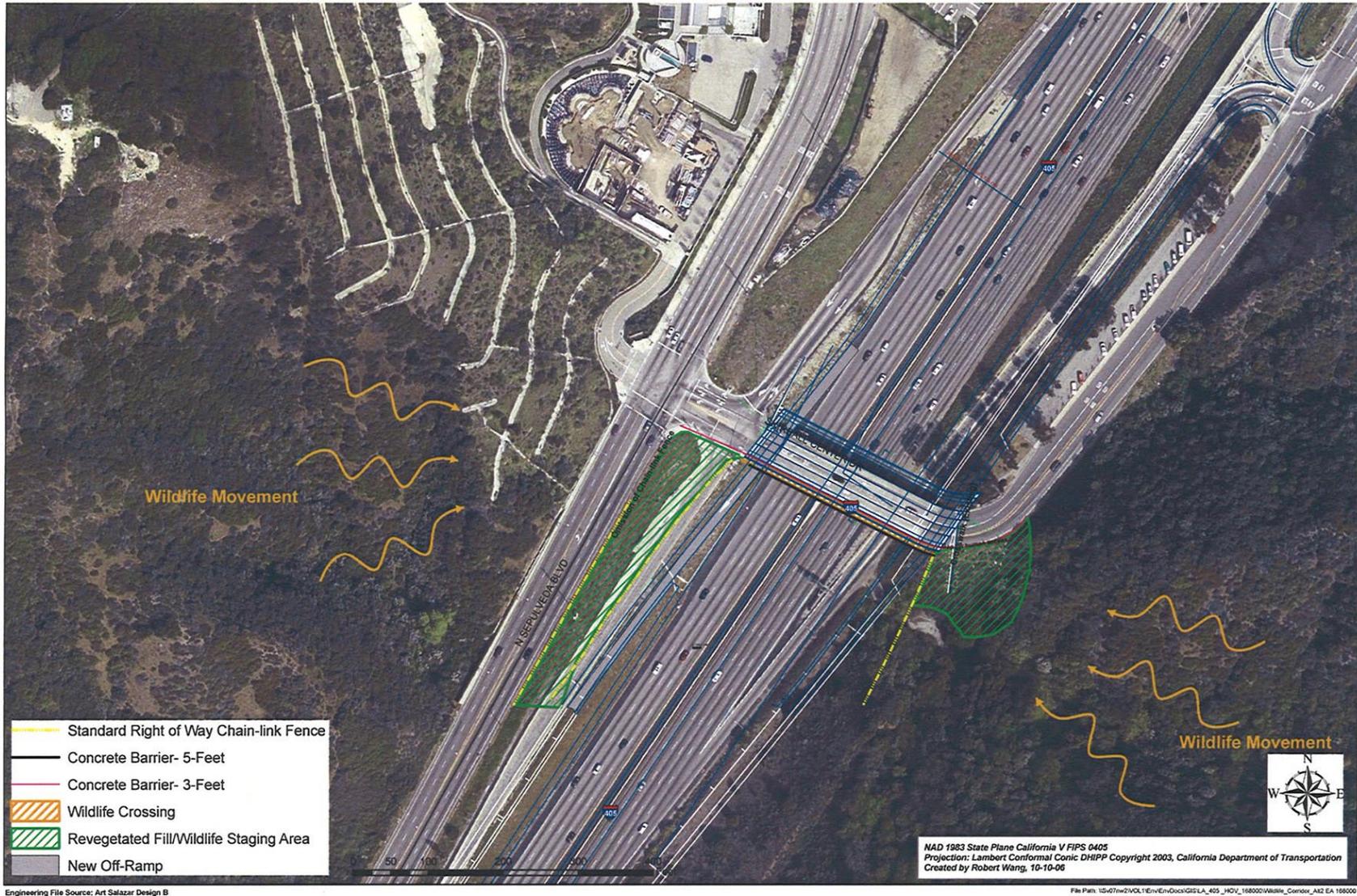
3.17.5 Cumulative Impacts

The proposed project could contribute to cumulative impacts to biological resources when combined with other past, present, and reasonably foreseeable future projects located within the project vicinity. The proposed project would increase the width of the freeway a minimum of 12 feet through all sections of the Sepulveda Pass where wildlife crossing is feasible. As a result, the length of any existing wildlife crossing route would become longer, negatively affecting wildlife. Lighting, noise and other freeway related infrastructure would also produce a permanent expanded disturbance footprint into habitat all along the east side of the I-405.

Major development and transportation projects in the area (see Tables 3.1-1 and 3.1-2) include a number of development/redevelopment projects that are proposed in the vicinity of the project area. The City of Los Angeles Department of Transportation (LADOT), in coordination with the Federal Highway Administration (FHWA) and Caltrans, is also in the planning stages for the Sepulveda Blvd. Reversible/Bike Lane and Intersection Improvement Project. Sepulveda Blvd. parallels I-405 for the length of the project area and the limits are from Wilshire Blvd. to Mulholland Drive in the city and county of Los Angeles. Improvements include auxiliary lanes, bike lanes, and up to six-foot wide shoulder additions for bicycle usage. Sepulveda Blvd. would be re-stripped through the Sepulveda Tunnel to provide a reversible lane that would operate during peak-hour traffic periods. Construction is proposed to begin in June 2007 and would last for approximately 18-24 months. Consecutive construction of the Sepulveda Reversible Lane Project (18-24 months) and the I-405 Sepulveda Pass Project (4-5 years) would potentially have a long-term cumulative construction impact on three known wildlife corridors in the Sepulveda Pass area. Minimization measures listed in the previous section will reduce these effects and the timing of construction would be carefully coordinated with LADOT to minimize the duration of construction in these sensitive wildlife crossing areas.

Mitigation for impact to wildlife movement capacity across the I-405 in the Santa Monica Mountains will include an enhanced sidewalk/wildlife crossing travel path on the Skirball Center Dr. overcrossing, as well as a wildlife crossing culvert under the proposed Getty Center Drive on-ramp. This would alleviate impacts to wildlife movement and would not contribute to cumulative wildlife impacts.

Figure 3.17-6: Proposed Wildlife Mitigation at the Skirball Center Drive Overpass



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3.18 VEGETATION

3.18.1 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). Please see the Threatened and Endangered Species Section 3.19 in this document for detailed 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.

Public Resources Code 21083, 21087 and the California Environmental Quality Act Guidelines Section 15126.2(a) require lead agencies to assess the impact of a proposed project by examining alterations in ecological systems. California Code of Regulations Fish and Game Code Section 1300-1301 and the Federal Wildlife Conservation Act of 1947 Section 1600-1616, state that the protection and conservation of fish and wildlife resources is of utmost public interest. CCR Section 1750, the Native Species Conservation and Enhancement Act, and Section 1801-1802 affirm that it is State policy to encourage preservation, conservation and maintenance of wildlife resources under the jurisdiction and influence of the State. Section 1802 instructs the California Department of Fish and Game to consult with lead agencies and to provide biological expertise to review and comment on environmental documents.

3.18.2 Affected Environment

Information regarding vegetation was obtained from the Natural Environment Study Report (NESR), July 2006. Surveys were conducted during the spring and summer of 2002 when the project was originally initiated, however due to the State budget problems in 2003, project activities were suspended until late 2005. Surveys resumed in spring 2006 to validate information from previous surveys.

The NESR was based on a review of project plans and meetings between Caltrans District Biology and District Design staff. Background research was conducted including the assessment of aerial photos of the project area, United States Geological Survey (USGS) topographic

quadrangle maps, United States Fish and Wildlife Service (USFWS) Species List, California Department of Fish and Game (CDFG) California Natural Diversity Database (CNDDDB), and the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants. All of the above sources were analyzed with respect to the project footprint. General field surveys were conducted over several seasons to identify the flora and fauna present in the project area.

The project area was divided into two Biological Survey Areas in an effort to sufficiently address natural conditions. Biological Survey Area-A (BSA-A) is from National Boulevard to the Getty Center Drive Undercrossing, spanning a distance of approximately 5 miles (see Figure 3.18-1). Biological Survey Area-B (BSA-B), is from Getty Center Drive north to Ventura Boulevard a distance of 4.7 miles (see Figure 3.18-2).

The BSA's consisted of the anticipated direct impact areas of roughly 30 feet for mainline widening and additional areas for proposed interchange improvements. Appropriate buffers were applied around areas of direct impact to include temporary construction impacts.

Biological Study Area – A (West Los Angeles Segment)

The land in this area is highly developed and urbanized. The topography consists of a coastal plain, gradually sloping towards the south, within the project area. Natural watercourses are not present in BSA-A, most likely due to the use of underground storm drain systems associated with development.

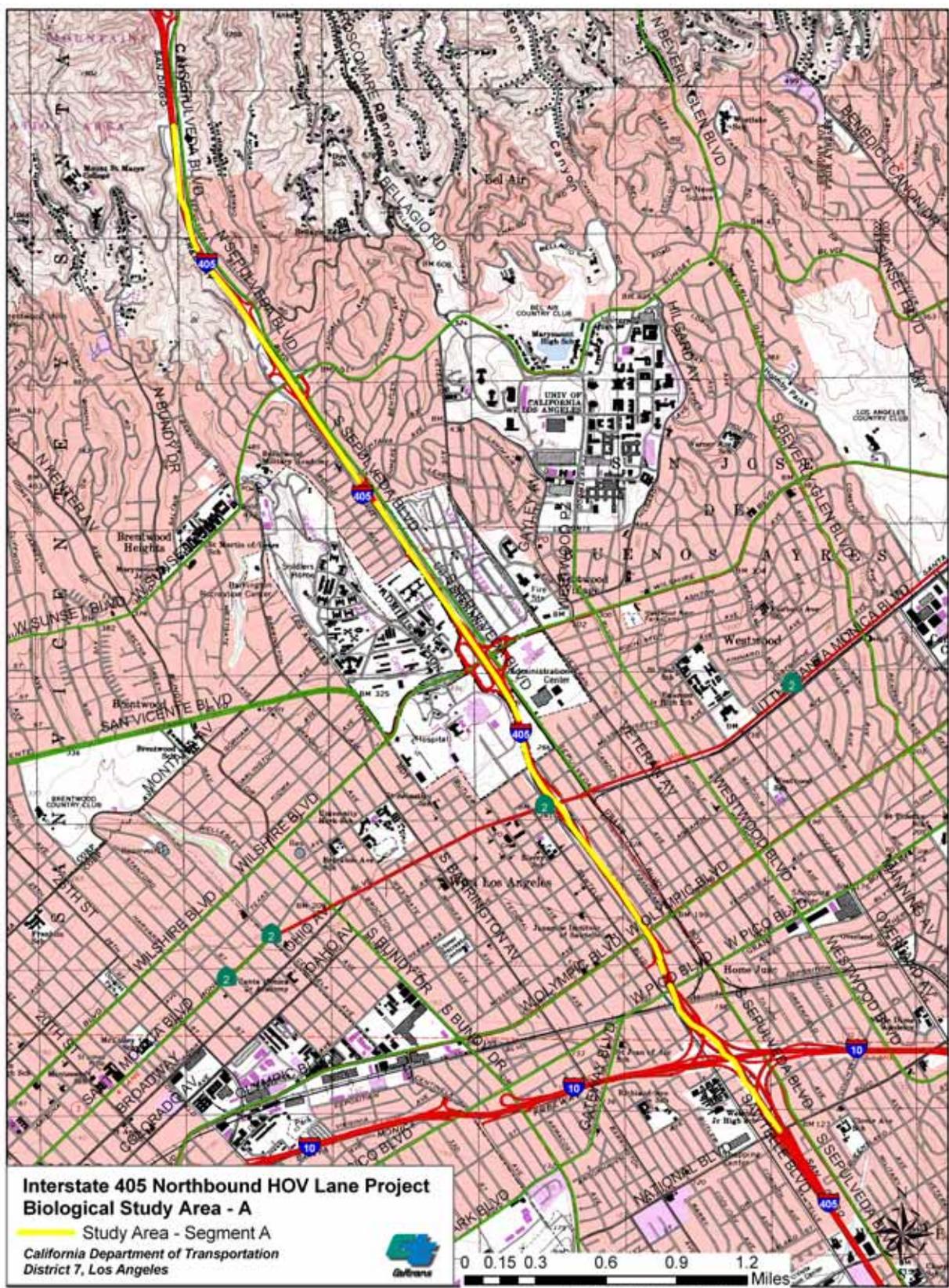
The southern half of the project area, surveyed in BSA-A, has been highly altered from its natural state due to the high level of land development, resulting in the absence of native plant communities and many wildlife species. Vegetation occurring within the freeway right-of-way consisted of common freeway landscaping plants. The plant species that were identified along BSA-A within the project footprint are listed in Table 3.18-1.

Table 3.18-1: Plant Species Identified in the Biological Study Area – A (BSA-A)

Common Name	Scientific Name
Wild Oat	<i>Avena fatua</i>
Eucalyptus	<i>Eucalyptus sp.</i>
Oleander	<i>Nerium oleander</i>
Tree tobacco	<i>Nicotiana glauca</i>
Avocado	<i>Persea sp.</i>
Pittosporum	<i>Pittosporum sp.</i>
Western Sycamore	<i>Platanus racemosa</i>
Peruvian Peppertree	<i>Schinus molle</i>
Brazilian Peppertree	<i>Schinus terebinthefolius</i>
Annual grasses	Various
Mexican Fan Palm	<i>Washingtonia robusta</i>

Source: Natural Environment Study, July 2006

Figure 3.18-1: Biological Study Area – A: West Los Angeles Segment



Biological Study Area – B (Sepulveda Pass Segment)

This study area encompasses the northern half of the project area. BSA-B supports a greater diversity and density of native plant and wildlife species compared to that of the more developed area in BSA-A, to the south. Native species diversity also increases with distance away from I-405 and Sepulveda Boulevard, which parallels the freeway in most areas. The I-405 in BSA-B is situated against the eastern slopes of Sepulveda Canyon through most of the pass, while Sepulveda Boulevard, which runs parallel to I-405, is situated against the west side of the canyon through most of the pass. One exception occurs south of the I-405 Sepulveda Boulevard undercrossing near the Getty Center Drive undercrossing where Sepulveda crosses to the east side of the canyon. The plant species that were identified along BSA-B within the project footprint are listed in Table 3.18-2.

Many of the slopes in Sepulveda Canyon have been previously cut back and benched from the construction of the freeway. Vegetation observed in BSA-B within the project footprint was mostly disturbed, consisting of either bare ground or ruderal and exotic plant species. The disturbed conditions observed in the project footprint are likely due to the high traffic volume on the freeway, regular slope mowing during the fire season, and initial disturbance resulting from the original construction of the freeway.

In undisturbed areas of the right-of-way between the southern extent of BSA-B and the summit of the Sepulveda Pass, a Chaparral community dominated by green bark ceonothus (*Ceanothus spinosus*) and sugar bush (*Rhus ovata*) was commonly found throughout the area on the canyon slopes. Coast live oak (*Quercus agrifolia*) and western sycamore (*Platanus racemosa*) were commonly found in the bottoms of the small canyons along the east side of I-405. These side canyons provided relatively good quality habitat for wildlife.

At the summit of the Sepulveda Pass, just north of the Mulholland Drive Overcrossing, plant diversity decreased on the previously cut and graded slopes along the sides of the freeway. Vegetation found in this area consisted mainly of annual grasses and California buckwheat (*Eriogonum fasciculatum*), with several coast live oak trees, California flannelbush (*Fremontodendron californicum*) and pine trees (*Pinus* sp.). The flannelbush and pine trees appear to have been planted along the freeway due to their orderly spacing and inappropriateness of these species to grow at this location naturally.

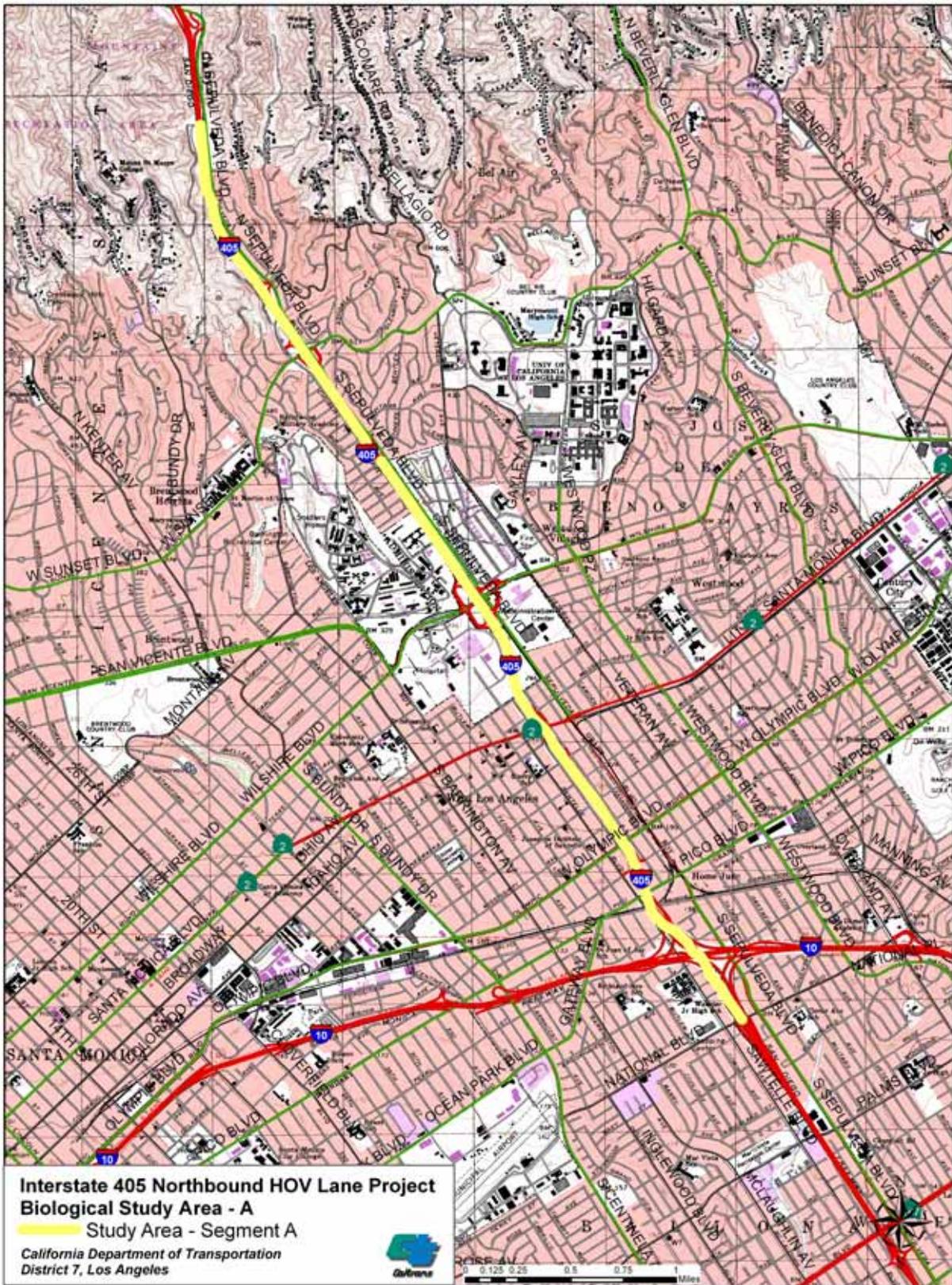
To the north of the Sepulveda Pass summit before the Sepulveda Boulevard undercrossing, at the north end of BSA-B, a mixture of eucalyptus (*Eucalyptus* sp.) likely planted as freeway landscaping, in addition to native species such as coast live oak, and California walnut (*Juglans californica*) compose the dominant vegetation species existing between the southbound lanes of I-405 and the adjacent residential community down the slope.

Table 3.18-2: Native Plant Species Identified in Biological Study Area- B (BSA-B)

Common Name	Scientific Name
California Sagebrush	<i>Artemisia californica</i>
Mugwort	<i>Artemisia douglasiana</i>
Coyotebush	<i>Baccharis pilularis</i>
Mulefat	<i>Baccharis salicifolia</i>
California Brickelbush	<i>Brickellia californica</i>
Greenbark Ceonothus	<i>Ceanothus spinosus</i>
Birch-leaf Mountain Mahogany	<i>Cercocarpus betuloides</i>
Chalk Dudleya	<i>Dudleya pulverulenta</i>
Durango Root	<i>Datisca glomerata</i>
California Buckwheat	<i>Eriogonum californica</i>
Golden Yarrow	<i>Eriophyllum confertiflorum</i>
California Flannelbush	<i>Fremontodendron californicum</i>
Everlasting	<i>Gnaphalium sp.</i>
Sawtooth Goldenbush	<i>Hazardia squarrosa</i>
Toyon	<i>Heteromeles arbutifolia</i>
California Black Walnut	<i>Juglans californica</i>
Deerweed	<i>Lotus scoparius</i>
Bush Lupin	<i>Lupinus longifolius</i>
Bush Mallow	<i>Malacothamnus fasciculatus</i>
California Coffeberry	<i>Rhamnus californica</i>
Sugar Bush	<i>Rhus ovata</i>
Wild Cucumber	<i>Marah macrocarpus</i>
Bush Monkey Flower	<i>Mimulus aurantiacus</i>
Phacelia	<i>Phacelia sp.</i>
Pine Tree	<i>Pinus sp.</i>
Western Sycamore	<i>Platanus racemosa</i>
Coast Live Oak	<i>Quercus agrifolia</i>
Lemonade Berry	<i>Rhus integrifolia</i>
Fuchsia-flowered Gooseberry	<i>Ribes speciosum</i>
California Wild Rose	<i>Rosa californica</i>
Arroyo Willow	<i>Salix lasiolepis</i>
Black Sage	<i>Salvia mellifera</i>
Mexican Elderberry	<i>Sambucus mexicana</i>
Purple Nightshade	<i>Solanum xanti</i>
Our Lords Candle	<i>Yucca whippleii</i>
Canyon Sunflower	<i>Venegasia carpesioides</i>

Source: Natural Environment Study, July 2006

Figure 3.18-2: Biological Study Area – B: Sepulveda Pass Segment



Two natural communities of special concern listed in the California Natural Diversity Database (CNDDDB) are the California Walnut Woodland and Coast live Oak Riparian Forest. Both species were observed adjacent to the project area in BSA-B and are relatively common through the Santa Monica Mountain Range. Additionally, a Ceonothus Chaparral Community, Willow/Mulefat Riparian Community and a Sycamore Riparian Community were identified in or adjacent to the project area.

The California walnut plant community generally exists on fine-textured soils of valley slopes and bottoms and is distributed widely throughout the Santa Monica Mountains. Loss of this habitat can be attributed to development pressures along this urban mountain range. Small remnants of this habitat exist adjacent to the project area. California walnut trees were observed in or adjacent to the project area with more trees found at the north end of the Sepulveda Pass. Greater numbers of California walnuts exist outside of the project area. A few individual trees were present within or near the project footprint. The Southern California Coast Live Oak Riparian Forest is another native plant community of concern that is listed in the CNDDDB search for the project area. This plant community generally exists within the canyon bottoms and throughout the Santa Monica Mountains. Coast live oak trees were found adjacent to and within the project footprint. Loss of these habitats (California Walnut Woodland and Coast Live Oak Riparian Forest) can also be attributed to development pressures along this urban mountain range.

Although the sycamore riparian woodland plant community was not listed in the NDDB for the project area, some remnants of this plant community were observed in the canyons adjacent to the project area to a limited extent. This plant community generally exists within the canyon bottoms in the area and throughout the Santa Monica Mountains.

Special Status Plant Species

The project area contains some Special Status plant species listed in the CNDDDB or U.S. Fish and Wildlife Service species list. These include: Lyon's pentachaeta, Santa Monica Mountains dudleya, slender-horned spine flower, thread-leaved brodiaea, Braunton's milk-vetch, Davidson's bush mallow, mesa horkelia, Plummer's mariposa lilly, and San Fernando Valley spine flower. Currently, they do not exist in the vicinity and were not observed during field reviews.

3.18.3 Impacts

Alternative 2

Although most of the project footprint lies in the disturbed roadside area, several components of the Alternative 2 are likely to affect native vegetation. In order to accommodate the widening of the freeway to add a new HOV lane, Sepulveda Boulevard would be realigned slightly to the east affecting a sliver of undeveloped land through this area. This area was observed to support some native species as well as exotic species, mainly Spanish broom (*Spartium junceum*).

The project footprint does not affect areas supporting the California Walnut Woodland and Coast Live Oak Riparian Forest habitats. The project footprint as proposed does not affect areas supporting a high density of western sycamores that would be considered a sycamore woodland habitat. The proposed project is not expected to affect or impact any of the previously discussed special status plant species.

Alternative 2 would also likely affect native vegetation and wildlife habitat through the reconfiguration of the northbound I-405 on-ramp at Sepulveda Boulevard, just north of Getty Center Drive. At this interchange, a new northbound off-ramp and on-ramp are planned. The new alignment of the on-ramp is planned through the Getty View Trailhead parking lot. The new on-ramp affects an area supporting a relatively high diversity of native plant species both planted and naturally occurring, including mature coast live oak and sycamore trees that have been preserved in this location by the Santa Monica Mountains Conservancy. This location is also considered to be one of the known wildlife crossing points across the I-405.

Most of the sycamore trees observed during the field surveys were located outside of the footprint of the proposed project in canyons adjacent to the project. Several sycamores were also planted along the freeway in the southern half of the project area (BSA-A) as part of freeway landscaping, which are not likely to provide much habitat value as those located in a more natural setting. Sycamores located adjacent to the proposed northbound on-ramp at the Sepulveda Boulevard Undercrossing have the potential to be removed due to their close proximity to the new ramp location.

Coast live oak trees have the potential to be removed as a result of this project. However, these oaks are not situated in riparian areas and are not at a density to be considered to be part of a riparian forest.

The project would also affect native vegetation beyond the disturbed roadside for the proposed construction of new on- and off-ramps along the southbound side of I-405, just north of Mission Dump Road. These new ramps would replace the existing ramps at Skirball Center Drive. A relatively small strip of native vegetation would be affected between the southbound lanes of the freeway and Sepulveda Boulevard.

Tree counts were conducted for Alternative 2 and the estimates are summarized in Table 3.18-3 below.

Table 3.18-3: Number of Trees Potentially Affected under Alternative 2

Alternative 2	# of Trees
Arroyo Willow	12
California Walnut	43
Greenbark Ceonothus	4
Coast Live Oak	41
Freemont Cottonwood	1
Mexican Elderberry	2
Sycamore	12

Source: Natural Environment Study, July 2006

Temporary Construction-Related Impacts

Four preliminary locations have also been identified for use as construction staging areas. However, if additional construction staging areas are required, these locations would be reviewed for biological resource impacts. The four preliminary construction staging locations are:

- Existing Getty Center Dr. off-ramp area within Caltrans right-of-way along northbound I-405;
- I-405/I-10 interchange area within Caltrans right-of-way;
- Wilshire Blvd. interchange area within the loops of the on/off-ramps along southbound I-405 within Caltrans right-of-way; and

Potential temporary construction-related impacts would include stockpiled materials, parked equipment, temporary buildings, storage tanks, and noise. Since the proposed staging areas are all within Caltrans Right-of-Way, in areas previously used for construction staging, impacts to sensitive biological resources are not anticipated.

Alternative 3

Alternative 3 of the project includes all of the impact components proposed in Alternative 2, and also includes widening on the southbound side of I-405 to meet current freeway standards.

Alternative 3 would affect additional areas containing native vegetation along the southbound side of I-405 along BSA-B, a width of about 20 feet from the existing shoulder. Additionally, a section of Sepulveda Boulevard 0.4-miles south of Bel Air Crest Rd. would be realigned towards the west by as much as 60 feet to accommodate the widening of the I-405 freeway. The main difference between Alternative 2 and Alternative 3 is in the number of oak trees to be impacted. The main difference in oak tree impacts is due to the number of oak trees located along the southbound I-405 on-ramp adjacent to Fiume Walk and Valley Vista Blvd. Tree counts were conducted for Alternative 3 and the results are summarized in Table 3.18-4 below.

Table 3.18-4: Number of Trees Potentially Affected under Alternative 3

Alternative 3	# of Trees
Arroyo Willow	12
California Walnut	43
Greenbark Ceonothus	4
Coast Live Oak	84
Freemont Cottonwood	1
Mexican Elderberry	2
Sycamore	12
Toyon	4

Source: Natural Environment Study, July 2006

Figure 3.18-3: Footprint of Disturbed Soil Areas and Areas of Native Vegetation

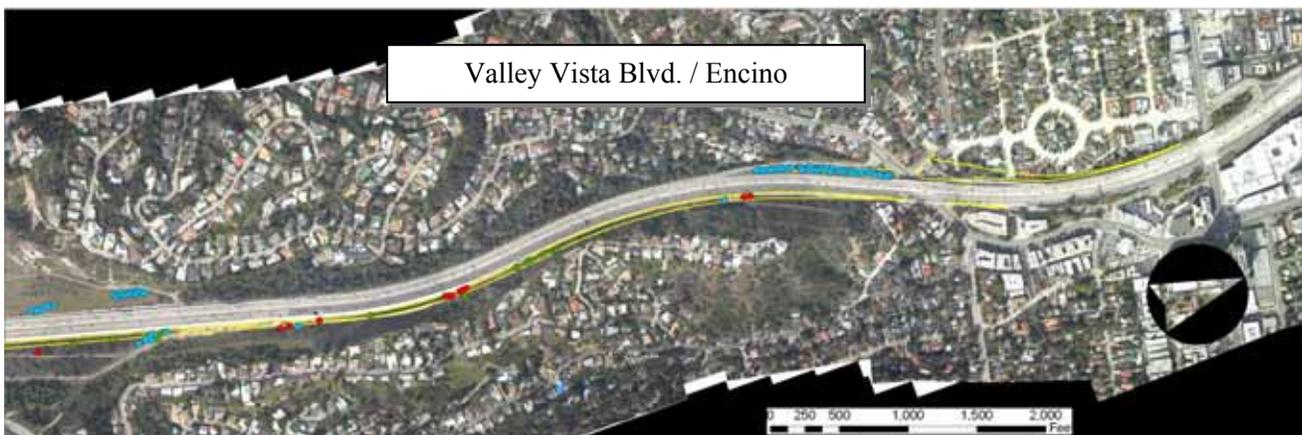
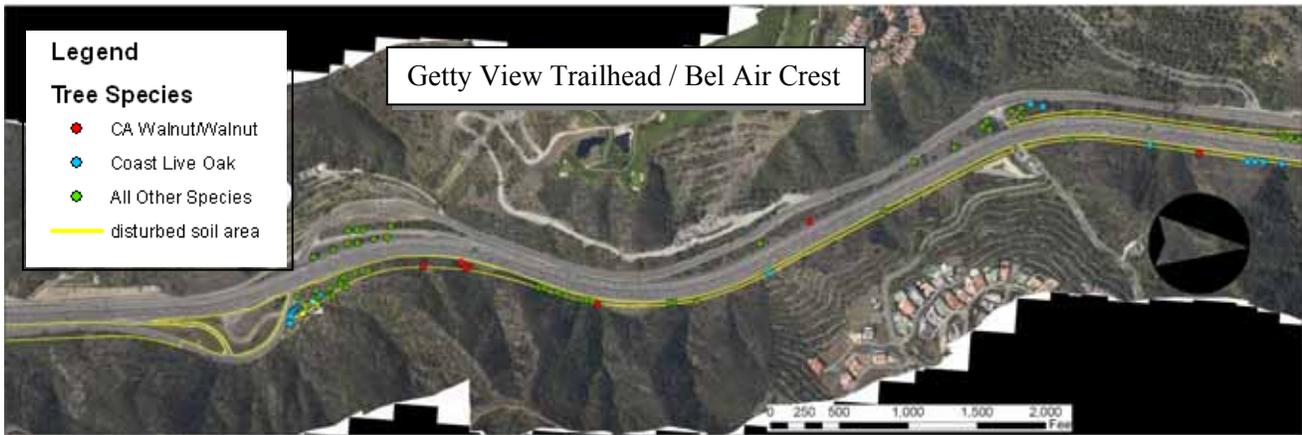


Table 3.18-5: Disturbed Soil Areas for Alternative 2 and 3

	Areas of Native Vegetation	Total Disturbed Soil Area
Alternative 2	160,580 Square Meters (36.68 Acres)	196,313 Square Meters (48.51 Acres)
Alternative 3	225,141 Square Meters (55.63 Acres)	335,709 Square Meters (82.95 Acres)

3.18.4 Avoidance, Minimization and Mitigation Measures

Walnut Trees

The removal of walnuts would be avoided to the greatest extent possible. However, should it be necessary to remove walnut trees for the construction of the project, the number of trees removed would be minimized to the least amount necessary.

Due to the relatively disturbed conditions in which the walnut trees are found, they are proposed to be replaced at a 5:1 ratio. Based on the total amount of walnuts affected and available on-site locations, favorable areas within the right of way would be selected by the District Biologist and the District Landscape Architect. Any required replacement beyond the space available in the right of way would be done off-site, in coordination with the Santa Monica Mountains Conservancy, which owns open-space land adjacent to the project.

Coast Live Oak Trees

The removal of Coast Live Oak trees would 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 would be minimized to the least amount necessary.

Due to the relatively disturbed conditions and low habitat value that the oak trees are found, they are proposed to be replaced at a 5:1 ratio. Based on the total amount of oaks affected and available on-site locations, favorable areas within the right of way would be selected by the District Biologist and the District Landscape Architect. Any required replacement beyond the space available in the right of way would be done off-site, in coordination with the Santa Monica Mountains Conservancy, which owns open-space land adjacent to the project.

Sycamore Riparian Woodland

The removal of sycamores would be avoided to the greatest extent possible. However, should it be necessary to remove sycamore trees for the construction of the project, the number of trees removed would be minimized to the least amount necessary.

Due to the relatively disturbed conditions in which the sycamore trees are found, they are proposed to be replaced at a 5:1 ratio. Based on the total amount of sycamores affected and available on-site locations, favorable areas within the right of way would be selected by the District Biologist and the District Landscape Architect. Any required replacement beyond the space available in the right of way would be done off-site, in coordination with the Santa Monica Mountains Conservancy, which owns open-space land adjacent to the project.

The 5:1 ratios have been identified in anticipation of needs and requirements of jurisdictional permits. They will be applied appropriately to areas that fall under the California Department of Fish and Game and U.S. Army Corps of Engineers jurisdiction or provide high-quality habitat.

Native Tree Replacement

Naturally existing native trees that have a 4-inch diameter at a height of 4.5 feet above grade (4-inch diameter at breast height) would be replaced at a 5:1 ratio. Tree replacement would be coordinated between the District Landscape Architect and District Biologist and incorporated into the plans. This native tree replacement ratio is limited to naturally occurring trees affected by the project, such as those that exist through the Sepulveda Pass. Native trees, which have been planted as a component of the freeway landscaping, particularly in the southern half of the project, would be replaced in accordance with District Landscape Architecture policies.

Invasive Species Control Measures

Revegetation of upland areas would incorporate appropriate native plant species found within the Santa Monica Mountains. The District Biologist and the District Landscape Architect would coordinate to create an acceptable plant pallet that would prevent the spread or reintroduction of invasive plant species.

Plant Survey Requirements

Plant surveys would be required for the following plants species: Braunton's Milk-vetch, Davidson's Bush Mallow and Mesa Horkelia. Although, these species are not anticipated to occur in the relatively disturbed footprint of the project area, in order to avoid any potential impacts to these species, additional spring surveys would be conducted annually prior to construction.

3.18.5 Cumulative Impacts

The southern half of the project area has been highly altered from its natural state due to the high level of land development, resulting in the absence of native plant communities and many wildlife species. Vegetation occurring within the freeway right-of-way consists of common freeway landscaping plants. Within the project footprint vegetation was mostly disturbed, consisting of either bare ground or ruderal and exotic plant species. The disturbed conditions observed in the project footprint are likely due to the high traffic volume on the freeway, regular slope mowing during the fire season, and initial disturbance resulting from the construction of the freeway.

The northern half of the project area supports a greater diversity and density of native plant and wildlife species compared to that of the more developed southern half of the project area. Native species diversity also increases with distance away from I-405 and Sepulveda Boulevard, which parallels the freeway in most areas.

The build alternatives are anticipated to have very minimal impacts to natural communities identified in the Natural Environment Study. The two natural communities of special concern listed in the California Natural Diversity Database (CNDDDB) are the California Walnut Woodland and Coast live Oak Riparian Forest. Both species were observed adjacent to the northern project area and are relatively common through the Santa Monica Mountain Range.

Additionally, a Ceonothus Chaparral Community, Willow/Mulefat Riparian Community and a Sycamore Riparian Community were identified in or adjacent to the project area. Due to the low level of impacts of the build alternatives to these natural communities, the proposed project is not anticipated to contribute to cumulative impacts to these plant communities.

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3.19 WILDLIFE

3.19.1 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 in Section 3.20. 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
- Marine Mammal Protection Act

State laws and regulations pertaining to wildlife include the following:

- California Environmental Quality Act
- Sections 1601 – 1603 of the Fish and Game Code
- Section 4150 and 4152 of the Fish and Game Code

3.19.2 Affected Environment

A Natural Environmental Study Report, July was prepared to assess the biological resources within and adjacent to the project limits.

The project area was divided into two Biological Survey Areas in an effort to sufficiently address natural conditions. Biological Survey Area-A (BSA-A) is from National Boulevard to the Getty Center Drive Undercrossing, spanning a distance of approximately 5 miles (see Figure 3.18-1). Biological Survey Area-B (BSA-B) is from Getty Center Drive north to Ventura Boulevard a distance of approximately 4.7 miles (see Figure 3.18-2).

Observation of wildlife in BSA-A was limited due to the absence of natural habitat and abundance of human disturbances and consisted primarily of common bird species. Wildlife associated with BSA-A is likely to include common species which are tolerant of human development such as rock doves, house sparrows, house finches and small mammals such as rats, opossums, and raccoons to name a few.

Side canyons in Biological Study Area-B (BSA-B) provide relatively good quality habitat for wildlife. Mule deer (*Odocoileus hemionus*) were observed on a few of the surveys at the base of the small canyons, in addition to scat observations of species likely from coyote (*Canis latrans*) and bobcat (*Felis rufus*). The surveys conducted of the project area resulted in the observation of

13 species of birds in the canyons throughout BSA-B, the birds are likely to be nesting in the higher quality habitat in the canyons. Additionally, white-throated swifts (*Aeronautes saxatalis*) were observed nesting inside the I-405 Sepulveda Boulevard Undercrossing, which provides evidence that other bridges through this area have the potential to provide nesting habitat for this and other similar species such as swallows (see Table 3.19-1: Wildlife Species Observed in BSA-B).

During surveys for the project, nesting white-throated swifts were seen at the Sepulveda Boulevard undercrossing at the southern end of the Sepulveda Pass. The swifts were seen flying in and out of the ventilation holes beneath the undercrossing structure during the nesting season.

Table 3.19-1: Wildlife Species Observed in Biological Study Area B (BSA-B)

Bird Species Common Name	Scientific Name
White-throated Swift	<i>Aeronautes saxatalis</i>
Scrub Jay	<i>Aphelocoma californica</i>
Red tailed hawk	<i>Buteo jamaicensis</i>
Anna's Hummingbird	<i>Calypte anna</i>
American Goldfinch	<i>Carduelis tristis</i>
House Finch	<i>Carpodacus mexicanus</i>
American Crow	<i>Corvus brachyrhynchos</i>
Song Sparrow	<i>Melospiza melodia</i>
Cliff Swallow	<i>Petrochelidon pyrrhonota</i>
California Towhee	<i>Pipilo crissalis</i>
Spotted Towhee	<i>Pipilo maculatus</i>
California Thrasher	<i>Toxostoma redivivum</i>
Mourning Dove	<i>Zenaida macroura</i>
Mammal Species	Scientific Name
Coyote (Scat observation)	<i>Canis latrans</i>
Bobcat (Scat observation)	<i>Felis rufus</i>
Skunk (Remains)	<i>Mephitis sp.</i>
Mule Deer	<i>Odocoileus hemionus</i>
Common Raccoon (Tracks)	<i>Procyon lotor</i>
Reptile	Reptilia
Gopher Snake	<i>Pituophis melanoleucus</i>
Western Fence Lizard	<i>Sceloporus occidentalis</i>

Source: Natural Environment Study, July 2006

3.19.3 Impacts

Bird species were the most common form of wildlife observed during the general biological surveys conducted for the proposed project. Birds were seen outside of the project footprint in most areas, as opposed to onsite, due to the disturbed conditions existing next to the freeway. However, where the project affects less disturbed vegetated areas farther from the freeway, potential impacts to nesting birds could occur. Additionally, areas within the project footprint, which provide shelter such as tall trees, dense shrubs, or inside bridge structures, could potentially support nesting birds.

3.19.4 Avoidance, Minimization and Mitigation Measures

To avoid or minimize impacts to animal species, the following measures are recommended for implementation:

Pre-Construction Surveys

Biological surveys of the project area would be performed in locations having increased biological sensitivity as determined by the District Biologist. General wildlife surveys would be conducted at least two weeks prior to the clearing and grubbing of vegetation.

Nesting Bird Surveys, Swallow Exclusion

In compliance with the Federal Migratory Bird Treaty Act and California Department of Fish and Game Code 3505 and 3503.5, for those project areas where nesting birds may occur, Caltrans would attempt to remove nesting habitat between the months of March 1 through September 1. If avoidance is not possible, a qualified biologist shall survey all potential nesting habitat within the entire project impact area. If an active bird nest is located, the nest site shall be flagged or staked a minimum of 150 feet, 500 feet for raptors in all directions. This flagged zone shall not be disturbed until the nest becomes inactive, unless otherwise directed by the California Department of Fish and Game. Bridges would also be surveyed for nesting birds, and exclusionary measures would be implemented to prevent nesting during construction activities.

Water Quality BMPs

All applicable construction Best Management Practices for water quality would be implemented to minimize project effects to jurisdictional drainages.

Riparian Habitat/Waters of the U.S. Impacts

Regulatory permits from the U.S. Army Corps of Engineers (Section 404 of the Federal Clean Water Act), the Los Angeles Regional Water Quality Control Board (Section 401 of the Federal Clean Water Act), and the California Department of Fish and Game (Section 1601) would be obtained for project impacts to jurisdictional drainages. Impacts to riparian habitat would be mitigated in consultation with the regulatory agencies once drainage design details were sufficient to provide an accurate impact area.

Upland Habitat/Invasive Species Control

Measures to prevent the spread or reintroduction of invasive plant species during construction operations shall be implemented in coordination between the District Landscape Architect and District Biologist. The re-vegetation of upland areas shall incorporate the appropriate native plant species found within the Santa Monica Mountains.

Construction Monitoring

A monitoring plan would be developed once the construction schedule is known in order to appropriately monitor biological resources.

3.19.5 Cumulative Impacts

Removal of mature trees has the potential to affect nesting migratory birds. Impacts to wetlands and non-wetland waters of the U.S. have the potential to affect migratory birds and aquatic species. Minimization measures that are applicable to the project (construction outside of the roosting/nesting season, replacement of trees and vegetation) are applicable to all development/redevelopment projects within the study area. With these minimization measures in place, cumulative impacts to animal species would not be substantial.

The build alternatives would remove mature trees that support resident and migratory nesting birds as a part of freeway widening. Minimization measures would be required to prevent potential impacts to migratory nesting birds during construction. Affected mature trees and vegetation would be replaced consistent with Caltrans requirements, which include native plant species requirements that would support native wildlife. With minimization measures in place to protect nesting birds during construction and replacement of mature trees and vegetation, the contribution of the build alternatives to cumulative wildlife impacts would not be substantial.

3.20 THREATENED AND ENDANGERED SPECIES

3.20.1 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.

3.20.2 Affected Environment

A Natural Environment Study Report (NESR) was prepared in July 2006. The NESR was based on a review of project plans and meetings between Caltrans District Biology and District Design staff. Background research was conducted including the assessment of the United States Fish and Wildlife Service (USFWS) Species List, California Department of Fish and Game (CDFG) California Natural Diversity Database (CNDDDB), and the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants. All of the above sources were analyzed with respect to the project footprint. General field surveys were conducted over several seasons to identify the flora and fauna present in the project area. Table 3.20-1 provides a summary of listed species of concern and the potential for presence in the project area.

Table 3.20-1: Listed, Proposed Species and Critical Habitat Potentially Occurring or Known to Occur in the Project Area

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent (HP/A/P)	Rationale
Wildlife Species					
Busck's Gall Moth	<i>Carolella busckana</i>	None	N/A	N/A	Little information for this unlisted species is currently available. The nearest occurrence of this species to the project area is a one-mile radius circle around the Beverly Terrace Hotel in Beverly Hills. Due to the unknown habitat associated with this species it is difficult to exclude the possibility of affecting this species with the proposed project.
Santa Ana Sucker	<i>Catostomus santaanae</i>	SSC, FT	This species is endemic to the coastal streams of the Southern Los Angeles Basin. These species are habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear water, & algae.	A	Habitat for this species does not occur within the project area due to habitat modification and land development. As such, this species is not expected to be affected by the proposed project.
Sandy Beach Tiger Beetle	<i>Cicindela hirticollis gravida</i>	N/A	Inhabits areas adjacent to non-brackish water along the coast of California from San Francisco Bay to Northern Mexico.	A	Habitat associated with this species is not present within the Biological Study Area of the project. This species is not expected to be affected by this project.
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	SE, FP	This species nests along broad, lower flood-bottoms of larger river systems. Usually nesting in riparian jungles of willow, often mixed with cottonwoods, w/ lower story of blackberry, nettles, or wild grape	A	Habitat for this species is not present on-site. As a result, impacts to this species are not expected with this project.
Monarch Butterfly	<i>Danaus plexippus</i>	None	Winter roost sites extend along the coast from northern mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves, consisting of trees such as eucalyptus monterey pine, or cypress, with nectar and water bodies nearby.	A	Due to the high level of disturbance from the heavy traffic volume along the freeway, trees in the project area are not expected to support roosts for this species. Species occurrences in the CDDDB did not list projects adjacent to the freeway. This species is not expected to be affected by this project.
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	SE, FE	Inhabits extensive thickets of low, dense willows on edge of wet meadows, ponds, or backwaters at 2000-8000 elevation.	A	Habitat for this species is not present on-site. As a result, impacts to this species are not expected with this project.
Southwestern Pond Turtle	<i>Emys (Clemmys) marmorata padilla</i>	SC	Inhabits permanent or nearly permanent bodies of water in many habitat types. Requires basking sites such as partially submerged logs, vegetation mats, or open mud banks and suitable nesting sites. Found below 6,000 ft elevation.	A	Suitable habitat for this species does not exist within the project footprint. Due to the absence of the species habitat this species is not expected to in the project area and in turn is not expected to be affected by the project.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent (HP/A/P)	Rationale
Unarmored Threespine Stickleback	<i>Gasterosteus aculeatus williamsoni</i>	SE, FE	This species is found in riparian habitats and is currently restricted to the Santa Clara River Watershed in this region.	A	Habitat for this species does not occur within the project area due to habitat modification and land development. As such, this species is not expected to be affected by the proposed project.
Bald Eagle	<i>Haliaeetus leucocephalus</i>	SE, FP, FT	Nesting & wintering habitat for this species includes ocean and lake shore margins, & rivers. Most nest within 1 mi of water.	A	Habitat for this species is not present on-site. As a result, impacts to this species are not expected with this project.
South Coast Marsh Vole	<i>Microtus californicus stephensi</i>	SSC	Associated with tidal marshes in Los Angeles, Orange, and Southern Ventura Counties	A	Habitat associated with this species is not present within the Biological Study Area of the project. This species is not expected to be affected by this project.
Mud Nama	<i>Nama stenocarpum</i>	CNPS 2	Associated with marsh and swamp habitats along lakeshores, riverbanks and intermittently wet areas between 5-500m elevation.	A	Habitat associated with this species is not present within the Biological Study Area of the project. This species is not expected to be affected by this project.
Southern Steelhead	<i>Onchorhynchus mykiss</i>	FE	This species has the potential to occur in coastal streams of Southern California.	A	Habitat for this species does not occur within the project area due to habitat modification and land development. As such, this species is not expected to be affected by the proposed project.
Coast (San Diego) Horned Lizard	<i>Phrynosoma coronatum (blainvillei)</i>	SC	Inhabits coastal sage scrub and chaparral in arid and semi-arid climate conditions. Prefers friable, rocky or shallow soils.	HP/A	Although chaparral habitat occurs adjacent to the project area, surveys of the project footprint did not result in the observation of this species and preferred habitat for this species. Additionally, historic occurrences have not been recorded in the project area. Due to the disturbed condition of the project footprint this species is not anticipated to be present and affected by the proposed project.
Coastal California Gnatcatcher	<i>Poliophtila californica californica</i>	FT, SC	Inhabits coastal sage scrub below 2500ft in Southern California particularly in low coastal sage scrub in arid washes, mesas and slopes.	A	Habitat associated with this species has the potential adjacent to the project area. However, surveys of the project footprint did not result in the observation of this species and historic occurrences have not been recorded in the project area. Associated habitat existing in the project area is comprised of small patches and high quality habitat is absent from the project footprint resulting in disturbed conditions. As a result, this species is not anticipated to be present and affected by the proposed project.
California Red-legged Frog	<i>Rana aurora draytonii</i>	SSC, FT	Lowlands and foothills in or near permanent sources of deep water with dense shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development.	A	Permanent sources of deep water are not present within the project area. Due to the absence of associated habitat, this species is not likely to be affected by this project.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent (HP/A/P)	Rationale
Mountain Yellow-legged Frog	<i>Rana muscosa</i>	SSC, FE	Populations in the San Gabriel, San Jacinto & San Bernardino Mountains are Federally Listed. This species is associated with mountainous aquatic habitats.	A	Permanent sources of water were not present in the project area to provide sufficient habitat for this species. Due to the absence of associated habitat, this species is not likely to be affected by this project.
Socalchemmis gertschi	<i>Socalchemmis gertschi</i>	None	N/A	N/A	Little information for this unlisted species is currently available. The nearest occurrence of this species to the project area is Brentwood. Due to the unknown habitat associated with this species it is difficult to exclude the possibility of affecting this species with the proposed project.
Riverside Fairy Shrimp	<i>Streptocephalus woottoni</i>	FE	This species is endemic to west Riverside, Orange and San Diego Counties in areas of tectonic swales/earth slump basins in grassland & coastal sage scrub. Inhabits seasonal pools filled by winter/spring rains and hatch in warm water later in the season.	A	Habitat for this species was not identified on site during field surveys. Additionally this species is not known to occur in the area. This species is not expected to be affected by the proposed project.
Least Bell's Vireo	<i>Vireo bellii pusillus</i>	SE, FE	This species is a summer resident of Southern California occurring in low riparian habitat closer to water or in dry river bottoms below 2,000 ft elevation. Nests are placed along margins of bushes or on twigs projecting into pathways usually in willow, baccharis or mesquite.	A	Habitat associated with this species is not present within the Biological Study Area of the project. This species is not expected to be affected by this project.
Plant Species					
Braunton's Milk-Vetch	<i>Astragalus brauntonii</i>	FE, CNPS 1B	Found in closed-cone coniferous forest, chaparral, coastal scrub, valley and foothill grassland. Particularly in recent burns or disturbed areas in stiff gravelly clay soils overlaying granite or limestone. Elevations from 4-640m.	HP / A	Background research and on-site surveys conducted did not identify the presence of this species in the project area. This species is not expected to be affected by this project since it has not been found in the project footprint.
Ventura Marsh Milk-Vetch	<i>Astragalus pycnostachyus var. lanosissimus</i>	SE, FE, CNPS 1B	Found in coastal marsh habitats within reach of the high tide line or protected by barrier beaches and more rarely near seeps on sandy bluffs. Elevations from 1-35m.	A	Habitat associated with this species is not present in the project footprint. As the result of the absence of habitat, this species is not expected to be impacted by this project.
Coastal Dunes Milk-Vetch	<i>Astragalus tener var. titi</i>	SE, FE,	Found in coastal bluff scrub and coastal dune habitats particularly in moist, sandy	A	Habitat associated with this species is not present in the project footprint. As the result of the absence of habitat, this species is

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent (HP/A/P)	Rationale
		CNPS 1B	depressions of bluffs or dunes along and near the Pacific Ocean. Elevations from 1-50m		not expected to be affected by this project.
Parish's Brittlegrass	<i>Atriplex parishii</i>	CNPS 1B	Found in alkali meadows, vernal pools, chenopod scrub and playas, usually on drying alkali flats with fine soils. Elevations from 4-140m.	A	Habitat associated with this species is not present in the project footprint. As the result of the absence of habitat, this species is not expected to be affected by this project.
Nevin's Barberry	<i>Berberis nevinii</i>	SE, FE, CNPS 1B	Chaparral, cismontane woodland, coastal scrub and riparian scrub. On steep north facing slopes or in low grade sandy washes. 290-1575m	A	This species was not found within the biological study area during the surveys. Due to the disturbed condition of the project footprint and minimal amounts of north facing slopes there is a low likelihood for this project to be affected by this project.
Thread-leaved Brodiaea	<i>Brodiaea filifolia</i>	SE, FT	Habitats associated with this species include cismontane woodland, coastal scrub, playas, valley and foothill grassland and vernal pools in clay soils.	A	Some habitat associated with this species is present in or adjacent to the project area, however this species is not known to be present in the project impact area and was not observed during general surveys of the project area. This species is not expected to be affected by this project.
Plummer's Mariposa Lilly	<i>Calochortus Plummerae</i>	CNPS 1B	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. Occurs on rocky and sandy sites, usually of granitic or alluvial material and can be common after fire. Elevation 90-1610m.	HP / A	Habitat associated with this species occurs adjacent to the project area. However, surveys of the project footprint did not result in the observation of this species. Due to the disturbed condition of the project footprint this species is not expected to be affected by the proposed project.
Lewis' Evening Primrose	<i>Camissonia lewisii</i>	CNPS List 3	This species is associated with coastal bluff scrub, cismontane woodland, coastal scrub, coastal dunes, valley and foothill grassland.	HP / A	Some habitat associated with this species occurs adjacent to the project area. However, surveys of the project footprint did not result in the observation of this species and historic occurrences have not been recorded in the project area. Due to the disturbed condition of the project footprint this species is not anticipated to be present and affected by the proposed project.
Southern Tarplant	<i>Centromadia parryi ssp. australis</i>	CNPS 1B	Associated with marsh and swamp margins, valley and foothill grasslands and vernal pools. Often in disturbed sites near the coast and in alkaline soils sometimes with saltgrass, found at elevations between 0-425m.	A	Habitat associated with this species is not present within the Biological Study Area of the project. This species is not expected to be affected by this project.
San Fernando Valley Spine Flower	<i>Chorizanthe parryi var. fernandina</i>	SE, FC, CNPS 1B	Coastal Scrub habitats with sandy soils between 3-1035m elevation.	A	Habitat associated with this species, consisting of coastal scrub with sandy soils, was not present in the project impact area. Additionally, surveys of the project footprint did not result in the observation of this species and historic occurrences have not

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent (HP/A/P)	Rationale
					been recorded in the project area. Due to the disturbed condition of the project footprint this species is not anticipated to be present and affected by the proposed project.
Globose Dune Beetle	<i>Coelus globosus</i>	N/A	Inhabitant of coastal sand dune habitat, from bodega head in Sonoma County south to Ensenada Mexico. In habits foredunes and sand hummocks; it burrows beneath the sand surface and is most common beneath dune vegetation.	A	Habitat associated with this species is not present within the Biological Study Area of the project. This species is not expected to be affected by this project.
Salt Marsh Bird's-Beak	<i>Cordylanthus maritimus</i> ssp. <i>Maritimus</i>	SE, FE, CNPS 1B	Coastal salt marsh, coastal dunes, species limited to higher zones of the salt marsh habitat. Elevations from 0-30m.	A	Habitat associated with this species is not present within the Biological Study Area of the project. This species is not expected to be affected by this project.
Slender-horned Spineflower	<i>Dedecahema leptoceras</i>	SE, FE	This species is associated with chaparral, coastal scrub (alluvial fan sage scrub), flood deposited terraces and washes.	HP/A	Some habitat associated with this species is present in or adjacent to the project area, however this species is not known to be present in the project impact area and was not observed during general surveys of the project area. Additionally, historic occurrences of this species have not been recorded in the project area. Due to the absence of quality habitat and negative survey results, this species is not expected to be affected by this project.
Beach Spectaclepod	<i>Dithyrea maritima</i>	FT, CNPS 1B	Found in coastal dunes, coastal scrub, formerly more widespread in coastal habitats in Southern California. Particular habitat associations include sea shores, on sandy dunes and sandy places near the shore elevations from 3-50m.	A	Habitat associated with this species is not present within the Biological Study Area of the project. This species is not expected to be affected by this project.
Santa Monica Mountains Dudleya	<i>Dudleya cymosa</i> ssp. <i>ovatifolia</i> .	SSC, FT	This species is associated with chaparral and coastal scrub habitats and are found in canyons with sedimentary and conglomerate rocks on primarily north facing slopes.	A	These species were not identified in the project area during the general surveys for the project. The presence of associated habitat adjacent to the project area creates a low potential for this species to be present and canyon slopes where this species is more likely to be found are not within the project impact area. As a result, impacts to this species are not anticipated with this project.
Many-Stemmed	<i>Dudleya multicaulis</i>	CNPS 1B	Chaparral, coastal scrub, valley and foothill grassland in heavy and often clayey soils or	A	Habitat associated with this species occurs adjacent to the project area. However, surveys of the project footprint did not

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent (HP/A/P)	Rationale
Dudleya			grassy slopes. Elevations from 0-790m.		result in the observation of this species and historic occurrences have not been recorded in the project area. Due to the disturbed condition of the project footprint this species is not anticipated to be present and affected by the proposed project.
San Diego Button Celery	<i>Eryngium aristulantum var. parishii</i>	SE, FE	This species is associated with vernal pools, coastal scrub, and valley and foothill grassland. San Diego mesa hardpan & clay pan vernal pools & southern interior basalt flow vernal pools are also closely associated with this species.	A	Habitat closely associated with this species was not found within the project area. Existing species occurrence records do not indicate the presence of this species in adjacent areas. As a result this species is not expected to be affected by the proposed project.
Mesa Horkelia	<i>Horkelia cuneata ssp. puberula</i>	CNPS 1B	Chaparral, cismontane woodland, coastal scrub in sandy or gravelly sites at elevations from 70-810m.	HP / A	Some habitat associated with this species occurs adjacent to the project area. However, surveys of the project footprint did not result in the observation of this species and historic occurrences have not been recorded in the project area. Due to the disturbed condition of the project footprint this species is not anticipated to be present and affected by the proposed project.
Davidson's Bush Mallow	<i>Malacothamnus davidsonii</i>	CNPS 1B	Coastal scrub, riparian woodland and chaparral habitats particularly in sandy washes. Elevations from 180-855m.	HP / A	Chaparral habitat which this species is associated with is present in the project area. However, biological surveys did not identify the presence of this species in the project area. Additionally, sandy washes which this species associates are not in the project area. There is a low likelihood that that this species will be affected by this project.
Spreading Navarretia	<i>Navarretia Fossalis</i>	FT	Habitats associated with this species include vernal pools, chenopod scrub, marshes and swamps and playas.	A	Habitats associated with this species are not present in the project area. This species is not expected to be affected by this project.
California Orcutt Grass	<i>Orcuttia californica</i>	SE, FE	This species is associated with vernal pool habitats.	A	Vernal pool habitats are not present in the project area. This species is not expected to be affected by this project.
Lyon's pentachaeta	<i>Pentachaeta lyonii</i>	SE, FE	This species is associated with chaparral and valley and foothill grassland habitats along edges of clearings in chaparral and usually at the ecotone between grassland and chaparral or edges of firebreaks.	HP/ A	Habitat associated with this species is present adjacent to the project area. However the CNDDDB and CNPS databases did not indicate occurrences of this species within the project area. General surveys of the project footprint did not identify the presence of this species. This species is known to exist further to the west in the Santa Monica Mountains. Due to a potential for this species to exist in the project area, additional surveys to verify the absence of this species will be conducted prior to construction.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent (HP/A/P)	Rationale
Brand's Phacelia	<i>Phacelia stellaris</i>	SSC, FP	This species is associated with coastal strand and coastal sage scrub habitats.	A	Habitats associated with this species are not present in the project area. This species is not expected to be affected by this project.
Salt Spring Checkerbloom	<i>Sidalcea neomexicana</i>	CNPS 2	Associated with alkali playas brackish marshes, chaparral, coastal scrub, lower montane coniferous forest, mojavean desert scrub, alkali springs and marshes from 0-1500m elevation.	HP / A	Some habitat associated with this species occurs adjacent to the project area. However, surveys of the project footprint did not result in the observation of this species and historic occurrences have not been recorded in the project area. Due to the disturbed condition of the project footprint this species is not anticipated to be present and affected by the proposed project.
Plant Communities					
California Walnut Woodland	N/A	N/A	This plant community generally exists on the north facing slopes throughout the Santa Monica Mountains. Some areas adjacent to the project area, particularly on the north facing slopes support California walnuts.	HP (Historic)	This plant community has been observed adjacent to the project limits. Much of the project footprint affects disturbed slopes that were graded to construct the existing freeway, which do not provide ideal conditions for this species. Individual species occurring adjacent to the freeway may be removed as a result of this project. However groups of walnuts that comprise a woodland habitat will not be affected by this project.
Riversidian Alluvial Fan Sage Scrub	N/A	N/A		A	This plant community is absent from the project footprint and will not be affected by this project.
Southern Coast Live Oak Riparian Forest	N/A	N/A	This plant community generally exists within the canyon bottoms throughout the Santa Monica Mountains. Small patches of this habitat exist in the vicinity of the project area.	HP (Historic)	This plant community has been observed in the vicinity of the project area according to the CNDDDB. Much of the project footprint affects disturbed slopes that were graded to construct the existing freeway, which do not provide ideal conditions for this species. Individual oaks occurring adjacent to the freeway may be removed as a result of this project. However dense stands of oaks that comprise a forest will not be affected by this project.

Notes: Absent [A] - no habitat present and no further work needed. Habitat Present [HP] -habitat is, or may be present. The species may be present. Present [P] - the species is present. Critical Habitat [CH] - project footprint is located within a designated critical habitat unit, but does not necessarily mean that appropriate habitat is 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).

3.20.3 Impacts

It was determined through the Natural Environment Study Report that adverse affects to federally listed threatened or endangered species are not expected due to the absence of listed species from the project area. Initial consultation in the form of a species list request was conducted on December 19, 2002 and subsequently on January 6, 2006 to request a revised species list. No further consultation was initiated because effects to Federal-listed species are not anticipated.

Adverse affects to state listed threatened or endangered species are not expected due to the absence of listed species or species habitat in the project area. As a result, consultation with the California Department of Fish and Game (CDFG) was not initiated because effects to State-listed species are not anticipated, however, CDFG was included in the formal scoping and distribution of the DEIR/EIS for the proposed project.

Sensitive plant and wildlife species recorded in the general area, coupled with field surveys, did not show the presence of special-status species in the project area. The project as currently proposed is not expected to have an effect on listed and special status species.

A “no effect” determination was made since there would be no impacts to federally listed threatened or endangered species, State-listed species or special-status species.

3.20.4 Avoidance, Minimization and Mitigation Measures

None Required.

3.20.5 Cumulative Impacts

Because the project alternatives would not impact threatened or endangered species, no cumulative contribution would occur.

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3.21 THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The proposed project involves tradeoffs between obtaining the long-term benefits of traffic and circulation improvements against short-term impacts to the environment. Construction activities would result in a number of temporary impacts that would cease upon completion of the proposed HOV lane, ramp and interchange improvements. These long-term impacts losses would be: air quality degradation associated with increased emissions of criteria pollutants; noise impacts generated by heavy equipment operation; biological resource impacts caused by the removal of mature trees and native vegetation; socioeconomic and community impacts from construction effects; impacts to utility systems caused by relocation and potential service interruption; right-of-way, generation of hazardous materials and waste from construction; and intermittent roadway obstruction and traffic detours. These impacts would be mitigated to minimize the proposed project impacts during the construction phase.

The proposed project would provide future congestion relief to improve traffic flow on the freeway and arterial transportation system; improve the transportation link between the Sepulveda Pass and the San Fernando Valley; and improve Interstate 405 to meet functional and safety standards.

Over the long-term, the proposed project would provide for increased vehicular movement and accessibility in the western Los Angeles County area. By increasing accessibility and substantially reducing travel time, the proposed project will enhance long-term economic productivity in the region. The Interstate 405 HOV Project is proposed in response to existing and projected land development in the Southern California region. As discussed in Section 3.6, the extent of development occurring outside of the project would create unacceptable levels of service on existing transportation facilities. Since the proposed project would serve to improve traffic conditions in the region. Regional and local short-term adverse impacts resulting from the project development are consistent with the enhancement of long-term productivity.

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3.22 ANY IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES WHICH WOULD BE INVOLVED IN THE PROPOSED ACTION

Implementation of the proposed action involves commitment of a range of natural, physical, human, and fiscal resources. Land dedicated for the construction and subsequent operation of the proposed freeway, ramps, and interchange improvements would constitute a semi-permanent commitment for the life of the street facility. However, if a greater need arose for use of the land or if the transportation facility became obsolete, the land could be converted to another use. Currently, there is no reason to believe such a conversion would ever be necessary or desirable, given that the project corridor has been used for transportation purposes for over 50 years and will continue to be for the foreseeable future.

Construction and operation of the proposed project would also require consumption of fossil fuels, labor, and construction materials. Additionally, the project would require expenditure of labor, and natural resources would be used in the fabrication and preparation of necessary construction materials. These expenditures would be, for the most part, irrecoverable. However, they are not in short supply, and their use would not have an adverse effect upon continued availability of these resources.

Any construction would also require a substantial one-time expenditure of both federal and local funds, which are not retrievable. The proposed project would also require the use of human resources in the fabrication and preparation of construction materials and in the construction of new highway facilities. Although the expenditure of labor would not be retrievable, the project would not have an adverse impact upon the continued availability of human resources over the long term.

The commitment of these resources is based on the concept that residents in the immediate area, as well as the region, state, and nation, would benefit from the improved transportation system, as well as roadway safety, in this critical transportation corridor. These benefits would consist of improved accessibility and safety, improved traffic and mass-transit service, savings in time, and greater availability of quality services, all of which are anticipated to beneficially outweigh the commitment of these resources.

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3.23 UNAVOIDABLE ADVERSE IMPACTS

No Build Alternative

The No-Build alternative would result in increasing traffic congestion. There are unavoidable indirect effects associated with increased traffic congestion including decreasing air quality, increased fossil fuel consumption, and increasing travel time through the corridor, overall reducing the quality of life.

Alternative 2

The following impacts have been identified as adverse and unavoidable:

- Displacement of residents and businesses adjacent to the freeway due to freeway widening by requiring acquisition of private real property.
- Increased noise levels that may not be entirely abated.
- Direct taking of one historic National Register eligible resource (Mulholland Bridge).
- Direct use of Section 4(f) resources (Getty View Trail and Trailhead with parking lot).
- Temporary (Getty View Trailhead) and permanent (Federal Building) loss of parking would be unavoidable.
- Short-term construction impacts (i.e. noise, dust, and localized traffic congestion). Although noise and air impacts during construction are unavoidable, these temporary impacts would cease once the project is completed.

Alternative 3

Overall, Alternative 3 would have the same adverse and unavoidable impacts as Alternative 2, with additional displacement of residents adjacent to the freeway due to I-405 southbound widening.

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CHAPTER 4 CALIFORNIA ENVIRONMENTAL QUALITY ACT EVALUATION

4.1 Determining Significance Under CEQA

The proposed project is a joint project by the California Department of Transportation (Department) and the Federal Highway Administration (FHWA) and is subject to state and federal environmental review requirements. Project documentation, therefore has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Policy Act (NEPA). The Department is the lead agency under CEQA and the FHWA is the lead agency under NEPA.

This chapter describes the significance of the proposed project's (i.e. build alternatives) environmental impacts under the California Environmental Quality Act (CEQA) in accordance with the regulations in the *State CEQA Guidelines*. The reader is referred to Chapter 3 for a discussion of the affected environment and the environmental consequences of the proposed project required under the National Environmental Policy Act (NEPA). Please refer to Appendix A for the CEQA Checklist. Also provided in this chapter are other discussions required by CEQA including Irreversible Environmental Changes that could occur due to the proposed project, Growth Inducement effects, Alternatives, and the Environmentally Superior Alternative.

One of the primary differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an EIS, or some lower level of documentation will be required. NEPA requires that an EIS be prepared when the proposed federal action (project) as a whole has the potential to "significantly affect the quality of the human environment." The NEPA determination of significance is based on context and intensity; CEQA is based on a similar concept- environmental setting. Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, once a decision is made regarding the need for an EIS, it is the magnitude of impact that is evaluated and no judgement of its individual significance is deemed important for the text. NEPA does not require that a determination of significant impacts be stated in the environmental document.

CEQA requires that a determination of significant impacts be stated in the environmental evaluation; NEPA does not. Under NEPA, significance issued to determine whether an Environmental Impact Statement (EIS) or some lower level of documentation would be required. Consequently, some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, once a decision to prepare an EIS is made, it is the magnitude of the impact that is evaluated and no judgment of its significance is deemed important in the text. NEPA does not require that a determination of significant impacts be stated in an EIS.

4.2 Discussion of CEQA Checklist Responses

4.2.1 Significant Environmental Effects of the Proposed Project

The following impacts are considered significant under CEQA, but are considered less than significant with the implementation of proposed mitigation measures.

Air Quality

Please refer to the discussion in Section 3.13.4 of this document.

Biological Resources

Please refer to the discussion in Section 3.17.4 and 3.18.4 of this document.

Geology and Soils

Please refer to the discussion in Section 3.11.4 of this document.

Hazards and Hazardous Materials

Please refer to the discussion in Section 3.12.4 of this document.

Hydrology and Water Quality

Please refer to the discussion in Section 3.9.4 and 3.10.4 of the I-405 Sepulveda Pass Project EIR/EIS.

Public Services/Utilities

Please refer to the discussion in Section 3.4.4 of this document.

Transportation/Traffic

Please refer to the discussion in Section 3.5.4 of this document.

4.2.2 Unavoidable Significant Environmental Effects

Under CEQA, the following impacts would be considered significant and would remain significant with implementation of proposed mitigation measures.

Land Use and Planning

Please refer to the discussion in Section 3.1.4, 3.2.4, and 3.3.4 of this document.

Noise

Please refer to the discussion in Section 3.14.4 of this document.

Population and Housing

Please refer to the discussion in Section 3.3.4 of this document.

Transportation/Traffic

Please refer to the discussion in Section 3.5.4 of this document.

Mandatory Findings of Significance

Please refer to the discussion in Section 3.3.4, 3.5.4 and 3.14.4 of this document.

4.2.3 Significant Irreversible Environmental Changes

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse therefore unlikely. Primary impacts and, particularly, secondary impacts (such as a highway improvement that provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

Please refer to Section 3.21 regarding the relationship between short-term uses of the human environment and the maintenance and enhancement of long-term productivity. Please refer to Section 3.22 regarding any irreversible and irretrievable commitment of resources, which would be involved in the proposed project.

4.2.4 Mitigation Measures for Significant Impacts Under CEQA

Proposed mitigation measures for significant impacts under CEQA can be found in Chapter 3. An Environmental Commitment Record with a Mitigation Monitoring and Reporting Record can be found in Chapter 6.

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CHAPTER 5 SUMMARY OF PUBLIC INVOLVEMENT PROCESS/ TRIBAL COORDINATION

5.1 Public Outreach

The public outreach process has been on going, as information became available. The environmental scoping process was initiated in January 2001 with the preparation and distribution of a Notice of Preparation (NOP) and the publication of a Notice of Intent (NOI) on January 7, 2002 in the Federal Register. In addition, a Notice of Scoping/Initiation of Studies was circulated to organizations, businesses, and residents notifying these interested parties of the scoping process being undertaken and the dates of the scoping meetings. An environmental scoping notice and a news release for the public scoping meetings were sent to several newspapers in the region. Information about the project has been available on an ongoing basis via the Internet at www.dot.ca.gov/dist07/. The Web site provides comprehensive information about the planning process, including the proposed alternatives. The Web site provides an opportunity for the public to e-mail comments and questions directly to the Department of Transportation, District 7. State budget problems in 2003 temporarily suspended activities on the CEQA/NEPA public outreach process, however, they commenced again in 2005.

5.2 Scoping and Community Meetings

The scoping process for this project included direct mailings to over 11,000 applicable public agencies, interested groups, and individuals. As previously noted, State budget problems in 2003 suspended project activities, including community meetings. The scoping process was re-initiated in October 2005. In addition, a scoping notice appeared in the following newspapers:

Publication	Dates
The Los Angeles Times	January 3-4, 2002 October 9, 2005
The Daily News	January 3, 2002 October 9, 2005
L.A. Watts Times	April 25, 2002 September 22, 2005
La Opinion	January 4, 2002

To initiate the formal environmental process for this project two public scoping meetings were held. Each meeting provided participants with an opportunity to provide input on the project, the alternatives being considered, and environmental/community concerns. The meetings were held at:

- The Veteran's Administration (VA) Hospital in West Los Angeles - January 16, 2002
- The Sherman Oaks Radisson Hotel in Sherman Oaks - January 17, 2002

Additional public outreach activities such as a website (www.dot.ca.gov/dist07/move405) and a quarterly newsletter (On the Move) were developed in an effort to maintain public involvement and participation.

Comments made at the scoping meetings and written responses to the NOP identified a number of key issues to be addressed in the Draft EIR/EIS. The main concern voiced by participants regarding the project was the need to study a multi-modal approach. Many participants feel that an HOV lane alone will not do anything to significantly reduce traffic congestion on I-405. Instead, several people made comments stated that rail options on or along I-405 needed to be seriously considered to make the northbound HOV Sepulveda Pass Project a viable solution to reducing congestion. Some participants voiced strong opposition to an elevated viaduct structure. Other general comments included the need to improve transitions to the US-101 freeway, noise, air quality and visual impacts, and opposition to any right-of-way acquisition or to closing the Moraga Dr. and Montana Ave. ramps. For more detailed information see the I-405 Final Public Scoping Summary Report (Spring 2002) and Supplemental I-405 Final Scoping Summary Report (Winter 2006).

A total of seven elected officials attended briefings that were held between January 7th and January 15th 2002 as part of the public information process. The briefings were held to provide an opportunity for elected officials to learn about project options and discuss any concerns they may have with various Interstate 405 improvement projects, including the northbound HOV Sepulveda Pass Project. Individual briefings were held with representatives of the following elected officials who were in office in 2002:

- Los Angeles City Councilmember Jack Weiss
- Office of Los Angeles City Councilmember Cindy Miscikowski
- Office of Assembly Speaker Robert Hertzberg
- Office of Assemblymember Paul Koretz
- Office of Assemblymember Fran Pavley
- Office of California Senator Sheila Kuehl
- Office of Congressman Brad Sherman

In February 2002, Caltrans held a community meeting for the officers of the West Hills Property Owners, the Brentwood Glen Association and the Bel Air Homeowners Association (HOA). In addition, Caltrans made a presentation to the members of the Brentwood Community Council on April 2, 2002 and has continued to conduct meetings with these stakeholders.

Caltrans Environmental Planning staff initiated coordination with representatives from the National Park Service, Mountains Recreation and Conservation Authority and the Santa Monica Mountains Conservancy (SMMC) who jointly administer the Santa Monica Mountains National Recreation Area (SMMNRA) via email on November 3, 2005. A field meeting was held between Caltrans Environmental Planning staff and a representative of the SMMC, to discuss potential mitigation options on December 8, 2005. A second field meeting was held on April 26, 2006 between members of the Caltrans Project Development Team and SMMC to further review the feasibility of mitigation options. A letter from the Chief Deputy Director of the SMMC, was received on May 3, 2006 and May 22, 2006 with recommended mitigation measures and justification for enhanced wildlife crossing structures for specific areas within the project limits

that are affected by the proposed project. Caltrans provided a letter of response on June 12, 2006 addressing the comments and concerns regarding permanent and temporary impacts on Conservancy-owned parkland.

On June 15, 2006 Caltrans staff met with members of the Bel Air Homeowners Association to discuss project updates and then on October 25, 2006 another meeting was held with the Westwood HOA. The final meeting of 2006 came on December 13, 2006 with the Bel Air Crest HOA.

A meeting was held on January 10, 2007 at the Westwood Recreation Center and attended by the City of Los Angeles Department of Recreation and Parks and a representative from Councilmember Weiss' Office. This meeting was called to discuss potential temporary impacts to the Westwood Recreation Center which borders northbound I-405 on Sepulveda Blvd. between Ohio and Wilshire Blvd.

Representatives of ten elected officials attended briefings that were held on January 17th and January 18th 2007 as part of the public information process. The briefings were to provide an opportunity for elected officials to discuss any concerns they may have with various Interstate 405 improvement projects, including the northbound HOV Sepulveda Pass Project, and coordinate the best approach for communicating with constituents. The following elected officials were represented at the meetings:

- Office of California Senator Sheila Kuehl
- Office of Congressman Brad Sherman
- Office of Assembly Majority Floor Leader Karen Bass
- Office of Assemblymember Lloyd E. Levine
- Office of Assemblymember Mike Feuer
- Office of Assemblymember Julia Brownley
- Office of Los Angeles County Supervisor Zev Yaroslavsky
- Office of Los Angeles City Councilmember Jack Weiss
- Office of Los Angeles City Councilmember Bill Rosendahl
- Office of Los Angeles City Councilmember Wendy Greuel
- Office of Los Angeles City Councilmember Tom LaBonge

Caltrans' staff met with the University of California Los Angeles (UCLA) Government Affairs staff on February 5, 2007 to discuss the proposed project and temporary construction impacts to the area bordering their property. UCLA staff expressed their concern regarding the closure of the Montana off-ramp since many people use this ramp to get to campus as an alternate to using the Wilshire Blvd. off-ramp. Other issues that were raised included the worsening of the parking and traffic situation that already exists in the area.

Caltrans' staff also met with the Salvation Army Westwood Transitional Village and the Bessie Pregonson Child Development Center on February 5, 2007 and February 23, 2007 to discuss the proposed project and temporary construction-related impacts to the area bordering their property. Their main concern was regarding noise and air quality issues, especially with regards to the

outdoor toddler play area that would be adjacent to the proposed northbound I-405 Wilshire off-ramp.

Caltrans' staff met with the Veterans Administration (VA) on February 13, 2007 to discuss the proposed project and potential impacts to the transportation yard that borders the existing southbound I-405 Wilshire Blvd. off-ramp. The VA has a master plan for the entire property referred to as Capital Assets Realignment for Enhanced Services (CARES). CARES provides a process that aims to reorganize and develop a plan for VA's physical infrastructure to properly plan for the future needs of veterans, and, in turn, to realize improved health care services. Any proposed project must be considered by the CARES master development plan. Currently, there are no plans for the transportation yard area, however, coordination would be necessary for the use of the VA property.

Notices were sent to all parties listed on the I-405 Sepulveda Pass Project database (including a ¼-mile swathe of the project area) on March 10, 2007 to inform the public of the upcoming community meetings at the Westwood Recreation Center on March 20, 2007 and the Valley Beth Shalom on March 22, 2007. In addition, community meeting notices appeared in the following newspapers:

Publication	Dates
LA Weekly	March 15, 2007
Jewish Journal	March 16, 2007
L.A. Watts Times	March 8, 2007
Daily Breeze	March 13, 2007
Rafu Shimpo	March 14, 2007
La Opinion	March 14, 2007

Contact and coordination is ongoing for interested parties that have any other concerns, each group has also been added to a mailing list in order to receive new information as it becomes available.

5.3 Notice of Preparation and Notice of Intent

The scoping process was initiated by widespread notification of government agencies and the public via the Notice of Intent (NOI) and the Notice of Preparation (NOP). Affected agencies were informed about the proposed project through the distribution of the NOI (in accordance with NEPA) and the NOP (in accordance with CEQA). The NOI was published in the Federal Register on January 7, 2002. Notices were placed in newspapers of general circulation, mailing the NOP to potentially affected government agencies, residents, and businesses.

5.4 Native American Consultation

Information on historic resources in the project area was sought from local governments, Indian tribes, public and private organizations, and other parties likely to have knowledge of, or concerns with such resources.

Native American consultation and coordination was initiated on November 16, 1999 with a letter to the Native American Heritage Commission to inform tribes, groups and individuals of the proposed project. An area map of the proposed project as well as project description was sent to the representatives of various tribes for review. The Gabrieleno/Tongva Tribal Council responded on December 14, 1999 stating their concern regarding the existence of archaeological sites and/or cultural deposits that are within the proximity of the area of potential effect (APE). They also recommended having qualified archaeological and Native American monitors present during project excavation. Caltrans provided a letter of response on December 29, 1999 addressing the Gabrieleno/Tongva Tribal Council's concerns. In order to ensure that any potential, unknown, and undetected cultural resources are not disturbed during project construction, having qualified archaeological and Native American monitors on site in sensitive areas during project construction will be included as a bid item in the final project.

Notification letters were mailed again on March 11, 2003 to re-initiate Native American consultation. On March 23, 2003, a representative of the California Tribal Council and Native American Heritage Commission phoned and spoke with a Caltrans Principal Architectural Historian, and asked for additional information and to be kept informed of any changes or updates to the project. They expressed their concern regarding cultural sensitivity through the Brentwood Heights area, as well as a monument on Mulholland Drive that may require project monitoring.

5.5 Newsletters

The public outreach program includes preparation of a newsletter to notify the public of major issues and upcoming milestones related to the I-405 Sepulveda Pass Project. The newsletter explains the environmental review process, provides information on community concerns related to the proposed alternatives, provides a schedule for the proposed project, gives general updates and provides contact information for questions and/or concerns related to the I-405 Project. The distribution of the newsletter is based upon a mailing list that includes attendees to the scoping meetings, local public officials, interested parties, local libraries, and stakeholders identified by each city within the study area. The first newsletter was distributed in summer 2002. Due to State budget problems in 2003 the public outreach process was temporarily suspended however, they commenced again with the second newsletter distributed in fall 2006. Newsletters will continue to be distributed periodically throughout the development process.

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CHAPTER 6 ENVIRONMENTAL COMMITMENTS RECORD

Mitigation Monitoring and Reporting Record (MMRR) for the I-405 Sepulveda Pass Widening and HOV Project

INTRODUCTION

In accordance with section 21081.6 of the California Environmental Quality Act (CEQA), Caltrans Division of Environmental Planning (DEP) adopted a Mitigation Monitoring Program (MMP). The MMP is to ensure implementation of measures that would avoid or mitigate significant effects of the project. The MMP provides a systematic method by which Caltrans DEP would be able document the implementation of each mitigation measure that has been monitored and completed during the associated stage of the project. The program also includes mitigation measures that have been developed during the CEQA/National Environmental Policy Act (NEPA) certification.

The MMP creates a simple procedure with minimal paperwork that would provide concise yet sufficient documentation that all mitigation measures have been implemented. There are four simple steps that would result in the production of one reporting form for each mitigation measure and a summary table for all measures, as described below.

STEP 1: DESIGNATE PROGRAM COORDINATOR

Given that a number of people would be involved in the mitigation monitoring process, it is important to designate one person, however the DEP would have ultimate responsibility for ensuring that all mitigation measures are monitored and that a complete, updated report documenting such activities is filed. For purposes of this plan, the designated person would be the Project Manager. The Project Manager would have a central role in the activities described in the following steps.

STEP 2: ASSEMBLE TEAM OF MONITORS

The first task of the Project Manager would be to assemble the personnel capable of monitoring all mitigation measures included in the MMRR. Monitors may include the Resident Engineer, Design Engineer, Landscape Architect, and other members of Caltrans or contractors, etc. that would be responsible for overseeing specific mitigation measures.

The Project Manager should assign specific mitigation measures to each of the monitors. The monitoring activities provided in the attached summary table should be self-explanatory. However, the Project Manager should make sure the monitors understand what is required.

STEP 3: ONGOING REPORTING

During the course of the design, construction, and operational stages of the project, the Project Manager would maintain contact with the monitors to ensure that their activities have been completed at the appropriate time.

Monitors would fill out a **Mitigation Monitoring Report** form for each of their assigned mitigation measures as these measures are monitored and completed. The form summarizes the monitoring activities undertaken and documents that the mitigation measure was or was not carried out. To support the conclusion on the form, references to other project documents, such as engineering drawings or contract documents, may be included. Typically, this report would be filled out when the mitigation measure is implemented. However, there may be some cases where a mitigation measure was not implemented, for example if the mitigation measure applied to a contingency situation that did not occur. There may be other cases in which reports would be required on a periodic basis, until such time as the measure is completed. It is important that a form be filled out for all measures, completed or not.

The Environmental Planner would collect and review the reporting forms for each mitigation measure, keep a file of all reporting forms and supporting documentation, and update a summary table for all mitigation measures.

STEP 4: REPORT PROGRESS TO DEP

The Division of Environmental Planning should be updated as to the progress of the mitigation monitoring and reporting on a regular basis. This can be done at regular scheduled meetings.

I-405 SEPULVEDA PASS WIDENING AND HOV PROJECT
MITIGATION MONITORING REPORT

Project/Component: I-405 Sepulveda Pass Widening and HOV Project		EA: 120300	PM: 28.8/39.0
Mitigation Log Name: Land Use	Party Responsible for Mitigation Monitoring: Right-of-Way and Public Affairs		
Required Monitoring/Reporting Frequency:		Implementation/Monitoring Phase: Design Construction Operation	
Mitigation Measure(s):			
<ul style="list-style-type: none"> • Prior to and during construction, Caltrans would continue its outreach program by notifying the residents, businesses, and any service providers within the area. Caltrans would inform the surrounding communities about the project construction schedule, relocation arrangements and assistance programs, traffic-affected areas and the Traffic Management Plan, and other relevant project information. • Information gathered through Caltrans' community outreach program would be used to develop the construction traffic control plans and alternate access routes to maintain critical business activities. Caltrans staff would inform the public of its progress in implementing the measures selected through periodic project newsletters sent to businesses, residents, and property owners within close proximity to the project. Staff would be assigned to work directly with the public to provide project information and resolve construction-related problems. • Caltrans staff would contact and interview individual businesses potentially affected by construction activities. Interviews with commercial and industrial businesses would be conducted in order to understand and identify business usage; delivery and shipping patterns; frequented travel routes of customers and clients upon entering and exiting the business establishment; parking requirements; hours of operation; and critical times of the day and year for business activities. • Parcels subject to full acquisition shall be reconfigured or combined with adjacent parcels to allow for development commensurate with previous land uses. Commercial and industrial land uses subject to partial acquisitions should be reconfigured on site in such a manner as to remain in operation. Reconfigurations of remnant properties would need to comply with local codes. 			
Mitigation Monitoring Action Performed:			
<p>Mitigation Complete? Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>If yes, reference any supporting documentation such as engineering drawings, contract documents, or other reports as applicable.</p> <p>If no, itemize outstanding mitigation and reasons why measures were not implemented.</p>			

In accordance with the California Public Resources Code Section 21081.1, I hereby certify under penalty that the information contained herein is true and correct to the best of my knowledge.	
Name/Title/Agency of Person Completing Report:	
Signature:	Date:
Signature of Project Manager:	Date:
Environmental Oversight:	Date:

I-405 SEPULVEDA PASS WIDENING AND HOV PROJECT
MITIGATION MONITORING REPORT

Project/Component: I-405 Sepulveda Pass Widening and HOV Project		EA: 120300	PM: 28.8/39.0
Mitigation Log Name: Community Impacts - Relocations	Party Responsible for Mitigation Monitoring: Right-of-Way Relocation Assistance Program		
Required Monitoring/Reporting Frequency:		Implementation/Monitoring Phase: Design Construction Operation	
Mitigation Measure(s): Public agencies responsible for the acquisitions are required to provide relocation assistance to displaced residents and businesses and compensate the property owners for the sale of the property in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1974, revised effective January 1, 1991 (Public Law 91-646 & 49 CFR Part 24) (see Appendix D). To minimize the impact on cities due to loss of property and sales tax, efforts would be made to find suitable replacement housing or business locations within the community if the displacees desire to remain.			
Mitigation Monitoring Action Performed: 			
Mitigation Complete? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, reference any supporting documentation such as engineering drawings, contract documents, or other reports as applicable. If no, itemize outstanding mitigation and reasons why measures were not implemented.			
In accordance with the California Public Resources Code Section 21081.1, I hereby certify under penalty that the information contained herein is true and correct to the best of my knowledge.			
Name/Title/Agency of Person Completing Report: 			
Signature:		Date:	
Signature of Project Manager:		Date:	
Environmental Oversight:		Date:	

I-405 SEPULVEDA PASS WIDENING AND HOV PROJECT
MITIGATION MONITORING REPORT

Project/Component: I-405 Sepulveda Pass Widening and HOV Project		EA: 120300	PM: 28.8/39.0
Mitigation Log Name: Community Impacts: Community Character & Cohesion	Party Responsible for Mitigation Monitoring: Design Engineer, RE		
Required Monitoring/Reporting Frequency:	Implementation/Monitoring Phase: Design Construction Operation		
<p>Mitigation Measure(s):</p> <ul style="list-style-type: none"> • Pedestrian access points to businesses within the construction area would be maintained throughout the construction period. If usual access points were lost, provisions for alternative access to the affected parcels would be made. Appropriate signage would be placed to inform and direct both pedestrian and vehicular traffic to local businesses via alternate routes. Temporary sidewalks, if necessary, would be installed during the construction phase. Disabled access would be maintained during construction where feasible. • During construction, Caltrans staff would establish an information field office near the construction site. The field office would serve the following multiple purposes: <ul style="list-style-type: none"> – Provide the community and businesses with a physical location where information pertaining to construction can be exchanged; – Enable Caltrans staff to better understand community/business needs during construction; – Notify property owners, residences, and businesses of major construction activities; – Respond to phone inquiries; and – Coordinate business outreach programs. • Information and field office telephone numbers would be available to provide community members and businesses a means of direct communication regarding construction activities. Caltrans staff would review and forward calls to the appropriate party for action. Community involvement specialists would be available for solving individual problems, handling construction complaints, providing general information, and providing information such as current project schedule, dates for upcoming community meetings, and notice of construction impacts. • A Traffic Management Plan would be developed to maintain access to all businesses near construction activity. For example, mitigation measures to alleviate traffic impacts include: 1) avoiding access points to construction sites on residential streets and posting speed limits of 25 mph along the streets in the vicinity of the construction sites; and 2) preparing specific traffic mitigation plans for each construction site, including detour routes, lane assignments, and vehicular and pedestrian traffic circulation and control. 			

Mitigation Monitoring Action Performed:	
Mitigation Complete? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, reference any supporting documentation such as engineering drawings, contract documents, or other reports as applicable. If no, itemize outstanding mitigation and reasons why measures were not implemented.	
In accordance with the California Public Resources Code Section 21081.1, I hereby certify under penalty that the information contained herein is true and correct to the best of my knowledge.	
Name/Title/Agency of Person Completing Report:	
Signature:	Date:
Signature of Project Manager:	Date:
Environmental Oversight:	Date:

I-405 SEPULVEDA PASS WIDENING AND HOV PROJECT
MITIGATION MONITORING REPORT

Project/Component: I-405 Sepulveda Pass Widening and HOV Project		EA: 120300	PM: 28.8/39.0
Mitigation Log Name: Utilities & Emergency/Community Services	Party Responsible for Mitigation Monitoring: Design Engineer, RE, Maintenance		
Required Monitoring/Reporting Frequency:		Implementation/Monitoring Phase: Design Construction Operation	
Mitigation Measure(s):			
<ul style="list-style-type: none"> • Utility infrastructure affected by project construction would be relocated before construction, relocated during construction, protected in place, or abandoned. Those utilities that must be relocated as a part of project construction would be relocated in such a manner as to minimize any disruption of service those utilities provide. • The impact to fire, police and emergency service response times would be minimized by the implementation of a Traffic Management Plan (TMP) that would contain detailed plans of access routes and detours during construction. The TMP should be reviewed and approved by any potentially affected fire or law enforcement agency. Caltrans would maintain contact with the community, police and fire protection services through public outreach during the construction phase. 			
Mitigation Monitoring Action Performed:			
Mitigation Complete? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, reference any supporting documentation such as engineering drawings, contract documents, or other reports as applicable. If no, itemize outstanding mitigation and reasons why measures were not implemented.			
In accordance with the California Public Resources Code Section 21081.1, I hereby certify under penalty that the information contained herein is true and correct to the best of my knowledge.			
Name/Title/Agency of Person Completing Report:			
Signature:		Date:	
Signature of Project Manager:		Date:	
Environmental Oversight:		Date:	

I-405 SEPULVEDA PASS WIDENING AND HOV PROJECT
MITIGATION MONITORING REPORT

Project/Component: I-405 Sepulveda Pass Widening and HOV Project		EA: 120300	PM: 28.8/39.0
Mitigation Log Name: Traffic & Transportation/Pedestrian & Bicycle Facilities	Party Responsible for Mitigation Monitoring: Design Engineer, RE, Maintenance		
Required Monitoring/Reporting Frequency:		Implementation/Monitoring Phase: <u>Design Construction Operation</u>	
<p>Mitigation Measure(s):</p> <ul style="list-style-type: none"> • Implement an effective Traffic Management Plan that would include detailed construction staging plans and analysis of how traffic would be affected during construction; • Construction phasing plans would emphasize traffic operations and traffic safety; • Maintain the number of existing traffic lanes on the freeway and busy ramps during peak traffic periods; • Construct the improvements at the Wilshire Boulevard, Sunset Boulevard, and Getty Center Drive interchanges prior to closing the Montana Avenue off-ramp and the Moraga Drive on/off-ramps; • Construct the new southbound Skirball Center Drive/Sepulveda Boulevard on/off-ramps prior to closing the existing ramps; • Coordinate with MTA to provide rerouting information, including operating schedules, to public users at least one week in advance to minimize impacts; • Obtain a permit from the Federal Land Agency for an aerial highway easement and a portion of the federal parking lost area at the southeast corner of Wilshire Blvd. and Sepulveda Blvd. Caltrans would replace the loss of parking spaces in adjacent land belonging to Caltrans; and • Coordinate with the City of Los Angeles to adjust signal timing. 			
<p>Mitigation Monitoring Action Performed:</p> 			
<p>Mitigation Complete? Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>If yes, reference any supporting documentation such as engineering drawings, contract documents, or other reports as applicable.</p> <p>If no, itemize outstanding mitigation and reasons why measures were not implemented.</p>			

In accordance with the California Public Resources Code Section 21081.1, I hereby certify under penalty that the information contained herein is true and correct to the best of my knowledge.	
Name/Title/Agency of Person Completing Report:	
Signature:	Date:
Signature of Project Manager:	Date:
Environmental Oversight:	Date:

I-405 SEPULVEDA PASS WIDENING AND HOV PROJECT
MITIGATION MONITORING REPORT

Project/Component: I-405 Sepulveda Pass Widening and HOV Project		EA: 120300	PM: 28.8/39.0
Mitigation Log Name: Historic Resources	Party Responsible for Mitigation Monitoring: Environmental Planning, RE		
Required Monitoring/Reporting Frequency:	Implementation/Monitoring Phase: Design Construction Operation		
Mitigation Measure(s): A draft Memorandum of Agreement (MOA) will be submitted to the Federal Highway Administration and the State Historic Preservation Officer after sufficient design work has been completed for the Division of Environmental Planning to ascertain impacts and consider mitigation for the Mulholland Bridge. FHWA will execute the MOA and Caltrans will concur.			
Mitigation Monitoring Action Performed: 			
Mitigation Complete? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, reference any supporting documentation such as engineering drawings, contract documents, or other reports as applicable. If no, itemize outstanding mitigation and reasons why measures were not implemented.			
In accordance with the California Public Resources Code Section 21081.1, I hereby certify under penalty that the information contained herein is true and correct to the best of my knowledge.			
Name/Title/Agency of Person Completing Report: 			
Signature:		Date:	
Signature of Project Manager:		Date:	
Environmental Oversight:		Date:	

I-405 SEPULVEDA PASS WIDENING AND HOV PROJECT
MITIGATION MONITORING REPORT

Project/Component: I-405 Sepulveda Pass Widening and HOV Project		EA: 120300	PM: 28.8/39.0
Mitigation Log Name: Cultural Resources	Party Responsible for Mitigation Monitoring: Environmental Planning, RE		
Required Monitoring/Reporting Frequency:	Implementation/Monitoring Phase: Design <u>Construction</u> Operation		
Mitigation Measure(s):			
<p>None Required. However, should buried cultural materials be encountered during construction, it is Caltrans policy that work in that area must stop until a qualified archaeologist can evaluate the nature and significance of the find (Environmental Handbook, Volume 2, Chapter 7, Section 7-8).</p> <p>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) who will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains should contact Gary Iverson, <i>District 7, Historic Resource Coordinator</i> so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.</p>			
Mitigation Monitoring Action Performed:			
Mitigation Complete? Yes <input type="checkbox"/> No <input type="checkbox"/>			
If yes, reference any supporting documentation such as engineering drawings, contract documents, or other reports as applicable.			
If no, itemize outstanding mitigation and reasons why measures were not implemented.			
In accordance with the California Public Resources Code Section 21081.1, I hereby certify under penalty that the information contained herein is true and correct to the best of my knowledge.			
Name/Title/Agency of Person Completing Report:			
Signature:		Date:	
Signature of Project Manager:		Date:	
Environmental Oversight:		Date:	

I-405 SEPULVEDA PASS WIDENING AND HOV PROJECT
MITIGATION MONITORING REPORT

Project/Component: I-405 Sepulveda Pass Widening and HOV Project		EA: 120300	PM: 28.8/39.0
Mitigation Log Name: Visual/Aesthetics	Party Responsible for Mitigation Monitoring: Design engineer, RE, Maintenance		
Required Monitoring/Reporting Frequency:	Implementation/Monitoring Phase: Design Construction Operation		
Mitigation Measure(s):			
Mitigation Monitoring Action Performed:			
<p>Mitigation Complete? Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>If yes, reference any supporting documentation such as engineering drawings, contract documents, or other reports as applicable.</p> <p>If no, itemize outstanding mitigation and reasons why measures were not implemented.</p>			
In accordance with the California Public Resources Code Section 21081.1, I hereby certify under penalty that the information contained herein is true and correct to the best of my knowledge.			
Name/Title/Agency of Person Completing Report:			
Signature:		Date:	
Signature of Project Manager:		Date:	
Environmental Oversight:		Date:	

I-405 SEPULVEDA PASS WIDENING AND HOV PROJECT
MITIGATION MONITORING REPORT

Project/Component: I-405 Sepulveda Pass Widening and HOV Project		EA: 120300	PM: 28.8/39.0
Mitigation Log Name: Water Quality & Storm Water Runoff	Party Responsible for Mitigation Monitoring: Design Engineer, RE, & Maintenance		
Required Monitoring/Reporting Frequency: 65 & 90%PS&E, Construction & Operation	Implementation/Monitoring Phase: Design Construction Operation		
<p>Mitigation Measure(s):</p> <p>For both short-term (construction) and long-term (operational) water quality impacts, temporary, as well as permanent Best Management Practices (BMPs) would be identified during the project’s final design stage, when there is sufficient engineering details available to warrant competent analysis. In addition, the following mitigation measures would be carried out:</p> <ul style="list-style-type: none"> • The proposed project would be subject to the NPDES permitting process which contain standard provisions intended to provide a required level of storm water pollution prevention. • A Water Pollution Control Plan would be developed by the contractor, and approved by Caltrans, as well as Federal, State and local resource agencies. This Plan would incorporate the resource agency approved methodology as well as all other appropriate techniques for reducing impacts to water quality. • A Construction Storm Water Pollution Prevention Plan (SWPPP) would be prepared prior to the start of construction to ensure compliance with existing NPDES permits. The SWPPP would identify potential sources of pollutants, describe erosion and sediment controls, contain non-storm water provisions, describe post-construction storm water management, describe waste management activities, include a maintenance and inspection component, include a list of contractors, incorporate other storm water related plans if applicable, and would list the name of the preparer. • Caltrans would conduct additional inspections or analysis if required by the RWQCB, inspect construction sites prior to anticipated storm events and after actual events in order to identify areas contributing to storm water discharge pollutants in order to evaluate the adequacy of the control measures identified in the SWPPP, certify annually that construction is in compliance with the applicable NPDES permit and SWPPP, and retain the monitoring records for at least three years following completion of construction. • The Storm Water Data Report for this project includes treatment Best Management Practices (BMPs), design BMPs, and temporary construction BMPs to prevent sediment and other pollutants from entering the storm drain system. Six treatment BMPs (i.e. Infiltration Trench, Retention Basin, and Bio Swales) are proposed for incorporation into 			

<p>the project (see Figure 3.10-1: Proposed Storm Water Treatment BMP Locations). Type selection and final location of the proposed devices would be determined during final design.</p> <ul style="list-style-type: none"> • Caltrans would obtain necessary permits pursuant to Sections 401 and 404 of the Clean Water Act, as well as California Fish and Game Code 1601. The resource agencies that issue these permits often impose additional avoidance, minimization, and mitigation measures as part of the conditions of the permits. Caltrans shall comply with all permit conditions. 	
<p>Mitigation Monitoring Action Performed:</p>	
<p>Mitigation Complete? Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>If yes, reference any supporting documentation such as engineering drawings, contract documents, or other reports as applicable.</p> <p>If no, itemize outstanding mitigation and reasons why measures were not implemented.</p>	
<p>In accordance with the California Public Resources Code Section 21081.1, I hereby certify under penalty that the information contained herein is true and correct to the best of my knowledge.</p>	
<p>Name/Title/Agency of Person Completing Report:</p>	
Signature:	Date:
Signature of Project Manager:	Date:
Environmental Oversight:	Date:

I-405 SEPULVEDA PASS WIDENING AND HOV PROJECT
MITIGATION MONITORING REPORT

Project/Component: I-405 Sepulveda Pass Widening and HOV Project		EA: 120300	PM: 28.8/39.0
Mitigation Log Name: Hydrology & Floodplains	Party Responsible for Mitigation Monitoring: Design Engineer, RE, Maintenance, Biology		
Required Monitoring/Reporting Frequency:	Implementation/Monitoring Phase: Design Construction Operation		
Mitigation Measure(s): Appropriate drainage and/or pumping systems would be incorporated into the design of the project to control localized flooding or ponding on the freeway. In areas of shallow groundwater, the placing of subdrains or utilizing groundwater pumps would drain freestanding water. Construction activities in flood control channels would only be scheduled to occur during the dry season (April 1-October 31). If construction during that time is not possible, a suitable water diversion plan must be developed and implemented to minimize impact to water quality. Permits would be obtained prior to construction in the channels. A 1601 Streambed Alteration Agreement would be obtained from CDFG. In addition, a 404 permit from the U.S. Army Corps of Engineers and a 401 Certification/Waiver from the Regional Water Quality Control Board may be required. For engineering purposes, groundwater can be mitigated by adoption appropriate foundation design practices for the new structures (retaining wall, tunneling, extension of the existing structure, etc). For construction purposes, any intercepted groundwater flow would require the construction of a system to collect and dispose of the water in an appropriate and approved way.			
Mitigation Monitoring Action Performed:			
Mitigation Complete? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, reference any supporting documentation such as engineering drawings, contract documents, or other reports as applicable. If no, itemize outstanding mitigation and reasons why measures were not implemented.			
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Environmental Oversight:		Date:	

I-405 SEPULVEDA PASS WIDENING AND HOV PROJECT
MITIGATION MONITORING REPORT

Project/Component: I-405 Sepulveda Pass Widening and HOV Project		EA: 120300	PM: 28.8/39.0
Mitigation Log Name: Geology/Soils	Party Responsible for Mitigation Monitoring: Design Engineer, RE, Geotech		
Required Monitoring/Reporting Frequency:	Implementation/Monitoring Phase: Design Construction Operation		
<p>Mitigation Measure(s):</p> <ul style="list-style-type: none"> • Additional subsurface exploration for potential liquefaction from Santa Monica Boulevard to Wilshire Boulevard (post miles 30.73 to 32.1). • To mitigate against liquefaction, new piles required for structural support would be placed to a depth below the zones of potential liquefaction to protect structures from this hazard. Because the area could experience earthquakes with ground movement, the structures and the highway would be built to withstand these movements utilizing the latest technology and design details. • Insufficiently compacted native material in the immediate area of construction would be removed and re-compacted to 90 percent in cut areas and replaced with an imported sub-base in structural sections. In fill areas above natural ground, the natural material would be removed until dense material is reached and replaced as a compacted fill. • It is recommended that fill slopes be treated immediately after construction with planting, hydroseeding or paving to reduce erosion. 			
Mitigation Monitoring Action Performed:			
<p>Mitigation Complete? Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>If yes, reference any supporting documentation such as engineering drawings, contract documents, or other reports as applicable.</p> <p>If no, itemize outstanding mitigation and reasons why measures were not implemented.</p>			
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Environmental Oversight:		Date:	

I-405 SEPULVEDA PASS WIDENING AND HOV PROJECT
MITIGATION MONITORING REPORT

Project/Component: I-405 Sepulveda Pass Widening and HOV Project		EA: 120300	PM: 28.8/39.0
Mitigation Log Name: Aerially Deposited Lead	Party Responsible for Mitigation Monitoring: Hazardous Waste Unit and RE		
Required Monitoring/Reporting Frequency:	Implementation/Monitoring Phase: Design Construction Operation		
Mitigation Measure(s):			
<ul style="list-style-type: none"> • Aerially deposited lead surveys should be performed along portions of I-405 where project construction activities may disturb or affect the unpaved shoulders. If excavated soil at the site is to be reused within the Caltrans rights-of-way, any portion of the upper 0.9m of soil should be placed under pavement and at least 1.5m above the maximum groundwater elevation in accordance with the DTSC Lead Variance. If any portion of the upper 0.9m of soil excavated at the site is to be disposed, it should be handled as a hazardous material with respect to total and soluble lead content. Caltrans would notify contractors performing the construction activities that hazardous concentrations of lead may be present in on-site soil and that appropriate health and safety measures should be taken to minimize exposure to lead. • If apparent soil contamination is discovered during project construction activities (indicated by odors, staining, or field screening instruments), construction activities should stop at such locations and the soil should be sampled and analyzed at a state certified laboratory to determine the type(s) and concentration(s) of contaminants that may be present; special handling or disposal requirements for the soil may be necessary. 			
Mitigation Monitoring Action Performed:			
Mitigation Complete? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, reference any supporting documentation such as engineering drawings, contract documents, or other reports as applicable. If no, itemize outstanding mitigation and reasons why measures were not implemented.			
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Environmental Oversight:		Date:	

I-405 SEPULVEDA PASS WIDENING AND HOV PROJECT
MITIGATION MONITORING REPORT

Project/Component: I-405 Sepulveda Pass Widening and HOV Project		EA: 120300	PM: 28.8/39.0
Mitigation Log Name: Hazardous Waste/Materials	Party Responsible for Mitigation Monitoring: Hazardous Waste and RE		
Required Monitoring/Reporting Frequency:	Implementation/Monitoring Phase: Design Construction Operation		
<p>Mitigation Measure(s):</p> <ul style="list-style-type: none"> • Perform a subsurface investigation beneath the residence at the corner of Cashmere Street and Sepulveda Boulevard (11326 Cashmere Street, the current location of Church Lane) to assess the soil and groundwater for petroleum hydrocarbons because a gasoline station used to sit on this property. This site is one of three historic gasoline station sites along Church Lane. • Perform a subsurface investigation beneath the residence at the corner of Burnham Avenue and Sepulveda Boulevard (11327 Burnham Street, the current location of Church Lane) to assess the soil and groundwater for petroleum hydrocarbons because a gasoline station used to sit on this property. This site is one of three historic gasoline station sites along Church Lane. • Perform a subsurface investigation beneath the residence at the corner of Bolas Street and Sepulveda Boulevard (11326 Bolas Street, the current location of Church Lane) to assess the soil and groundwater for petroleum hydrocarbons because a gasoline station used to sit on this property. This site is one of three historic gasoline station sites along Church Lane. • Perform a subsurface investigation within the proposed permanent easement (PE) and temporary construction easement (TCE) adjacent to the Veterans Administration storage area property on the west side of I-405 to assess the soil and groundwater for petroleum hydrocarbons and volatile organic compounds due to current and historical storage of potentially hazardous materials. • Perform a subsurface investigation within the proposed PE and TCE next to the Richfield Oil Company property on the west side of I-405 to assess the soil and groundwater for petroleum hydrocarbons and volatile organic compounds due to current and historic oil exploration, production, and storage. • The underground storage tank at the Verizon property (formerly GTE, proposed right-of-way property) at 598 Sepulveda Boulevard should be properly closed by removal, in accordance with local regulations. A subsurface investigation should be performed to assess the soil and groundwater for petroleum hydrocarbons and volatile organic compounds. • Perform a subsurface investigation within the proposed PE and TCE next to the dry cleaner at 641 North Sepulveda Boulevard to assess the soil and groundwater for volatile organic compounds. 			

- Before demolition, significant renovation or retrofitting of buildings or freeway structures in the project area, asbestos-containing material and lead-based paint surveys should be conducted by a state certified asbestos consultant. If asbestos-containing materials or lead-based paints are detected, these materials must be removed by a licensed contractor before demolition or retrofit activities.

Mitigation Monitoring Action Performed:

Mitigation Complete? Yes No

If yes, reference any supporting documentation such as engineering drawings, contract documents, or other reports as applicable.

If no, itemize outstanding mitigation and reasons why measures were not implemented.

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I-405 SEPULVEDA PASS WIDENING AND HOV PROJECT
MITIGATION MONITORING REPORT

Project/Component: I-405 Sepulveda Pass Widening and HOV Project		EA: 120300	PM: 28.8/39.0
Mitigation Log Name: Construction Air Quality	Party Responsible for Mitigation Monitoring: RE, Contractor		
Required Monitoring/Reporting Frequency:	Implementation/Monitoring Phase: Design <u>Construction</u> Operation		
<p>Mitigation Measure(s):</p> <p>To reduce fugitive dust emissions the construction contractor shall adhere to the requirements of SCAQMD Rule 403. The Best Available Control Measures (BACMs) and Reasonably Available Control Measures (RACMs) specified in SCAQMD’s Rule 203 Implementation Handbook shall be incorporated into the project construction.</p> <p>In addition to the SCAQMD standard measures to reduce construction emissions, Caltrans Standard Construction Specifications shall be adhered to in order to reduce emissions. The following is a list of Caltrans standard measures provided to reduce the emission of fugitive dust.</p> <ul style="list-style-type: none"> A. All disturbed areas, including storage piles, that are not being actively utilized for construction purposes shall be effectively stabilized for dust emissions using water, chemical stabilizers/suppressants, or vegetative ground cover. B. All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized for dust emissions using water or chemical stabilizers/suppressants. C. All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled for fugitive dust emissions by utilizing applications of water or by presoaking. D. When materials are transported off site, all material shall be covered or effectively wetted to limit visible dust emissions, or at least six inches of freeboard space from the top of the container shall be maintained. E. All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at least once every 24 hours when operations are occurring. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. The use of blower devices is expressly forbidden. F. Following the addition of materials to or the removal of materials from the surface of outdoor storage piles, said piles shall be effectively stabilized for fugitive dust emissions utilizing sufficient water or chemical stabilizers/suppressants. G. Traffic speeds on unpaved roads shall be limited to 24 kph (15 mph). H. Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than 1 percent. I. Wheel washers for all exiting trucks shall be installed, or all trucks and equipment shall be washed off before leaving the site. J. Wind breaks shall be installed at windward side(s) of construction areas. K. Excavation and grading activity shall be suspended when winds exceed 32 kph (20 mph). 			

L. Area subject to excavation, grading, and other construction activity shall be limited at any one time.

The following measures are recommended for implementation to reduce air pollutants generated by vehicle and equipment exhaust during the project construction phase:

- The construction contractor shall select the construction equipment used on site based on low emission factors and high energy efficiency. The construction contractor shall ensure that construction grading plans include a statement that all construction equipment would be tuned and maintained in accordance with the manufacturer's specifications.
- The construction contractor shall utilize electric or diesel powered equipment in lieu of gasoline powered engines where feasible.
- The construction contractor shall ensure that construction grading plans include a statement that work crews would shut off equipment when not in use.
- The construction contractor shall time the construction activities so as not to interfere with peak hour traffic and to minimize obstruction of through traffic lanes adjacent to the site; if necessary, a flagperson shall be retained to maintain safety adjacent to existing roadways.
- The construction contractor shall support and encourage ridesharing and transit incentives for the construction crew.

Mitigation Monitoring Action Performed:

Mitigation Complete? Yes No

If yes, reference any supporting documentation such as engineering drawings, contract documents, or other reports as applicable.

If no, itemize outstanding mitigation and reasons why measures were not implemented.

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Name/Title/Agency of Person Completing Report:

Signature:

Date:

Signature of Project Manager:

Date:

Environmental Oversight:

Date:

I-405 SEPULVEDA PASS WIDENING AND HOV PROJECT
MITIGATION MONITORING REPORT

Project/Component: I-405 Sepulveda Pass Widening and HOV Project		EA: 120300	PM: 28.8/39.0
Mitigation Log Name: Operational Noise Abatement	Party Responsible for Mitigation Monitoring: Design Engineer, RE and Noise		
Required Monitoring/Reporting Frequency:	Implementation/Monitoring Phase: Design Construction Operation		
Mitigation Measure(s): Soundwalls shall be constructed according to the recommendations provided in the I-405 Sepulveda Pass Project Noise Study Report and Section 3.14 of the EIR/EIS. A final decision on the installation of abatement measures would be made upon completion of the design process and the public involvement process.			
Mitigation Monitoring Action Performed: 			
Mitigation Complete? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, reference any supporting documentation such as engineering drawings, contract documents, or other reports as applicable. If no, itemize outstanding mitigation and reasons why measures were not implemented.			
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Environmental Oversight:		Date:	

I-405 SEPULVEDA PASS WIDENING AND HOV PROJECT
MITIGATION MONITORING REPORT

Project/Component: I-405 Sepulveda Pass Widening and HOV Project		EA: 120300	PM: 28.8/39.0
Mitigation Log Name: Construction Noise	Party Responsible for Mitigation Monitoring: Design Engineer, RE		
Required Monitoring/Reporting Frequency:		Implementation/Monitoring Phase: Design Construction Operation	
<p>Mitigation Measure(s):</p> <p><u>Equipment Noise Control</u></p> <ul style="list-style-type: none"> • Where practical, feasible and reasonable, proposed soundwalls shall be constructed prior to the removal of existing soundwalls in the beginning of the project as a mean of minimizing any impact on the sensitive receptors. • Use newer equipment with improved noise muffling and ensure that all equipment items have the manufacturers' recommended noise abatement measures, such as mufflers, engine enclosures, and engine vibration isolators intact and operational. Newer equipment would generally be quieter in operation than older equipment. All construction equipment should be inspected at periodic intervals to ensure proper maintenance and presence of noise control devices (e.g., mufflers and shrouding, etc.). • Utilize construction methods or equipment that would provide the lowest level of noise and ground vibration impact such as alternative low-noise pile installation methods. • Turn off idling equipment. • Temporary noise barriers should be used and relocated, as needed, to protect sensitive receptors against excessive noise from construction activities. <p><u>Administrative Measures</u></p> <ul style="list-style-type: none"> • Implement a construction noise and/or vibration monitoring program in or limit the impacts. • Comply, when possible, with relevant construction noise criteria of affected the City of Los Angeles. • Limit construction activities to daytime hours, if possible. If nighttime construction is absolutely necessary, obtain the proper permits and variances. • Keep noise levels relatively uniform and avoid impulsive noises. • Maintain good public relations with the community to minimize objections to unavoidable construction impacts. Provide frequent activity updates of all construction activities and schedules. <p>A combination of abatement/mitigation techniques with equipment noise control and administrative measures can be selected to provide the most effective means to minimize effects of the construction activity. Application of these abatement/mitigation would reduce construction related noise impacts; however, a temporary increase in noise and vibration over the existing ambient levels may still occur.</p>			
Mitigation Monitoring Action Performed:			
<p>Mitigation Complete? Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>If yes, reference any supporting documentation such as engineering drawings, contract documents, or other reports as applicable.</p> <p>If no, itemize outstanding mitigation and reasons why measures were not implemented.</p>			

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I-405 SEPULVEDA PASS WIDENING AND HOV PROJECT
MITIGATION MONITORING REPORT

Project/Component: I-405 Sepulveda Pass Widening and HOV Project		EA: 120300	PM: 28.8/39.0
Mitigation Log Name: Wetlands	Party Responsible for Mitigation Monitoring: RE and Biology		
Required Monitoring/Reporting Frequency:	Implementation/Monitoring Phase: Design Construction Operation		
Mitigation Measure(s):			
<p>As the design of the project is developed further and the extent of the widening is better defined, studies to determine impacts to jurisdictional drainage areas should be conducted. Although sensitive wildlife species were not identified during the surveys to date, additional follow-up surveys are recommended, prior to construction, to evaluate new project information that becomes available through project development, as well as any new biological information that becomes available as a result of other studies.</p> <p>The following permits would be required prior to construction: Clean Water Act Section 404 Permit from the U.S. Army Corps of Engineers for anticipated impacts to Waters of the U.S.; a Clean Water Act Section 401 Water Quality Certification from the Los Angeles Regional Water Quality Control Board for anticipated impacts to Waters of the U.S.; and a Streambed Alteration Agreement under Section 1600 of the California Department of Fish and Game Code for the drainage modifications in the project area.</p>			
Mitigation Monitoring Action Performed:			
<p>Mitigation Complete? Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>If yes, reference any supporting documentation such as engineering drawings, contract documents, or other reports as applicable.</p> <p>If no, itemize outstanding mitigation and reasons why measures were not implemented.</p>			
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I-405 SEPULVEDA PASS WIDENING AND HOV PROJECT
MITIGATION MONITORING REPORT

Project/Component: I-405 Sepulveda Pass Widening and HOV Project		EA: 120300	PM: 28.8/39.0
Mitigation Log Name: Vegetation	Party Responsible for Mitigation Monitoring: Biology and RE		
Required Monitoring/Reporting Frequency:	Implementation/Monitoring Phase: <u>Design</u> Construction Operation		
<p>Mitigation Measure(s):</p> <p><u>Walnut Trees</u> The removal of walnuts would be avoided to the greatest extent possible. However, should it be necessary to remove walnut trees for the construction of the project, the number of trees removed would be minimized to the least amount necessary.</p> <p><u>Coast Live Oak Tress</u> The removal of Coast Live Oak Trees would 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 would be minimized to the least amount necessary.</p> <p><u>Sycamore Riparian Woodland</u> The removal of sycamores would be avoided to the greatest extent possible. However, should it be necessary to remove sycamore trees for the construction of the project, the number of trees removed would be minimized to the least amount necessary.</p> <p>Due to the relatively disturbed conditions in which the walnuts, oaks and sycamore trees are found, they are proposed to be replaced at a 5:1 ratio. Based on the total amount of sycamores affected and available on-site locations, favorable areas within the right of way would be selected by the District Biologist and the District Landscape Architect. Any required replacement beyond the space available in the right of way would be done off-site, in coordination with the Santa Monica Mountains Conservancy, which owns open-space land adjacent to the project.</p> <p><u>Native Tree Replacement</u> Naturally existing native trees that have a 4-inch diameter at a height of 4.5 feet above grade (4-inch diameter at breast height) would be replaced at a 5:1 ratio. Tree replacement would be coordinated between the District Landscape Architect and District Biologist and incorporated into the plans. This native tree replacement ratio is limited to naturally occurring trees affected by the project, such as those that exist through the Sepulveda Pass. Native trees, which have been planted as a component of the freeway landscaping, particularly in the southern half of the project, would be replaced in accordance with District Landscape architecture policies.</p> <p><u>Invasive Species Control Measures</u> Revegetation of upland areas would incorporate appropriate native plant species found within the Santa Monica Mountains. The District Biologist and the District Landscape Architect would coordinate to create an acceptable plant pallet that would prevent the spread or reintroduction of invasive plant species.</p>			

<u>Plant Survey Requirements</u>	
Plant surveys would be required for the following plants species: Braunton's Milk-vetch, Davidson's Bush Mallow and Mesa Horkelia. Although, these species are not anticipated to occur in the relatively disturbed footprint of the project area, in order to avoid any potential impacts to these species, additional surveys would be conducted prior to construction.	
Mitigation Monitoring Action Performed:	
Mitigation Complete? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, reference any supporting documentation such as engineering drawings, contract documents, or other reports as applicable. If no, itemize outstanding mitigation and reasons why measures were not implemented.	
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I-405 SEPULVEDA PASS WIDENING AND HOV PROJECT
MITIGATION MONITORING REPORT

Project/Component: I-405 Sepulveda Pass Widening and HOV Project		EA: 120300	PM: 28.8/39.0
Mitigation Log Name: Wildlife	Party Responsible for Mitigation Monitoring: Environmental Planning, Landscape Designer, Design Engineer, RE, Maintenance		
Required Monitoring/Reporting Frequency:		Implementation/Monitoring Phase: Design Construction Operation	
<p>Mitigation Measure(s):</p> <p>Wildlife Crossing Mitigation</p> <p><u>Sepulveda Blvd. Underpass and I-405 (at the Getty View Trailhead)</u></p> <p>Because of project impacts to wildlife movement, the following mitigation measures are proposed to minimize the impact of the new on-ramp:</p> <ul style="list-style-type: none"> • An appropriate sized culvert would be created underneath the proposed on-ramp to funnel wildlife from the underpass area to the more natural areas of Sepulveda Ridge. It is proposed to put the new culvert near the existing trailhead parking area due to geometrics of the new on-ramp as well as existing wildlife movement patterns. • The Santa Monica Mountains Conservancy and Caltrans would collaborate to create the design of the culvert so that existing wildlife that roams in this area would be able to successfully reach habitat on either side of the new on-ramp. • The abutment slope of the Sepulveda Blvd. overcrossing would be regraded to maximize the potential for wildlife to cross it. • Re-plant new and existing Caltrans areas for use as “stepping stones” for wildlife. Some of these areas are the southbound off-ramp gore area, abutment slope of the Sepulveda Blvd. overcrossing down to the wildlife culvert, and the southbound off-ramp and on-ramp right-of-way areas. Appropriate native vegetation would include a mixture of trees, shrubs and ground cover. The density would be appropriate for wildlife to maneuver in, but not too dense or too sparse. The Landscape Architecture department and the Division of Environmental Planning (in coordination with the Santa Monica Mountains Conservancy) would work together to create the appropriate re-vegetation plan suitable for the area. • The right-of-way fence under I-405 at the Sepulveda Blvd. overcrossing would be removed so that wildlife can cross Sepulveda at this location without restriction. It is also recommended to move or even remove additional fencing at the on- and off-ramps on both the northbound and southbound sides if deemed feasible by Caltrans to funnel the wildlife onto the stepping stones and eventually to the wildlife culvert under the new on-ramp. Consultation with the SMMC on the exact location of these fence modifications should take place during the later design phase of the project. • Appropriate signs should be placed along Sepulveda Blvd. to warn motorists of the potential for wildlife to cross the roadway in that area. There should be a warning sign on the northbound and southbound sides of Sepulveda Blvd. Consultation with the City of Los Angeles Department of Transportation would be necessary to erect this sign. 			

Bel Air Crest Underpass

- The re-grading of the abutment slopes would be done in a manner that is consistent with the existing slopes.
- The vegetation planted on the new abutment slopes should consist of native species in a varied assortment of trees, shrubs and ground cover.
- Right-of-way fencing should be placed in a manner that is not restrictive for wildlife to access natural areas adjacent to Caltrans property, wherever feasible.
- The profile of the access road would be lowered in order to maintain and preserve the slope where existing wildlife access trails from the underpass that lead to natural areas to the north and south.

Skirball Center Drive Overpass

Modifications to the Skirball Center Drive overpass would affect the existing trailhead for the Sepulveda Trail. The trailhead is currently located just east of the overpass next to the existing pedestrian crosswalk. The following mitigation measures are proposed:

- Caltrans right-of-way fencing would be removed along the northbound side of Sepulveda Blvd. from approximately 70 feet south of the intersection of Sepulveda Blvd. and Skirball Center Drive.
- The island area south of Skirball Center Drive, east of Sepulveda and west of I-405 would be replanted with native vegetation in a mixture of ground cover, shrubs and possibly trees that is preferable for wildlife habitat. All concrete from the existing on-ramp would be removed. This island would serve as a stepping stone area. A perimeter fence should be constructed to funnel the wildlife to the overpass. To help the funnel effect, the fencing should be placed directing wildlife toward the bridge structure. Caltrans would continue to consult with the Santa Monica Mountains Conservancy during the later design stages of the project to finalize optimal plans for this funneling effect.
- The new overpass would include a minimum 10-foot wide travel path on the south side of the bridge to accommodate wildlife movement. This path would function as a wildlife conduit (nighttime hours) as well as a pedestrian sidewalk. The south side of the path would have a minimum 5-foot high continuous, solid wall. This wall would extend beyond any travel lanes (including ramps) so that wildlife views are blocked to the freeway traffic below. The north side of the travel path would have a continuous 3-foot high concrete wall/curb extending from a point 20 feet east of the Sepulveda northbound street lane to the eastern end of the bridge structure.
- The 3-foot high concrete wall would continue on the eastern side of the overpass for potentially 100 feet northward to prevent wildlife from crossing Skirball Center Drive and instead directing them towards the overcrossing. In addition, the fencing between the bridge and the trailhead area should be placed in a manner naturally directing wildlife to the Sepulveda Trail area from the bridge, and vice versa.
- The existing trailhead slope would be regraded and filled to accommodate the widening of the bridge structure and freeway. In addition, during construction, lighting would be kept to a minimum during the night so as not to impede wildlife.

Mitigation Monitoring Action Performed:	
Mitigation Complete? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, reference any supporting documentation such as engineering drawings, contract documents, or other reports as applicable. If no, itemize outstanding mitigation and reasons why measures were not implemented.	
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Name/Title/Agency of Person Completing Report:	
Signature:	Date:
Signature of Project Manager:	Date:
Environmental Oversight:	Date:

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CHAPTER 7 LIST OF PREPARERS

Federal Highway Administration

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Brett Gainer	Agency Counsel
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California Department of Transportation

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Carlos Montez	Sr. Environmental Planner, Document Preparation and Review
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Liz Suh	Assoc. Environmental Planner, 4(f) & Document Preparation
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Claudia Harbert	Associate Environmental Planner, Cultural Resources
BranDee Bruce	Associate Environmental Planner, Cultural Resources
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Jin Lee	Senior Transportation Engineer, Noise Study
Arnold Parmar	Transportation Engineer, Noise Unit
Ayubur Rahman	Senior Transportation Engineer, Hazardous Waste
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Rene Yin	Senior Transportation Engineer, Project Design
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Dorothy Rahn	Right-of-Way, Relocation Impact Report
Cynthia Stroud	Right-of-Way, Relocation Impact Report
Catherine Zepeda	Visual Impact Assessment
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Lydia LaPointe	Traffic Investigations/Analysis

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CHAPTER 8 DISTRIBUTION LIST

Due to the high level of interest in the project area, a separate report containing residential and other interested parties' names has been prepared due to the extensive list of names. That report along with the other technical reports can be viewed at the District 7 office during normal business hours. Only federal/state/local agencies and elected officials and involved organizations, are included below.

Agency/Organization/Party	Attention
Federal Agencies	
Advisory Council on Historic Preservation	Executive Director
Federal Transit Authority	Mr. Ray Tellis
U.S. Environmental Protection Agency	Office of Federal Activities, EIS Filing Section
U.S. Environmental Protection Agency, Region 9 Office of Planning and Public Affairs	Environmental Review Section
U.S. Army Corps of Engineers	District Engineer
U.S. Fish and Wildlife Service	Mr. Ken Berg, Environmental Review
U.S. Department of Transportation, Federal Highway Administration, Region 9	Mr. Gene Fong, Division Administrator
U.S. General Services Administration	Mr. Morris Angell
U.S. Department of Interior National Park Service	Pacific West Regional Office
Elected Officials	
U.S. Senate	The Honorable Barbara Boxer
U.S. Senate	The Honorable Dianne Feinstein
U.S. Congress District 27	The Honorable Brad Sherman
U.S. Congress District 28	The Honorable Howard L. Berman
U.S. Congress District 30	The Honorable Henry Waxman
U.S. Congress District 36	The Honorable Jane Harman
California State Senate District 21	The Honorable Jack Scott
California State Senate District 23	The Honorable Sheila James Kuehl
California State Senate District 26	The Honorable Mark Ridley Thomas
California State Senate District 28	The Honorable Jenny Oropenza
California State Assembly District 40	The Honorable Lloyd Levine
California State Assembly District 41	The Honorable Julia Brownley
California State Assembly District 42	The Honorable Mike Feuer
California State Assembly District 46	The Honorable Fabian Nunez
California State Assembly District 47	The Honorable Karen Bass

Agency/Organization/Party	Attention
California State Assembly District 53	The Honorable Ted Lieu
Los Angeles County Board of Supervisors District 2	The Honorable Yvonne Braithwaite Burke
Los Angeles County Board of Supervisors District 3	The Honorable Zev Yaroslavsky
Los Angeles City Mayor	The Honorable Antonio Villaraigosa
Los Angeles City Council District 2	The Honorable Wendy Greuel
Los Angeles City Council District 4	The Honorable Tom LaBonge
Los Angeles City Council District 5	The Honorable Jack Weiss
Los Angeles City Council District 6	The Honorable Tony Cardenas
Los Angeles City Council District 11	The Honorable Bill Rosendahl
Los Angeles City Council District 12	The Honorable Greig Smith
State Agencies	
State Clearinghouse Office of Planning & Research	Environmental Review Section
California Air Resources Board	Distributed through State Clearinghouse
California Native Plant Society	Distributed through State Clearinghouse
California Department of Fish and Game Region 5	Distributed through State Clearinghouse
California Department of Transportation	Headquarters
California Regional Water Quality Control Board – Los Angeles Region	Distributed through State Clearinghouse
California Native American Heritage Commission	Distributed through State Clearinghouse
California State Department of Parks and Recreation Office of Historic Preservation	Distributed through State Clearinghouse
State Resources Agency	Distributed through State Clearinghouse
California Highway Patrol	Chief E. W. Gomez
Santa Monica Mountain Conservancy	Distributed through State Clearinghouse
Department of Toxic Substances Control	Distributed through State Clearinghouse
Santa Monica Mountains Conservancy	Paul Edelman
Santa Monica Mountains National Recreation Area	Arthur Eck
Local Agencies	
Los Angeles County Clerk	County Clerk
County of Los Angeles Community Development Commission	Mr. Carlos Jackson, Executive Director
County of Los Angeles Department of Regional Planning	Planning Director James Hart
Los Angeles County Sheriffs Department	Mr. Lee Baca
South Coast Air Quality Management District	Program Supervisor, CEQA Section
Southern California Association of Governments	Mr. Mark A. Pisano, Executive Director

Agency/Organization/Party	Attention
Los Angeles County Metropolitan Transit Authority	Mr. Brian Lin
City of Los Angeles Department of Public Works	Mr. Dung Tran
City of Los Angeles Planning Department	Director, S. Gail Goldberg
City of Los Angeles Department of Transportation	Mr. James M. Okazaki, Assistant General Manager
City of Los Angeles Department of Parks and Recreation - Westwood Recreation Center	Director Charles Chavoor
City of Los Angeles Police Department	Chief William J. Bratton
City of Los Angeles Fire Department	Chief Michael E. Littleton
Gabrielino Tribal Council	Mr. Anthony Moraly
Community Redevelopment Agency Advisory Council	Environmental Review
Los Angeles County Bicycle Coalition	Mr. Matt Benjamin
Sherman Oaks Galleria	Douglas Emmett
University of Judaism	Robert Wexler, President
University of California, Los Angeles	Chancellor, Gene Block
Skirball Cultural Center	Dr. Uri D. Herscher
J. Paul Getty Center	Louise H. Bryson, Chair Board of Trustees
Santa Monica Bus	Stephanie Negriff, Director Transportation Services
Antelope Valley Transit	Randy Floyd, Executive Director
Metro Bus	Kevin Desmond, General Manager
Veteran's Administration	Ralph Tillman, Director
Southern California Regional Rail Authority – Metrolink	Ms. Deadra Knox, Strategic Development Planner
The Burlington Northern and Santa Fe Railway Company	Mr. John C. Shurson, Assistant Director Public Projects
Union Pacific Railroad	Mr. Richard Gonzales, Senior Manager Industry and Public Projects
Amtrak	Mr. Cassim Mamoon
Los Angeles Unified School District 3	Superintendent Grace Strauther
American Automobile Association	John Zeigler
Village Church	Pastor
Verizon	Manager
Westwood Transitional Village	Estella Wilson
Brentwood Glen Home Owners Association	Ms. Judy Meadow
Sherman Oaks Home Owners Association	Richard Close
Brentwood Home Owners Association	Bette Harris, President
Westwood Hills Home Owners Association	Carole Magnuson

Agency/Organization/Party	Attention
Brentwood Circle Home Owners Association	Marie Sudar
Mountain Gate Community Association	Louise Frankel
Mountainview Home Owners Association	President
Bel Air Beverly Crest Neighborhood Council	President
West Los Angeles Little League	Michael Rosenfeld
Sherman Oaks City Council	Jill Banks Barad, President
Felicia Mahood Senior Center	Director
Bessie Pregerson Day Care Facility	Judge Pregerson
Brentwood Community Council	Wendy-Sue Rosen, Chairwoman
Sierra Club	Rosemarie White
Environmental Health Vector Management	Director

CEQA 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 Incorporated	Less Than Significant Impact	No Impact
AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CULTURAL RESOURCES -- Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
LAND USE AND PLANNING -- Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parks?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
UTILITIES AND SERVICE SYSTEMS -- Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section 4(f) Evaluation

Interstate 405 Sepulveda Pass Project

High Occupancy Vehicle (HOV) Improvements
between National Blvd. and Greenleaf Street,
in the City of Los Angeles, Los Angeles County



Sepulveda Pass Roadside Trailheads and Trails

State of California
Department of Transportation
and
U.S. Department of Transportation
Federal Highway Administration

Submitted Pursuant to
42 U.S.C. 42(2)(c)
and
49 U.S.C. 303

January 2007



I. INTRODUCTION

The environmental transportation law known as Section 4(f), which is part of the United States Department of Transportation Act of 1966 (49 U.S.C. §303), 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.” Further, it is specified that, “the Secretary [of Transportation] may approve a transportation program or project...requiring the use of publicly owned land of a public park, recreation area, wildlife and waterfowl refuge of national, State or local significance, or land of an historic site of national, State, or local significance (as determined by Federal, State, or local officials having jurisdiction over the park, area, refuge, or site) only if –

- (1) there is no prudent and feasible alternative to using the land; and
- (2) the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.”

Section 4(f) further requires consultation with the Department of Interior and, as appropriate, the involved offices of the Department of Agriculture and Housing and Urban and Development in developing transportation projects and programs, which use lands, protected by Section 4(f).

In general, a Section 4(f) “use” occurs with a Department of Transportation approved project or program when any of the following conditions are met:

Direct Use

A direct use of a Section 4(f) resource takes place when property is permanently incorporated into a proposed transportation project (23 CFR Section 771.135(p)(1)). This may occur as a result of partial or full acquisition of a fee simple interest, permanent easements, or temporary easements that exceed regulatory limits noted below.

Temporary Use

A temporary occupancy of a Section 4(f) resource is considered a “use” when it is adverse in terms of the preservationist purposes of the Section 4(f) statute. However, under FHWA regulations (23 CFR Section 771.135(p)(7)), a temporary occupancy of property does not constitute a use of a Section 4(f) resource when the following conditions are satisfied.

- The occupancy must be of temporary duration (i.e. shorter than the period of construction) and not involve a change in ownership of the property.
- The scope of work must be minor, with only minimal changes to the protected resource.
- There are no permanent adverse physical effects on the protected resource, and there will be no temporary or permanent interference with the activities or purpose of the resource.
- The property being used must be fully restored to a condition that is at least as good as that which existed prior to the proposed project.
- There must be documented agreement of the appropriate official having jurisdiction over the resource regarding the foregoing requirements.

Constructive Use

A constructive use of a Section 4(f) resource occurs when a transportation project does not permanently incorporate land from the resource, but the proximity of the project results in impacts (i.e. noise, vibration, visual, access, and/or ecological impacts) so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired (i.e. “constructive use”).

Section 4(f) is applicable to historic and archaeological resources when the resource is included on, or eligible for, the National Register of Historic Places (NRHP) (23 CFR 771.135(e)). Section 4(f) does not apply to archaeological sites where it is determined after consultation with the State Historic Preservation Officer and the Advisory Council on Historic Preservation that the resource is important chiefly because of what can be learned by data recovery and has minimal value for preservation in place. Constructive use does not occur when compliance with the requirements of Section 106 of the National Historic Preservation Act (16 U.S.C. §470) and related regulations defining proximity impacts of a proposed project on an NRHP site results in a finding of “no effect” or “no adverse effect” (23 CFR 771.135(p)(5)(i)).

The Federal Highway Administration Section 4(f) Checklist, *Attachment B – Park, Recreational Facilities, Wildlife Refuges, and Historic Properties Evaluated Relative to the Requirements of Section 4(f)*, revised July 1998, represents their recommended “best practices” for compliance with Section 4(f) requirements. Attachment B of the checklist indicates that all archaeological and historical sites within the Section 106 Area of Potential Effect (APE) and all public parks, recreational facilities, and wildlife refuges within approximately 0.5-mi (0.8-km) of any of the project alternatives should be included in the evaluation.

On behalf of FHWA, the California Department of Transportation has prepared this Section 4(f) evaluation because the proposed project would involve the use of Section 4(f) resources. This evaluation identifies the significant Section 4(f) resources in the project area, describes the nature and extent of the use of these resources, evaluates alternatives that would avoid the use of Section 4(f) resources, and describes measures to minimize harm to the affected resources.

II. PROPOSED PROJECT

Purpose and Need

The primary purpose of the proposed project is to reduce existing and forecast traffic congestion on I-405 between I-10 to US-101. This project would reduce congestion and is expected to enhance traffic operations by adding freeway capacity in an area that already experiences heavy congestion.

The secondary goal is to improve both existing and future mobility and enhance safety throughout the corridor, while minimizing environmental and economic impacts. The project would transfer through-vehicle trips to the regional highway system, ease congestion, improve mobility by moving twice as many vehicles as a regular traffic lane, decrease commuter times for all drivers, reduce air pollution, and promote ridesharing.

The Sepulveda Pass between I-10 and US-101 experiences heavy traffic congestion due to inadequate lane width, a great deal of vehicle weaving (vehicles moving from one lane to another), and above

average accident rates. An HOV lane would add capacity to the mainline freeway and prevent the existing traffic condition from further deterioration due to forecasted traffic volume increases for opening year 2015 and horizon year 2031. From a traffic operations perspective, HOV improvements would result in an improved condition with substantial benefits in reducing delay. The proposed project improvements would standardize traffic lanes, median, and shoulder and allow the State to implement current functional and safety design standards, which would increase safety and overall operation of the facility.

Currently, there is a gap along the entire I-405 corridor in Los Angeles. HOV lanes currently operate on both northbound and southbound I-405 from the Orange County line to State Route 90, also called the Marina Freeway, from north of Burbank Blvd. to Route 118, and only in the southbound direction from Waterford Street to north of Burbank Blvd. The southbound I-405 HOV lane from Waterford Street to I-10 is currently under construction.

For a complete discussion of the purpose and need of the proposed I-405 Sepulveda Pass Project, please refer to Chapter 1 of the Environmental Impact Report/Environmental Impact Statement (EIR/EIS). Chapter 1 of the EIR/EIS summarizes the present and future conditions of the existing I-405 project area that constitute the need for actions. Several project alternatives have been developed to meet the purpose and need. Chapter 2 of the EIR/EIS presents details of project alternative development. Safety and operational improvements include ramps, overcrossing structures, as well as standardizing lanes and shoulders. If no improvements are made within the project limits, the Sepulveda Pass will continue to be a major bottleneck.

Project Alternatives

Listed below are the three alternatives that are evaluated in the Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the proposed I-405 Sepulveda Pass Project. A No Build Alternative and two build alternatives are being considered for implementation:

- **Alternative 1: No Build Alternative**

- **Alternative 2: Add a Standard Northbound HOV Lane and Standardize Northbound Mixed-Flow Lanes, Median and Shoulder:**

The existing road would be widened to add one standard northbound HOV lane and would provide standard freeway typical cross-section within the project limits except through the I-405/I-10 interchange. A 12-foot half median, 12-foot HOV lane, 4-foot HOV buffer, five 12-foot mixed-flow lanes (MFL), and a 10-foot outside shoulder would be provided. In addition, various structures would be widened, replaced, built or removed.

- **Alternative 3: Add a Standard Northbound HOV Lane and Standardize Northbound and Southbound HOV Lane, Mixed-Flow Lanes, Median, and Shoulder:**
The existing facility would be widened to add one standard northbound HOV lane and standardize the non-standard southbound HOV lane, five MFL, median

and shoulder. The project would provide standard freeway typical cross-section within the project limits except through the I-405/I-10 interchange. The proposed project would provide a 12-foot half median, 12-foot HOV lane, 4-foot HOV buffer, five 12-foot MFL, and a 10-foot outside shoulder. In addition, various structures would be widened, replaced, built or removed.

For a detailed description of these alternatives, please refer to Chapter 2 of the I-405 Sepulveda Pass Project EIR/EIS.

III. 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.

The I-405 Sepulveda Pass Project area was subjected to background research, field surveys, and aerial photo analysis by land use planners, biologists, archaeologists, and historians in an effort to locate and describe any public parks, recreation areas, wildlife and waterfowl refuges, and historic sites (properties) potentially affected by the proposed project. For purposes of this Section 4(f) evaluation, only those public park/recreation resources within approximately 0.25-mile of the project area (please refer to Table 1) of any of the project alternatives were included in the evaluation. Approximately a third of the length of the project area (Sepulveda Pass) is designated as open space which is part of the Santa Monica Mountains National Recreation Area. As described more fully below, the Section 4(f) resources in the vicinity of the project area include publicly owned parks/recreation areas and significant historic sites. There are no wildlife and waterfowl refuges in the proposed project area.

Section 4(f) resources that are not directly adjacent to the corridor are not anticipated to incur right-of-way, noise, or visual impacts as a result of project construction or operation and thus would not be considered a use of Section 4(f) resources. The historic properties qualifying as Section 4(f) resources are only those determined to be of national, state, or local significance, as evidenced by being eligible for the National Register of Historic Places.

Figure 1: Section 4(f) Resources within ¼-mile of the I-405

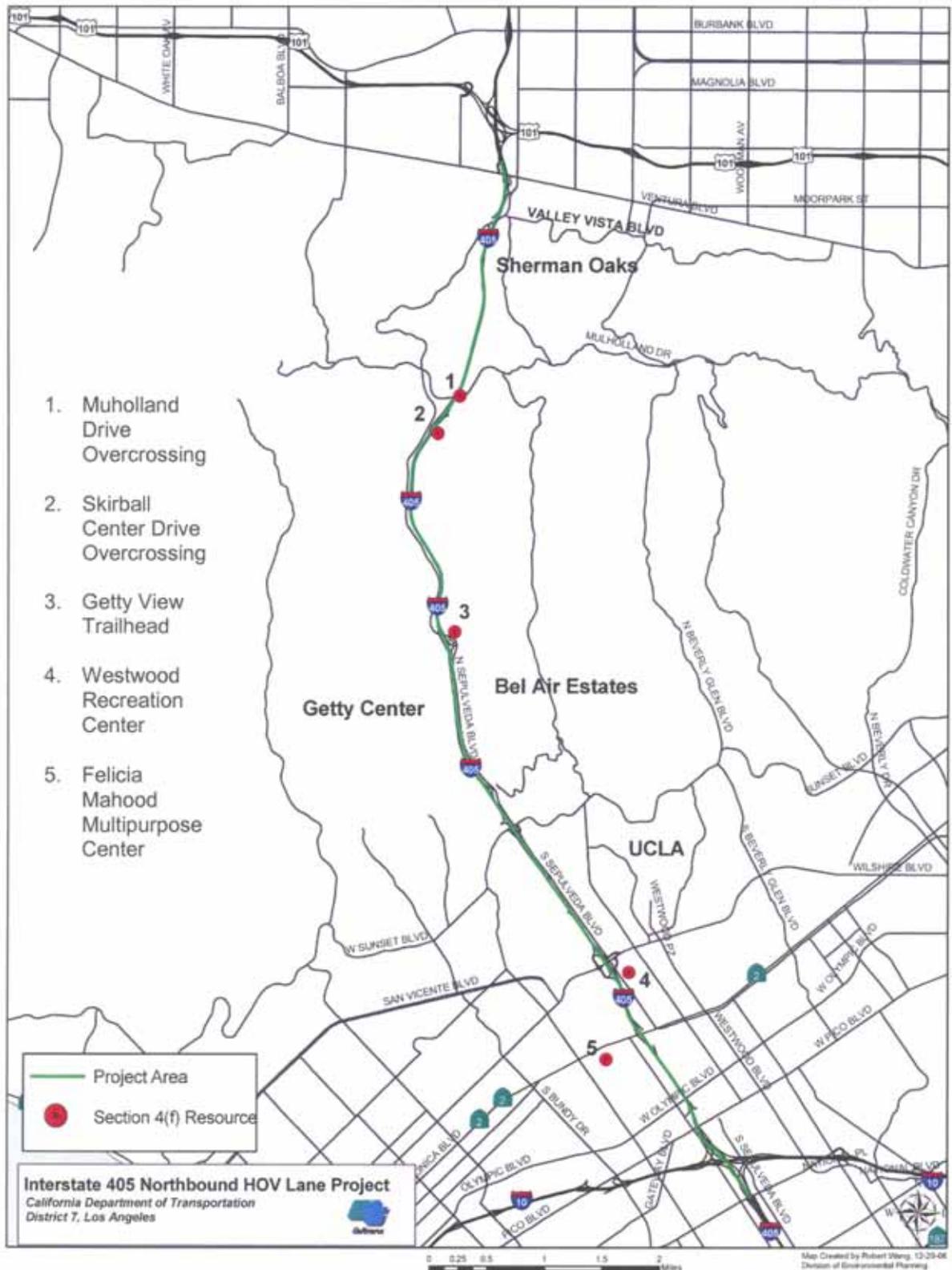


Table 1: Summary of Section 4(f) Resources

Section 4(f) Resource	Location	Current Ownership	Features
Westwood Recreation Center	1350 S. Sepulveda Blvd. - Triangular parcel on the east side of the I-405 freeway (western boundary) at Ohio Ave. on the south and Sepulveda Blvd. on the east.	Public – Owned and operated by the City of Los Angeles Department of Recreation and Parks	Barbecue pits, baseball diamonds, basketball courts, children’s play area, community room, indoor gym, and picnic tables, and Bad News Bears Baseball Diamond/Field
Felicia Mahood Multipurpose Center	11338 Santa Monica Blvd. - South side of Santa Monica Blvd. and the east side of Purdue Ave	Public – Owned and operated by the City of Los Angeles Department of Recreation and Parks	Auditorium, baseball diamond, basketball courts, children’s play area, indoor gym, picnic tables, seasonal pool, soccer field, tennis courts, volleyball courts, and concrete stage
Getty View Trailhead	East side of the I-405 freeway on the east side of North Sepulveda Blvd., at the North Sepulveda Blvd. on-ramp.	Public – Jointly Administered by the Santa Monica Mountains Conservancy and National Park Service	Trailhead marker, parking, American with Disabilities Act-accessible picnic benches, trails, and interpretive kiosks
Skirball Trailhead	Eastside of the I-405 freeway at the southeast curve of the Skirball Center Overcrossing	Public – Jointly Administered by the Santa Monica Mountains Conservancy and National Park Service	Trailhead marker and trail
Mulholland Drive Overcrossing Bridge# 53-0739	Mulholland Drive over Route 405 at postmile 37.03 in Los Angeles County.	Public – Maintained by the State of California Department of Transportation	Determined eligible in the State Historic Bridge Inventory Update (2006), <i>Concrete Box Girder Bridges</i> , April 2004. The period of significance is 1959, and the bridge was found eligible under Criterion C for transportation and engineering.

A. Westwood Recreation Center

The Westwood Recreation Center is located along the eastside of northbound I-405 with access to park facilities on Sepulveda Boulevard, between Wilshire Boulevard to the north and Ohio Avenue to the south (see Figure 2: Westwood Recreation Center). Facility features include barbecue pits, baseball diamonds, basketball courts, children's play area, community room, indoor gym, and picnic tables. Special features include the Bad News Bears Baseball Diamond/Field, Live Scan (fingerprinting), and Aidan's Place. Aidan's Place is the second West Coast Boundless Playground created, owned and operated by the city of Los Angeles Department of Recreation and Parks.

The Playground Resource Center West in partnership with the city of Los Angeles Department of Recreation and Parks dedicated this special playground to Aidan James, who had been born with a progressive disease that left him ventilator dependent and wheelchair bound. The City of Los Angeles Department of Recreation and Parks has three universally accessible playgrounds where children of all abilities can play side-by-side. The objective is to create a truly unique recreational environment in Los Angeles that provides an opportunity for children with disabilities to play at their highest level, enhancing their emotional, physical and social development, as well as teaching compassion and acceptance.

Figure 2: Westwood Recreation Center



B. Felicia Mahood Multipurpose Center

The Felicia Mahood Multipurpose Center is owned and operated by the City of Los Angeles Department of Recreation and Parks. It is located at the West Los Angeles Civic Center on Santa Monica Boulevard, just west of I-405, between Corinth Avenue and Purdue Avenue, adjacent to the West Los Angeles Library and post office (see Figure 3: Felicia Mahood Center). The facility receives Kinship Care Grant funds which enable the center to provide services to adults aged 60 and over who are sole providers raising grandchildren or other relative children. Recreational and educational classes, special events and daily meals are provided to the public using a donation-based fee structure. The center also offers a travel club and sponsors many on-going programs.

At the center, seniors can obtain referrals for services and guidance on how to obtain those services. They can also access a Case Management Program (for those over 60), funded by the Department of Aging and Community Development. Social and support services are offered, with emphasis on low income and/or minorities. Facility features include an auditorium, baseball diamond, basketball courts, children's play area, indoor gym, picnic tables, seasonal pool, soccer field, tennis courts, volleyball courts, and concrete stage. The auditorium has a banquet capacity of 200 and an assembly capacity of 300. The auditorium is also used as a community room. The facility's hours of operation are Monday, Tuesday, and Thursday 7:00 a.m. to 9:00 p.m., Wednesday and Friday 7:00 a.m. to 10:00 p.m., and Saturday and Sunday 9:00 a.m. to 5:30 p.m.

Figure 3: Felicia Mahood Center



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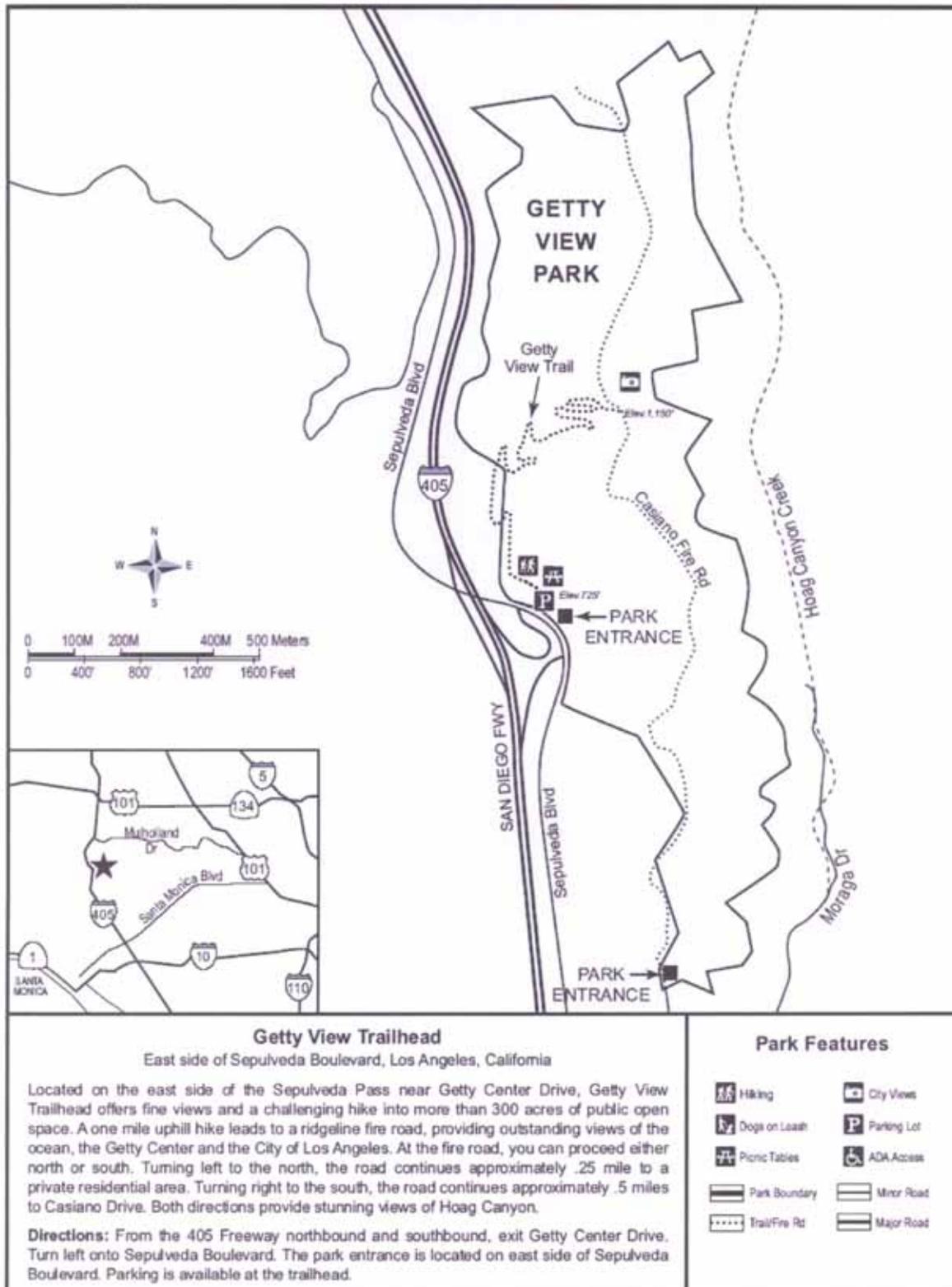
C. Getty View Trailhead

On the eastside of the Sepulveda Pass near Getty Center Drive is the Getty View Trailhead (see Figure 4: Getty View Trail Directions and Trail Map and Figure 5: Aerial view of the Getty View Trail and Trailhead) which offers a view and a challenging hike into more than three hundred acres of public open space overlooking Hoag Canyon. The Getty View Trailhead is a public trail owned and operated by the Santa Monica Mountains Conservancy and jointly administered by the National Park Service. Park amenities include Americans with Disabilities Act-accessible picnic benches, parking, trails, and interpretive kiosks. There are six parking spaces and one disabled space for a total of seven located on Sepulveda Boulevard east of I-405. The park is closed from sunset to sunrise and has locks on the gate to the entrance of the park.

A one-mile uphill hike leads visitors to a ridgeline fire road, providing views of the Pacific Ocean, the Getty Center and the city of Los Angeles. At the fire road, visitors can proceed north (left) or south (right). Turning left to the north, the road continues a quarter-mile to a private residential area. Turning right to the south, the road continues a half-mile and connects to Casiano Drive. Both directions provide views of Hoag Canyon. Another access overlooking Hoag Canyon is the Sepulveda Pass Trailhead, located adjacent to the Mulholland Park and Ride at Sepulveda Boulevard and Mulholland Drive. This trail will take you south approximately one mile through the side canyons of Sepulveda Pass and up to an open plateau.

This area has been identified by the Santa Monica Mountains Conservancy to be a wildlife crossing point. Wildlife habitat on the eastern side of this underpass connects to Sepulveda Ridge and Moraga Canyon. The western side of the underpass is a Metropolitan Water District (MWD) facility that is surrounded by chaparral habitat. To the immediate northwest of the MWD facility is the access road to the defunct Mission Canyon Landfill. West of the landfill lies Bundy Canyon and Kenter Ridge which is an undeveloped area. These regions connect this area to the greater portions of the Santa Monica Mountains National Recreation Area. The Sepulveda Blvd. underpass is believed to provide an important link between the wildlife habitat on the east and west side of the I-405 over the Santa Monica Mountains, due to the practically impassable multi-lane freeway. Without wildlife movement across the freeway, the isolated wildlife populations are at risk because of the effects of habitat fragmentation.

Figure 4: Map of the Getty View Trail



Source: Santa Monica Mountains Conservancy.2004.Getty View Trailhead Directions and Trail Map.

Figure 5: Aerial View of the Getty View Trail and Trailhead



D. Skirball Trailhead at Skirball Center Overcrossing

Another access point overlooking Hoag Canyon is the Skirball Trailhead, located adjacent to the Mulholland Park and Ride at Sepulveda Boulevard and Mulholland Drive (see Figure 6: Skirball Trailhead at Skirball Center OC). This trail will take you south approximately one mile through the side canyons of Sepulveda Pass and up to an open plateau. The Skirball Trailhead is closed from sunset to sunrise and is a public trail owned and operated by the Santa Monica Mountains Conservancy and jointly administered by the National Park Service.

This area has also been identified by the Santa Monica Mountains Conservancy to be a wildlife crossing point. To the immediate southeast of the overpass and directly adjoining the overpass is the undeveloped Sepulveda Trail area which consists of three parallel canyons and three intervening flat-topped ridges that descend from Casiano Drive down to the freeway. Extending north from the overpass is a narrow band of undeveloped land that ends at the Mulholland Drive overpass. The Skirball Center overcrossing is believed to provide an important link between the wildlife habitat on the east and west side of the I-405 over the Santa Monica Mountains.

- * The Sepulveda Pass Trailhead and Trail Improvement Project (Getty View Trailhead and Trail/Skirball Trailhead) was designed and constructed through a grant from the Environmental Enhancement and Mitigation Program in 1996. The grant application shows that the requested amount for the total project cost estimate was \$186,000 broken down by \$159,800 for the Sepulveda Trailhead/Trail (aka Getty View Trailhead/Trail) and \$26,200 for the Skirball Lane Trailhead/Trail.

Figure 6: Skirball Trailhead



E. Mulholland Drive Overcrossing (Bridge# 53-0739)

The Mulholland Drive overcrossing spans a deep gorge through which I-405 passes (see Figure 7: Mulholland Drive Overcrossing). With its completion in 1959, the 235-foot main span was the longest box girder span in the western United States, and was not surpassed in California until 1969. Furthermore, this record span was nearly 50 percent longer than the state's previous record for a box girder bridge, which was the 160-foot span of the Flower Street Bridge over Highway 110 in Los Angeles (Bridge# 53-1010, built in 1956). Because of the size of this bridge and its height above the gorge, the contractor used fill from excavation elsewhere on the freeway project to level the gorge until it reached a height of approximately 12 feet below the soffit of the bridge; this allowed vehicle access to the construction site. This fill was removed upon completion of the bridge, leaving the bridge deck approximately 85 feet above the freeway.

In addition to being a significant engineering and construction achievement, this bridge exemplifies the minimalist, or Modernist, aesthetics of the period. The curved box girder structure has a depth at mid-span of slightly less than 3 percent of the span length, an unusually low ratio that contributes to the bridge's graceful and dramatic appearance.

The encasement of the columns during a 1996 seismic retrofit project has diminished the bridge's integrity of design somewhat, but it appears to retain sufficient integrity to be eligible for the National Register listing under Criterion C. In addition, this bridge is considered an historical resource for the purposes under the California Environmental Quality Act.

Figure 7: Mulholland Drive Overcrossing



IV. IMPACTS TO SECTION 4(f) PROPERTIES

As discussed in Section I, the use of Section 4(f) properties typically occurs when there is either a permanent commitment of the Section 4(f) site for a transportation project (actual use) or where the proximity of a project to the Section 4(f) site, without acquisition of land, causes impacts such as noise, visual, or access restrictions that could impair the values and utility of the land (constructive use).

The reconstruction and widening of the I-405 freeway would add one standard northbound HOV lane and standardize the southbound lanes, median and shoulder. The proposed project would provide a 12-foot half median, 12-foot HOV lane, 4-foot HOV buffer, five 12-foot mixed flow lanes, and a 10-foot outside shoulder. All of the build alternatives (2A/2B and 3A/3B) would result in similar impacts to Section 4(f) resources. The following sections, which discuss impacts and mitigation measures, apply to all build alternatives. This includes whether any permanent or temporary occupation of a property would occur, or whether the proximity of the project would cause any access disruption, noise, vibration, or aesthetic effects that would substantially impair the features or attributes that qualify the resource for protection under Section 4(f). The analysis of potential effects on Section 4(f) resources includes 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 and need for the project is usually also not prudent. Table 2 summarizes the potential impacts to Section 4(f) resources as a result of the proposed project.

Table 2: Section 4(f) Resources within ¼-mile of the Build Alternatives

Section 4(f) Resource	Type of Resource	Potential Impacts	Direct Use	Temporary Use/ Occupancy	Constructive Use
Westwood Recreation Center	Park and Recreation Center	Traffic Noise and Temporary Construction Impacts	No	Yes	No
Getty View Trailhead	Trail	Construction of new on-ramp would remove a parking lot at the trailhead and part of the trail, which is an area supporting a relatively high diversity of native plant species would be impacted. A known wildlife crossing point across the I-405 would be impacted.	Yes	No	No
Skirball Trailhead	Trail	Re-grading the slope would remove trailhead and trail access would be temporarily impaired during construction. A known wildlife crossing point across the I-405 would be impacted.	No	Yes	No
Felicia Mahood Multipurpose Center	Park and Recreation Center	None	No	No	No
Mulholland Drive Overcrossing Bridge# 53-0739	Historic Resource	Structure to be replaced due to freeway widening.	Yes	No	No

A. Westwood Recreation Center – Temporary Occupancy

As documented below, the proposed build alternatives would result in a temporary occupancy of the Westwood Recreation Center – Bad News Bears Field in accordance with the requirements of 23 CFR Section 771.135(p)(7) for a temporary occupancy. The Traffic Noise Study Report that was prepared for the proposed project determined that all of the build alternatives would have a traffic noise impact on this resource as there is an area of frequent human use. However, even without the proposed project, the existing noise level at this park is above the threshold for parks. The proposed project would increase noise levels by 2-3 dBA, which is barely perceptible by healthy human ears. A soundwall has been proposed for this area and a temporary construction easement would be required for soundwall construction. Soundwalls would be constructed during the first stage of construction.

Duration – A temporary easement for retaining wall/soundwall construction would be of temporary duration and would be shorter than the overall period of project construction.

Scope of Work – A minimal temporary easement (approximately 6 feet) for retaining wall/soundwall construction would be required.

Effects on the Resource – There would be no permanent adverse effects on the protected resource and there would be no temporary or permanent interference with the activities or purpose of the resource. Public access to the park would be maintained during the period of construction.

Finish Phase Restoration – During the finish phase of project construction, the park would be returned to a condition that is at least as good or better than at present.

Coordination – The City of Los Angeles, as the agency having jurisdiction over this resource, has been consulted and concurred with the foregoing determination that the proposed project alternatives would satisfy the requirements of 23 CFR Section 771.135(p)(7) for a temporary occupancy.

B. Getty View Trailhead – Direct Use

In order to accommodate the northbound I-405 freeway widening, the existing Getty Center Drive on-ramp would be removed. The existing on-ramp contains several design deficiencies including a small turning radius and the accident rate for the existing configuration is four times higher than the statewide average. Reconstructing the on-ramp at the same location would not provide adequate space to construct a properly designed on-ramp. An on-ramp at the same location would have an even smaller turning radius and steeper profile that would not accommodate adequate traveling speed for the on-ramp. This would create additional safety issues and higher accident rates, especially for larger vehicles. The proposed diamond on-ramp would be safer and more efficient and would meet design requirements.

- The new northbound on-ramp would be constructed from Sepulveda Boulevard. The parking lot at the Getty View Trailhead (total of seven parking spaces) would be acquired in order to accommodate the new freeway on-ramp;

- A portion of the Getty View trail would be relocated to make room for the new on-ramp. The area of impact (new on-ramp, retaining wall, grading) would be approximately 3.75 acres (see Figure 3);
- A sliver of undeveloped land supporting a relatively high diversity of native plant species both planted and naturally occurring which includes mature coast live oak and sycamore trees that have been preserved in this location by the Santa Monica Mountains Conservancy (SMMC) would be affected (for more detail, see Section 3.17 of the I-405 Sepulveda Pass Project EIR/EIS);
- The project would hinder a known wildlife crossing point, identified by the SMMC, across the I-405 would be hindered (for more detail, see Section 3.18 of the I-405 Sepulveda Pass Project EIR/EIS); and
- Trail access would be closed temporarily during construction.

C. Skirball Trailhead at Skirball Center Drive Overcrossing – Temporary Occupancy

As documented below, the proposed build alternatives would result in a temporary occupancy of the Skirball Trailhead at the Skirball Center Drive Overcrossing in accordance with the requirements of 23 CFR Section 771.135(p)(7) for a temporary occupancy.

Duration – The Skirball Center Drive Overcrossing would be replaced in order to accommodate freeway widening and would temporarily (for about 3-4 months) affect trail access during construction.

Scope of Work – The slope located along the southeast curve of the Skirball Center Overcrossing would be re-graded. This would eliminate the existing trailhead. The area of impact (grading) would be approximately 0.3 acres (see Figure 4).

Effects on the Resource – There would be no permanent adverse effects on the protected resource and there would be no interference with the activities or purpose of the resource. During construction, trail access will be closed temporarily at this location; however, the main trail will remain functional and accessible from other access points.

Finish Phase Restoration – During the finish phase of project construction, the trailhead would be returned to a condition that is at least as good or better than at present.

Coordination – The Santa Monica Mountains Conservancy, as the agency having jurisdiction over this resource, has been consulted and concurred with the foregoing determination that the proposed project alternatives would satisfy the requirements of 23 CFR Section 771.135(p)(7) for a temporary occupancy.

D. Felicia Mahood Multipurpose Center – No Impact

The proposed project would not have an impact on the Felicia Mahood Multipurpose Center as it is approximately 900 ft from the I-405 (about 2 city blocks to the west) and does not involve the acquisition of the recreation center and access to the center would not be affected. Noise and visual impacts were not identified at this location.

E. Mulholland Drive Overcrossing (Bridge# 53-0739) – Direct Use

The build alternatives would result in an adverse effect on the Mulholland Drive Overcrossing and its character-defining features because they would result in the complete destruction of the historic property in order to accommodate freeway widening.

V. AVOIDANCE ALTERNATIVES

A. Alternative 1: No Build Alternative

The No Build Alternative would not improve the existing or future congestion problems in the project area. While this alternative would not involve any Section 4(f) resource, it would not meet the purpose and need of the proposed project of increasing the vehicle-carrying capacity of the I-405 freeway facility or correct deficiencies of current conditions. It would be inconsistent with Caltrans' goal of minimizing congestion and maintaining an efficient and effective interregional mobility system.

B. Getty View Trailhead Avoidance Alternatives

As a result of the proposed freeway widening, the proposed northbound I-405 on-ramp from Sepulveda Blvd. at the Getty Center interchange must re-constructed. The following avoidance alternatives have been analyzed:

- B1) Hook On-ramp: The hook on-ramp would begin near the end of the current northbound I-405 off-ramp to Sepulveda Blvd. at the Getty Center interchange. The hook on-ramp would turn 85° to the right through a horizontal curve and then join the freeway.

The Hook On-ramp Alternative was determined to be not prudent because it would create additional impacts to wildlife. The hook on-ramp would require further extension into adjacent land, designated as open space and owned by the Santa Monica Mountains Conservancy as well as extending the tunnel undercrossing created by the hook ramp by an additional 26 feet. Through consultation with the SMMC, it was determined that in the case of the new Getty Center on-ramp, the proposed project would add a major new constraint to a habitat linkage that already requires a surface crossing of Sepulveda Blvd. and a long diagonal crossing under the freeway.

Additional Engineering and Design Constraints Associated with the Hook On-ramp Alternative:

- The profile of the on-ramp would have an 11 percent slope due to a rise in elevation from 707 feet to an elevation of 758 feet over a distance of 453 feet. This slope would be very steep and would pose safety problems.
- The entrance would be located at the mid-point of a right turning curve where there could be a stopping sight distance issue that could result in accidents on Sepulveda Blvd. This could create an unfavorable situation for drivers since the hook on-ramp would create an 85 degree turning radius to the right through a horizontal curve, which may compromise driver's safety during unsafe conditions. Vehicles under severe centrifugal effect could slide laterally and spin out of control.
- The proposed freeway widening would be 22 feet. The freeway bridge would be widened by an extra 26 feet in order to accommodate the new on-ramp, in addition to the already proposed widening. The path under the bridge would become longer and darker for wildlife crossing.
- Currently, a left-turn lane on Sepulveda Blvd. does not exist for vehicles to enter the on-ramp. Sepulveda Blvd. would have to be further realigned along the mountainside to accommodate the new on-ramp and a left-turn lane in the median.

B2) S-shaped On-ramp: The S-shaped on-ramp would begin at the entrance of the current northbound Route 405 on-ramp from Sepulveda Blvd. at the Getty Center interchange. The S-shaped on-ramp would turn 30° to the left through a horizontal curve and then 215° to the right through another horizontal curve, and eventually join the freeway.

The S-shaped On-ramp Alternative was determined not prudent because it would not meet the project purpose and need. An S-shape ramp configuration currently exists at the site and is unsafe. 2006 accident data indicated 14 accidents occurred at this ramp showing a 3.55 rate of incidence compared to the statewide average of 0.85 for a similar ramp. In addition, the proposed freeway widening would add 22 feet to the freeway widening and 26 ft. to the Sepulveda Blvd overcrossing to accommodate the S-shaped ramp. The s-shaped on-ramp would require further extension into adjacent land since Sepulveda Blvd. would have to be realigned to accommodate the new ramp which is designated as open space and owned by the Santa Monica Mountains Conservancy as well as extending the tunnel undercrossing created by the s-shaped ramp by an additional 26 feet

Additional Engineering and Design Constraints Associated with the S-shaped On-ramp Alternative:

- The profile of the ramp would have an 8.33% slope due to a rise in elevation from 219 meters (719 feet) to an elevation of 231 meters (758 feet) over a distance of 144 meters (472 feet). This slope would be very steep and pose safety problems. Our observation shows that vehicles on this type of slope would have difficulty reaching an adequate speed at the end of the gore area for merging safely with freeway traffic, creating another safety issue.
- Widening of the freeway would reduce the area available to properly fit an on-ramp. The small turning radius would not accommodate adequate traveling speed on the ramp, which would make the ramp a traveling hazard, especially for larger vehicles. The existing slope of the "S" shape of the horizontal alignment is currently 6.44% at the

right edge of pavement and 7.68% at the left edge of pavement. The horizontal alignment would be further worsened in this design, which would make traveling on the ramp awkward and unsafe.

- The proposed freeway widening would be 6.74 meters (22 feet). The freeway bridge would be widened by an extra 8 meters (26 feet) in order to accommodate the new on-ramp, in addition to the already proposed widening. The path under the bridge would be longer and darker which would negatively affect documented wildlife movement at this location. Consequently, the bridge would be wider and the re-graded slope at the northeast corner would encroach into adjacent land owned by the Santa Monica Mountains Conservancy.

**Evaluation of Avoidance Alternative Selection Process
at Sepulveda Blvd. and the Getty View Trailhead**

4(f) Avoidance Alternative	Feasible & Prudent Alternative	Uses of 4(f) land	Relative net harm to 4(f) land after mitigation
B1 (Hook On-ramp)	Yes No	Yes	N/A
B2 (S-Shaped On-ramp)	Yes No	Yes	N/A
B3 (Parallel Ramp – Alt. 2 & 3)	Yes Yes	Yes	N/A

Since the project involves increasing the width of the freeway through all sections of the Sepulveda Pass where wildlife crossing is feasible, it has been determined through the professional judgment of biologists of the SMMC that the length of any existing wildlife crossing route would be increased.

The Parallel On-ramp Alternative was determined feasible and prudent. This on-ramp design would extend into 4(f) land and create an additional tunnel undercrossing of 21 feet. However, this alternative would have two tunnels buffered by land in between. The wildlife corridor impacts associated with this alternative would not be as severe as the Hook On-ramp and S-shaped On-ramp Alternatives with a continuous lengthened tunnel alongside the Sepulveda Blvd. undercrossing, which would deter wildlife currently using the undercrossing. The parallel on-ramp would be designed to allow a break, providing an area of natural light for wildlife to pass through. This alternative would also provide a safer on-ramp than the Hook On-ramp and S-shaped On-ramp Alternatives.

Based on the above considerations, the proposed action includes all possible planning to minimize harm to the Getty View Trailhead resulting from such use.

C. Mulholland Drive Overcrossing Avoidance Alternatives

As a result of the proposed freeway widening in the vicinity of the Mulholland Drive Overcrossing (OC), the OC must be replaced in its entirety because the existing bridge columns and abutments are located directly in the path of the proposed freeway widening and reconstructed ramps. Proposed widening work cannot be rerouted around the existing structure due to the following reasons:

1. In order to provide a northbound HOV lane and standard lane widths, it would be necessary to realign three mixed-flow lanes around the existing overcrossing columns, thus forming a type of parallel collector-distributor roadway similar to those found on Route 10 (Santa Monica Freeway) west of Route 110 (Harbor Freeway). A Safety Project Report dated December 30, 2005 found that recent three-year accident rates on the Santa Monica Freeway collector-distributor roads were higher than the statewide average. An accident analysis of the adjacent freeway found that accident rates were lower than the statewide average. This suggests that collector-distributor roads, with obstructions on both sides, present higher accident risks to motorists.

TASAS Table B Accident Data from 2002 to 2005 indicates that the accident rate for the northbound on-ramp from Mulholland Drive/Skirball Center Drive at the existing overcrossing is nearly five times the statewide average for this type of highway facility. This high accident rate does not permit any further reduction in design standards.

The Caltrans Highway Design Manual Topic 203 requires that roadway horizontal alignment “provide for safe and continuous operation at a uniform design speed” and that “sudden reductions in alignment standards should be avoided.” Realigning freeway traffic lanes around existing bridge columns would introduce non-standard, lower-speed curves likely resulting in driver confusion, increased accidents traffic, congestion, and reduction in freeway level of service.

State and AASHTO (federal) highway design standards (HDM Topic 309) require a minimum nine meter-wide *Clear Recovery Zone* adjacent to the roadway free of permanent obstructions such as bridge columns.

2. Construction of a collector-distributor road would require some excavation of the bridge abutment embankment slope in order to construct a retaining wall. Three types of retaining walls are typically used: cantilever, soil nail, and soldier pile. The following scenarios would still apply if non-standard 11-foot wide lanes were used.
 - A *soldier pile* wall would not require abutment slope excavation until piles and lateral supports are installed first to stabilize the slope. However, this type of wall is not constructible due to the lack of vertical clearance available (24 feet) to install the 50-foot long steel piles.
 - A *cantilever* wall is not feasible because required excavation would destabilize the abutment slope, weaken soil pressure at existing piles and undermine the bridge abutment. This would result in overall weakening of the critical supports of the overcrossing structure, constituting a threat to public safety. Temporary shoring of the abutment slope would not be feasible due to the lack of sufficient vertical clearance.

- A *soil nail* wall may be feasible at this location only if special mitigation measures are undertaken during construction to prevent potential caving problems typically associated with this type of wall.

Based on the above considerations, there is no prudent alternative to avoid the destruction of the Mulholland Drive Overcrossing (OC) and it would be necessary to completely remove and replace the OC in order to implement highway design standards which would provide safe and proper widening of I-405.

D. Skirball Trailhead at Skirball Center Drive OC Avoidance Alternatives

An avoidance alternative analysis for the replacement of the Skirball Center Drive Overcrossing was conducted. As a result of the proposed freeway widening in the vicinity of Skirball Center Drive, the northbound off-ramp to Skirball Center Drive would be reconstructed, and the southbound off-ramp at Skirball Center Drive would be realigned, resulting in replacement of the Skirball Center Drive Overcrossing (OC). The OC must be replaced in its entirety because existing bridge columns and abutments are located directly in the path of the widened freeway and rebuilt ramps. Proposed widening work cannot be rerouted around the existing structure due to the following reasons:

1. State and AASHTO (federal) highway design standards (HDM Topic 309) require a minimum nine meter-wide *Clear Recovery Zone* adjacent to the roadway free of permanent obstructions such as bridge columns.
2. HDM Topic 203 requires that roadway horizontal alignment “provide for safe and continuous operation at a uniform design speed” and that “sudden reductions in alignment standards should be avoided.” Realignment freeway lanes around existing bridge columns would introduce non-standard, lower-speed curves likely resulting in driver confusion, increased traffic accidents, congestion, and reduction in level of service.
3. Realigning proposed widening work around the existing structure would also require excavation of the bridge abutment embankment slope in order to construct retaining walls. Not only would retaining walls likely conflict with abutment piles, they would be unacceptable because disturbance of the steep (1:1.5) embankment slopes would risk undermining the bridge abutments, potentially weakening the support of the overcrossing.

Based on the above considerations, there is no prudent alternative to avoid the use of land at the Sepulveda Pass Trailhead, however, the proposed action includes all possible planning to minimize harm to the Sepulveda Pass Trailhead resulting from such use. It would be necessary to completely reconstruct the Skirball Center Drive OC in order to properly and safely widen I-405.

VI. MEASURES TO MINIMIZE HARM

Mitigation measures will be further developed in consultation with the official of the agency having jurisdiction over each of the impacted properties.

A. Westwood Recreation Center

- A soundwall along the edge of shoulder on northbound I-405 has been recommended as a traffic noise abatement measure under all build alternatives.
- The soundwall would be constructed first which would provide a barrier to temporary construction noise and dust impacts.
- Lighting would be provided at the end of construction (to be determined).

B. Getty View Trailhead

The following mitigation measures are proposed and illustrated in Figure 8: Proposed Wildlife Crossing and Mitigation at the Getty View Trailhead:

- Mitigation in the form of an in lieu fee agreement to the Santa Monica Mountains Conservancy (SMMC) for the relocation and reconstruction of the seven (7) parking spaces that would be removed;
- An appropriate sized culvert would be created underneath the proposed on-ramp to funnel wildlife from the underpass area to the more natural areas of Sepulveda Ridge. It is proposed to put the new culvert near the existing trailhead parking area due to geometrics of the new on-ramp as well as existing wildlife movement patterns. (Engineering feasibility (i.e. topography constraints) and cost influenced the design of this minimization measure. More favorable crossing conditions could be developed if these limitations were not a factor);
- Newly graded and adjacent Caltrans right-of-way would be vegetated for use as stepping stones for wildlife. Appropriate native vegetation would be determined by the Caltrans' Landscape Architecture Department and the Division of Environmental Planning;
- The right-of-way fence underneath the I-405 at the Sepulveda Blvd. overcrossing would be removed so that wildlife can cross Sepulveda Blvd. at this location without the fence restriction as well as move/remove additional fencing at the on/off-ramps on both northbound and southbound sides if deemed feasible by Caltrans and in consultation with the SMMC to funnel the wildlife into the stepping stones and eventually to the wildlife culvert underneath the new on-ramp;
- Signs would be placed to warn motorists of wildlife crossings along Sepulveda Blvd. in consultation with the City of Los Angeles Department of Transportation; and
- Mitigation in the form of an in lieu fee agreement to the Mountains Recreation and Conservation Authority as requested by the Santa Monica Mountains Conservancy, for the modification/realignment of a new trail.
 - The Sepulveda Pass Trailhead and Trail Improvement Project was designed and constructed through a grant from the Environmental Enhancement and Mitigation Program in 1996. According to Applicant-State Agreement No.: 96-24 Environmental Enhancement and Mitigation Program, made effective on October 18, 1996, Article VI, the Applicant (Mountains Recreation and Conservation Authority) shall be reimbursed an amount at least equal to the

amount of the State's funding participation in the project or the pro rata fair market value shall be based on the fund transfer amount applied toward the purchase of the property and the design and construction of improvements in proportion to the total purchase price of the property and the cost of all improvements made prior to the time of sale.

- The 1996 grant application shows that the requested amount for the project cost estimate was \$159,800 for the Sepulveda Trailhead/Trail (aka Getty View Trailhead/Trail).

Figure 8: Proposed Wildlife Crossing and Mitigation at the Getty View Trailhead



C. Skirball Trailhead at Skirball Center OC

The following mitigation measures are proposed and illustrated in Figure 9: Proposed Wildlife Crossing and Mitigation at the Skirball Center Drive Overpass.

- Caltrans right-of-way fencing would be removed along the northbound side of Sepulveda Blvd. from approximately 70 feet south of the intersection of Sepulveda Blvd. and Skirball Center Drive.
- The island area south of Skirball Center Drive, east of Sepulveda and west of I-405 would be replanted with native vegetation in a mixture of ground cover, shrubs and possibly trees that are preferable for wildlife habitat. All concrete from the existing on-ramp would be removed. This island would serve as a stepping stone area. A perimeter fence should be constructed to funnel the wildlife to the overpass. To help the funnel effect, the fencing should be placed directing wildlife toward the bridge structure. Caltrans would continue to consult with the Santa Monica Mountains Conservancy during the later design stages of the project to finalize optimal plans for this funneling effect.
- The new overpass would include a minimum 10-foot wide travel path on the south side of the bridge to accommodate wildlife movement. This path would function as a wildlife conduit (nighttime hours) as well as a pedestrian sidewalk. The south side of the path would have a minimum 5-foot high continuous, solid wall. This wall would extend beyond any travel lanes (including ramps) so that wildlife views are blocked to the freeway traffic below. The north side of the travel path would have a continuous 3-foot high concrete wall/curb extending from a point 20 feet east of the Sepulveda northbound street lane to the eastern end of the bridge structure to separate the travel path from the roadway. (Engineering feasibility (e.g. compliance with Americans with Disabilities Act standards) and cost influenced the design of this minimization measure. More favorable crossing conditions could be developed if these limitations were not a factor.)
- All new street lights to be installed would be in coordination with the City of Los Angeles Bureau of Street Lighting and in accordance with the lighting specifications using the lowest level of illumination/brightness to meet safety needs while minimizing glare. The lights would be equipped with shields to direct light and minimize spill-over and would use metal halide lamps for better color rendering;
- The existing trailhead slope would be regraded, filled and re-vegetated to accommodate the widening of the bridge structure and freeway;
- During construction, lighting would be kept to a minimum during the night so as not to impede wildlife.
- Possible improvements to fencing to limit wildlife access to the highway will be considered during final design.
- A monitoring plan (prior to and during construction) and success criteria (post-construction) of the proposed mitigation measures will be established in conjunction with the Los Angeles Department of Transportation.
- Mitigation in the form of an in lieu fee agreement to the Mountains Recreation and Conservation Authority as requested by the Santa Monica Mountains Conservancy, for additional improvements to the trailhead.
 - The 1996 grant application shows that the requested amount for the project cost estimate was \$26,200 for the Skirball Lane Trailhead/Trail.

Figure 9: Proposed Wildlife Crossing and Mitigation at the Skirball Center Drive Overpass



D. Mulholland Drive Overcrossing (Bridge# 53-0739)

Concurrence was received on the Finding of Effect from the State Historic Preservation Officer (SHPO) on October 18, 2006 for the proposed project. It was determined that the proposed project would have an adverse effect on the Mulholland Drive Overcrossing since it would be demolished and replaced. As a result, a Memorandum of Agreement (MOA) will be prepared by Caltrans and submitted to FHWA and the SHPO for comment. The purpose of the MOA is to resolve adverse effects on historic properties. Once FHWA and SHPO agree on the terms and conditions of the MOA, it will be executed and Caltrans will concur.

VII. COORDINATION AND FINDINGS

Coordination has been ongoing between members of the Caltrans Project Development Team and with members of the public and other public agencies that have jurisdiction over the project area.

Section 4(f) coordination commenced between Caltrans Environmental Planning staff via email notifying representatives from the National Park Service and the Santa Monica Mountains Conservancy (SMMC) who jointly administer the Santa Monica Mountains National Recreation Area on November 3, 2005. A field meeting was held between Caltrans Environmental Planning staff and a representative of the SMMC, to discuss potential mitigation options on December 8, 2005. A second field meeting was held on April 26, 2006 between members of the Caltrans Project Development Team and SMMC to further review the feasibility of mitigation options. A letter from the Chief Deputy Director of the SMMC, was received on May 3, 2006 and May 22, 2006 with recommended mitigation measures and justification for enhanced wildlife crossing structures for specific areas within the project limits that are affected by the proposed project. Caltrans provided a letter of response on June 12, 2006 addressing the comments and concerns regarding permanent and temporary impacts on Conservancy-owned parkland (copies of this correspondence are included in Appendix A).

Caltrans Environmental Planning staff also initiated coordination with the City of Los Angeles Department of Recreation and Parks on December 27, 2006. A field meeting was conducted on January 10, 2007 to discuss potential temporary construction impacts to the Westwood Recreation Center, particularly the Bad News Bears playing fields located just east of northbound I-405.

The Federal Highway Administration (FHWA) has determined that there are no archaeological sites within the APE. However, there is one (1) resource that was previously found eligible for listing in the National Register of Historic Places (NRHP). The Mulholland Drive Overcrossing, Bridge Number 53-0739, was found eligible for listing in the NRHP in the April 2004 Statewide Historic Bridge Inventory Update: *Concrete Box Girder Bridges*. The 1959 bridge was found eligible under Criterion C, in the area of transportation and engineering. Concurrence was received on the Finding of Effect from the State Historic Preservation Officer (SHPO) on October 18, 2006 for the proposed project. It was determined that the proposed project would have an adverse effect on the Mulholland Drive Overcrossing. As a result, a Memorandum of Agreement will be prepared by Caltrans and submitted to FHWA and the SHPO for comment resulting in an executed agreement. A copy of this correspondence is included in Appendix A.

Native American Consultation and Coordination

Native American consultation and coordination was initiated on November 16, 1999 to inform tribes, groups and individuals of the proposed project. An area map of the proposed project as well as project description was sent to the representatives of various tribes for review. The Gabrieleno/Tongva Tribal Council responded on December 14, 1999 stating their concern regarding the existence of archaeological sites and/or cultural deposits that are within the proximity of the area of potential effect (APE). They also recommended having qualified archaeological and Native American monitors present during project excavation. Caltrans provided a letter of response on December 29, 1999 addressing the Gabrieleno/Tongva Tribal Council's concerns. In order to ensure that any potential, unknown, and undetected cultural resources are not disturbed during project construction, having qualified archaeological and Native American monitors on site in sensitive areas during project construction will be included as a bid item in the final project.

Notification letters were mailed again on March 11, 2003 to initiate Native American consultation (copies of this correspondence are included in Appendix A). On March 23, 2003, a representative of the California Tribal Council and Native American Heritage Commission phoned and spoke with a Caltrans Principal Architectural Historian, and asked for additional information and to be kept informed of any changes or updates to the project. They expressed their concern regarding cultural sensitivity through the Brentwood Heights area, as well as a monument on Mulholland Drive that may require project monitoring.

Appendix A

Correspondence Letters:

**Santa Monica Mountains Conservancy,
Office of Historic Preservation,
&
Native American Consultation**

SANTA MONICA MOUNTAINS CONSERVANCY

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May 3, 2006

Mr. Ron Kosinski
Deputy District Director
Department of Transportation, District 7
100 South Main Street
Los Angeles, California 90012-3712

**Interstate 405 HOV Lane Over the Sepulveda Pass (I-10 to US-101)
Wildlife Crossings**

Dear Mr. Kosinski:

The Santa Monica Mountains Conservancy is the principal State planning agency for the Santa Monica Mountains zone. Both preserving and enhancing the capability of wildlife to cross the 405 Freeway in the Sepulveda Pass is major objective of this agency. Such movement capability is fundamental to protect the public's approximately \$100 million investment in open space located east of the 405 Freeway and within 5,000-acre, Los Angeles City-owned Griffith Park.

The Conservancy currently owns 272 acres that abut the subject Caltrans rights-of-ways on the east side of the 405 Freeway. Both the proposed new Getty Center Drive northbound on-ramp and the Skirball Center Drive bridge reconstruction require extensive grading and facilities on Conservancy-owned parkland.

The purpose of this letter is to insert the recommendations and concerns of our Natural Resources and Planning staff on wildlife movement into the planning and Draft Environmental Impact Report (DEIR) preparation process without delay. Airing of the complex issues regarding the sacrifice of State parkland for transportation infrastructure we shall leave to another venue but in no way diminishes this agency's concerns. Onsite meetings with your staff in December 2005 and last week are much appreciated. However, the late stage of the environmental review process took us by surprise last week, and we have no knowledge or record of receiving any written notice of, or the Notice of Preparation for, the subject project. We respectfully request that all such future documentation be sent to the attention of Paul Edelman, Deputy Director of Natural Resources and Planning, at the above address. We also request that this letter be included in the DEIR.

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Interstate 405 HOV Lane Over the Sepulveda Pass Wildlife Crossings
May 3, 2006
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The main focus of this letter is facilitate the incorporation of critical specific design components to accommodate wildlife movement on the proposed Skirball Center Drive bridge. A subsequent letter will address the proposed Getty Center Drive on-ramp and the loss of the Getty View Trailhead parking lot.

The complete reconstruction of a freeway bridge with documented large mammal crossings provides a once in a century opportunity to incorporate elements that permanently facilitate successful wildlife crossings. The Skirball Center Drive bridge plans presented by your staff last week showed just the standard required five-foot-wide sidewalk with no walls to buffer either street or freeway traffic noise. The bridge reconstruction proposal calls both for widening the bridge and extending its length by approximately twenty feet into Conservancy parkland. The manufactured fill slopes would extend even further into parkland and a riparian area. A longer wider bridge carrying more traffic would have a negative impact on wildlife movement capability.

This combination of adverse impacts and the opportunity of a complete fresh start designing a new bridge warrants a better design for wildlife movement at a key regional habitat choke point. We acknowledge that cost factors are an issue. However, both the CEQA process and good planning militate that decision makers be presented with the appropriate range of project alternatives. We request that the project and its DEIR alternatives be modified to include the following components and details.

Modifications between Freeway and Sepulveda Boulevard

The removal (relocation) of the southbound on-ramp provides excellent opportunities to improve the wildlife approach to the bridge area. Along this section of the immediate Sepulveda Boulevard interface, right-of-way fencing should be permanently omitted for approximately 70-feet south of the intersection of Sepulveda Boulevard and Skirball Center Drive. The entire island area located south of Skirball Center Drive, east of Sepulveda Boulevard, and west of the Freeway should have an eight-foot-high perimeter fence to allow the area to provide a temporary refuge for wildlife staging. Such fencing with wooden posts and large-sized rectangular mesh is now commonly used all over the world to funnel wildlife movement near highways. The large mesh minimizes its visibility.

Wildlife use of the bridge will increase if the interface between the above described island area, and a travel path on the south side of the bridge, is broadened to the greatest extent possible. To partially accomplish widening, or funnel design, the immediate transition point between the bridge structure and the island area should be flared. That flared area

Mr. Ron Kosinski
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must be located in the apex formed by the existing bridge and existing southbound on-ramp. It will require a special retaining wall on the west side of the proposed southbound on-ramp. Under separate cover, we will send a color annotated diagram based on the plans provided to our staff that depicts the suggested extent of this fencing and entry area widening.

Minimum Ten-Foot-Wide Bridge Pedestrian/Wildlife Travel Path with Walls

The above described fencing system should funnel animals to a minimum ten-foot-wide travel path on the south side of the bridge. The travel path would function both as a sidewalk and animal movement area (in the night hours). The south, or freeway side, of the travel path should have a minimum five-foot-high, continuous, solid masonry wall. That masonry wall must extend ten feet beyond any travel lanes (including ramps) below. The inside, or north, side of the travel path must have a continuous three-foot-high concrete wall extending from a point 20 feet east of the Sepulveda Boulevard northbound street lane to the eastern terminus of the bridge structure. A metal guard rail, as currently exists on top of the existing wall, is compatible with this design. Under separate cover we will send a color annotated diagram based on the plans provided to our staff that depicts the suggested extent of the separate masonry block and concrete walls.

Ideally portions of the ten-foot-wide travel path would have a maximum amount of surface area composed of resin-bound decomposed granite. For example five feet of concrete sidewalk would be located side-by-side with a five-foot-wide band of this more natural-like surface. The surface would not have to be permeable. Lighting should be carefully designed on the bridge and path to create the darkest conditions permissible on the southern side of the travel path.

If any portion of this proposed travel lane can be constructed to be less load bearing than a typical sidewalk-street combination, we urge the exploration of this idea to reduced costs. The DEIR analyses should address this option thoroughly. Because the freeway slopes considerably down (away) from this Conservancy-proposed five foot bridge widening, we do not believe height clearance limitations are a constraint. If the proposed travel path had less weight bearing restrictions it possibly could have a thinner profile.

Fencing and Eastern Transition into Conservancy Parkland

The above described wall should seamlessly connect to the above described type of wire mesh fencing along Skirball Center Drive. The fence should follow Skirball Center Drive

Mr. Ron Kosinski
Interstate 405 HOV Lane Over the Sepulveda Pass Wildlife Crossings
May 3, 2006
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for the length of the proposed new right-of-way shown on Conservancy land and potentially continue another 100 feet northward on Conservancy property (beyond proposed Caltrans right-of-way). A well marked gap in this mesh fence is necessary to maintain the existing pedestrian movement capability between the bridge, the park and ride lot and the Conservancy Skirball Center Drive Trailhead. Under separate cover we will send a color annotated diagram based on the plans provided to our staff that depicts the suggested extent of this fencing.

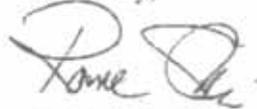
Wildlife use of the bridge will increase if the interface between the above described pedestrian and wildlife travel path and vegetated fill slopes to the east is broadened to the greatest extent possible. To partially accomplish widening, or funnel design, the immediate transition point between the bridge structure and the fill slope surface should be flared. That flared area must be located in the plan view apex formed by the outer edge (shown proposed retaining wall) of the proposed northbound off-ramp and Skirball Center Drive. The actual southeast corner of the bridge structure must flared southward to accomplish this important improvement.

These types of wildlife crossing are constructed all over the world and in at least five countries in Europe. The maintenance of unique wildlife populations in the Santa Monica Mountains National Recreation Area and the largest City-owned park is a major public benefit.

In our last site visit, the Caltrans engineers repeatedly stated design limitations based on existing standard regulations. We urge Caltrans to be creative and produce a cost effective design that enhances wildlife movement and meets all necessary safety requirements. Standard codes should not thwart the implementation of a regionally significant mitigation component to this large transportation project.

Please direct any questions or future correspondence to Paul Edelman at (310) 589-3200 ext. 128.

Sincerely,



RORIE SKEI
Chief Deputy Director

SANTA MONICA MOUNTAINS CONSERVANCY

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May 22, 2006

Mr. Ron Kosinski
Deputy District Director
Department of Transportation, District 7
100 South Main Street
Los Angeles, California 90012-3712



**Additional Pre-Draft DEIS-DEIR Comments
Interstate 405 HOV Lane Over the Sepulveda Pass (I-10 to US-101)**

Dear Mr. Kosinski:

The Santa Monica Mountains Conservancy sent a letter dated May 3, 2006 to your attention regarding the above-referenced Caltrans project in the Sepulveda Pass. This letter addresses additional issues of concern to this agency.

Both the proposed new Getty Center Drive northbound on ramp and the Skirball Center Drive bridge reconstruction projects would require the permanent loss of Conservancy-owned parkland and permanent indirect impacts to adjacent parkland. As stated by Caltrans staff, some of these impacts will be addressed in a Federal Section 4(f) evaluation process. In addition, the Draft Environmental Impact Statement and Draft Environmental Impact Report (DEIS-DEIR) will analyze these impacts.

The DEIS-DEIR should also address the process and timing by which Caltrans would attempt to get control of the subject land now held the Santa Monica Mountains Conservancy -State of California.

Getty View Trailhead and Proposed North-bound On-ramp

We recommend that the alternatives section in the DEIS-DEIR include projects in which the Conservancy land is not available for the proposed northbound Getty Center Drive on ramp located north of Sepulveda Boulevard. That recommendation is partially driven by the obligations of the Conservancy and the Mountains Recreation and Conservation Authority (MRCA) to both the State and the Los Angeles County Regional Park and Open Space District to maintain the Getty View Trailhead in that location. That trailhead project was funded both by an EEMP grant administered by Caltrans and by Proposition A funds administered by the Los Angeles County Regional Park and Open Space District. The MRCA would be obligated to reimburse the Open Space District if the improvements

are removed. The proposed on ramp would obliterate the trailhead parking lot and more than half of the improved area. The DEIS-DEIR should thoroughly address the constraints and opportunities of moving this unique recreational facility to the southeast.

Justification for Enhanced Wildlife Crossing Structures and Capability

The proposed project will increase the width of the freeway a minimum of twelve feet through all sections of the Sepulveda Pass where wildlife crossing is feasible. As a result, the length of any existing wildlife crossing route will be longer, which is a detriment. Lighting, noise and other freeway related infrastructure will also produce a permanent expanded disturbance footprint into habitat all along the east side of the freeway. In the case of the Skirball Center Bridge, vehicle traffic capacity, and undoubtedly traffic volume, will further substantially diminish wildlife crossing capacity over that structure. In the case of the Getty Center on-ramp, the proposed project would add a major new constraint to a habitat linkage that already requires a surface crossing of Sepulveda Boulevard and a long diagonal crossing under the freeway. The proposed project cumulatively degrades both habitat linkages.

The commensurate mitigation for this potentially unavoidable significant impact must result in equal or better, permanent wildlife movement capacity across the 405 Freeway in the Santa Monica Mountains and a system that will endure future traffic system improvements. The proposed five-foot-wide sidewalk with no walls to buffer either street or freeway traffic noise on the Skirball Center Bridge does nothing to compensate for the above described set of project-induced adverse impacts.

Our May 3, 2006 letter calls for a ten-foot-wide combination sidewalk and wildlife crossing travel path with buffer walls and entry flares because that is the minimum combination of improvements that can consistently deliver an adequate number of wildlife crossings according to our senior biologist. These recommended specifications must take into account increased population density in the region and increased travel volumes over the Sepulveda Pass over the next 100 years. Both will continually erode wildlife crossing potential over time. Hence, a solution today must be designed to deliver an adequate level of function for decades to justify the public expense.

No empirical study has measured the increased wildlife movement potential of a ten versus five-foot-wide, traffic lane-adjacent side walk across one of the most busy freeways in the world. The professional judgement of biologists must be employed to determine the scale and configuration of a crossing structure that will maintain adequate wildlife crossing capability over time. It may be that an eight-foot-wide Skirball Center Bridge travel path with reduced buffer walls and entry flares may maintain a bobcat population east of the freeway for 20 years if no further transportation facilities are constructed in the Sepulveda

Pass. However, that reduction in the Conservancy's proposed dimensions and configuration may prohibit adequate deer movement. We urge Caltrans to design this bridge with adequate wildlife crossing capability rather than to look towards the lack of site specific empirical data to support a design with a minimum, to near nothing added, as far as mitigation weight.

The range of other evidence, combined with the public resources at stake, frame a picture that militates the importance of the Conservancy's requested mitigation. For example, Roth (2001) documents the pressure of a broad range of wildlife species to cross the freeway at the Sepulveda Boulevard, Bel Air Crest, Skirball Center and Mulholland Drive freeway crossing structures. A resurgence of bobcat sightings and numerous mountain lion sightings east of the 405 Freeway in the last five years further illuminate both the value and validity of maintaining such crossing structures.

Species crossings do not necessarily need to be frequent to maintain populations on the east side of the freeway. Most studies of wildlife crossing freeways have short sample periods with a low probability of capturing the number of animal travel events necessary to maintain minimum population viabilities. A good example was the recent Caltrans sponsored study along the 118 Freeway. No one is sure which of the existing crossings are best facilitating the movement of each species. No one is sure of future land uses either. However, it is sure that the proposed project will result in a potential unavoidable significant impact to wildlife movement across the 405 Freeway and as far east as Griffith Park. Because the Skirball Center Drive bridge is the shortest crossing distance that does not rely on the openness of any private land (Bel Air Crest), does not include any underpasses known to intimidate deer, and offers the only opportunity to provide a high quality dedicated safe travel path for wildlife, its mitigation potential should be maximized within reason.

Caltrans staff has presented less resistance to our staff about a potential high quality wildlife crossing under the proposed Getty Center Drive on-ramp through both the trailhead parking area and a unique sycamore riparian community that is a last vestige of the former Sepulveda Canyon riparian ecosystem. Assuming our staff's field input is accommodated into both the Caltrans preferred project and its DEIS-DEIR alternatives, we suspect that the foundations of a reasonable crossing system at this site will be presented for public review. Nonetheless, it cannot adequately mitigate the diminution of wildlife crossing ability where Sepulveda Boulevard crosses under the freeway. This provides additional justification to maximize the mitigation measures at the Skirball Center Drive bridge.

Neither the physical or biological constraints of the proposed project area nor the proposed wildlife crossing mitigation measures are simple or standard. We urge Caltrans to forge

Mr. Ron Kosinski
Interstate 405 HOV Lane Pre-DEIS-DEIR Comments
May 22, 2006
Page 4

new ground on this important project and to build in the appropriate mitigation as dictated by science as opposed to standard construction regulations. As a society we get only one shot at this important juncture in the evolution of Southern California. We look forward to a ceremony dedicating a dedicated wildlife travel lane across the 405 Freeway, a bridge to the future that sweeps aside all mistakes of the past.

We respectfully request that all future documentation be sent to the attention of Paul Edelman, Deputy Director of Natural Resources and Planning, at the above address and that questions be directed to his attention at (310) 589-3200 ext. 128. We also request that this letter be included in the DEIS-DEIR.

Sincerely,



ELIZABETH A. CHEADLE
Chairperson

Ms. Elizabeth A. Cheadle
June 12, 2006
Page 2 of 2

On page 3 of the May 22 letter, you state that the Mulholland Drive overcrossing has pressure for wildlife crossings. Our research and interpretation of Roth's thesis have indicated that there are three key intersections where wildlife movement is the most promising in the Sepulveda Pass across I-405: Sepulveda Underpass at Getty View Trailhead, Bel Air Crest Underpass and Skirball Overpass. Consultation with Mr. Edelman has also confirmed that our efforts be focused in these areas to best preserve wildlife connectivity in the region.

When our staff met with Mr. Edelman in the field on December 8, 2005 and April 26, 2006, it was our understanding that the project plans and potential mitigation options at Getty View Trailhead, Bel Air Crest and Skirball Center Drive were discussed. Our staff has been working to incorporate his suggestions resulting from those meetings. If any opinions or suggestions have changed since those meetings, please notify us so we can work with your staff to address the impacts while keeping to our tight timeframe. We do appreciate your cooperation in this matter.

In order for us to incorporate your suggestions into our draft environmental document at this stage, we would appreciate your responses to our questions and diagrams by July 10, 2006. We believe it is best to resolve issues as early as possible in the environmental planning process. Thank you in advance for your assistance with these items.

Lastly, we would like to apologize for missing your agency during the earlier planning stages. We have added your name to our mailing list and you will receive future notifications of the project as they become available. We look forward to continuing to work with you and your staff on these issues.

Sincerely,



RON KOSINSKI
Deputy District Director

cc: Aziz Elattar
Barbara Marquez
Carlos Montez

DEPARTMENT OF TRANSPORTATIONDISTRICT 7, 120 SOUTH SPRING ST.
LOS ANGELES, CA 90012-3606

March 11, 2003

Los Angeles City Cultural Heritage Commission
422 S. Spring Street, 10th Floor
Los Angeles, CA 90012

Re: Highway Project on Route 405 northbound from Interstate 10 to Ventura Boulevard in the City of Los Angeles

To Whom It May Concern,

Caltrans District 7 proposes to add a High Occupancy Vehicle (HOV) lane to the northbound Route 405 from 0.5 km south of I-10 to Ventura Boulevard. This HOV lane is proposed to provide continuity for the northbound HOV lane on the entire Route 405 corridor in Los Angeles County. Right of way acquisition will be required along the southbound Route 405 roughly from Wilshire Boulevard to Sunset Boulevard, as well as small sliver takes in various other locations.

Caltrans' Division of Environmental Planning is currently conducting an evaluation of the environmental impacts, including effects on historic properties located within the project's area of potential effects (APE). In the course of conducting this study, we must coordinate with local historical organizations to ascertain whether there is a record of any building, district, site or landscape of national or local significance within the project area. Are you, or is your organization, aware of any such properties in the general area highlighted on the enclosed APE map or a 0.5 mil radius of the APE?

If any such properties exist within the project area, please indicate in writing the locations and whatever information you are able to transmit to us on the subject to the above address. As part of our study, we will be conducting research on the dates of construction, and architectural and historic significance within the immediate area of the proposed project.

Thank you in advance for taking the time to review our request. If you have any questions regarding the project area or this request, please feel free to contact me at 213.897.4095.

Sincerely,

A handwritten signature in black ink, appearing to read "Kelly Ewing".

Kelly Ewing
Associate Architectural Historian
Office of Environmental Planning
District 7, Los Angeles
California Department of Transportation

Enclosure

DEPARTMENT OF TRANSPORTATION
DISTRICT 7, 120 SOUTH SPRING ST.
LOS ANGELES, CA 90012-3606



March 11, 2003

Robert Dorame
P. O. Box 490
Bellflower, CA 90707

Re: Highway Project on Route 405 northbound from Interstate 10 to Ventura Boulevard in the City of Los Angeles

Dear Mr. Dorame,

Caltrans District 7 proposes to add a High Occupancy Vehicle (HOV) lane to the northbound Route 405 from 0.5 km south of I-10 to Ventura Boulevard. This HOV lane is proposed to provide continuity for the northbound HOV lane on the entire Route 405 corridor in Los Angeles County. Right of way acquisition will be required along the southbound Route 405 roughly from Wilshire Boulevard to Sunset Boulevard, as well as small sliver takes in various other locations.

Caltrans' Division of Environmental Planning is currently conducting an evaluation of the environmental impacts, including effects on cultural resources located within the project's area of potential effects (APE). In the course of conducting this study, Caltrans wishes to coordinate with Native American groups to ascertain whether there is a record of any sensitive traditional cultural properties or archaeological sites within the project area. Are you, or is your organization aware of any such properties in the general area highlighted on the enclosed APE map?

If any such resources exist within the project area, please let us know in writing (if possible and without violating any sacred trust) the locations and whatever information you are able to transmit to us on the subject as soon as convenient.

Thank you in advance for taking the time to review our request. If you have any questions regarding the project area or this request, please feel free to contact me at 213.897.4095.

Sincerely,

A handwritten signature in cursive script, appearing to read "Kelly Ewing".

Kelly Ewing
Associate Architectural Historian
Division of Environmental Planning
District 7, Los Angeles
California Department of Transportation

Enclosure

DEPARTMENT OF TRANSPORTATION

DISTRICT 7, 120 SOUTH SPRING ST.
LOS ANGELES, CA 90012-3606

March 11, 2003

Gabrielino Tongva Nation
501 Santa Monica Blvd., Suite 500
Santa Monica, CA 90401-2415

Re: Highway Project on Route 405 northbound from Interstate 10 to Ventura Boulevard in the City of Los Angeles

To Whom It May Concern,

Caltrans District 7 proposes to add a High Occupancy Vehicle (HOV) lane to the northbound Route 405 from 0.5 km south of I-10 to Ventura Boulevard. This HOV lane is proposed to provide continuity for the northbound HOV lane on the entire Route 405 corridor in Los Angeles County. Right of way acquisition will be required along the southbound Route 405 roughly from Wilshire Boulevard to Sunset Boulevard, as well as small sliver takes in various other locations.

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If any such resources exist within the project area, please let us know in writing (if possible and without violating any sacred trust) the locations and whatever information you are able to transmit to us on the subject as soon as convenient.

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Sincerely,

A handwritten signature in black ink, appearing to read "Kelly Ewing".

Kelly Ewing
Associate Architectural Historian
Division of Environmental Planning
District 7, Los Angeles
California Department of Transportation

Enclosure

DEPARTMENT OF TRANSPORTATION

DISTRICT 7, 120 SOUTH SPRING ST.
LOS ANGELES, CA 90012-3606

March 11, 2003

Rudy Ortega
Gabrielino/Fernandino
11640 Rincon Avenue
Sylmar, CA 91324-5455

Re: Highway Project on Route 405 northbound from Interstate 10 to Ventura Boulevard in the City of Los Angeles

Dr. Mr. Ortega,

Caltrans District 7 proposes to add a High Occupancy Vehicle (HOV) lane to the northbound Route 405 from 0.5 km south of I-10 to Ventura Boulevard. This HOV lane is proposed to provide continuity for the northbound HOV lane on the entire Route 405 corridor in Los Angeles County. Right of way acquisition will be required along the southbound Route 405 roughly from Wilshire Boulevard to Sunset Boulevard, as well as small sliver takes in various other locations.

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If any such resources exist within the project area, please let us know in writing (if possible and without violating any sacred trust) the locations and whatever information you are able to transmit to us on the subject as soon as convenient.

Thank you in advance for taking the time to review our request. If you have any questions regarding the project area or this request, please feel free to contact me at 213.897.4095.

Sincerely,

A handwritten signature in cursive script that reads "Kelly Ewing".

Kelly Ewing
Associate Architectural Historian
Division of Environmental Planning
District 7, Los Angeles
California Department of Transportation

Enclosure

DEPARTMENT OF TRANSPORTATION

OFFICE OF THE DIRECTOR
1120 N STREET
P. O. BOX 942873
SACRAMENTO, CA 94273-0001
PHONE (916) 654-5266
FAX (916) 654-6608
TTY (916) 653-4086



*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.

A handwritten signature in black ink that reads "Will Kempton".

WILL KEMPTON
Director

APPENDIX D: SUMMARY OF RELOCATION BENEFITS AVAILABLE TO DISPLACED PARTIES

D-1 RELOCATION ASSISTANCE ADVISORY SERVICES

The California Department of Transportation 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 displacees in obtaining replacement housing by providing current and continuing information on the availability and prices of houses for sale and rental units that are comparable, "decent, safe and sanitary." Non-residential displacees will receive information on comparable properties for lease or purchase. For information on business, farm and non-profit organization relocation, refer to Section D-3, "Business and Farm Relocation Assistance Program."

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, comparable replacement dwellings will be offered to displacees that are fair housing open to all persons regardless of race, color, religion, sex, national origin, and 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 appropriate services being offered by public and private agencies in the area.

D-2 RESIDENTIAL RELOCATION PAYMENTS PROGRAM

The Relocation Payments Program will help eligible residential occupants by paying certain costs and expenses. These costs are limited to those necessary for, or incidental to, purchasing or renting the replacement dwelling and actual reasonable moving expenses to a new location within 50 miles of the displacees' property. Any actual moving costs in excess of the 50-mile limit will be the responsibility of the displacees. The Residential Relocation Program is summarized below:

Moving Costs

Any displaced person, who was lawfully in occupancy of the acquired property regardless of the length of occupancy in the acquired property, will be eligible for reimbursement of the moving costs. Displacees will receive either the actual reasonable costs involved in moving themselves and personal property up to a maximum of 50 miles, or a fixed payment based on a fixed moving cost schedule which is determined by the number of furnished or unfurnished rooms in the displacement dwelling.

Purchase Supplement

In addition to moving and related expense payments, eligible homeowners may be entitled to payments for increased costs of replacement housing.

Homeowners who have owned and occupied their properties for 180 days prior to the date of the first written offer to purchase the property, may qualify to receive a price differential payment and may qualify to receive reimbursement for certain nonrecurring costs incidental to the purchase of the replacement property. An interest differential payment is also available if the interest rate for the loan on the replacement dwelling is higher than the loan rate on the displacement dwelling, subject to certain limitations on reimbursement based upon the replacement property interest rate. Also, the interest differential must be based upon the lower of either: 1) the loan on the displacement property, or 2) the loan on the replacement property. The maximum combination of these supplemental payments that the owner-occupants can receive is \$22,500. If the total entitlement (without the moving payments) is in excess of \$22,500, the Last Resort Housing Program will be applied. Refer to synopsis of Last Resort Housing below.

Rental Supplement

Tenants who have occupied the property to be acquired by Caltrans for 90 days or more and owner-occupants of 90 to 179 days *prior to the date of the first written offer to purchase* may qualify to receive a rental differential payment. This payment is made when the department determines that the cost to rent a comparable "decent, safe and sanitary" replacement dwelling would be more than the present rent of the acquired dwelling. As an alternative, the tenant may qualify for a down payment benefit designed to assist in the purchase of a replacement property and the payment of certain costs incidental to the purchase, subject to certain limitations noted under the "Down Payment" section below. The maximum payment to any tenant of 90 days or more and any owner-occupant of 90 to 179 days, in addition to moving expenses, will be \$5,250. If the total entitlement for rental supplement exceeds \$5,250, the Last Resort Housing Program will be used. Please refer to Last Resort Housing clarification below.

The displaced person must rent and occupy a "decent, safe and sanitary" replacement dwelling within one year from the date the department takes legal possession of the property, or from the date the displacee vacates the department-acquired property, whichever is later.

Down Payment

The down payment option has been designed to aid owner-occupants of 90 to 179 days and tenants with no less than 90 days of continuous occupancy prior to the Department's first written offer. The down payment and incidental expenses cannot exceed the maximum payment of \$5,250. The one year eligibility period during which to purchase and occupy a "decent, safe and sanitary" replacement dwelling will apply.

Last Resort Housing

Federal regulations (49 CFR 25) contain the policy and procedure for implementing the Last Resort Housing Program on federal aid projects. Caltrans, in order to maintain uniformity in the program, has also adopted these federal guidelines on non-federal-aid projects. Last Resort Housing benefits are, except for the amounts of payments and the methods in making them, the same as those benefits for standard relocation as explained above. Last Resort Housing has been designed primarily to cover situations where available comparable replacement housing, or when their anticipated replacement housing payments exceed the \$5,250 and \$22,500 limits of standard relocation procedures. In certain exceptional situations, last resort housing may also be used for tenants of less than 90 days.

After the first written offer to acquire the property has been made, the Department will, within a reasonable length of time, personally contact the displacees to gather important information relating to: preferences in areas of relocation; the number of people to be displaced and the distribution of adults and children (according to age and gender); location of schools and employment; special arrangements necessary to accommodate disabled family members; and the financial ability to relocate to a comparable replacement dwelling which will house all members of the family decently.

The above explanation is general in nature and is not intended to be a complete explanation of relocation regulations. Any questions concerning relocation should be addressed to Caltrans. Any persons to be displaced will be assigned to a relocation advisor, who will work closely with each displaced household in order to see that all payments and benefits are fully utilized, and that all regulations are observed, thereby avoiding the possibility of displacees jeopardizing or forfeiting any of their benefits or payments.

D-3 BUSINESS AND FARM RELOCATION ASSISTANCE PROGRAM

The Business and Farm Relocation Program provides for aid in locating suitable replacement property and reimbursement for certain costs involved in relocation. The Relocation Advisory Assistance Program will provide current lists of properties offered for sale or rent, suitable for specific relocation needs.

There are different types of payments available to businesses, farms and non-profit organizations. These include: moving expenses, which consist of actual reasonable costs (as listed) for:

- The relocation of inventory, machinery, office equipment, and similar business-related personal property; dismantling, disconnecting, crating, packing, loading, insuring, transporting, unloading, unpacking, and reconnecting personal property.

- Loss of tangible personal property provides payment to relocate for "actual direct" losses of personal property that the owner elects not to move.
- Expenses related to searching for a new business site can be reimbursed up to \$1,000 for actual reasonable cost incurred.
- Reestablishment expenses relating to the new business operation.

Payment "in lieu" of moving expense is available to businesses which are expected to suffer a substantial loss of existing patronage as a result of the displacement, or if certain other requirements such as inability to find a suitable relocation site are met. This payment is an amount equal to the average annual net earnings for the last two taxable years prior to relocation. Such payment may not be less than \$1,000 or no more than \$20,000.

D-4 ADDITIONAL INFORMATION

Reimbursement for moving costs and replacement housing payments are not considered income for the purpose of the Internal Revenue Code of 1954, or sources for the purpose of determining the extent of eligibility of the displacees for assistance under the Social Security Act, local Section 8 housing programs, or other federal assistance programs.

Persons who are determined to be eligible for relocation payments, and 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 Caltrans, or believes that the payments made are inadequate, may appeal for a special hearing of the complaint. No legal assistance is required. Information about the appeal procedure is available from Caltrans 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.

**OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION**

P.O. BOX 942896
SACRAMENTO, CA 94296-0001
(916) 653-6624 Fax (916) 653-9824
calshpo@ohp.parks.ca.gov
www.ohp.parks.ca.gov



October 18, 2006

Reply To: FHWA060531K

Gene K. Fong, Division Administrator
Federal Highway Administration
650 Capitol Mall, Suite 4-100
Sacramento, CA 95814

Re: Finding of Effect for the Proposed I-405 Northbound HOV Lane Widening Project from 0.5 km south of I-10 to Ventura Boulevard, Los Angeles, CA

Dear Mr. Iverson:

Thank you for consulting with me about the subject undertaking in accordance with the *Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California (PA)*.

The California Department of Transportation (Department) is requesting my concurrence, pursuant to Stipulation X.C.1. of the PA, that the project as proposed will have an adverse effect on historic properties, specifically the Mulholland Drive Overcrossing (Bridge #53-0739), a property previously determined eligible for the National Register of Historic Places. Based on my review of the submitted documentation, I concur.

Thank you for considering historic properties during project planning. If you have any questions, please contact Natalie Lindquist of my staff at (916) 654-0631 or e-mail at nlindquist@parks.ca.gov.

Sincerely,

A handwritten signature in black ink that reads "Milford Wayne Donaldson" followed by a small circular mark.

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

Glossary of Technical Terms

ADT	Average Daily Traffic	LACMTA	Los Angeles County Metropolitan Transportation Authority
AADT	Annual Average Daily Traffic	LADOT	Los Angeles Department of Transportation
ACHP	Advisory Council on Historic Preservation	LARWQCB	Los Angeles Regional Water Quality Control Board
ACM	Asbestos Containing Materials	LBP	Lead Based Paint
ACOE	US Army Corps of Engineers	LOS	Level of Service
ADA	American with Disabilities Act	MCL	Mission Canyon Landfill
ADL	Aerially Deposited Lead	MFL	Mixed Flow Lanes
APE	Area of Potential Effect	MLD	Most Likely Descendant
AQ	Air Quality	MMP	Mitigation Monitoring Program
AQMP	Air Quality Management Plan	MMRR	Mitigation Monitoring and Reporting Record
ARB	Air Resources Board	MOA	Memorandum of Agreement
ASR	Archaeological Study Report	MOU	Memorandum of Understanding
BAC	Bel Air Crest	MSAT	Mobile Source Air Toxics
BMP	Best Management Practice	MTA	Metropolitan Transit Agency
BSA	Biological Study Area	MWD	Metropolitan Water District
CAA	Clean Air Act	NAAQS	National Ambient Air Quality Standards
CAAA	Clean Air Act Amendments	NAC	Noise Ambient Criteria
CARB	California Air Resources Board	NAHC	Native American Heritage Commission
CCR	California Code of Regulations	NATA	National Air Toxic Assessment
CC & R	Covenants, Conditions, and Restrictions	NESR	National Environmental Study Report
CDFG	California Department of Fish and Game	NHPA	National Historic Preservation Act
CEQ	Council on Environmental Quality	NLEV	National Low Emissions Vehicle
CEQA	California Environmental Quality Act	NOA	Naturally Occurring Asbestos
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act	NOAA	National Oceanic and Atmospheric Administration
CERFA	Community Environmental Response Facilitation Act	NOD	Notice of Determination (CEQA)
CESA	California Endangered Species Act	NOE	Notice of Exception (CEQA)
CFR	Code of Federal Regulations	NOI	Notice of Intent (NEPA)
CHP	California Highway Patrol	NOP	Notice of Preparation (CEQA)
CMP	Congestion Management Plan	NO_x	Nitrogen Oxide
CNDDB	California National Diversity Database	NPDES	National Pollutant Discharge Elimination System
CNPS	California Native Plant Society	NRHP	National Register of Historic Places
CO	Carbon Monoxide	O₃	Ozone
CT	California Department of Transportation (Caltrans)	OSHA	Occupation Safety and Health Act
CTC	California Transportation Committee	PA	Programmatic Agreement
CWA	Clean Water Act	PDT	Project Development Team
d.B.A.	decibels on the A scale	PE	Permanent Easement
DED	Draft Environmental Document	PeMS	Performance Measurement Systems
DEIR	Draft Environmental Impact Report	PM	Post Mile
DEIS	Draft Environmental Impact Statement	PM₁₀	Particulate Matter of 10 microns in diameter or smaller
DEP	Division of Environmental Planning (Caltrans)	POAQC	Project of Air Quality Concern
DOI	Department of the Interior	ppm	Parts per million
DOT	Department of Transportation	PR	Project Report
DTSC	Department of Toxic Substances Control	PS&E	Project Specifications and Estimates
EIR	Environmental Impact Report	PSI	Preliminary Site Investigation (HW)
EIS	Environmental Impact Statement	PSR	Project Study Report
EPA	Environmental Protection Agency	PSSR	Project Scope summary Report
ESA	Endangered Species Act	RAP	Relocation Assistance Program
FCAA	Federal Clean Air Act Amendments of 1990	RCRA	Resource Compensation Recovery Act
FED	Final Environmental Document	ROD	Record of Decision (Record of Decision)
FEIR	Final Environmental Impact Report	RTIP	Regional Transportation Improvement Plan
FEIS	Final Environmental Impact Statement	RTP	Regional Transportation Plan
FEMA	Federal Emergency Management Agency	RWQCB	Regional Water Quality Control Board
FESA	Federal Endangered Species Act	R/W	Right of Way
FHWA	Federal Highway Administration	SCAB	South Coast Air Basin
FTA	Federal Transit Administration	SCAG	Southern California Association of Governments
HOA	Home Owners Association	SCAQMD	South Coast Air Quality Management District
HOV	High Occupancy Vehicle	SCCIC	South Central Coastal Information Center
HP/A	Habitat Present/Absent	SCH	State Clearinghouse
HW	Hazardous Waste	SHOPP	State Highway Operation and Protection Program
IGR	Intergovernmental Review	SHPO	State Historic Preservation Officer
IRIS	Integrated Risk Information System	SI	Site Investigation
ISA	Initial Site Assessment	SR	State Route
KP	Kilometer Post	SWPPP	Storm Water Pollution Prevention Plan
LACDC	Los Angeles Community Development Commission		

TASAS	Traffic Accident Surveillance and Analysis System
TCE	Temporary Construction Easement
TCRP	Transportation Congestion Relief Program
TIP	Transportation Improvement Program
TMP	Traffic Management Plan
TNAP	Traffic Noise Analysis Protocol
TSCA	Toxic Substances Control Act
TSM	Transportation System Management
TWSC	Two Way Stop Control
USC	United States Code
USFWS	US Fish and Wildlife Service
USGS	United States Geological Services
VA	Value Analysis
VMT	Vehicle Miles Traveled
WEFZ	Whittier Elsinore Fault Zone

LA-405-KP 46.3/62.8 (PM 28.8/39.0)-EA 120300

ADDITION OF NORTHBOUND HOV LANE FROM 0.5 KM SOUTH OF I-10 TO VENTURA BOULEVARD

LEGEND:

 10-MINUTE NOISE MEASUREMENT SITE

 24-HOUR NOISE MEASUREMENT SITE

 MODELED NOISE SITE

 EXISTING SOUNDWALL

 PROPOSED SOUNDWALL

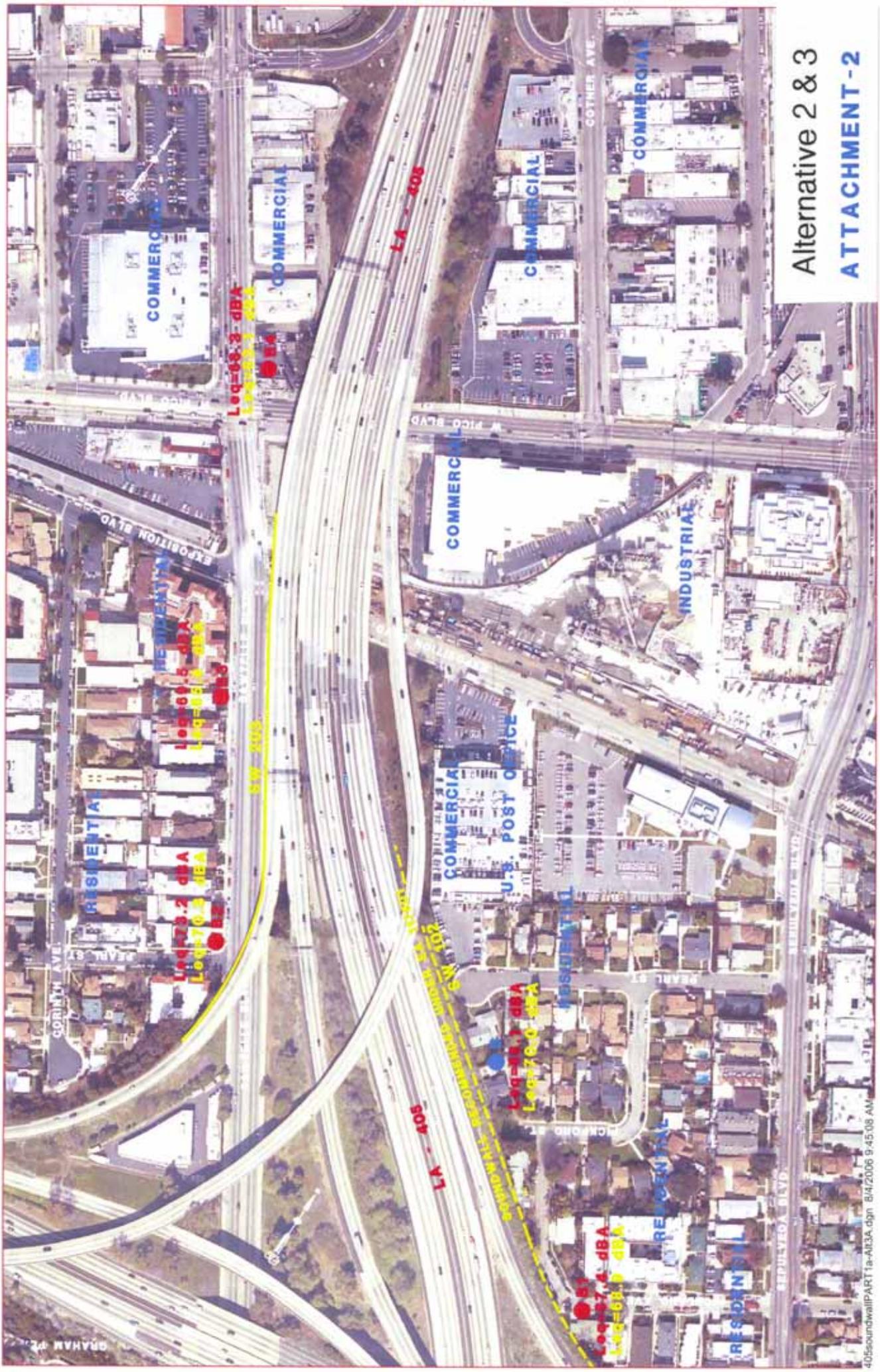
 PROPOSED SOUNDWALL UNDER ANOTHER PROJECT EA

EXISTING WORST-HOUR NOISE LEVELS ARE SHOWN IN COLOR **RED**

FUTURE WORST-HOUR NOISE LEVELS ARE SHOWN IN COLOR **YELLOW**



Alternative 2 & 3
ATTACHMENT - 1



Alternative 2 & 3
ATTACHMENT - 2



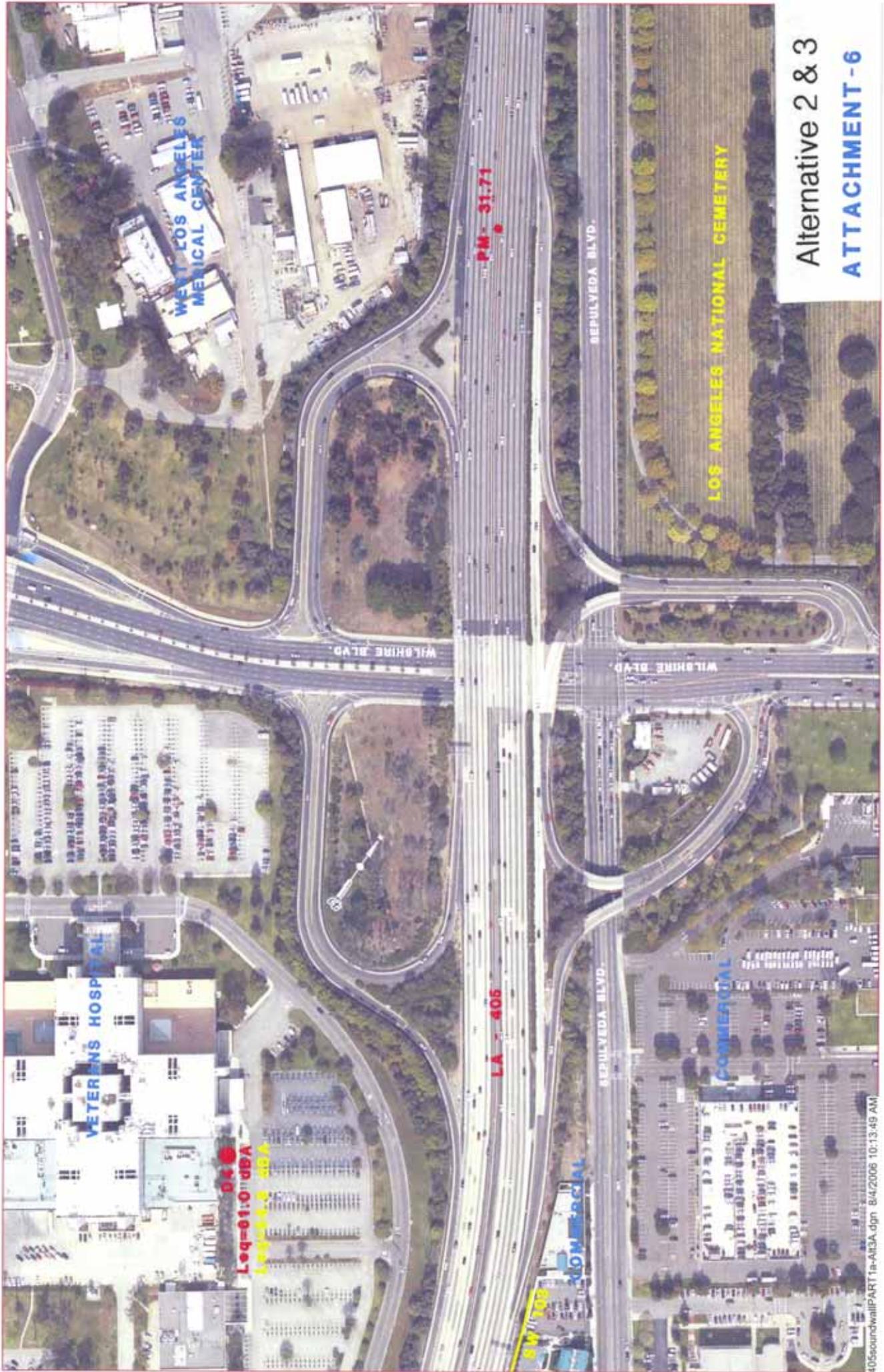
Alternative 2 & 3
ATTACHMENT -3



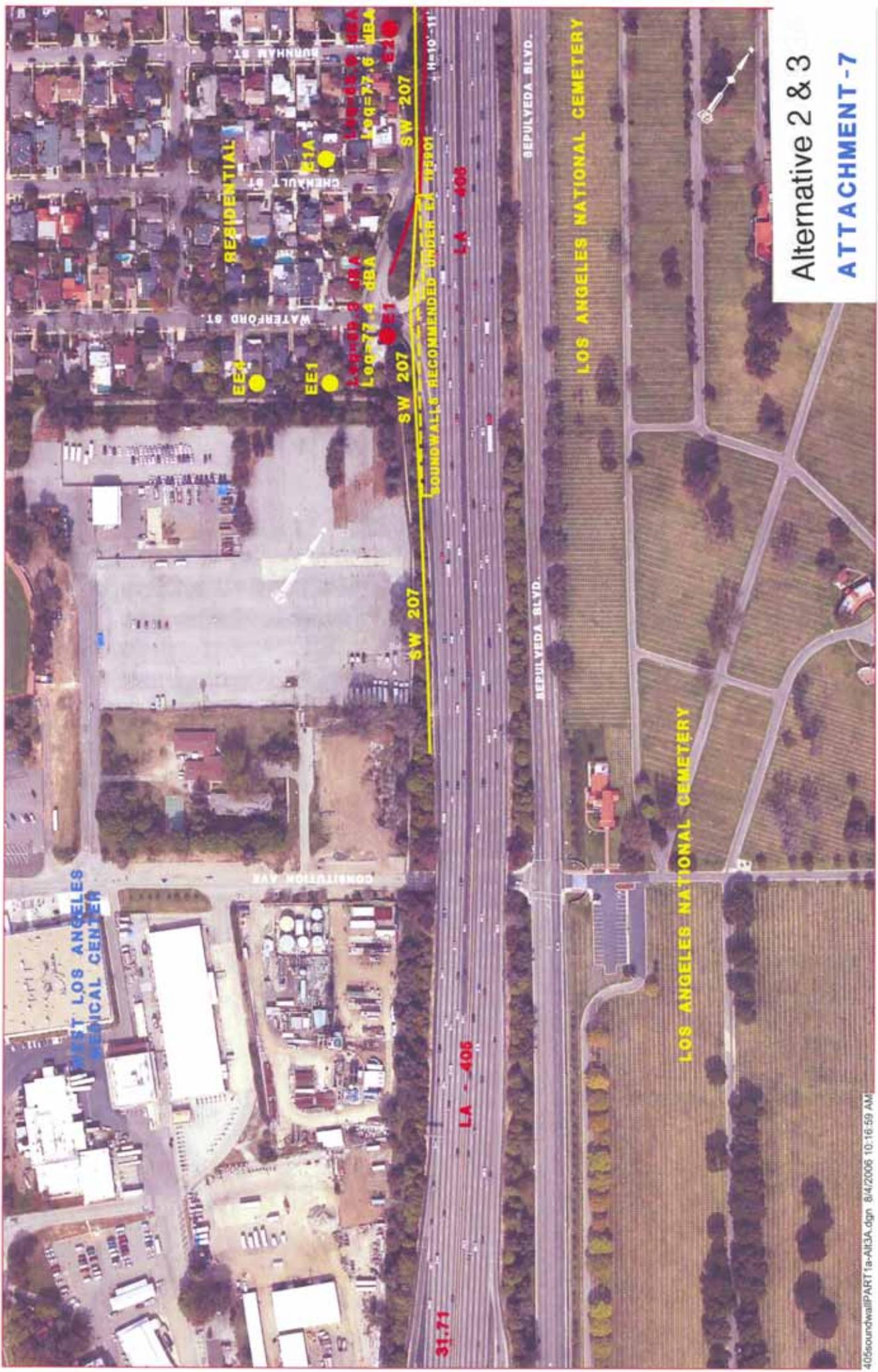
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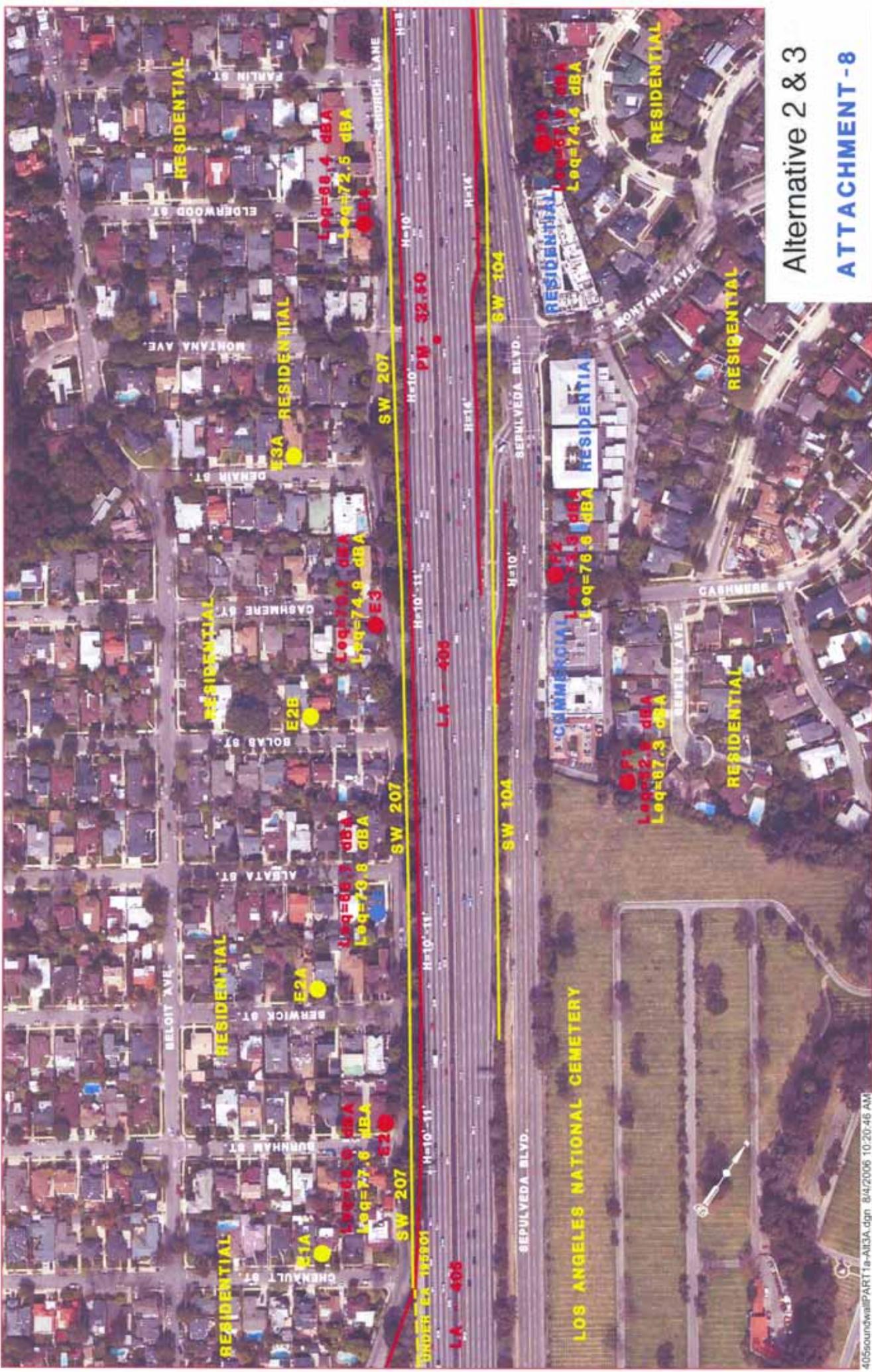
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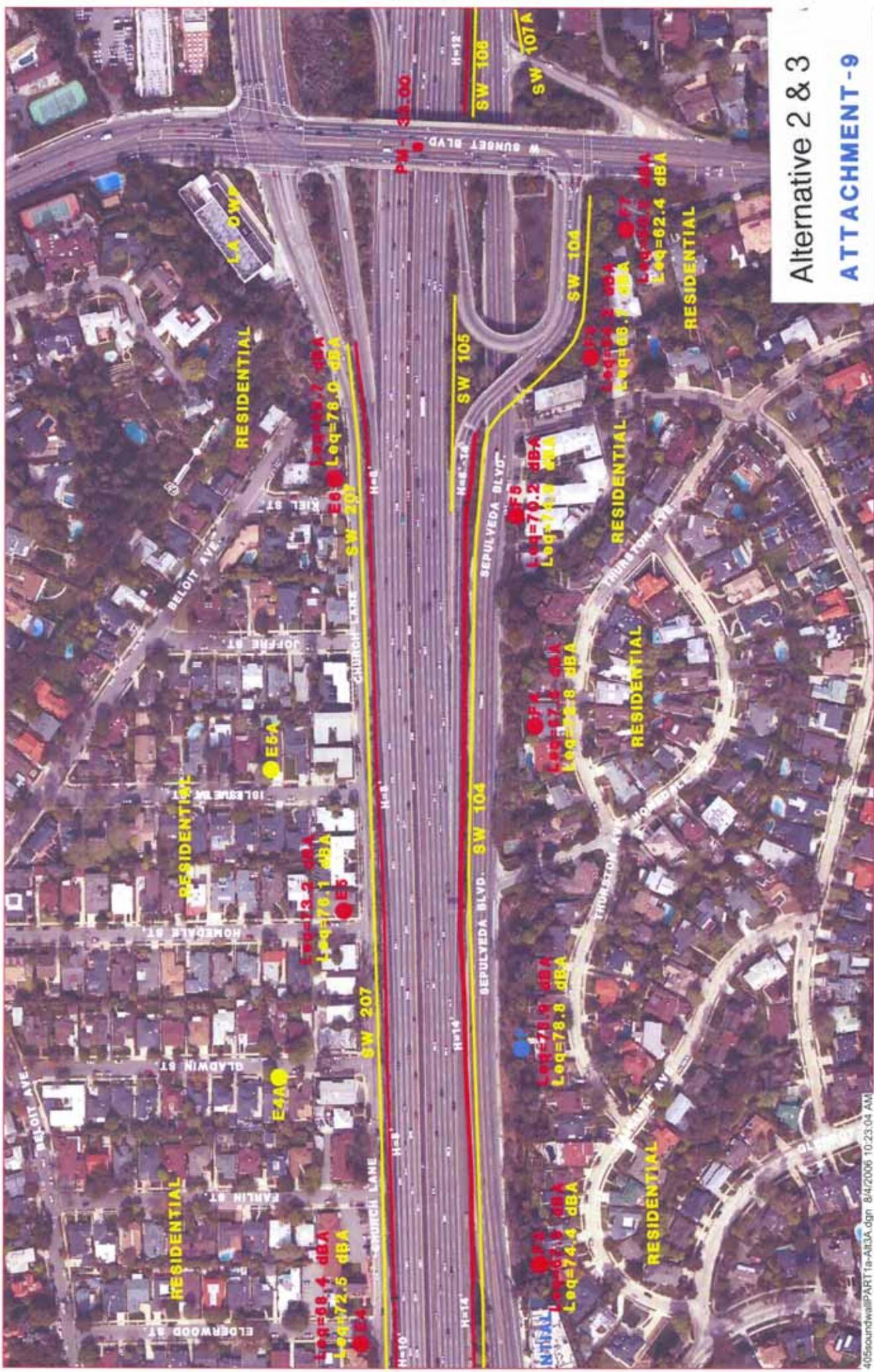
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ATTACHMENT - 6



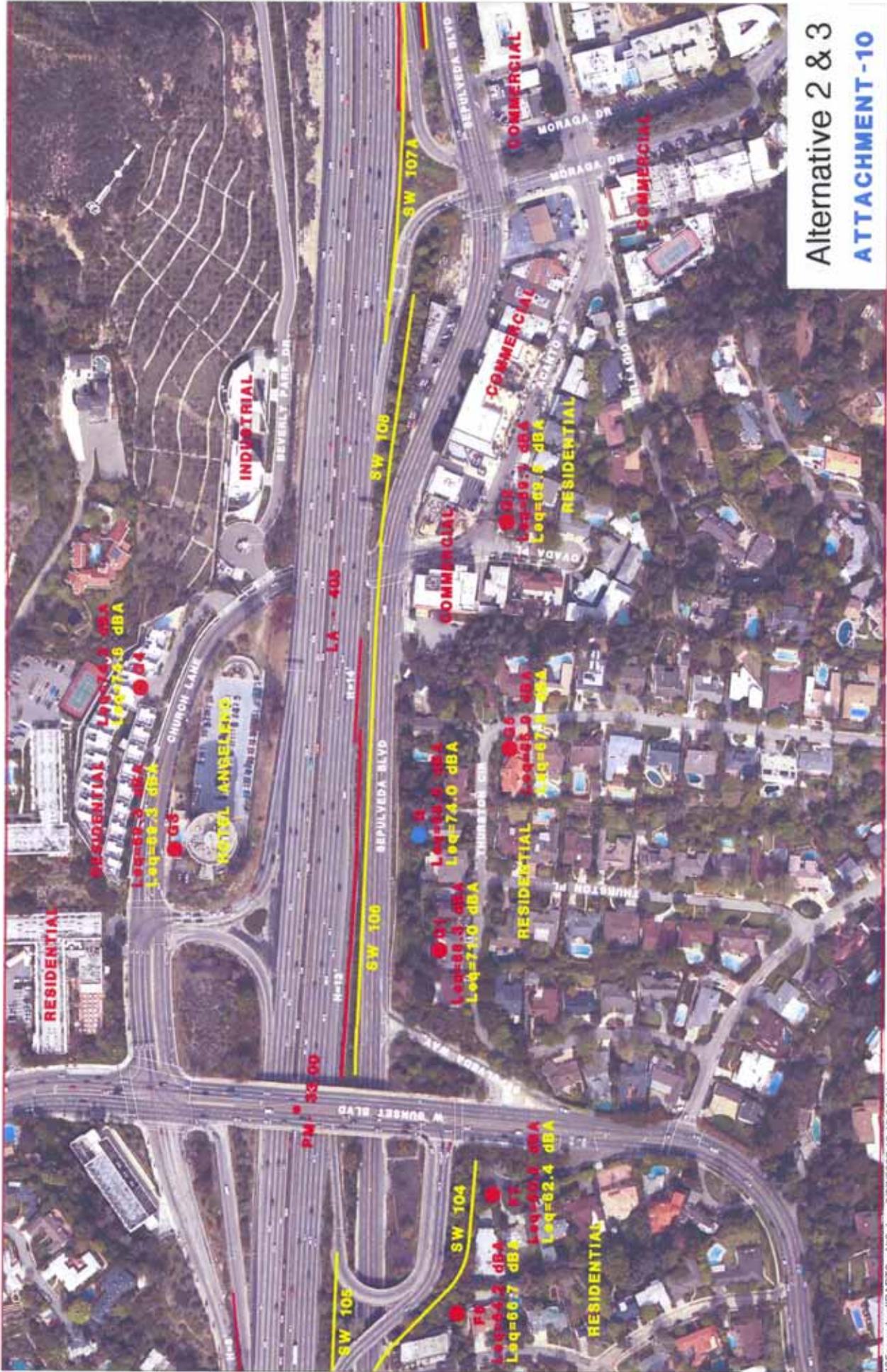
Alternative 2 & 3
ATTACHMENT - 7



Alternative 2 & 3
ATTACHMENT - 8



Alternative 2 & 3
ATTACHMENT-9



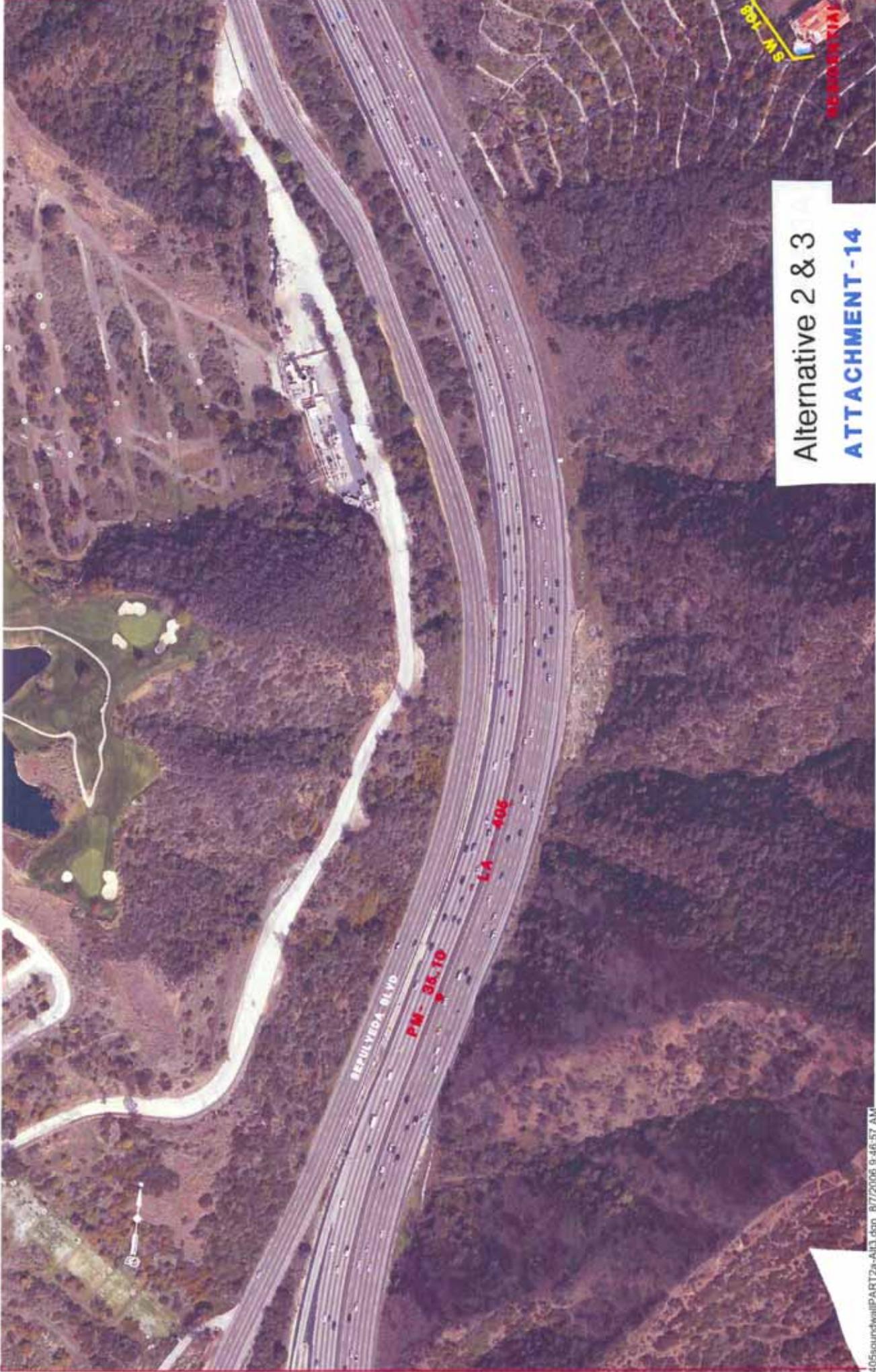
Alternative 2 & 3
ATTACHMENT-10



Alternative 2 & 3
ATTACHMENT -12



Alternative 2 & 3
ATTACHMENT -13



Alternative 2 & 3
ATTACHMENT -14



Alternative 2 & 3
ATTACHMENT-15



Alternative 2 & 3
ATTACHMENT -16



Alternative 2 & 3
ATTACHMENT-17



**MILKEN COMMUNITY
HIGH SCHOOL OF
STEPHEN WISE TEMPLE**
Leq=43.5 dBA
J2
Leq=69.9 dBA
Leq=71.4 dBA
J1

THE CURTIS SCHOOL
Leq=45.1 dBA
J98
J12A
Leq=64.2 dBA
Leq=64.2 dBA

Leq=55.0 dBA
J6
Leq=55.0 dBA

Leq=55.0 dBA
Leq=59.9 dBA
J4

RESIDENTIAL

UNIVERSITY OF JUDAISM

**Alternative 2 & 3
ATTACHMENT -18**



Alternative 2 & 3
ATTACHMENT -19

Right of Way Requirements for Each Alternative

Assessors Parcel Number (APN)	Address	City	Residential/Commercial	Alternative		
				2	3	
2280-001-022*	4160 Sepulveda Blvd.*	Los Angeles	Residential	Partial	Partial	
2280-001-023*	4168 Sepulveda Blvd.*	Los Angeles	Residential	Full	Full	
2280-001-024*	4200 Sepulveda Blvd.*	Los Angeles	Residential	Full	Full	
2280-001-025*	4210 Sepulveda Blvd.*	Los Angeles	Residential	Partial	Partial	
2280-002-022	15480 Del Gado Drive	Los Angeles	Residential	Part	Part	
2281-017-010	15460 Briarwood Drive	Los Angeles	Residential	Part	Part	
2281-020-001	15536 Briarwood Drive	Los Angeles	Residential	Part	Part	
2281-020-002	15528 Briarwood Drive	Los Angeles	Residential	Part	Part	
2281-020-003	15520 Briarwood Drive	Los Angeles	Residential	Part	Part	
2281-020-004	15514 Briarwood Drive	Los Angeles	Residential	Part	Part	
2281-020-005	15506 Briarwood Drive	Los Angeles	Residential	Part	Part	
2281-020-006	15498 Briarwood Drive	Los Angeles	Residential	Part	Part	
2281-020-008	15490 Briarwood Drive	Los Angeles	Residential	Part	Part	
2283-021-002	15367 Valley Vista Boulevard	Los Angeles	Residential	Full	Full	

*These parcels would be affected under the hook-ramp design option at Valley Vista Blvd.

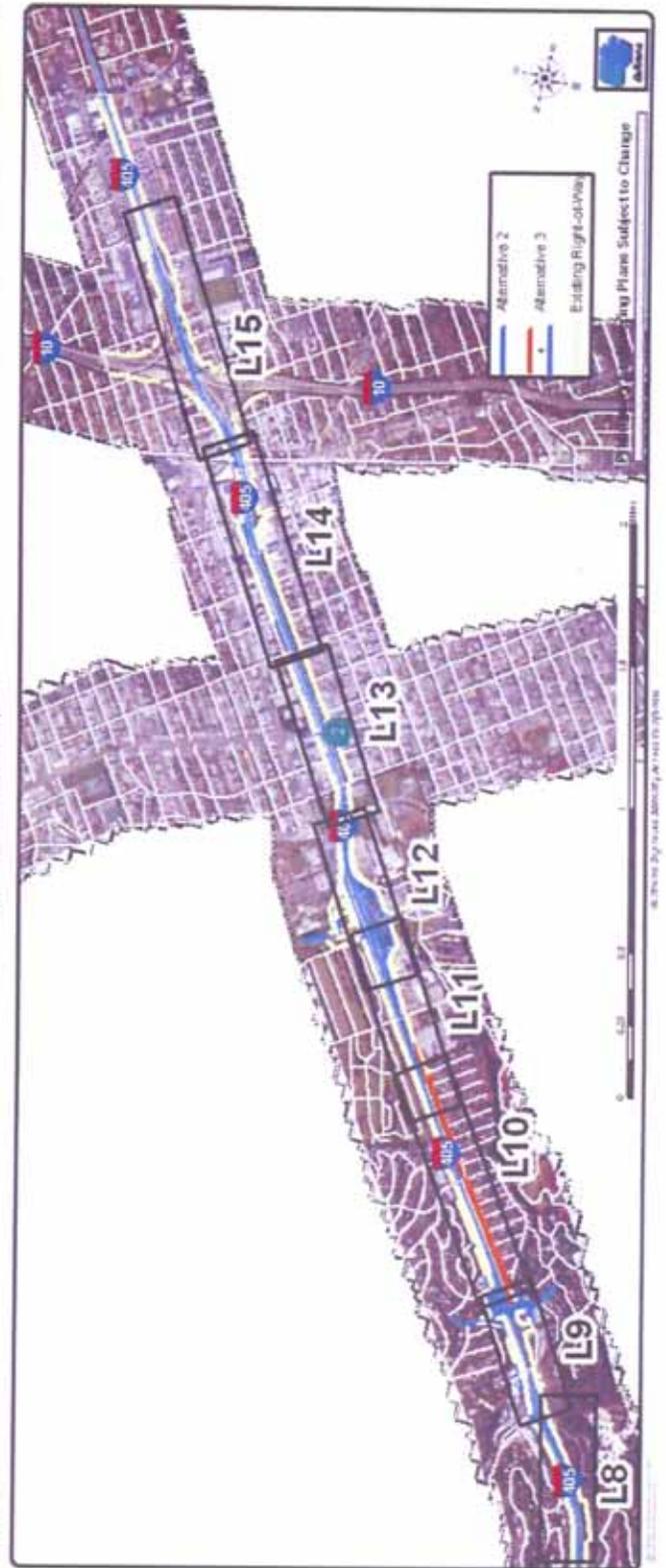
Assessors Parcel Number (APN)	Address	City	Residential/Commercial	Alternative	
				2	3
2283-021-009	15347 Sutton Street	Los Angeles	Residential	Full	Full
2283-021-010	4420 Sherman Oaks Circle	Los Angeles	Residential	Part	Part
2283-021-011	4426 Sherman Oaks Circle	Los Angeles	Residential	Full	Full
2283-021-012	15350 Sutton Street	Los Angeles	Residential	Full	Full
2283-022-016	4450 Sherman Oaks Circle	Los Angeles	Residential	Part	Part
2285-001-006	15368 Valley Vista Boulevard	Los Angeles	Residential	Full	Full
2285-001-007	15376 Valley Vista Boulevard	Los Angeles	Residential	Full	Full
4256-010-006	11122 Pico Boulevard	Los Angeles	Commercial	Part	Part
4256-010-011	11200 Pico Boulevard	Los Angeles	Commercial	Part	Part
4256-010-900	No Address Available	Los Angeles	Commercial	Part	Part
4324-017-001	1341 Sepulveda Boulevard	Los Angeles	Other	Part	Part
4324-017-903	No Address Available	Los Angeles	Other	Part	Part
4324-017-906	No Address Available	Los Angeles	Other	Part	Part
4363-027-901	No Address Available	Los Angeles	Other	Part	Part
4365-008-904	No Address Available	Los Angeles	Other	Part	Part
4365-009-900	No Address Available	Los Angeles	Other	Part	Part
4365-010-031	11332 Chenault Street	Los Angeles	Residential	None	Full
4365-013-007	11327 Chenault Street	Los Angeles	Residential	None	Full

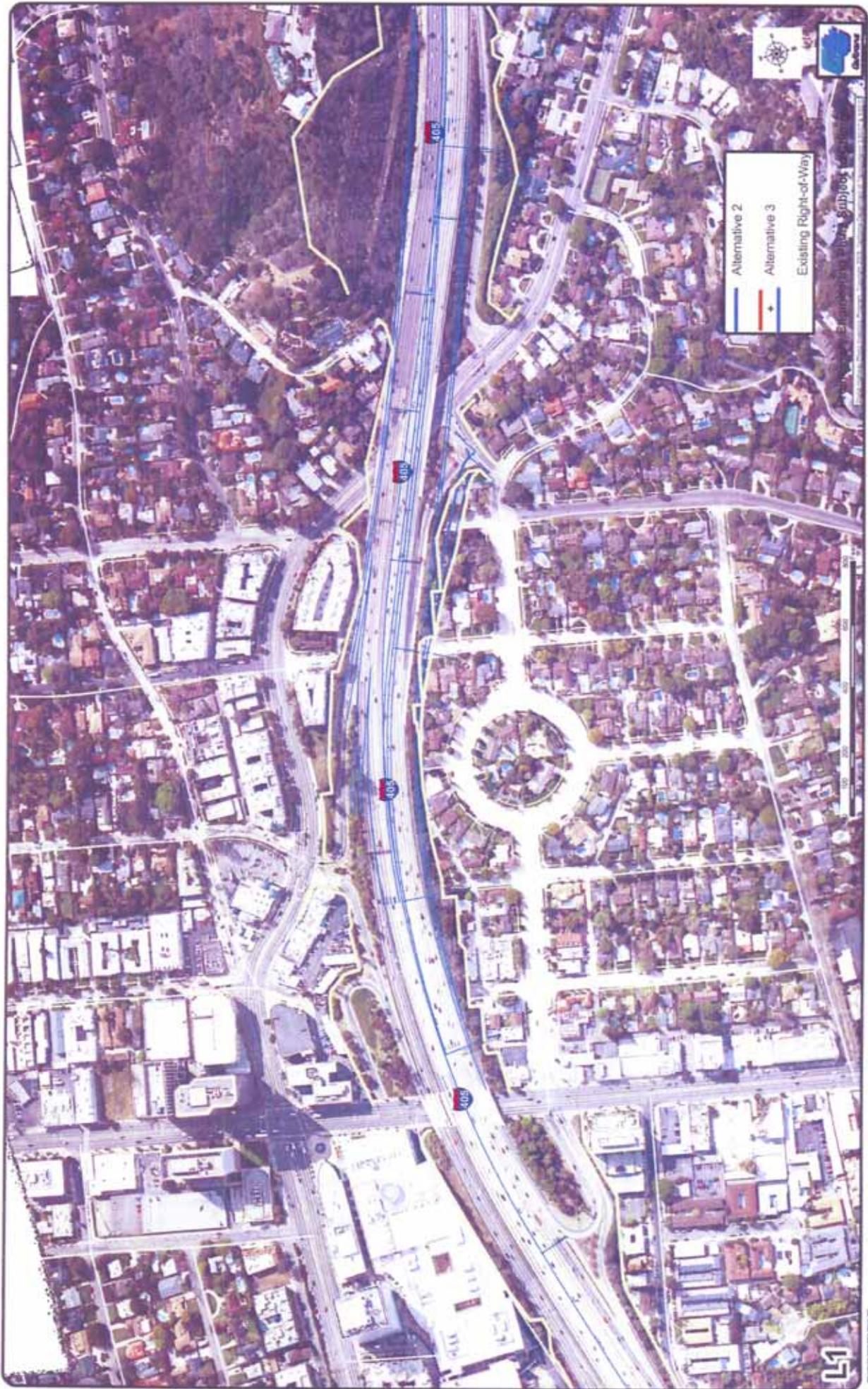
Assessors Parcel Number (APN)	Address	City	Residential/Commercial	Alternative	
				2	3
4365-013-011	11326 Burnham Street	Los Angeles	Residential	None	Full
4365-015-009	11327 Burnham Street	Los Angeles	Multi-Family Residential	None	Full
4365-015-012	11326 Berwick Street	Los Angeles	Residential	None	Full
4365-016-003	11326 Albata Street	Los Angeles	Residential	None	Full
4365-016-018	11327 Berwick Street	Los Angeles	Residential	None	Full
4365-018-008	11327 Albata Street	Los Angeles	Residential	None	Full
4365-018-011	11326 Bolas Street	Los Angeles	Residential	None	Full
4365-020-008	11327 Bolas Street	Los Angeles	Residential	None	Full
4365-020-018	11326 Cashmere Street	Los Angeles	Residential	None	Full
4365-022-020	11330 Denair Street	Los Angeles	Residential	None	Full
4365-022-021	11323 Cashmere Street	Los Angeles	Residential	None	Full
4365-024-021	11310 Elderwood Street	Los Angeles	Residential	None	Full
4365-024-023	11327 Montana Avenue	Los Angeles	Residential	None	Full
4365-025-024	343 S. Church Lane	Los Angeles	Non-profit	None	Full
4365-026-011	11300 Gladwin Street	Los Angeles	Multi-Family Residential	None	Full
4365-026-012	309 S. Church Lane	Los Angeles	Multi-Family Residential	None	Full
4365-026-013	313 S. Church Lane	Los Angeles	Multi-Family Residential	None	Full
4365-027-001	267 S. Church Lane	Los Angeles	Multi-Family Residential	None	Full

Assessors Parcel Number (APN)	Address	City	Residential/Commercial	Alternative		
				2	3	
4365-027-002	259 S. Church Lane	Los Angeles	Multi-Family Residential	None		Full
4365-027-015	275 S. Church Lane	Los Angeles	Multi-Family Residential	None		Full
4365-027-016	11301 Gladwin Street	Los Angeles	Multi-Family Residential	None		Full
4365-028-014	249 S. Church Lane	Los Angeles	Multi-Family Residential	None		Full
4365-028-015	237 S. Church Lane	Los Angeles	Multi-Family Residential	None		Full
4365-028-016	11304 Isita Street	Los Angeles	Multi-Family Residential	None		Full
4365-029-002	11308 Joffre Street	Los Angeles	Residential	None		Full
4365-029-019	11307 Isita Street	Los Angeles	Multi-Family Residential	None		Full
4365-029-020	217 S. Church Lane	Los Angeles	Multi-Family Residential	None		Full
4365-030-008	11332 Kiel Street	Los Angeles	Residential	None		Part
4365-030-016	11311 Joffre Street	Los Angeles	Residential	None		Full
4365-030-017	11333 Kiel Street	Los Angeles	Residential	None		Part
4366-010-015	11430 Thurston Circle	Los Angeles	Residential	Part		Part
4366-010-016	11420 Thurston Circle	Los Angeles	Residential	Part		Part
4366-010-017	11414 Thurston Circle	Los Angeles	Residential	Part		Part
4366-010-018	11406 Thurston Circle	Los Angeles	Residential	Part		Part
4366-010-019	11398 Thurston Circle	Los Angeles	Residential	Part		Part
4366-013-015	136 Bronwood Avenue	Los Angeles	Multi-Family Residential	Part		Part

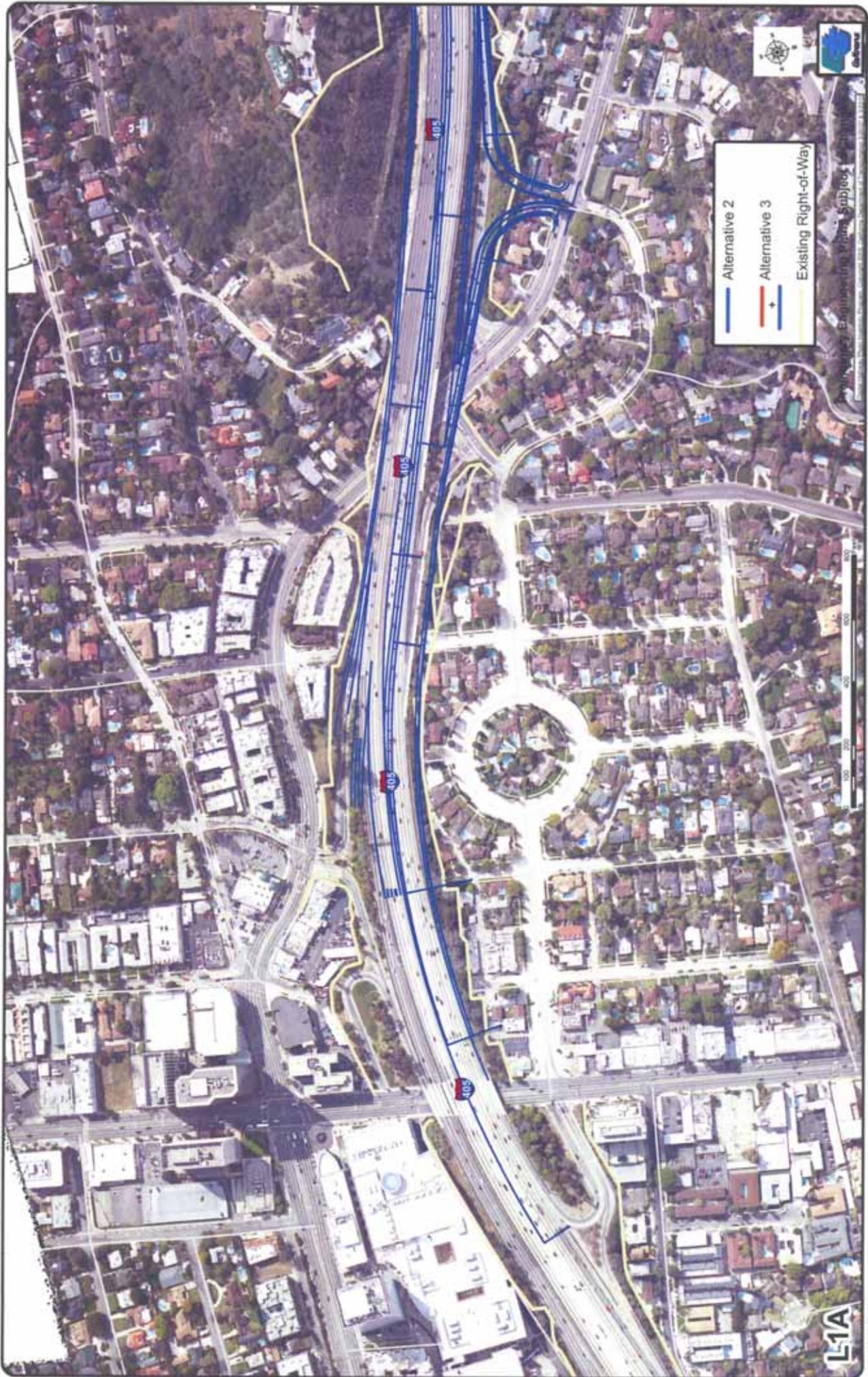
Assessors Parcel Number (APN)	Address	City	Residential/Commercial	Alternative		
				2	3	
4366-014-018	255 South Thurston Avenue	Los Angeles	Residential	Part		Part
4366-014-019	251 South Thurston Avenue	Los Angeles	Residential	Part		Part
4366-014-020	245 South Thurston Avenue	Los Angeles	Residential	Part		Part
4366-014-021	241 Thurston Avenue	Los Angeles	Residential	Part		Part
4366-014-022	231 Thurston Avenue	Los Angeles	Residential	Part		Part
4366-014-023	225 Thurston Avenue	Los Angeles	Residential	Part		Part
4366-014-024	219 Thurston Avenue	Los Angeles	Residential	Part		Part
4366-014-025	152 Sepulveda Boulevard	Los Angeles	Multi-Family Residential	Full		Full
4366-014-030	148 Sepulveda Boulevard	Los Angeles	Multi-Family Residential	Part		Part
4366-014-031	140 Sepulveda Boulevard	Los Angeles	Multi-Family Residential	Part		Part
4366-015-021	315 South Thurston Avenue	Los Angeles	Residential	Part		Part
4366-015-022	321 South Thurston Avenue	Los Angeles	Residential	Part		Part
4366-015-023	329 South Thurston Avenue	Los Angeles	Residential	Part		Part
4366-015-024	335 South Thurston Avenue	Los Angeles	Residential	Part		Part
4366-015-025	343 South Thurston Avenue	Los Angeles	Residential	Part		Part
4366-015-026	349 South Thurston Avenue	Los Angeles	Residential	Part		Part
4366-015-027	355 South Thurston Avenue	Los Angeles	Residential	Part		Part
4366-015-028	353 Dalkeith Avenue	Los Angeles	Residential	Part		Part

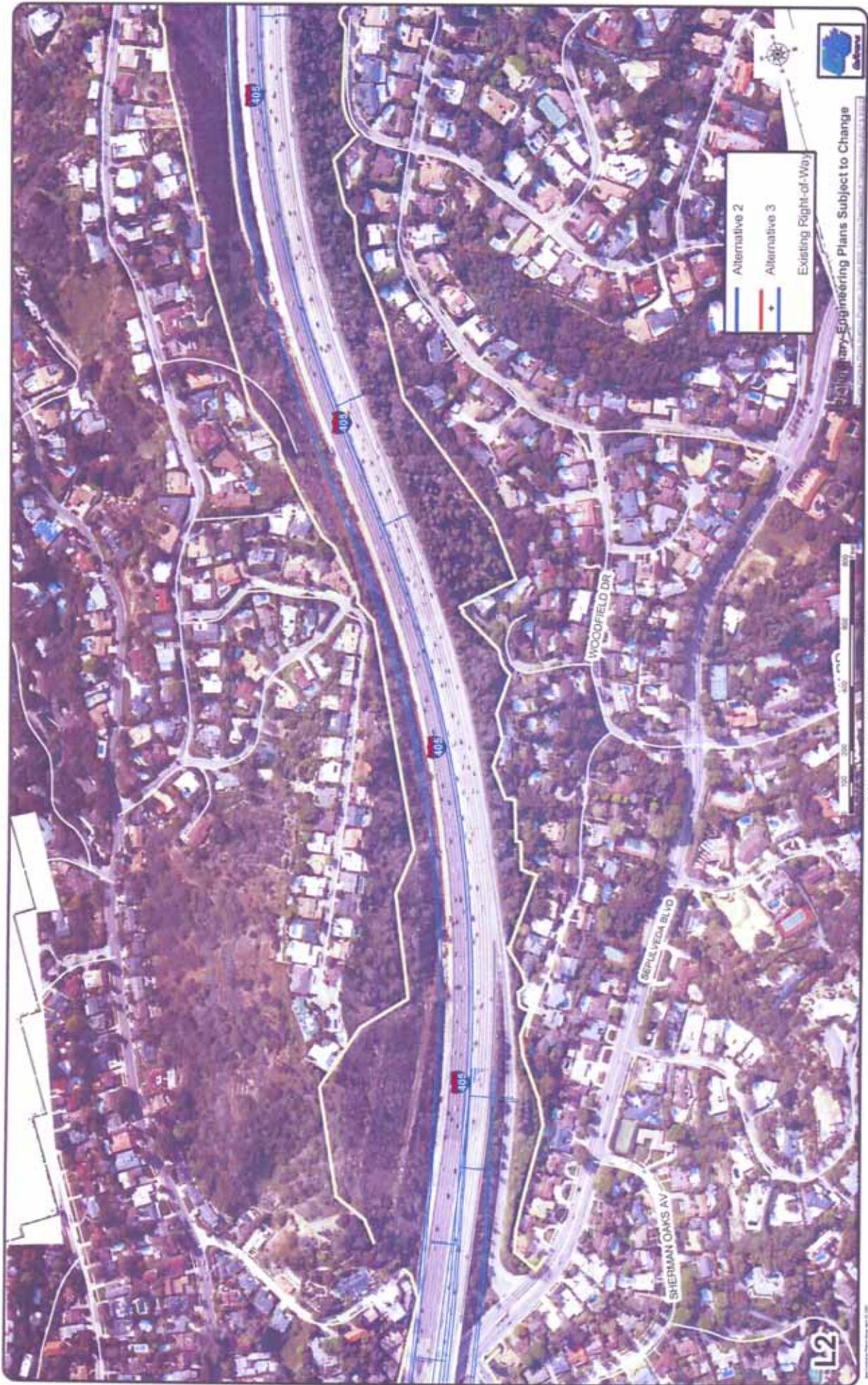
Assessors Parcel Number (APN)	Address	City	Residential/Commercial	Alternative	
				2	3
4366-015-029	359 Dalkeith Avenue	Los Angeles	Residential	Part	Part
4366-015-030	363 Dalkeith Avenue	Los Angeles	Residential	Part	Part
4366-015-031	367 Dalkeith Avenue	Los Angeles	Residential	Part	Part
4366-015-032	371 Dalkeith Avenue	Los Angeles	Residential	Part	Part
4366-015-033	375 Dalkeith Avenue	Los Angeles	Residential	Part	Part
4368-001-006	No Address Available	Los Angeles	Vacant Land	Part	Part
4368-016-001	600 Sepulveda Boulevard	Los Angeles	Commercial	Full	Full
4368-016-002	612 N. Sepulveda Boulevard	Los Angeles	Commercial	Full	Full
4368-016-800	598 Sepulveda Boulevard	Los Angeles	Commercial	Full	Full
4377-001-901	No Address Available	Los Angeles	Vacant Land	Part	Part
4377-043-013	No Address Available	Los Angeles	Vacant Land	Part	Part
4378-001-900	No Address Available	Los Angeles	Other	Part	Part
4378-001-901	No Address Available	Los Angeles	Other	Part	Part
4429-035-002	170 Church Lane	Los Angeles	Commercial	None	Part
4429-035-005	No Address Available	Los Angeles	Vacant Land	None	Part
4429-037-022	1200 Getty Center Drive	Los Angeles	Commercial	None	Part
4490-002-905	No Address Available	Los Angeles	Vacant Land	Part	Part
4493-014-024	No Address Available	Los Angeles	Vacant Land	None	Part



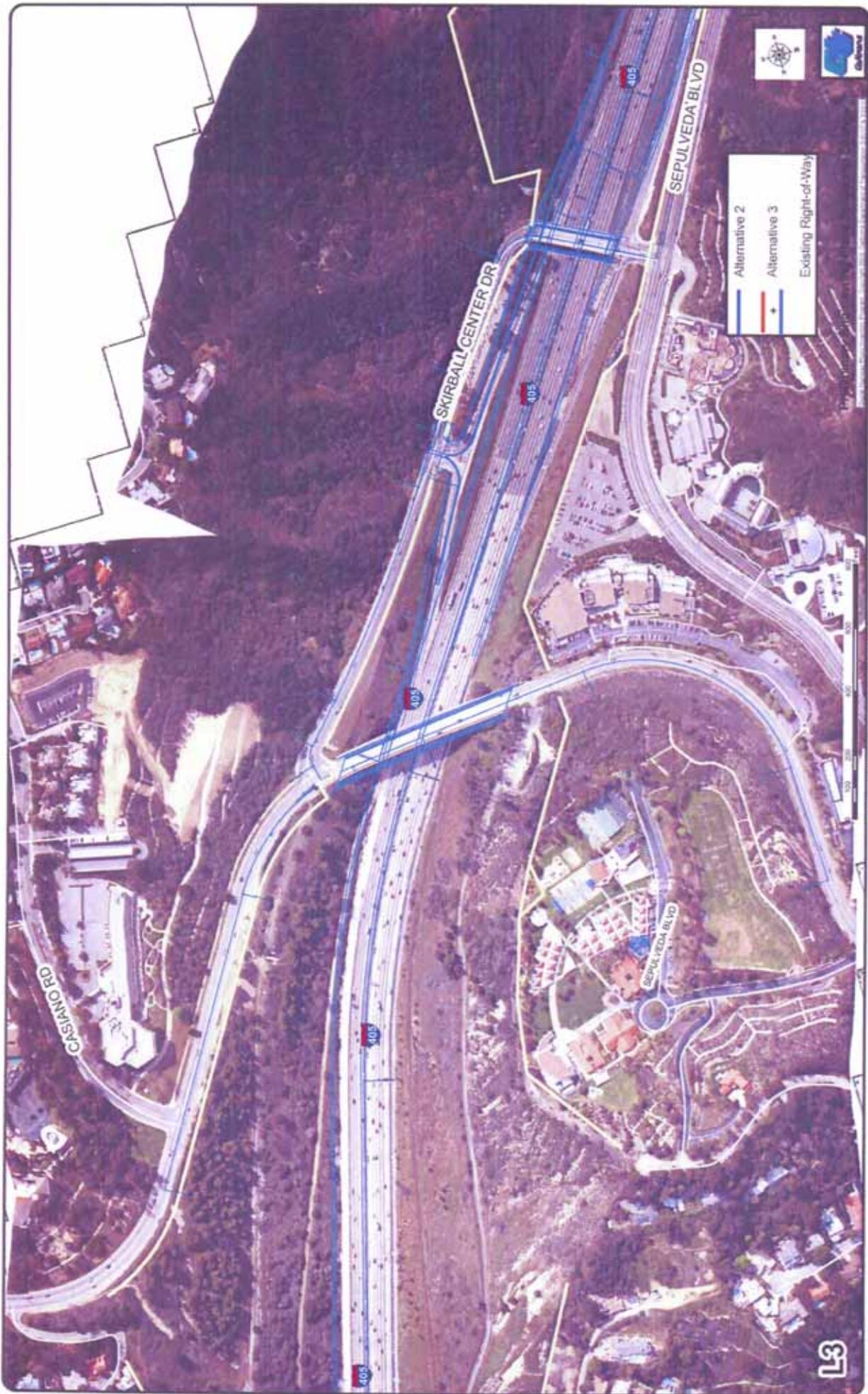


Caltrans Improves Mobility Across California

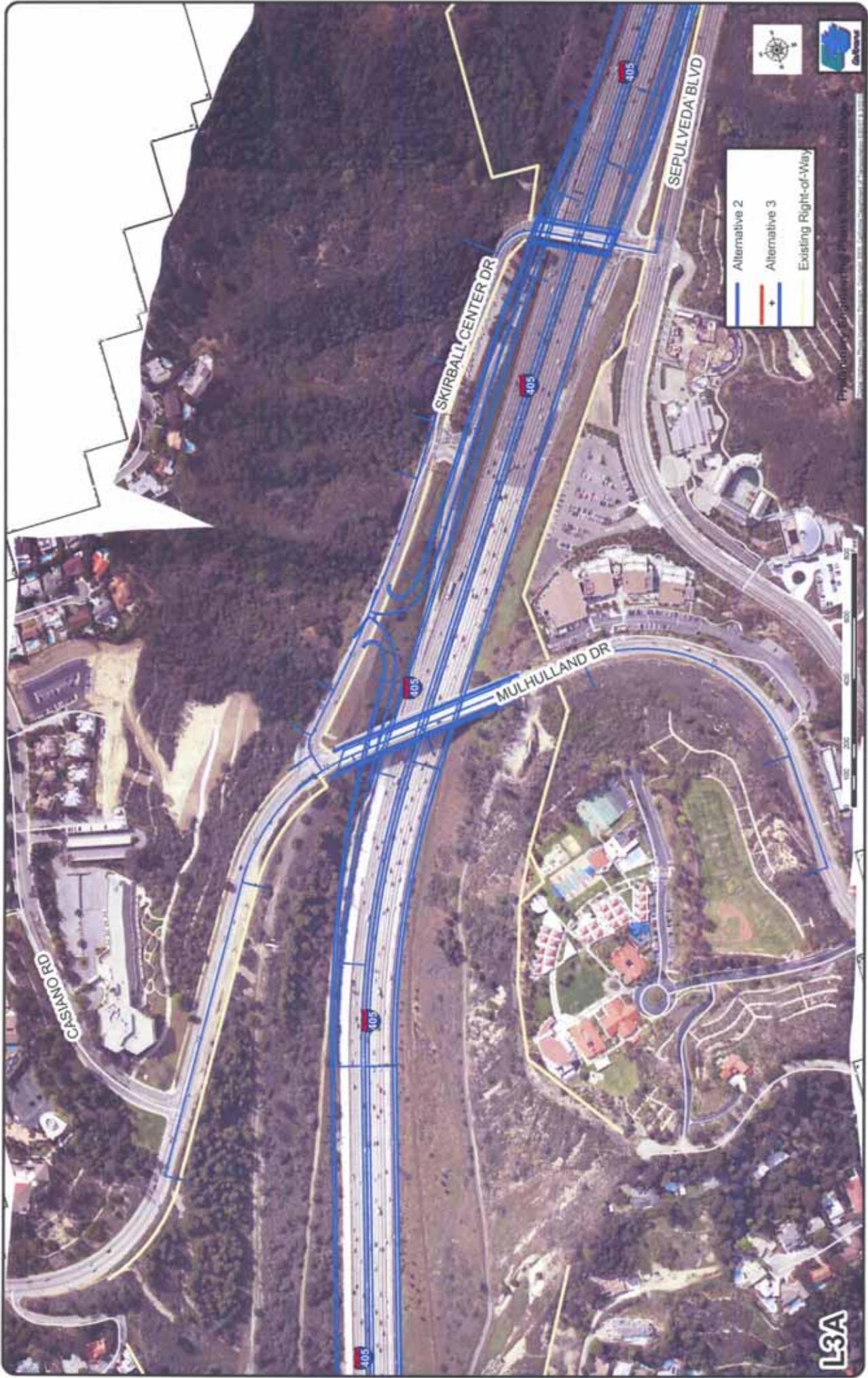




Childrens Expressway Mobility Across California

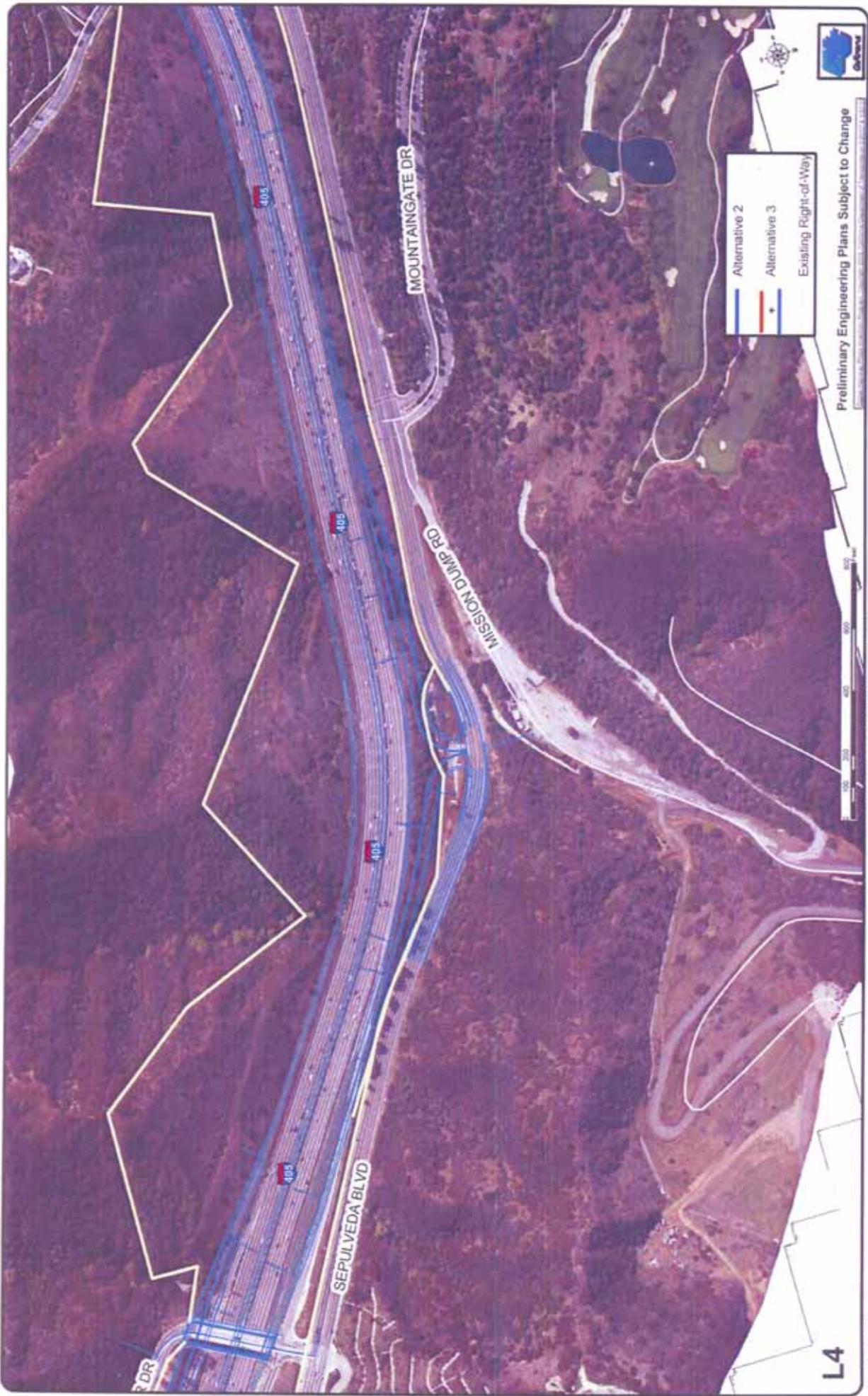


Caltrans Ingersoll Mobility across California



- Alternative 2
- Alternative 3
- Existing Right-of-Way

Catrazas Improves Mobility Across California



L4

California Improves Mobility Across California

Preliminary Engineering Plans Subject to Change

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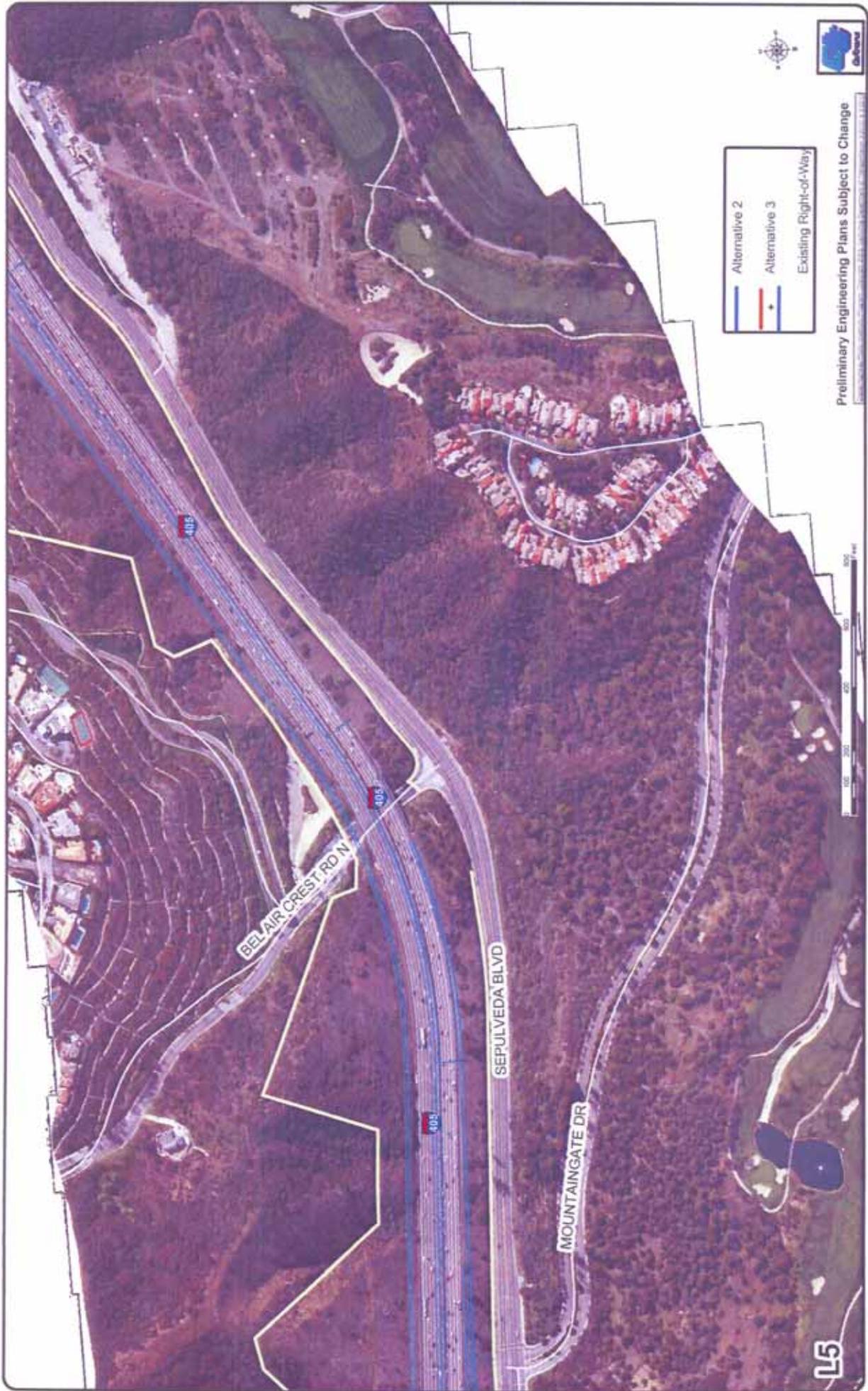


- Alternative 3
- Existing Right-of-Way
- skirball_ic_option2.dgn Polyline

Preliminary Engineering Plans Subject to Change

Caltrans Regional Mobility Across California

L4A



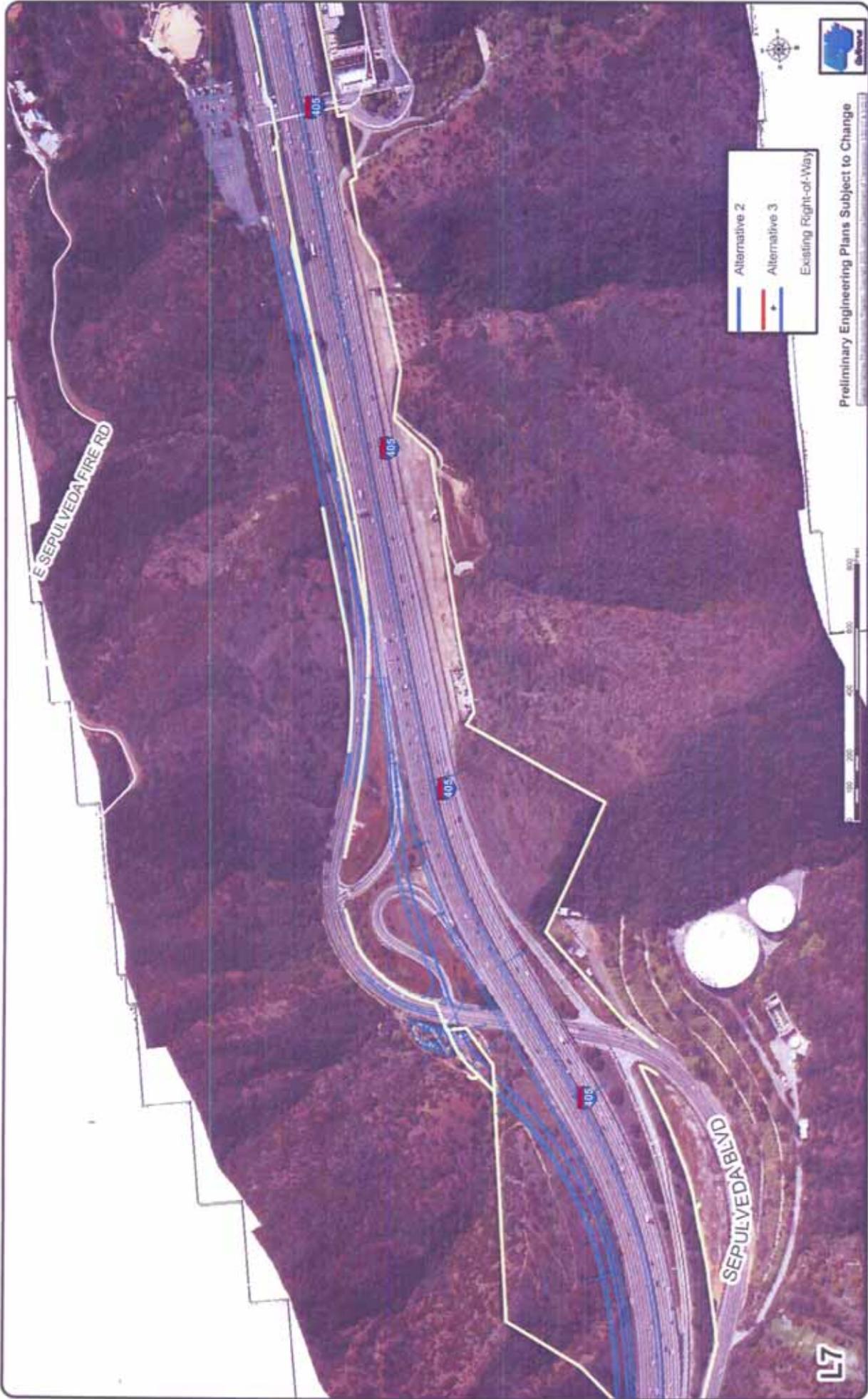
- Alternative 2
- Alternative 3
- Existing Right-of-Way

Preliminary Engineering Plans Subject to Change

California Improves Mobility Across California







Preliminary Engineering Plans Subject to Change

Caltrans Improves Mobility Across California

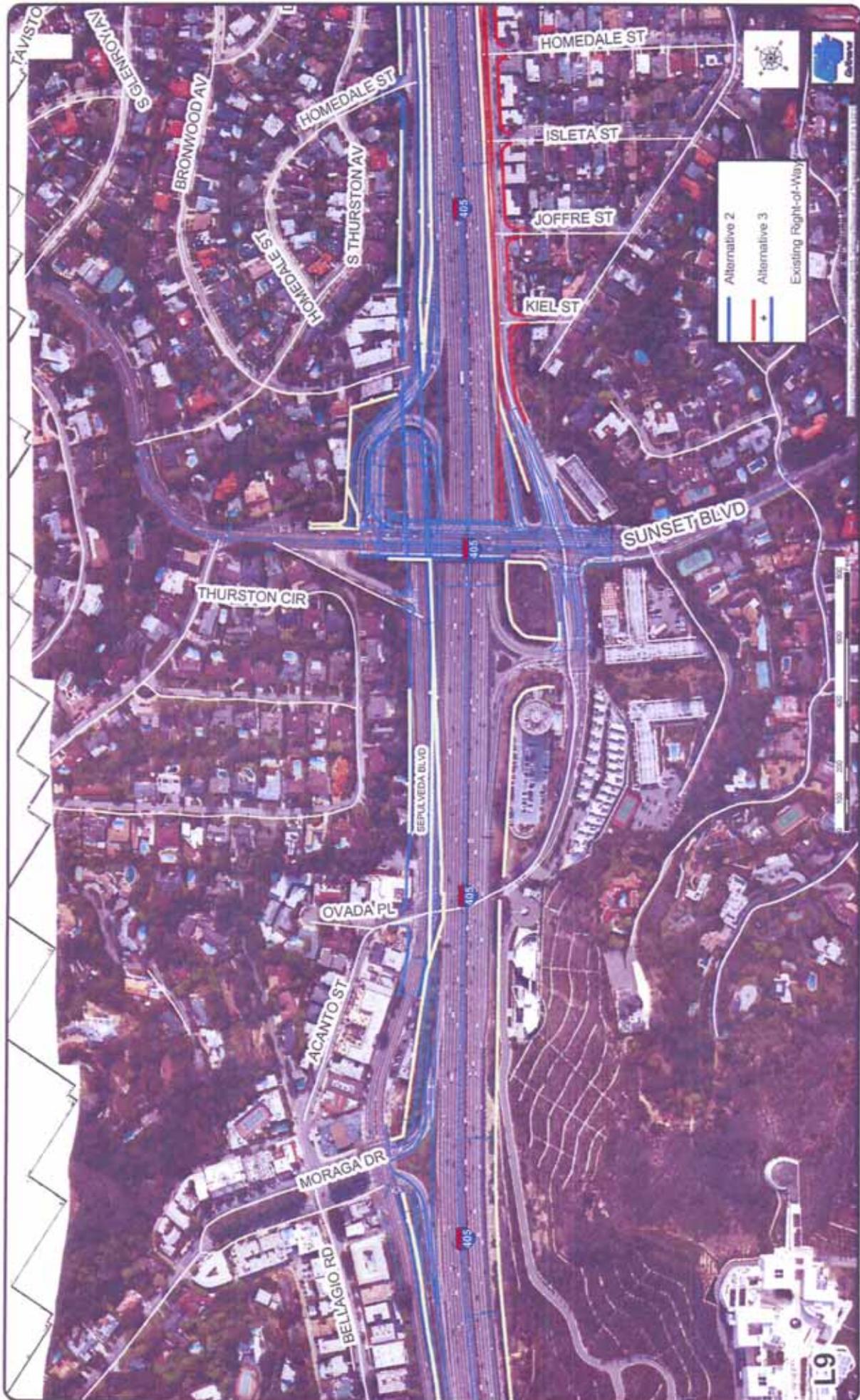


© 2013 Caltrans



Caltrans Improves Mobility Across California

L8



L9

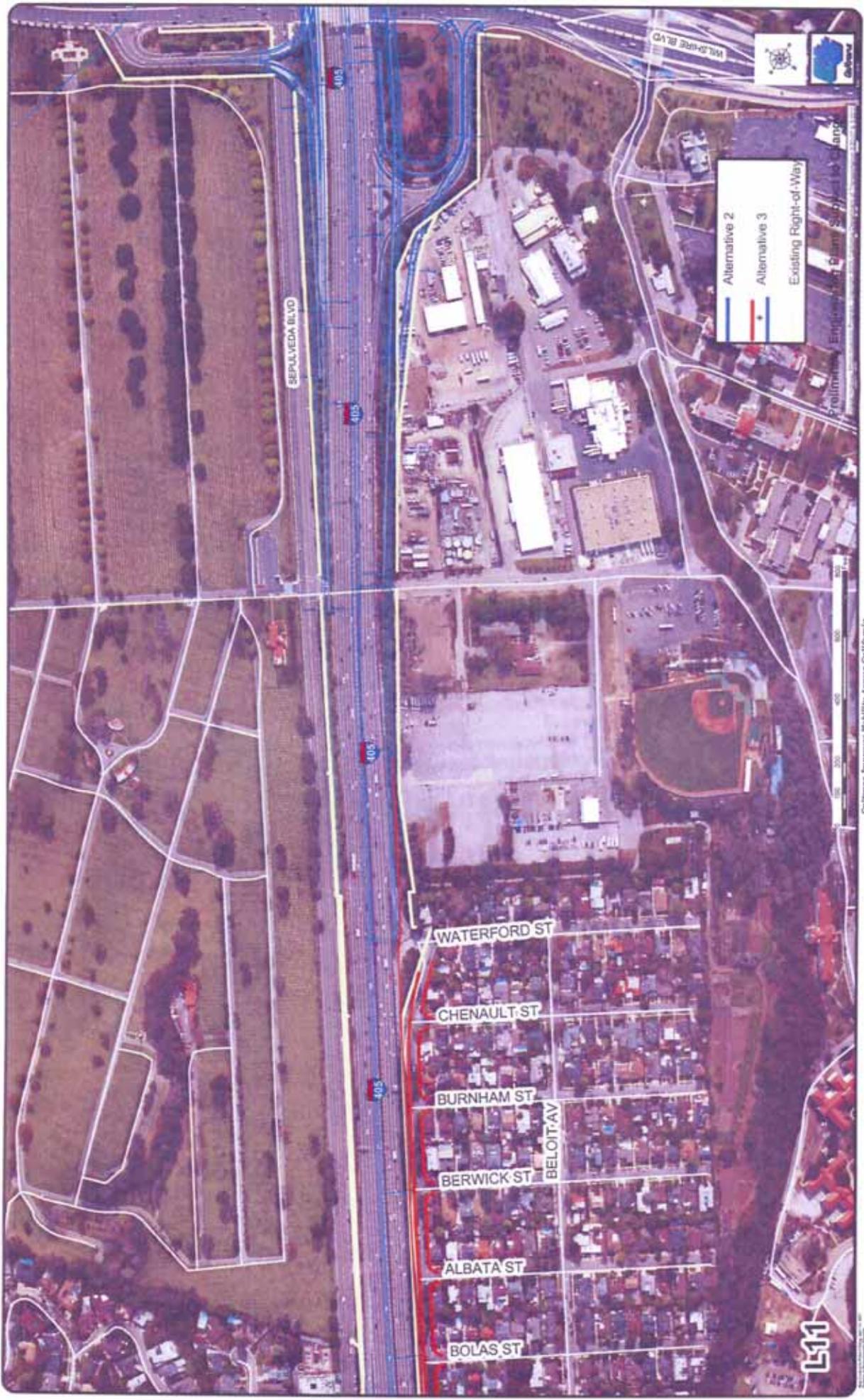


Alternative 2
 Alternative 3
 Existing Right-of-Way

0 100 200 300 400 500 600 700 800

California Improves Mobility Across California

L10

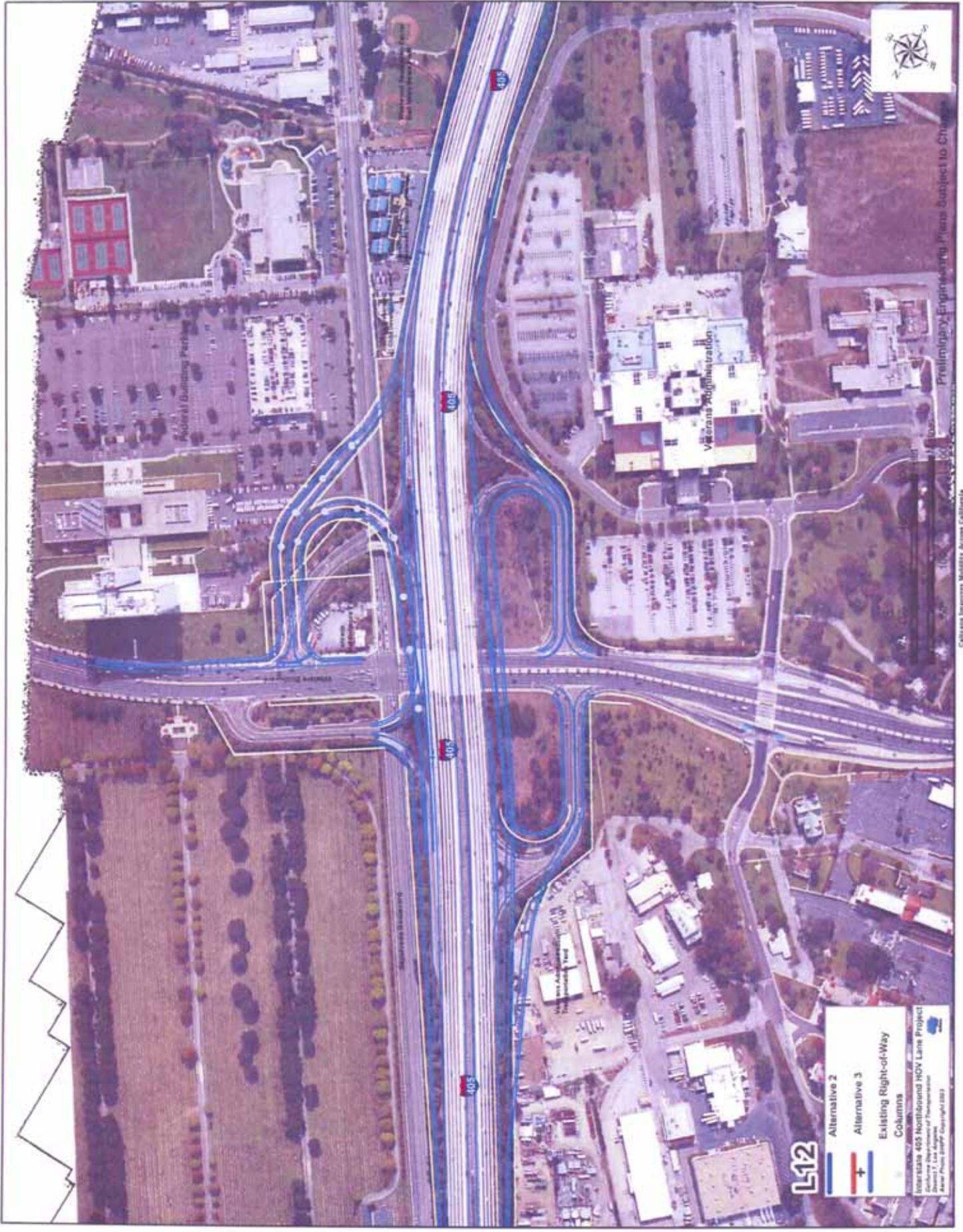


- Alternative 2
- Alternative 3
- Existing Right-of-Way

LSI

California High-Speed Rail

Preliminary Engineering Plans Subject to Change



L12

- Alternative 2
- Alternative 3
- Existing Right-of-Way
- Columns

Interstate 405 Northbound HOV Lane Project
 District 7, Los Angeles
 Major Project ID# 0000 Copyright 2013

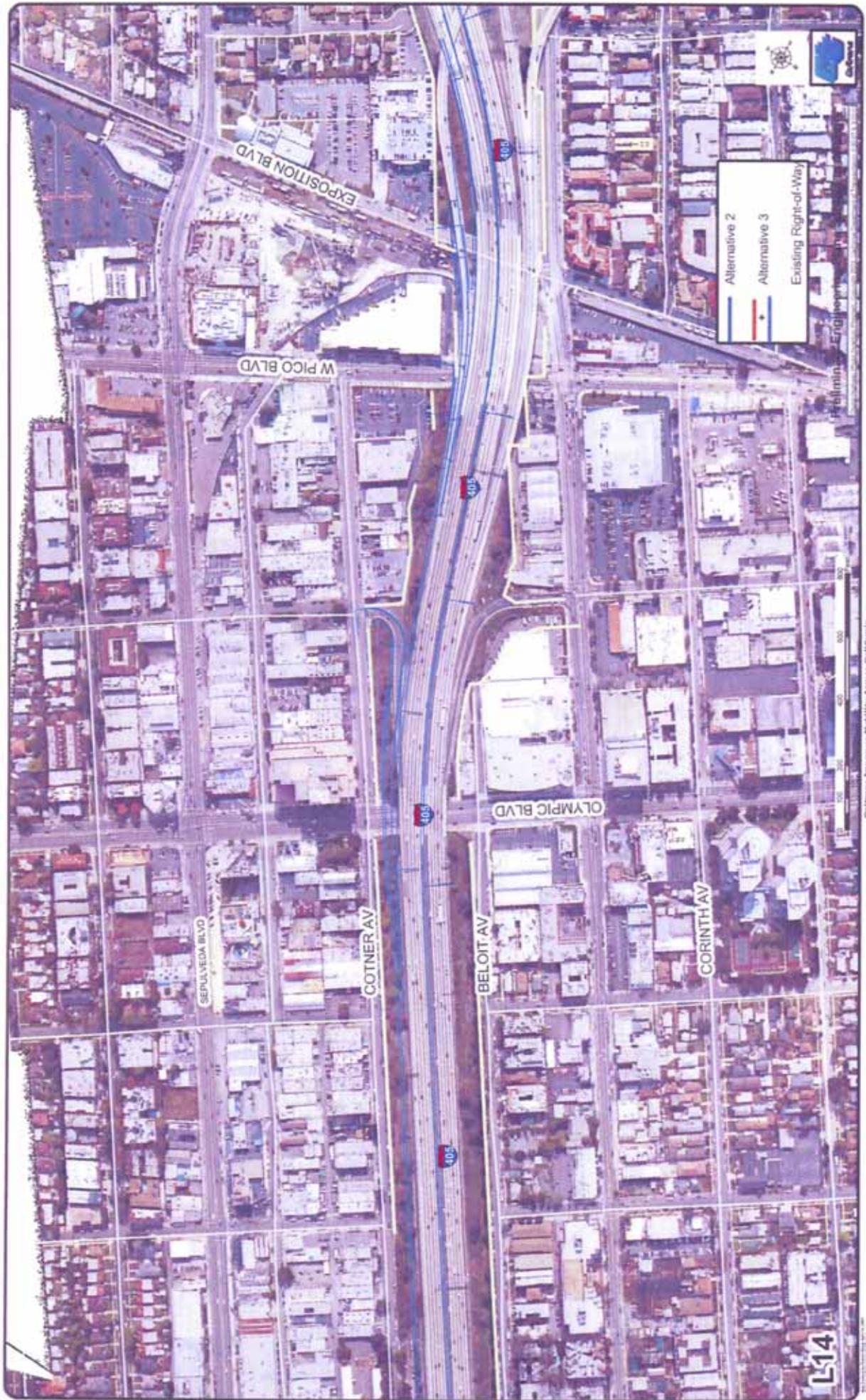
Preliminary Engineering Plans Subject to Change

California Improves Military Access Collection

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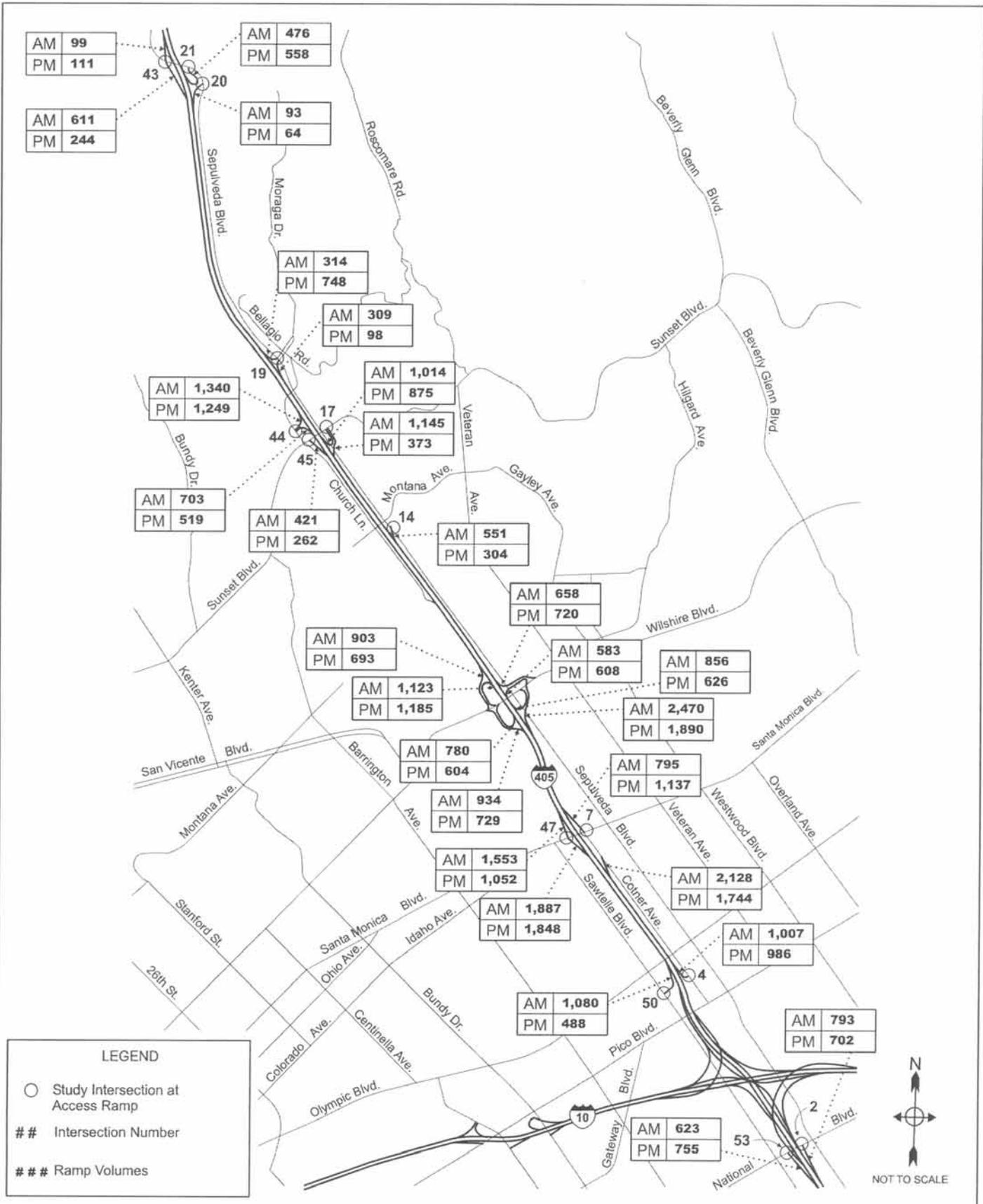
Caltrans Approves Mobility Across California



California High-Speed Rail Authority / Amicus California

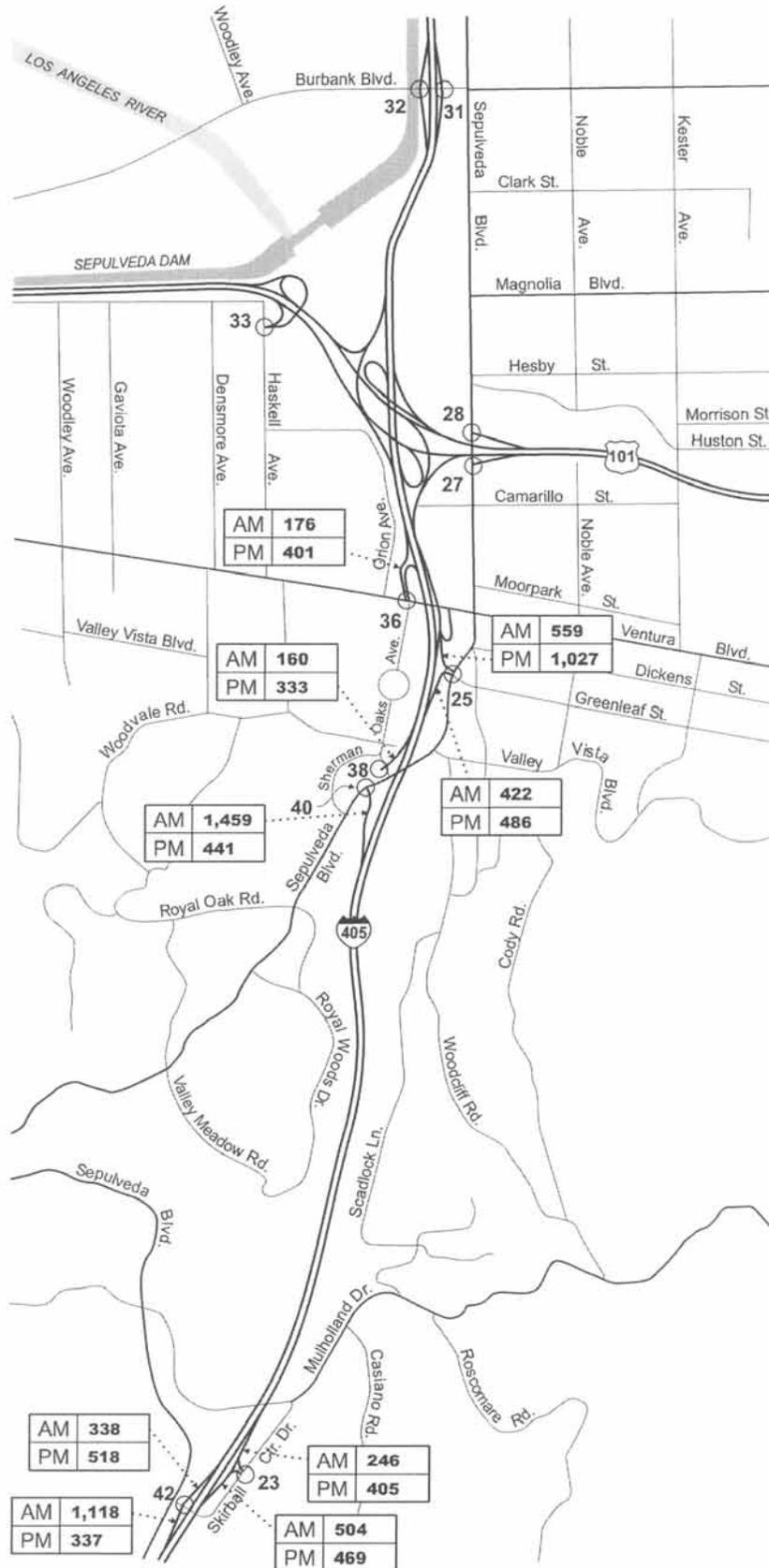


Outfront Improves Mobility Across Caltrans



IBI GROUP I-405 HOV Lane Over Sepulveda Pass (I-10 to US-101) Project
 Existing (Year 2005) Peak Hour Access Ramp Volumes - Southern Area

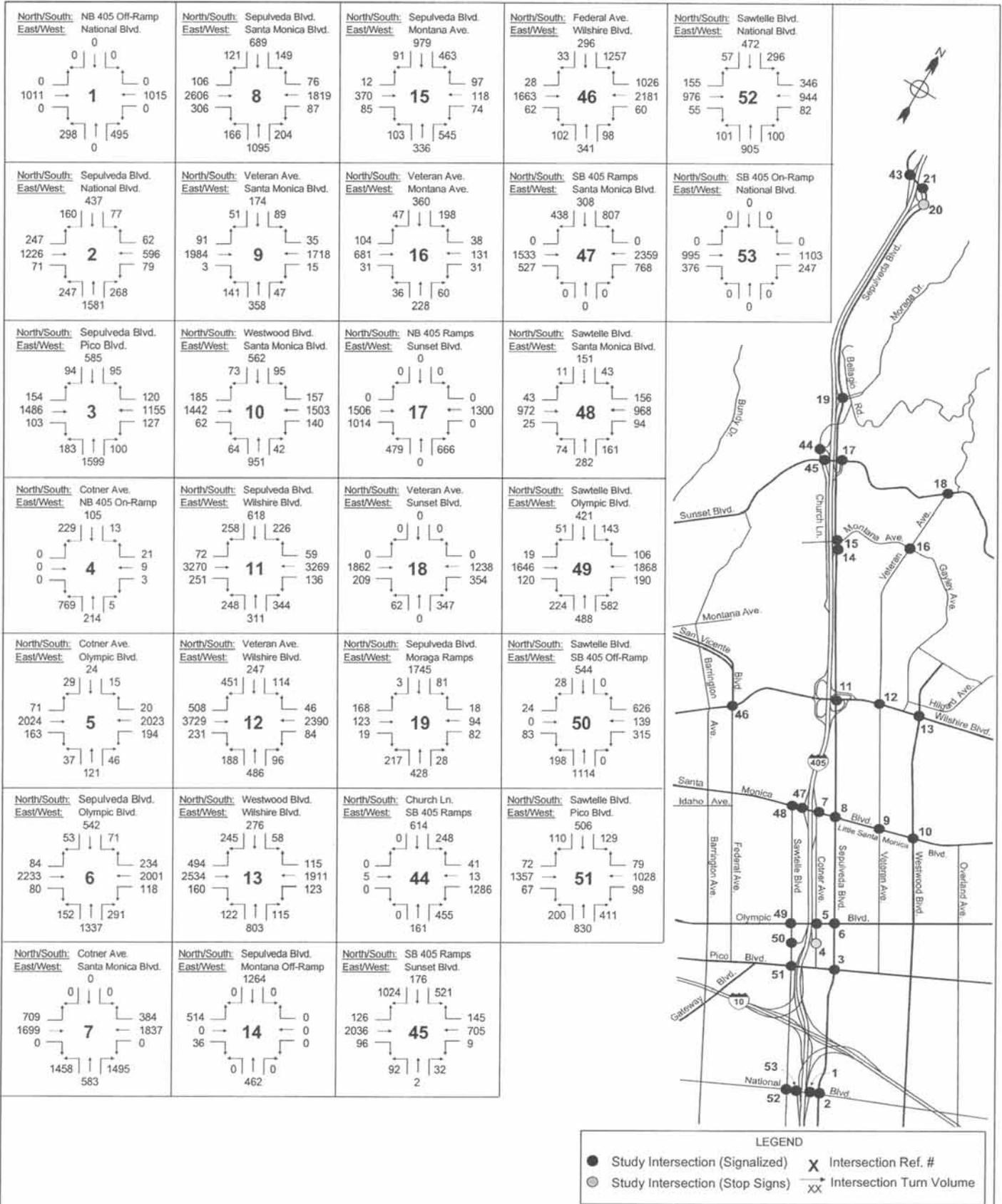
Figure 4A



LEGEND

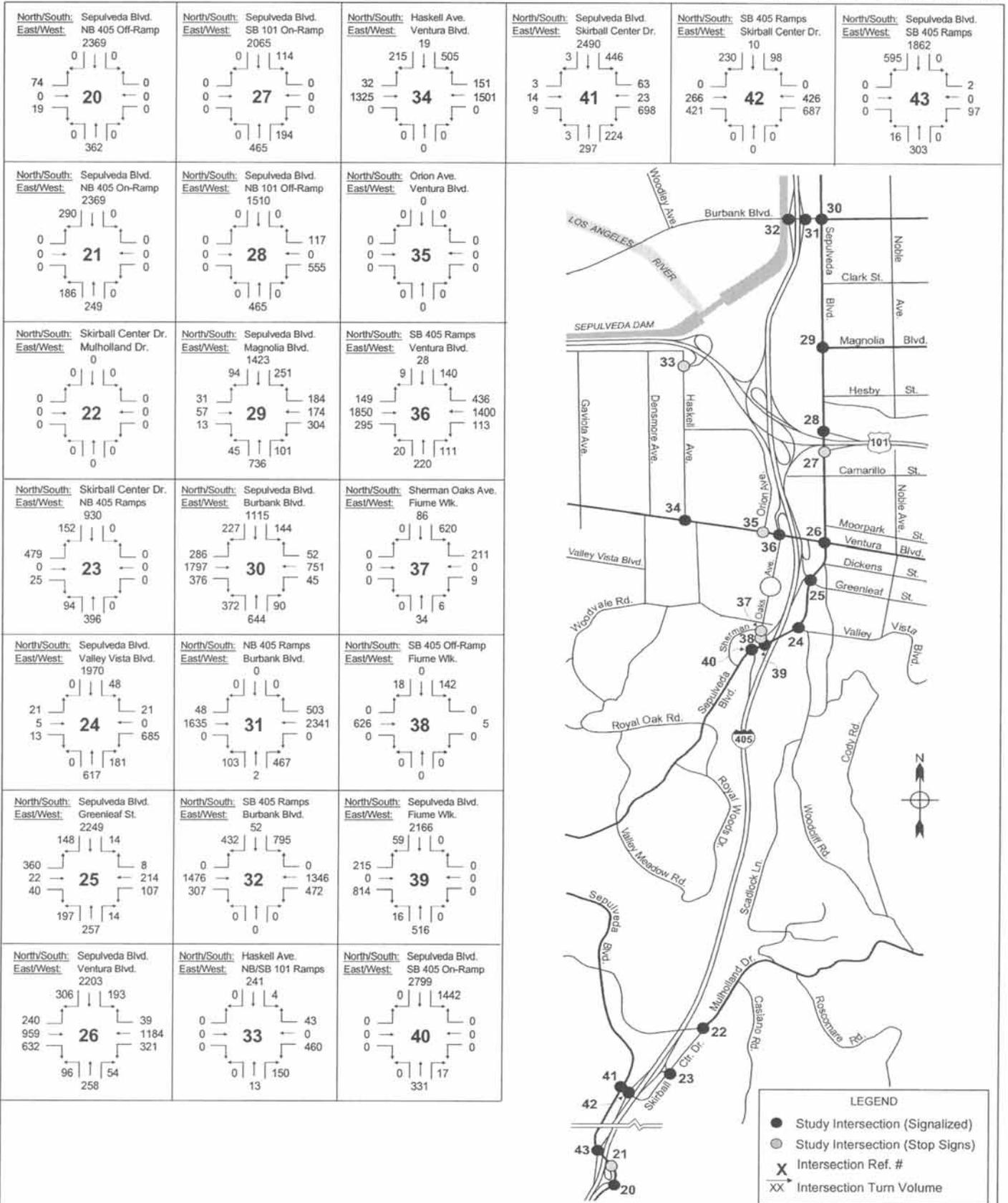
- Study Intersection at Ramp Location
- ## Intersection Number
- ### Ramp Volume

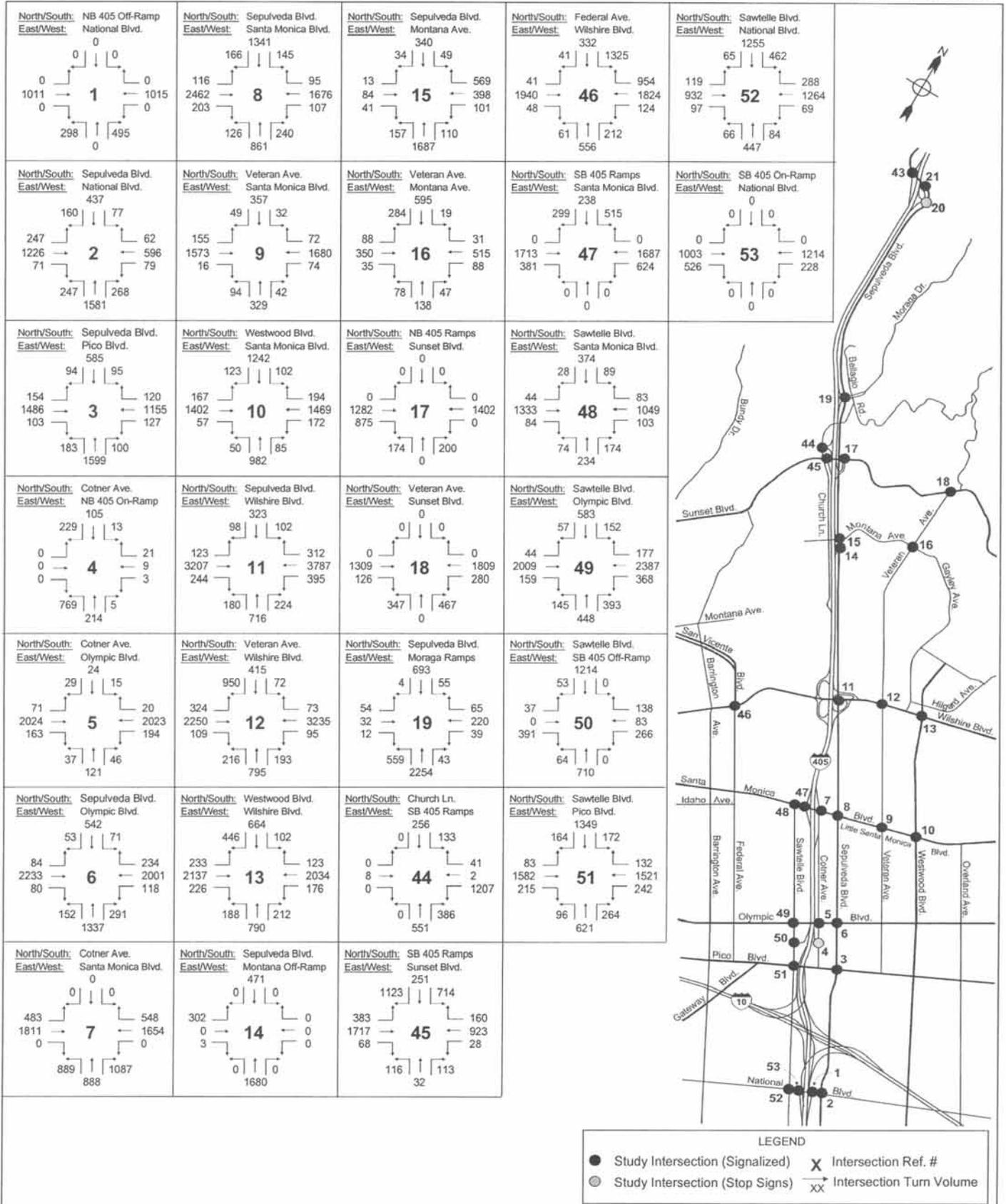




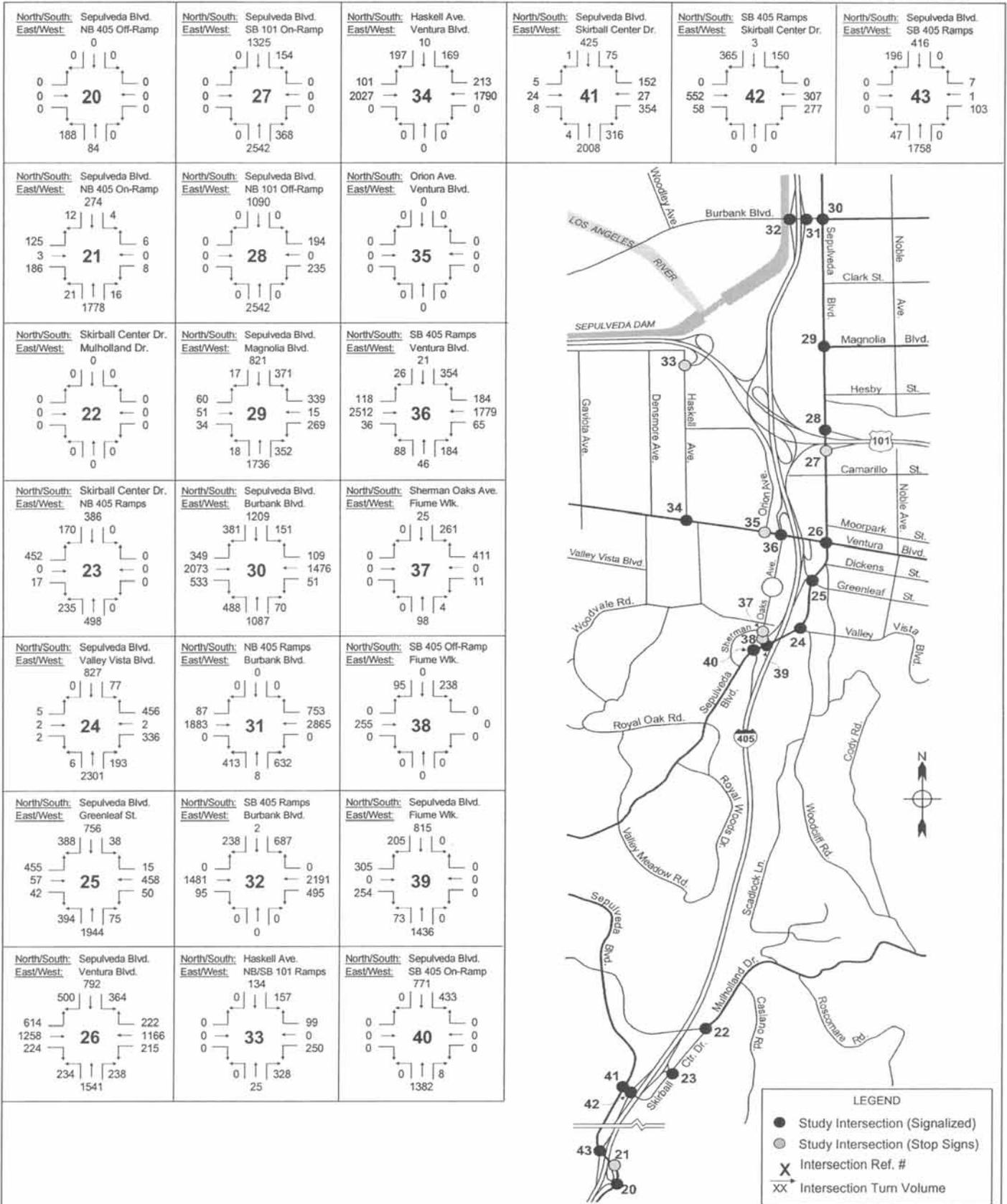
I-405 HOV Lane Over Sepulveda Pass (I-10 to US-101) Project
 Alternative 1 (Year 2005) Turning Movement Volumes - AM Peak Hour (Southern Area)

Figure 7A



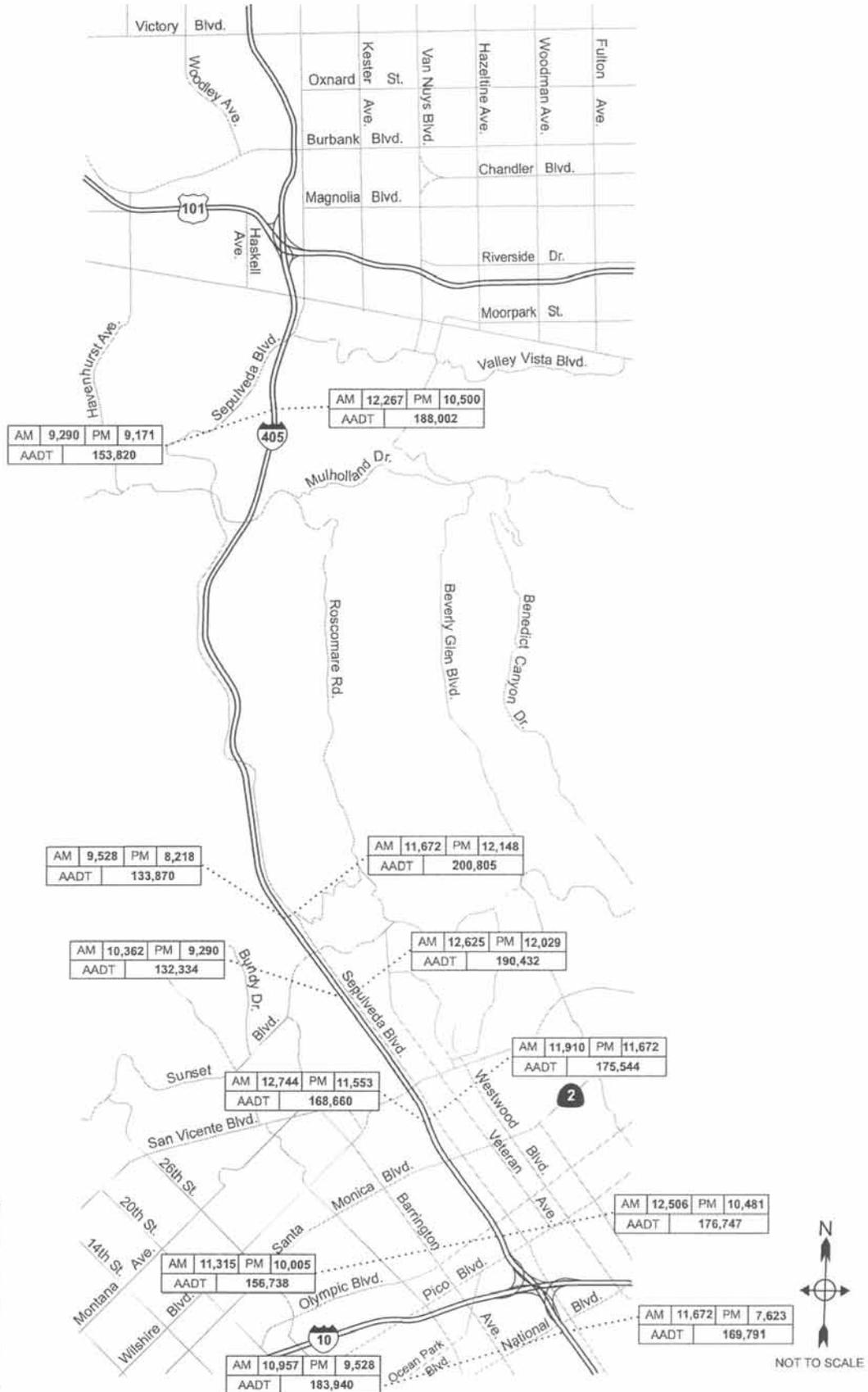


IBI GROUP I-405 HOV Lane Over Sepulveda Pass (I-10 to US-101) Project Figure 8A
 Alternative 1 (Year 2005) Turning Movement Volumes - PM Peak Hour (Southern Area)



I-405 HOV Lane Over Sepulveda Pass (I-10 to US-101) Project
 Alternative 1 (Year 2005) Turning Movement Volumes - PM Peak Hour (Northern Area)

Figure 8B

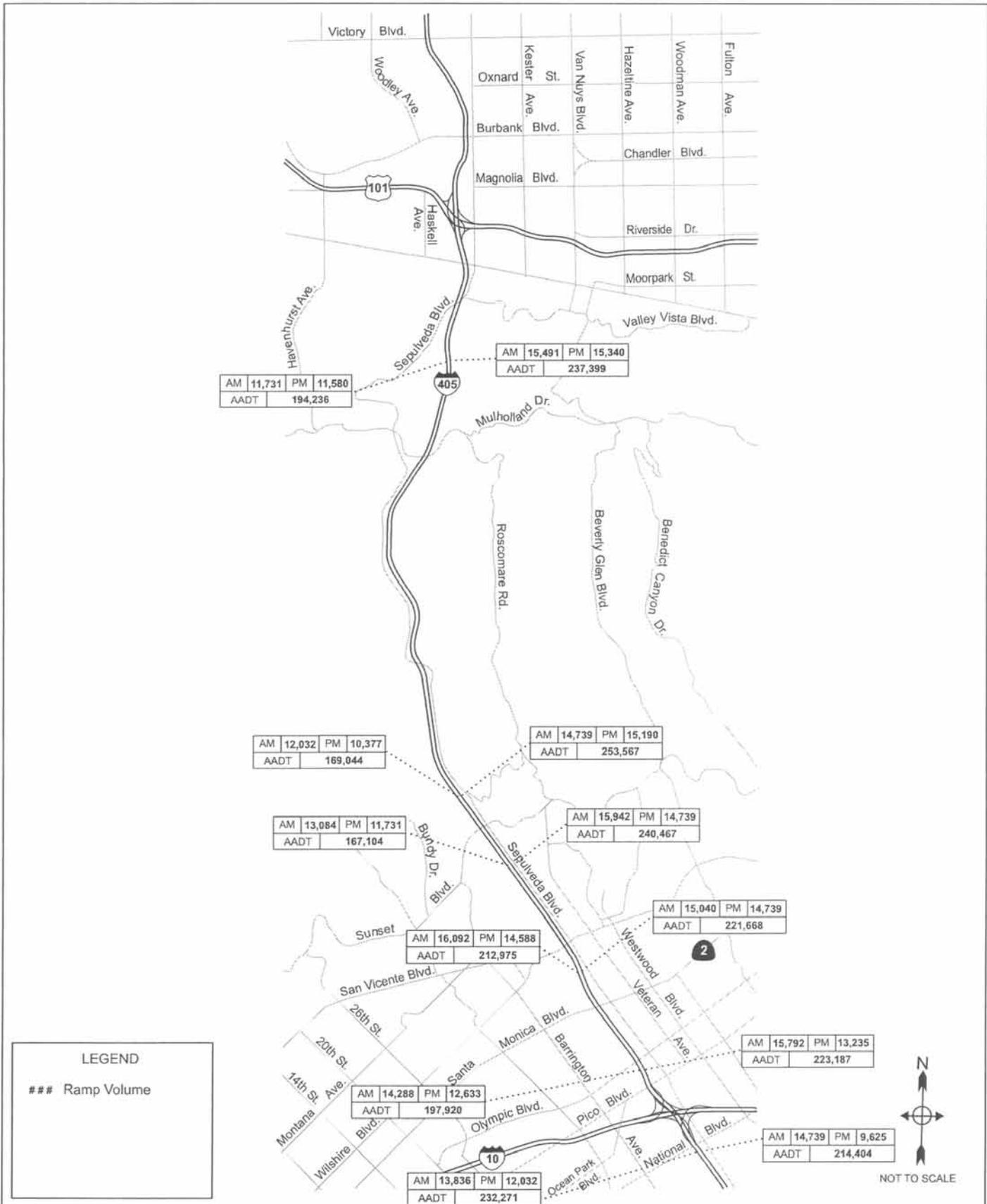


LEGEND
 ### Ramp Volume

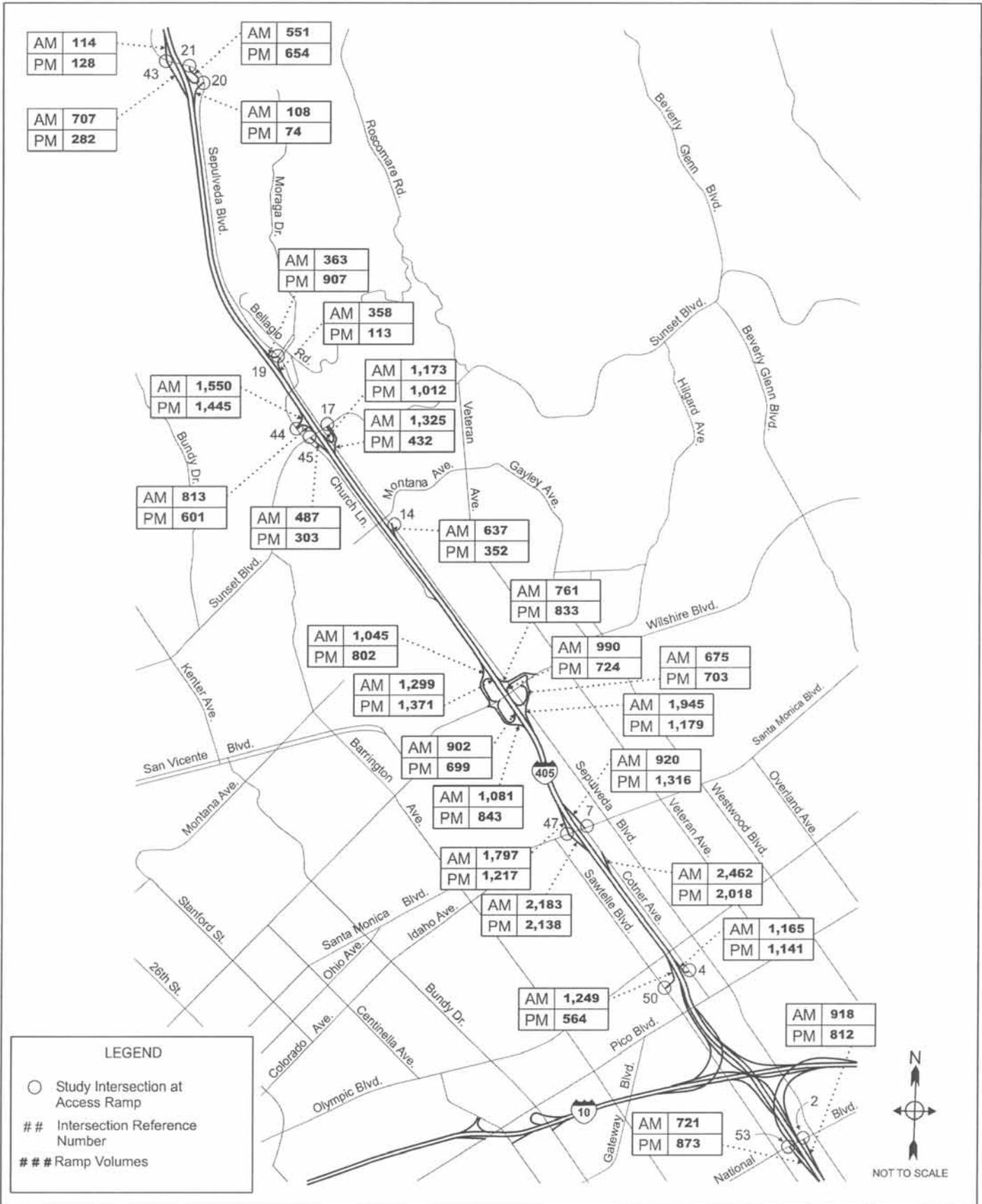


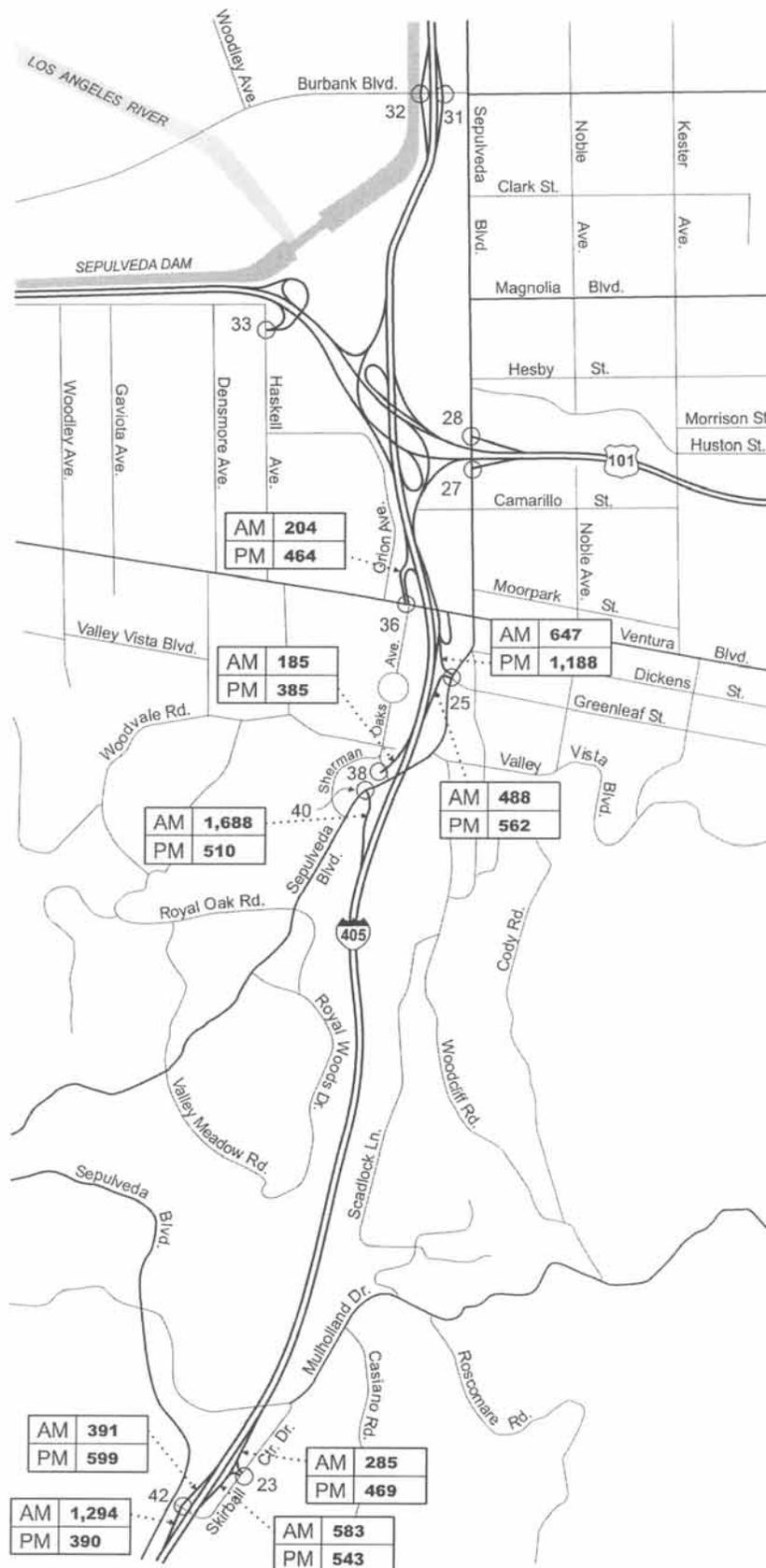
I-405 HOV Lane Over Sepulveda Pass (I-10 TO US-101) Project
 Year 2015 I-405 Mainline Forecast Traffic Volumes

Figure 9



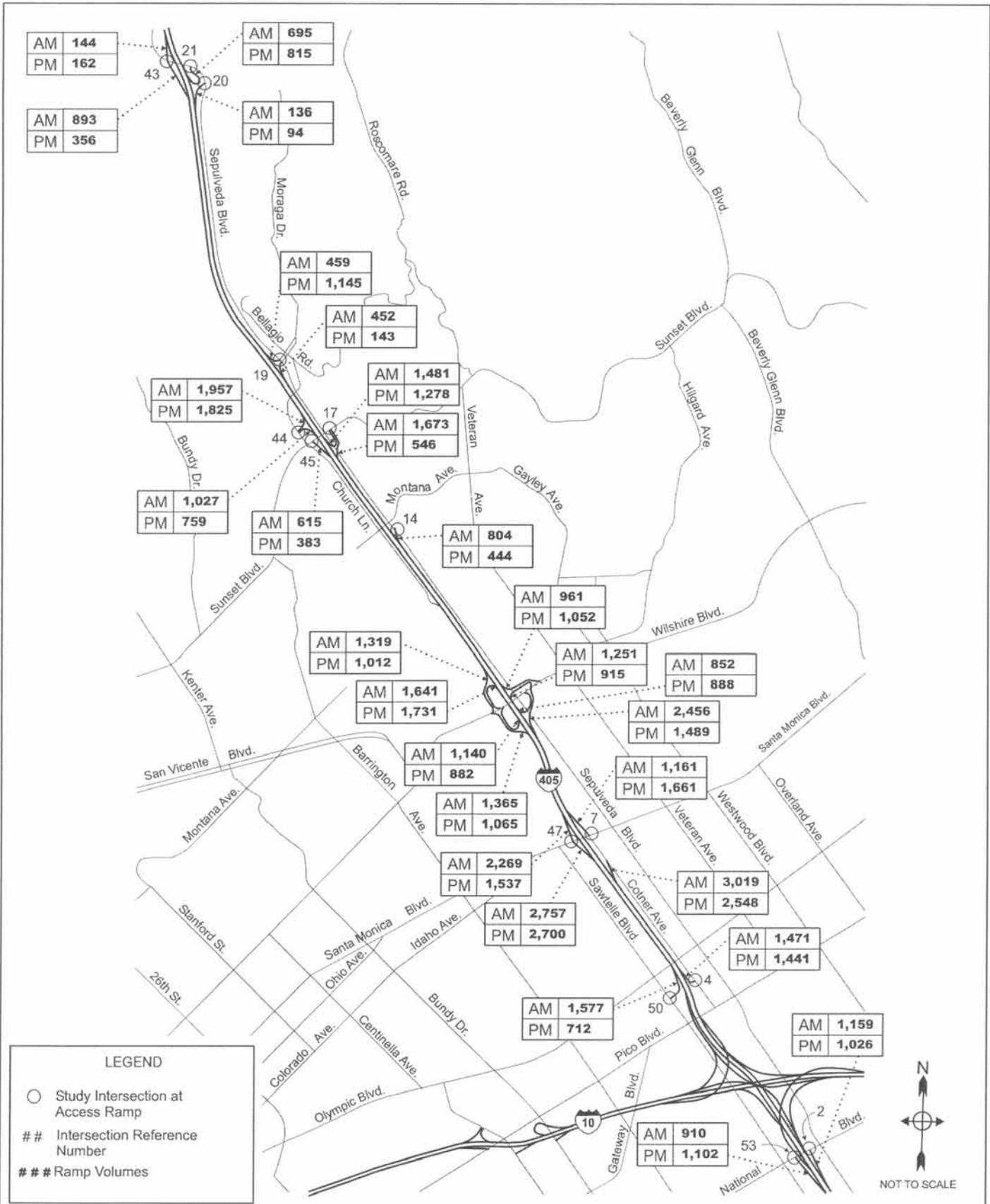
IBI GROUP	I-405 HOV Lane Over Sepulveda Pass (I-10 TO US-101) Project	Figure 10
	Year 2031 I-405 Mainline Forecast Traffic Volumes	



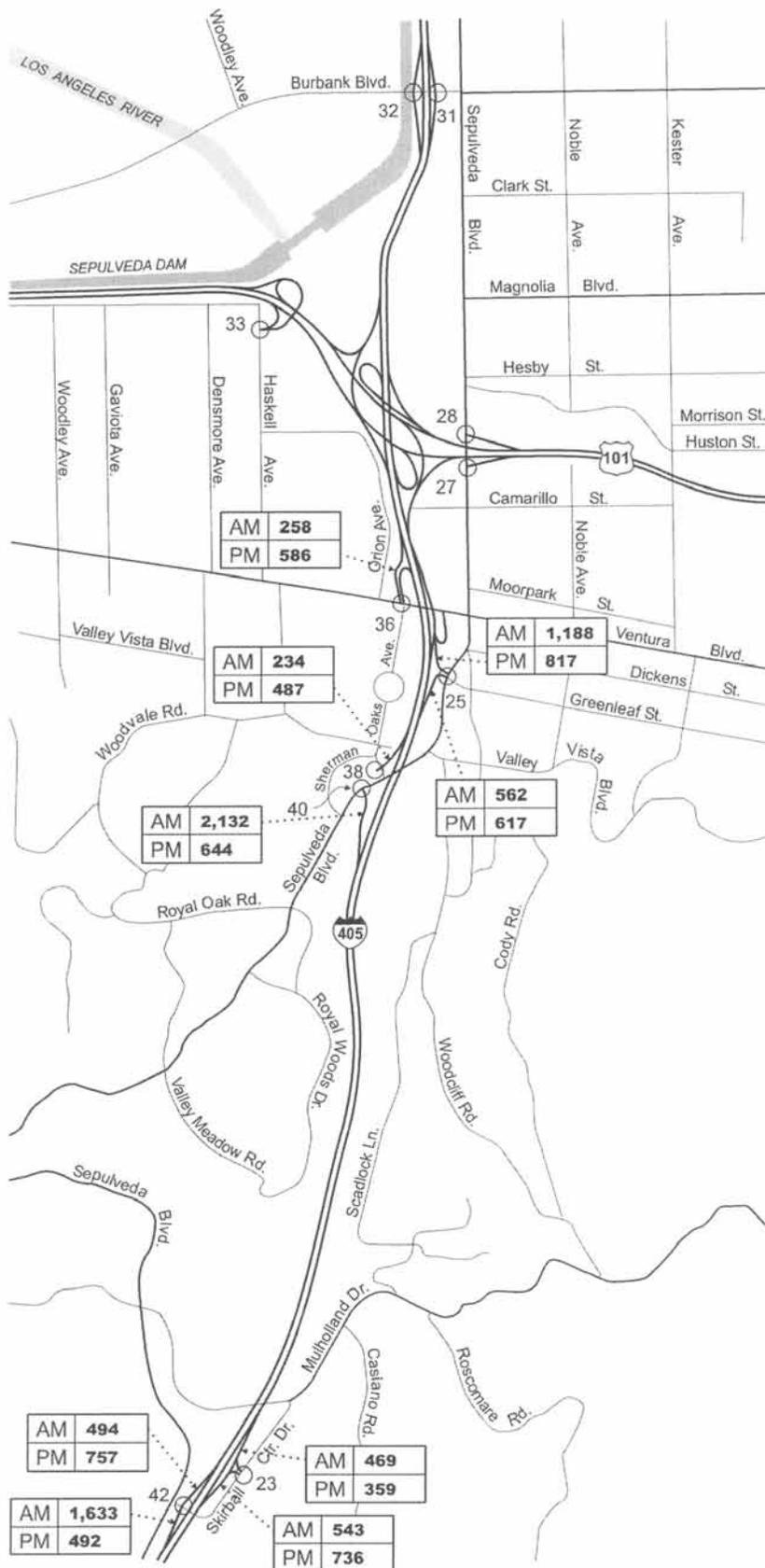


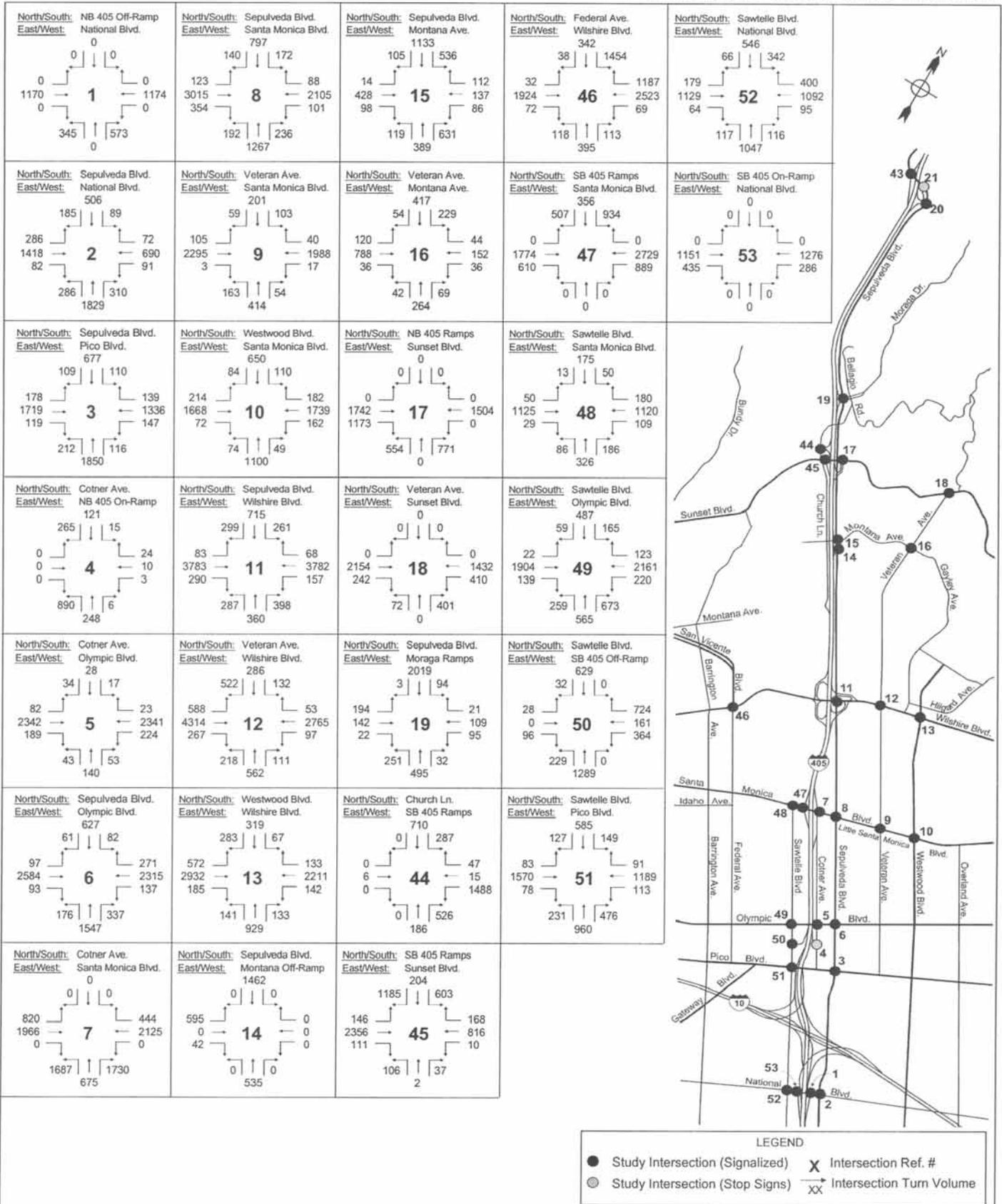
LEGEND	
○	Study Intersection at Ramp Location
##	Intersection Reference Number
###	Ramp Volumes





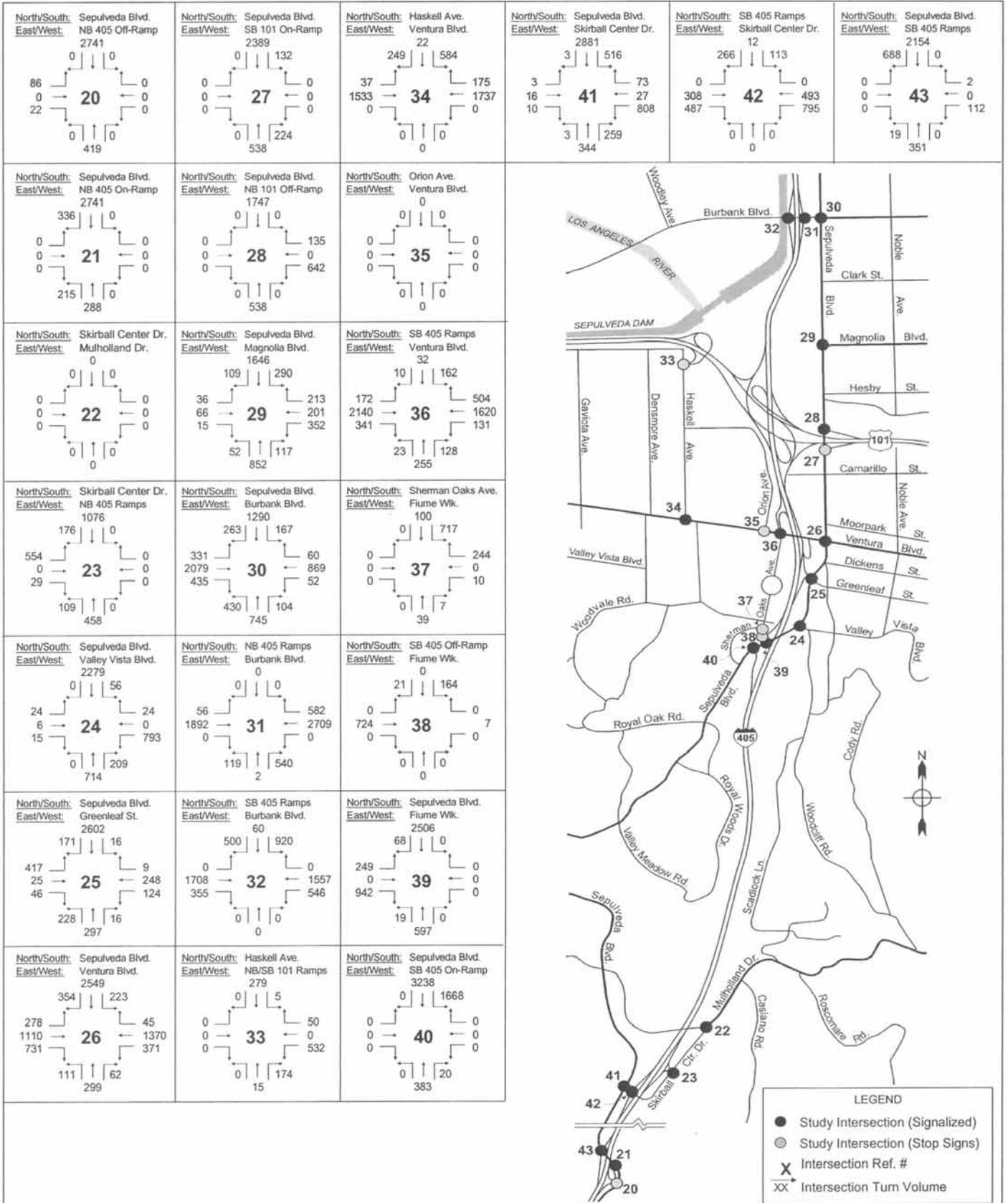
IBI GROUP	I-405 HOV Lane Over Sepulveda Pass (I-10 to US-101) Project	Figure 12A
	Alternative 1 Year 2031 Peak Hour Access Ramp Volumes - Southern Area	



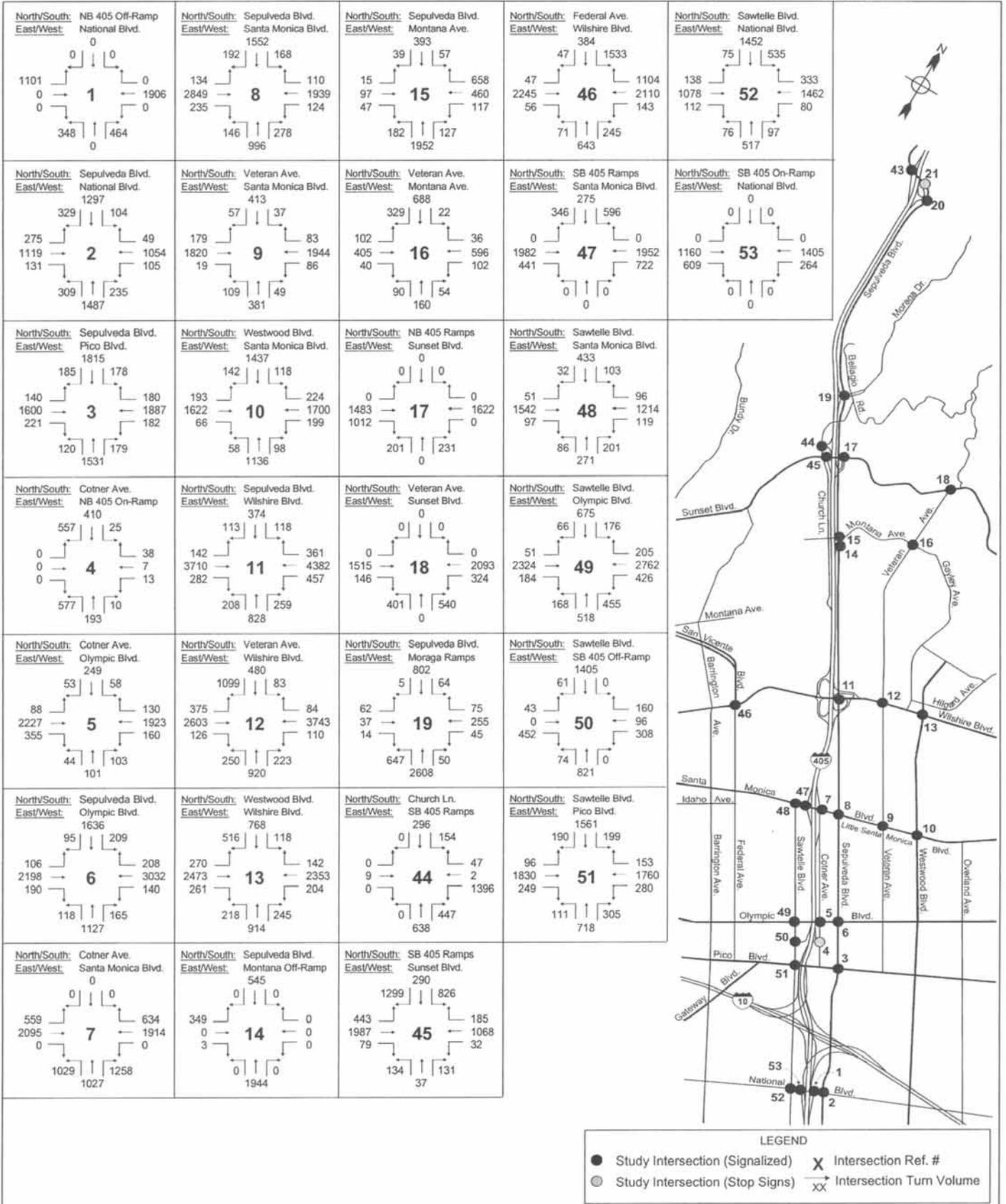


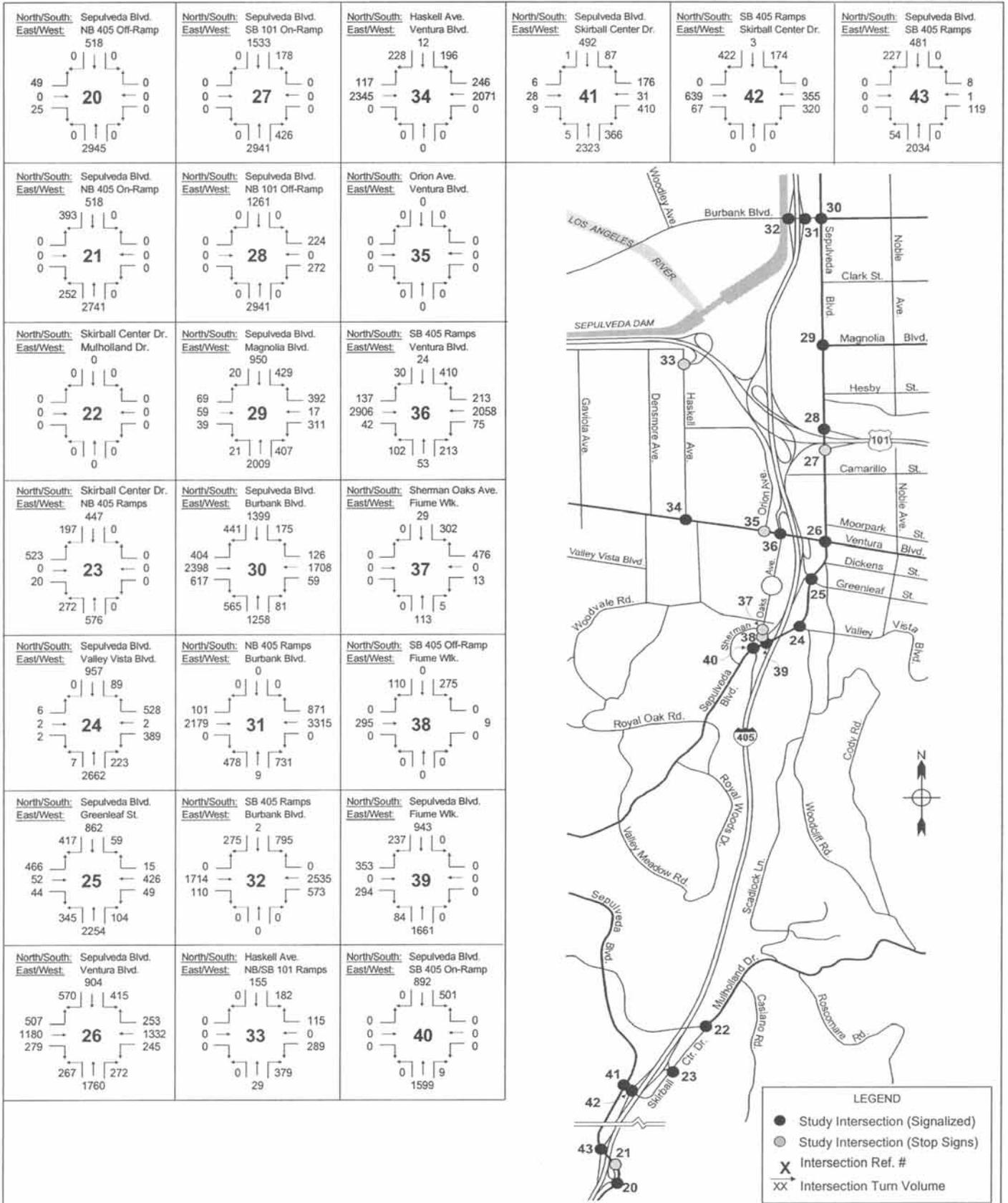
I-405 HOV Lane Over Sepulveda Pass (I-10 to US-101) Project
 Alternative 1 (Year 2015) Turning Movement Volumes - AM Peak Hour (Southern Area)

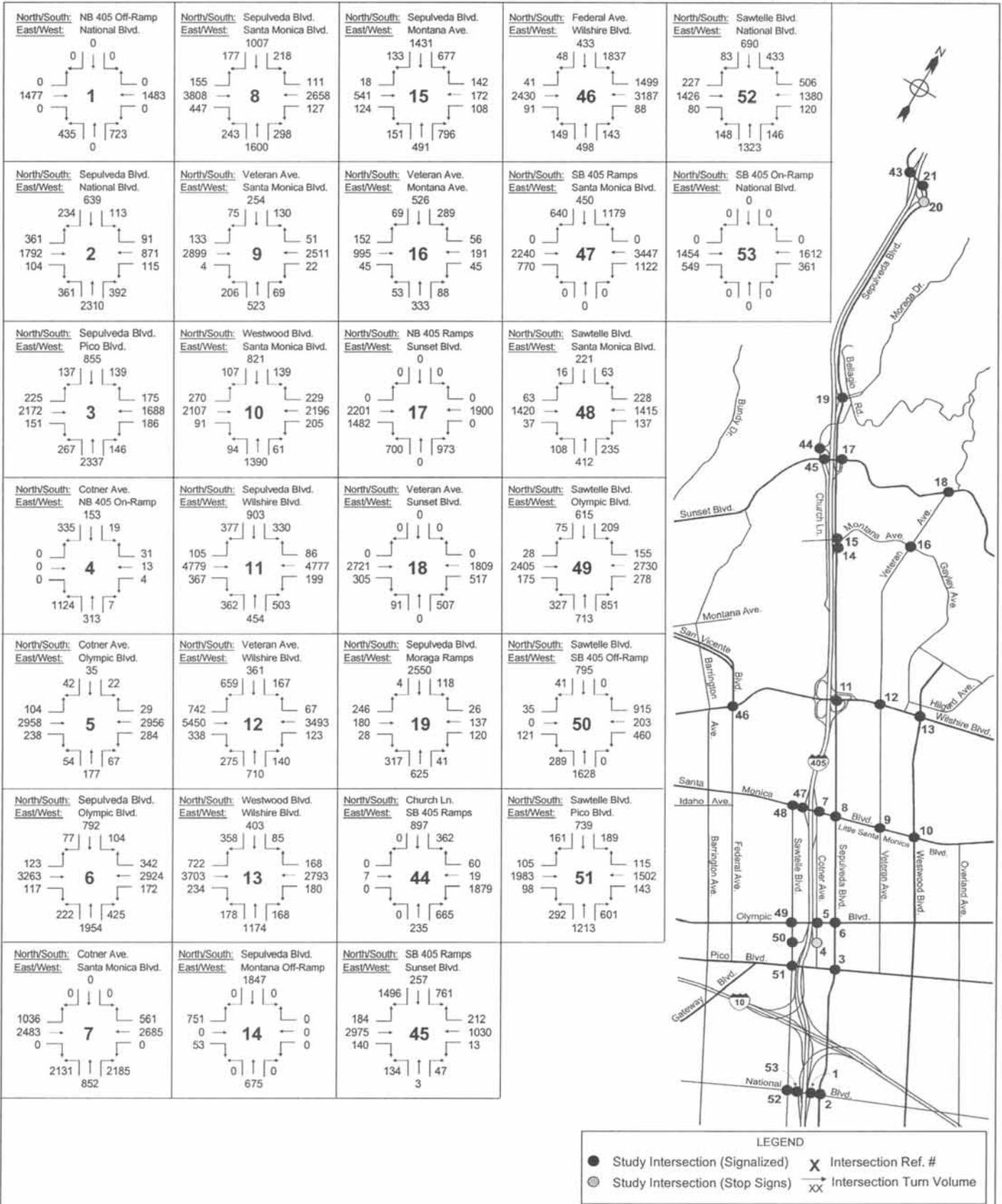
Figure 13A



IBI GROUP I-405 HOV Lane Over Sepulveda Pass (I-10 to US-101) Project Figure 13B
 Alternative 1 (Year 2015) Turning Movement Volumes - AM Peak Hour (Northern Area)

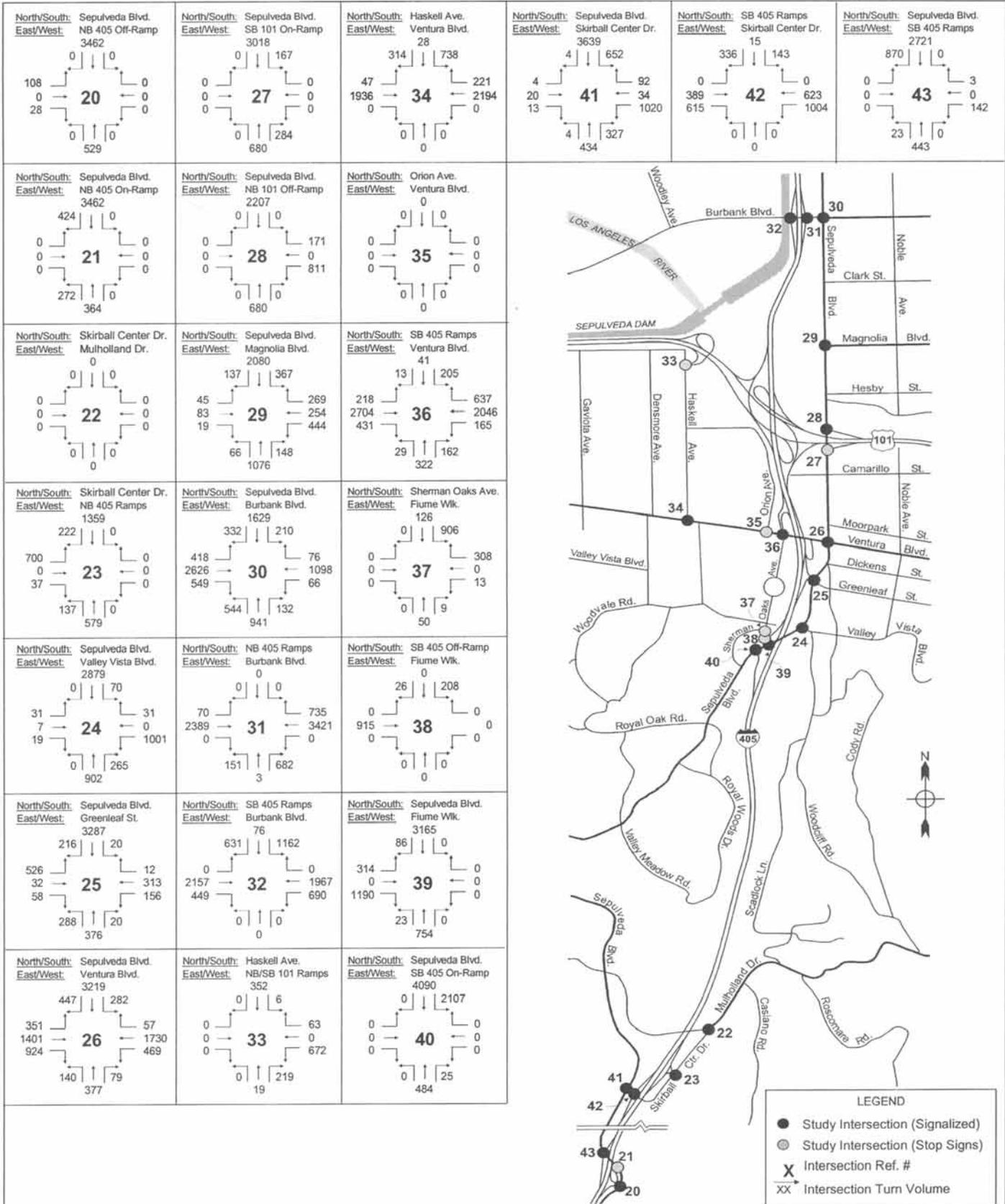




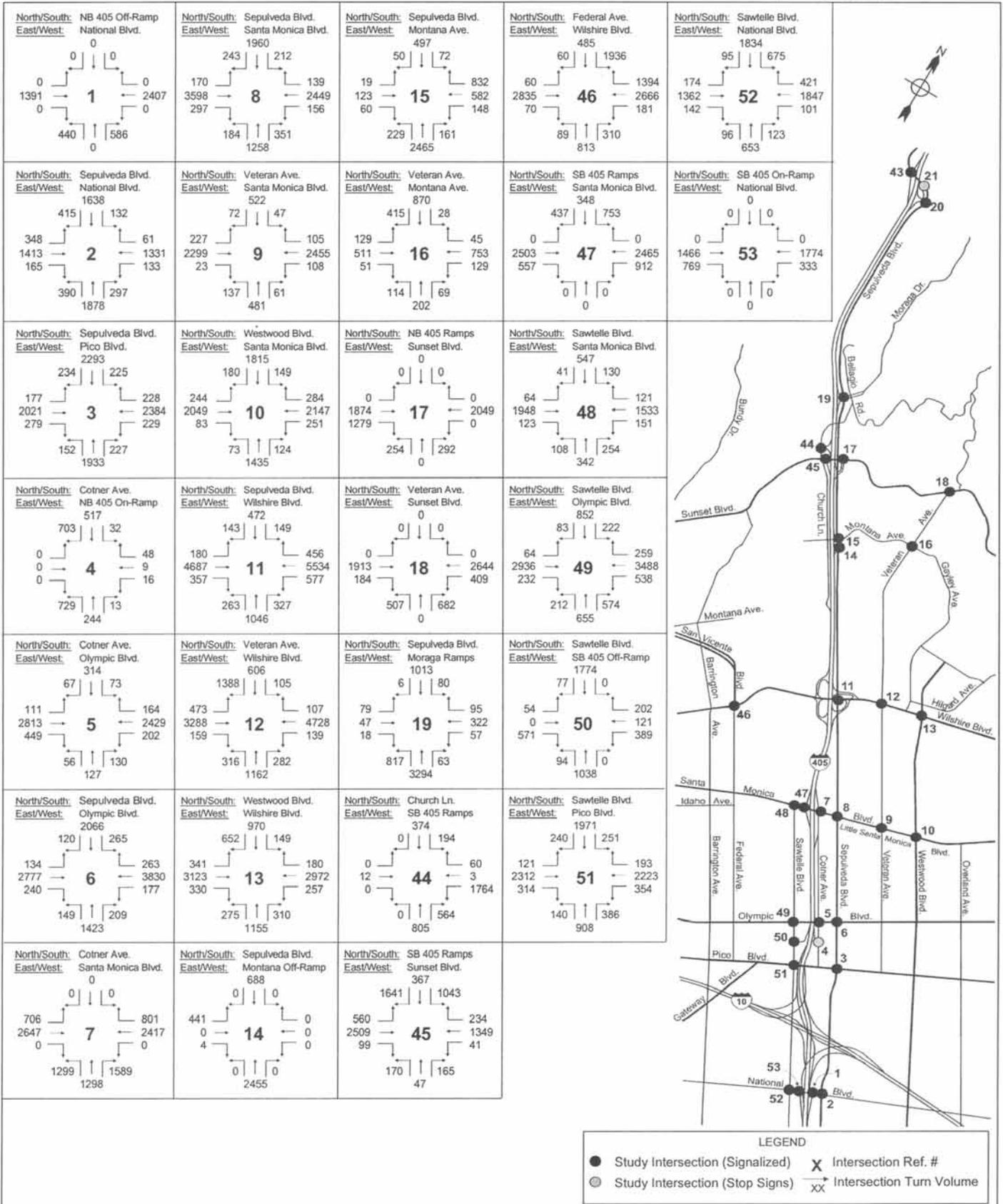


I-405 HOV Lane Over Sepulveda Pass (I-10 to US-101) Project
 Alternative 1 (Year 2031) Turning Movement Volumes - AM Peak Hour (Southern Area)

Figure 15A

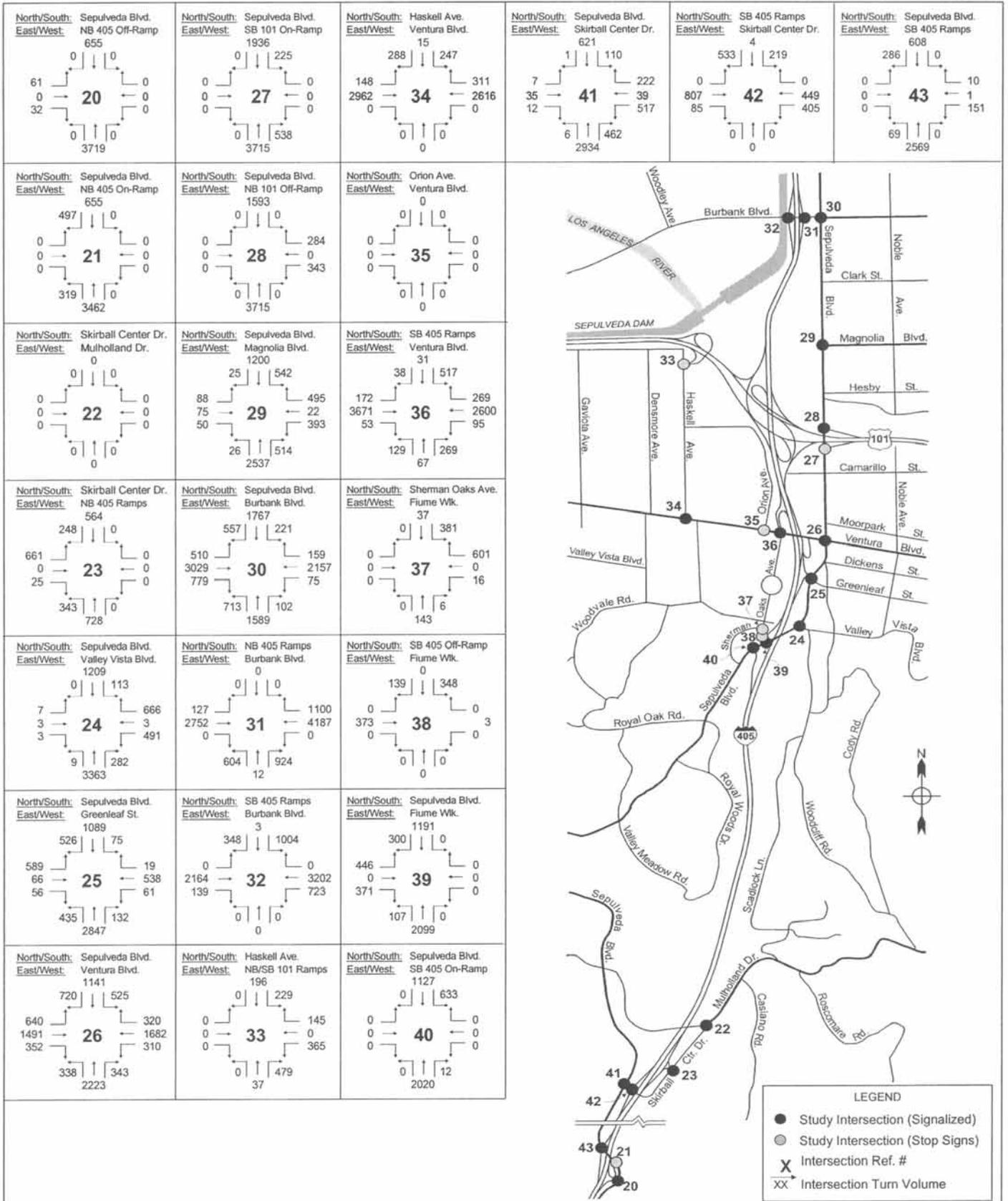


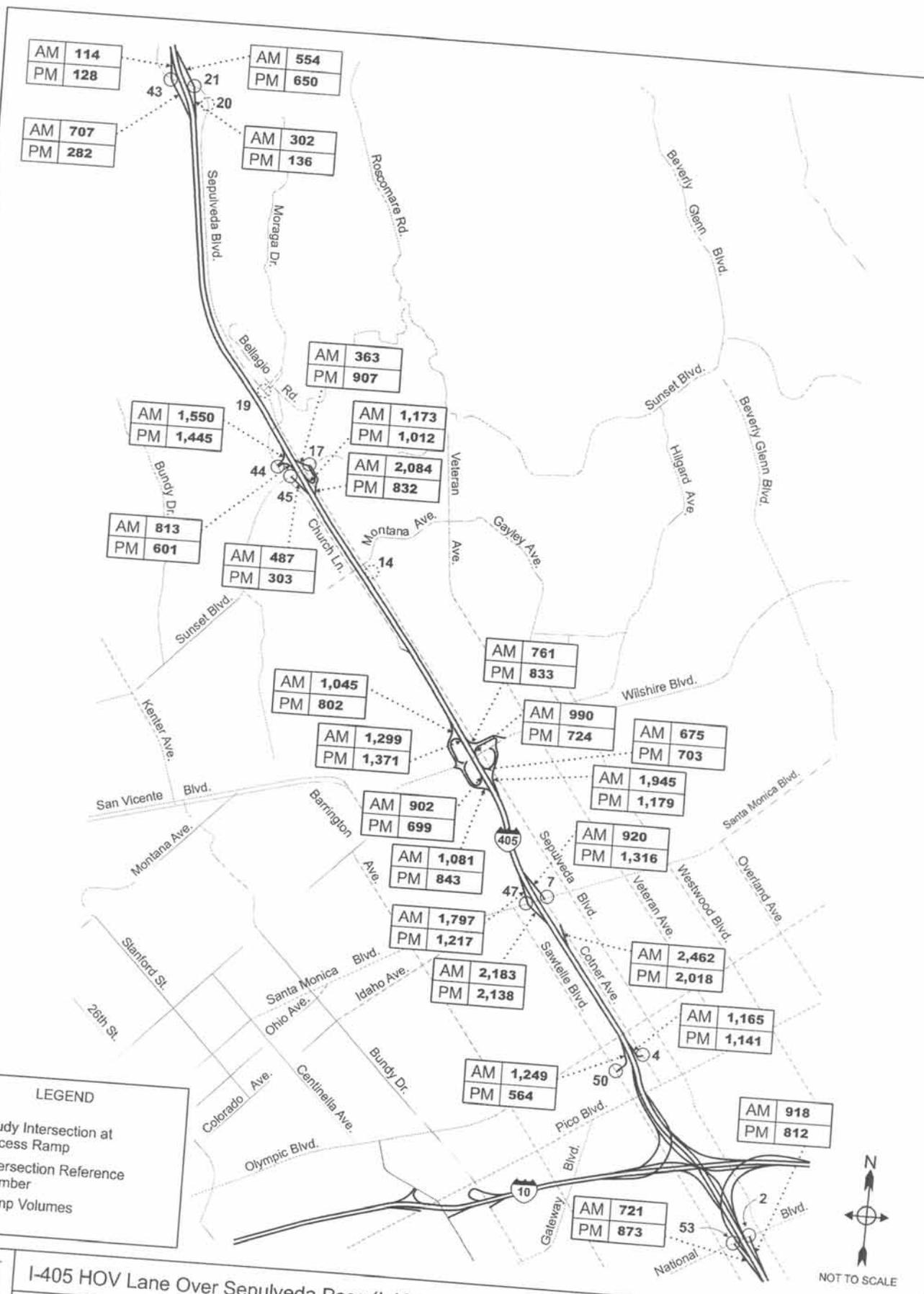
IBI GROUP I-405 HOV Lane Over Sepulveda Pass (I-10 to US-101) Project Figure 15B
 Alternative 1 (Year 2031) Turning Movement Volumes - AM Peak Hour (Northern Area)



I-405 HOV Lane Over Sepulveda Pass (I-10 to US-101) Project
 Alternative 1 (Year 2031) Turning Movement Volumes - PM Peak Hour (Southern Area)

Figure 16A



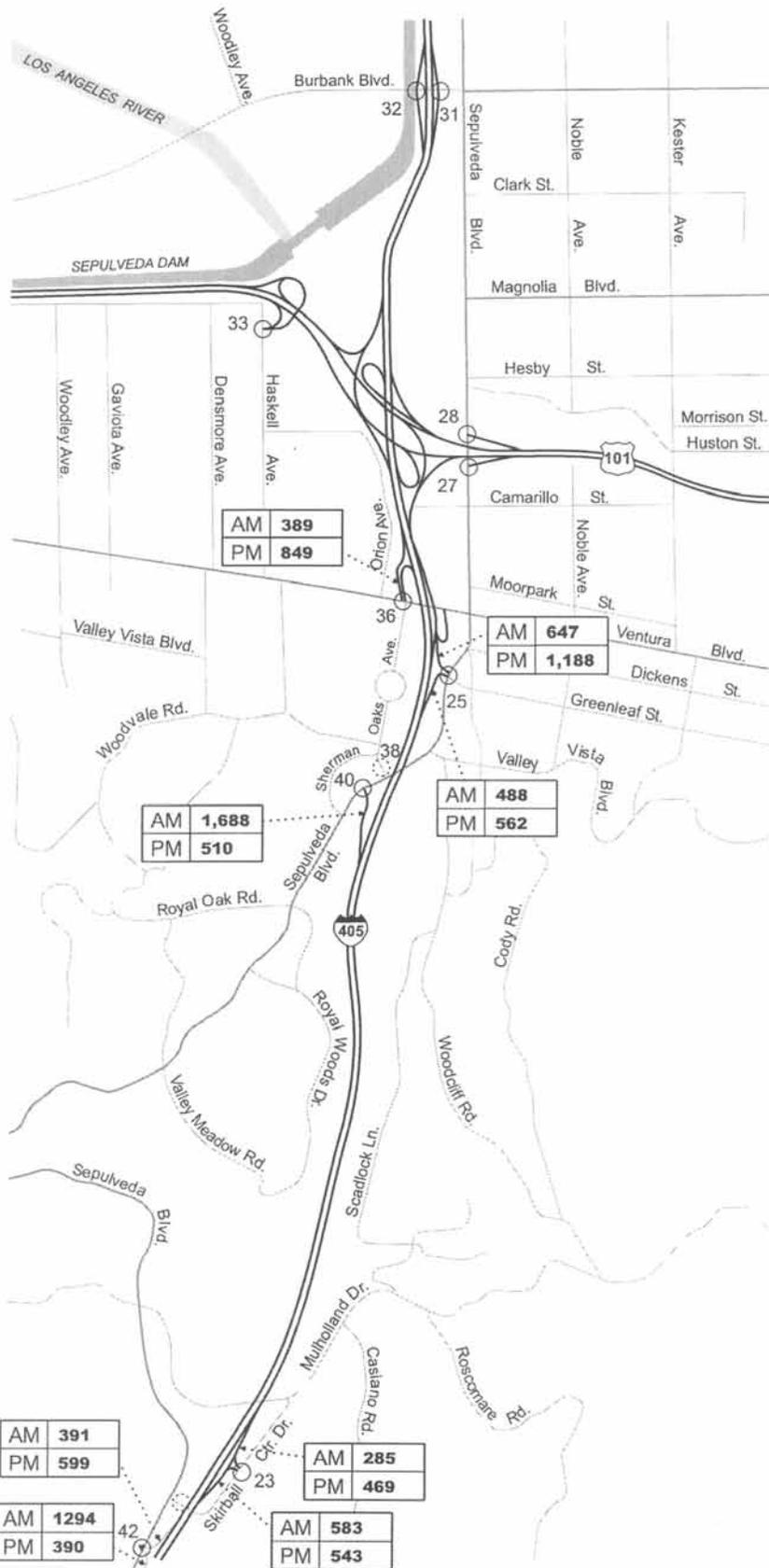


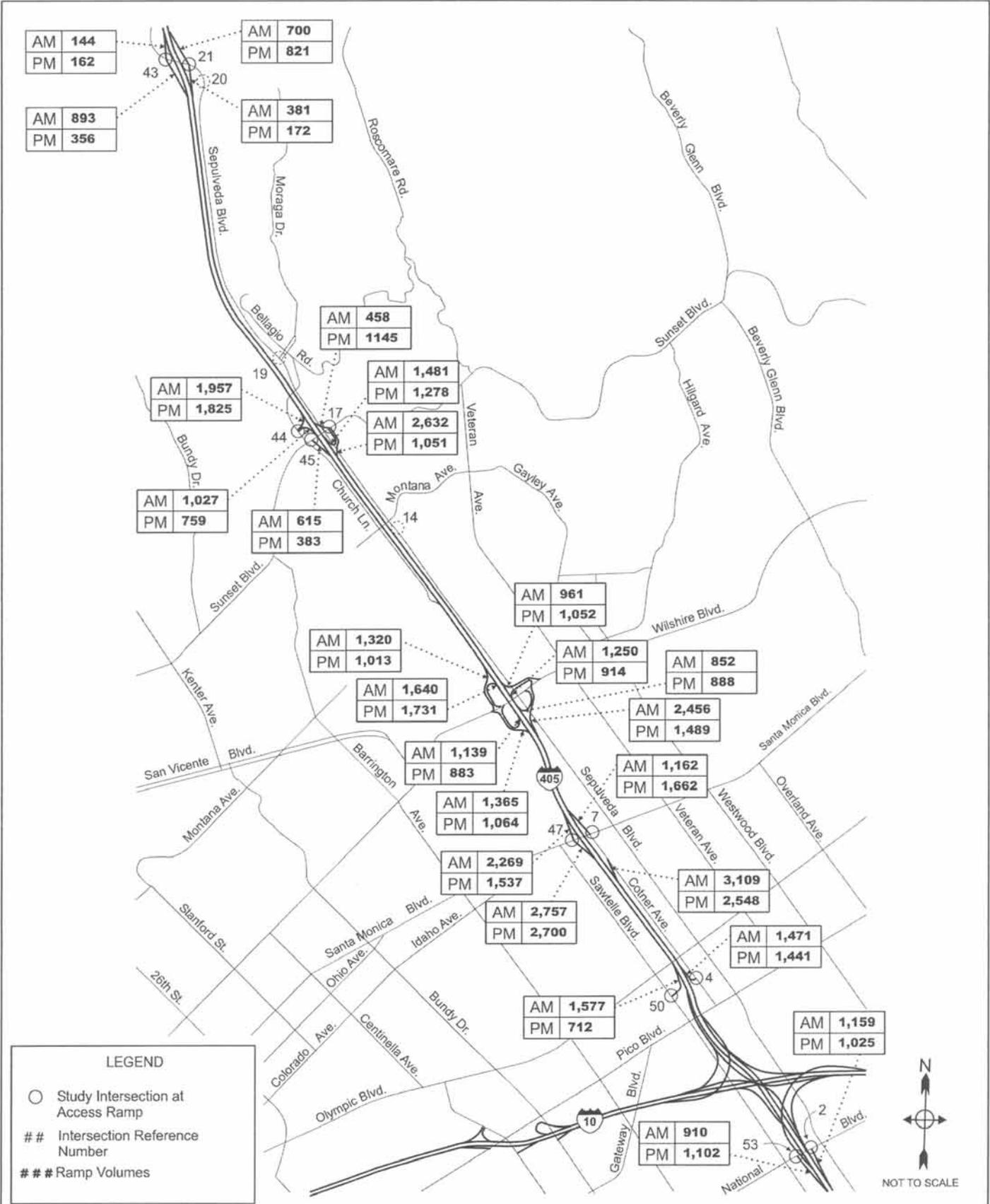
IBI
GROUP

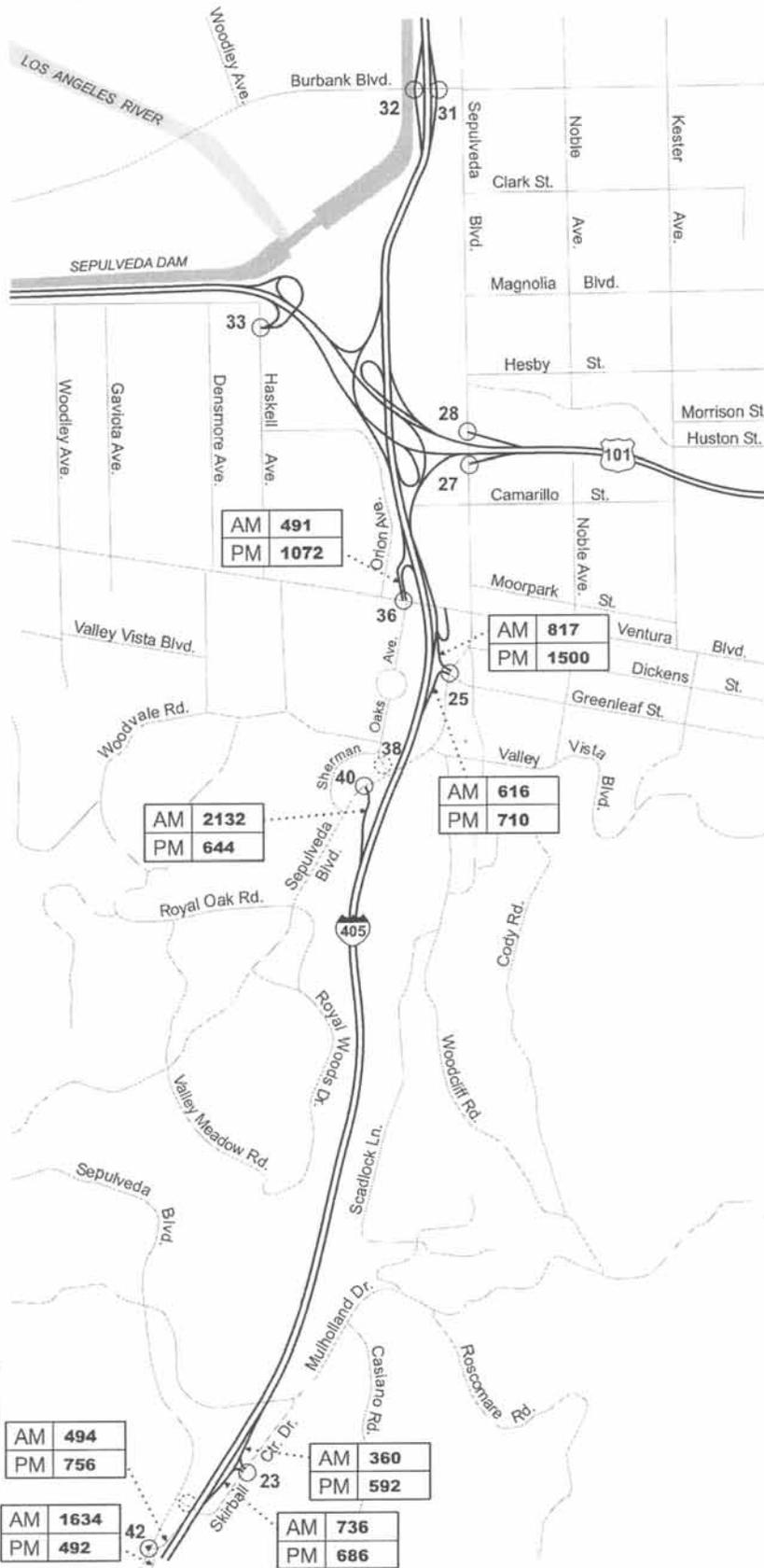
I-405 HOV Lane Over Sepulveda Pass (I-10 to US-101) Project
Alternative 2 Year 2015 Peak Hour Access Ramp Volumes - Southern Area

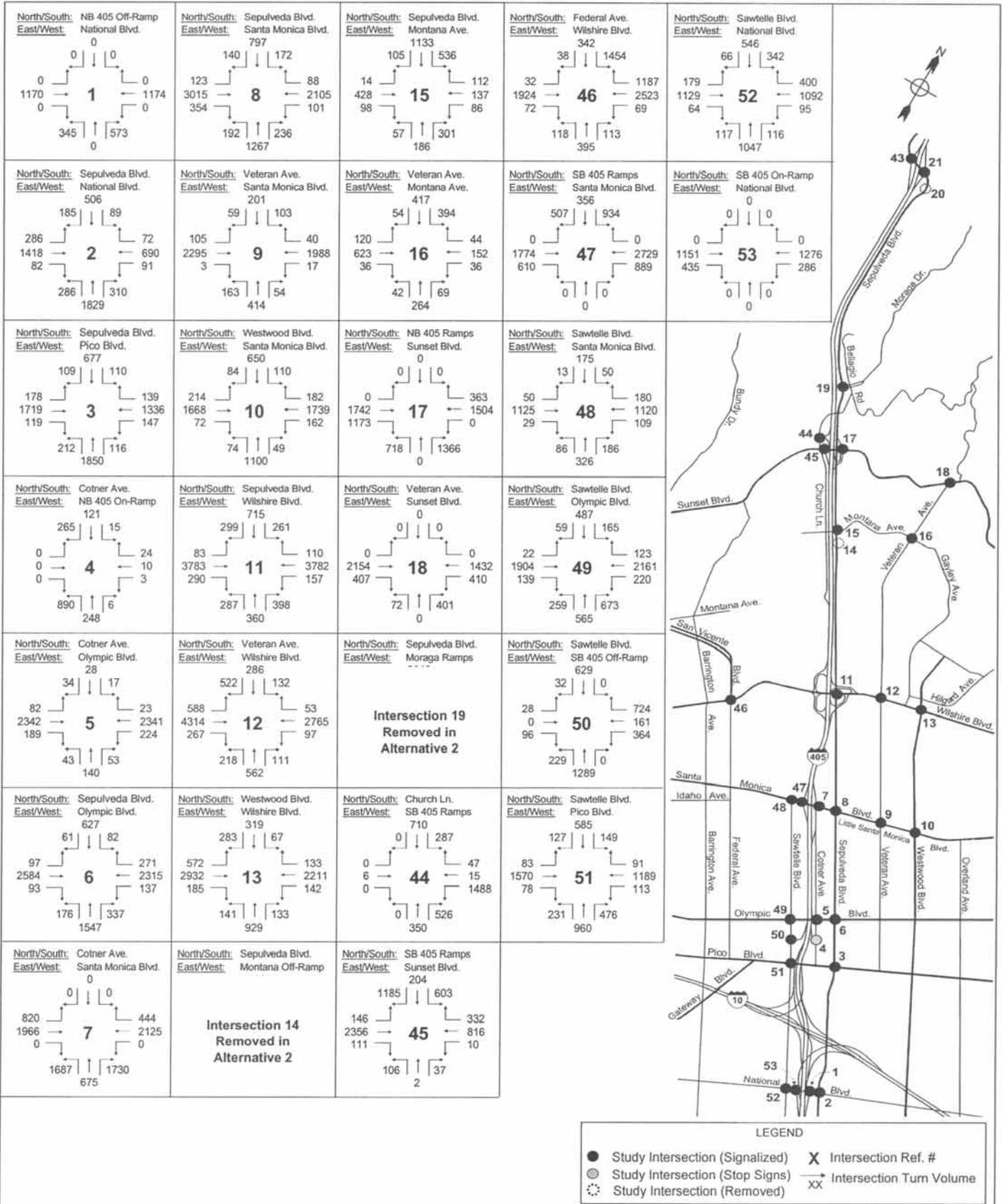


Figure 18A



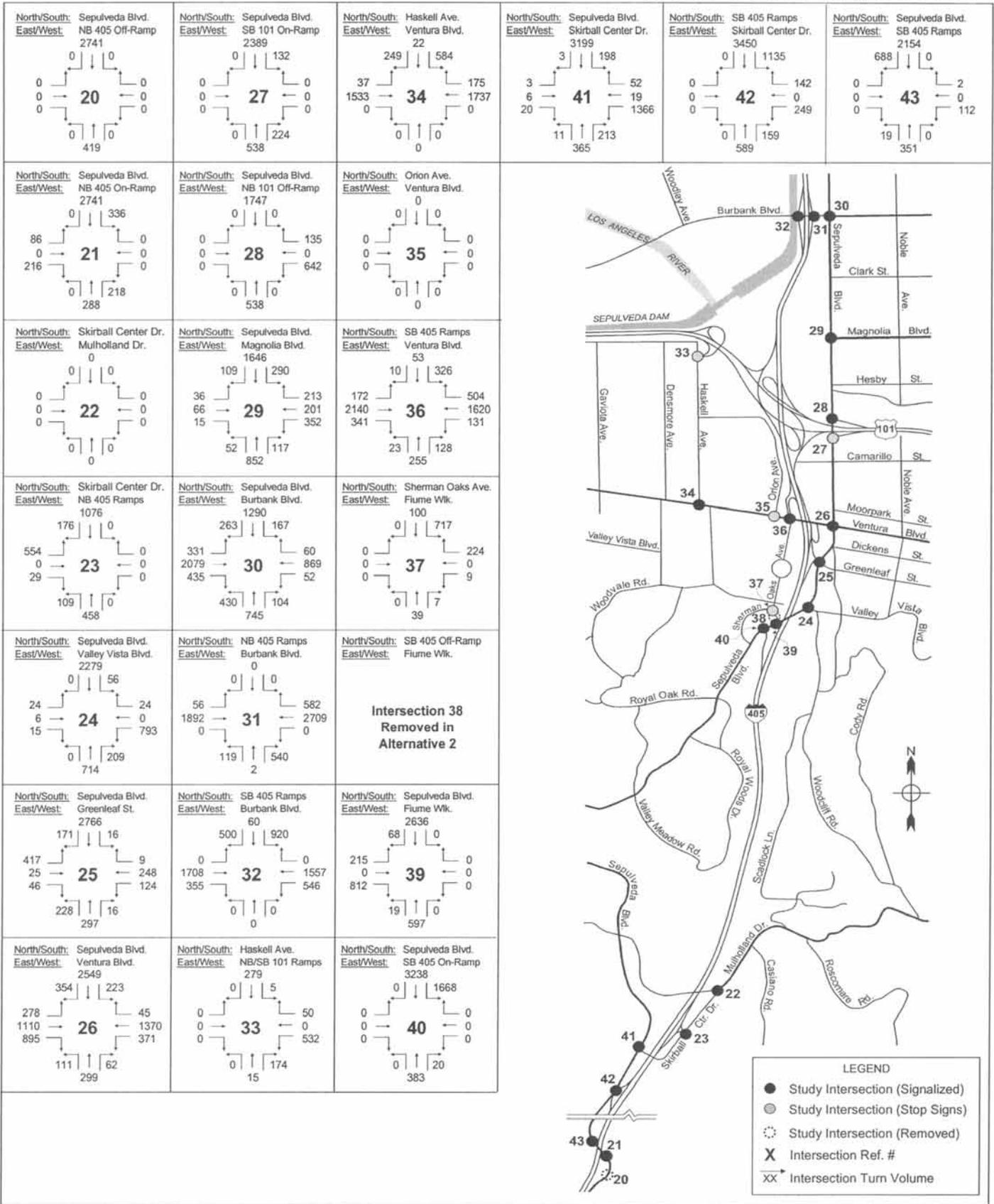




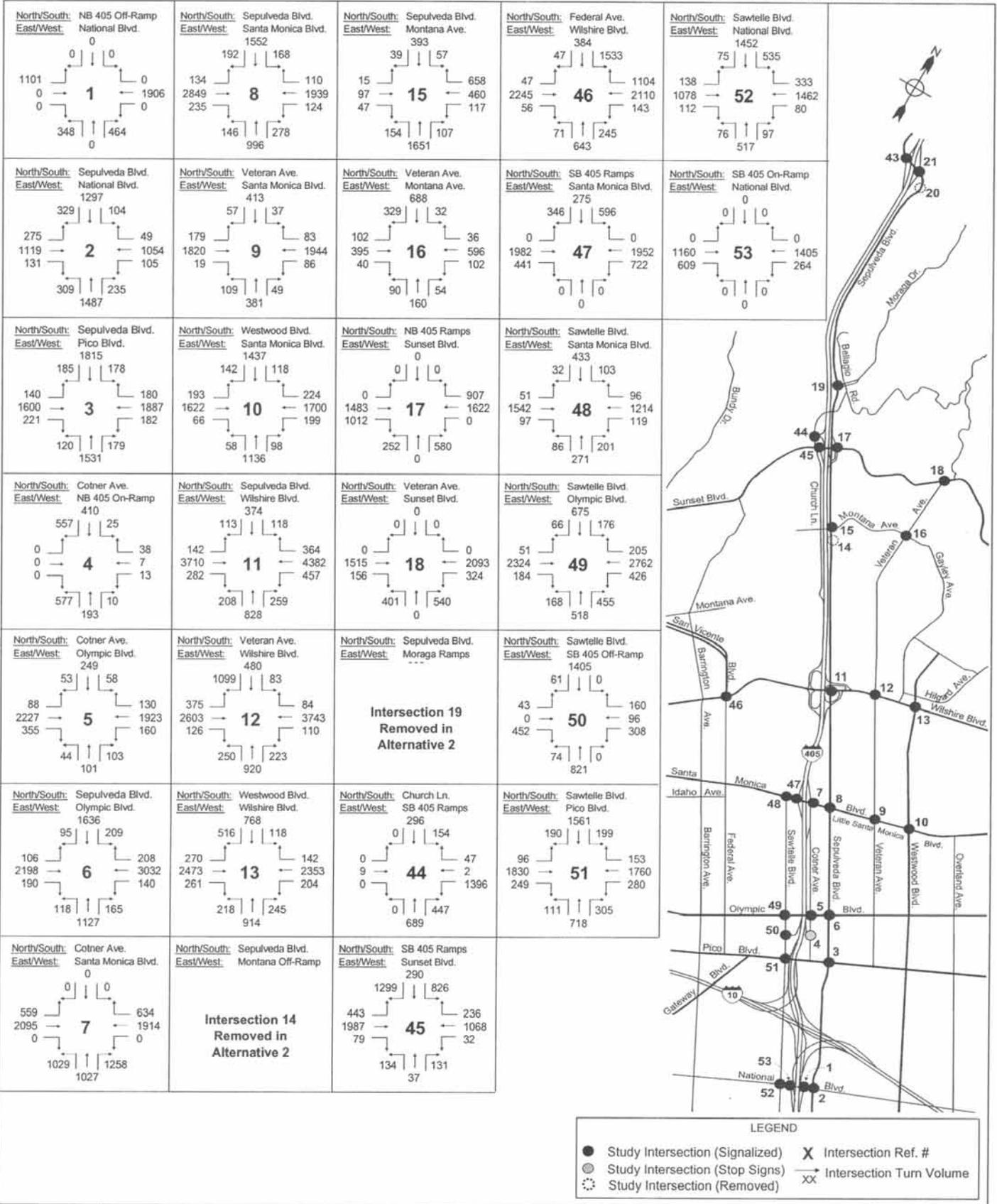


IBI GROUP I-405 HOV Lane Over Sepulveda Pass (I-10 to US-101) Project Figure 21A

Alternative 2 (Year 2015) Turning Movement Volumes - AM Peak Hour (Southern Area)

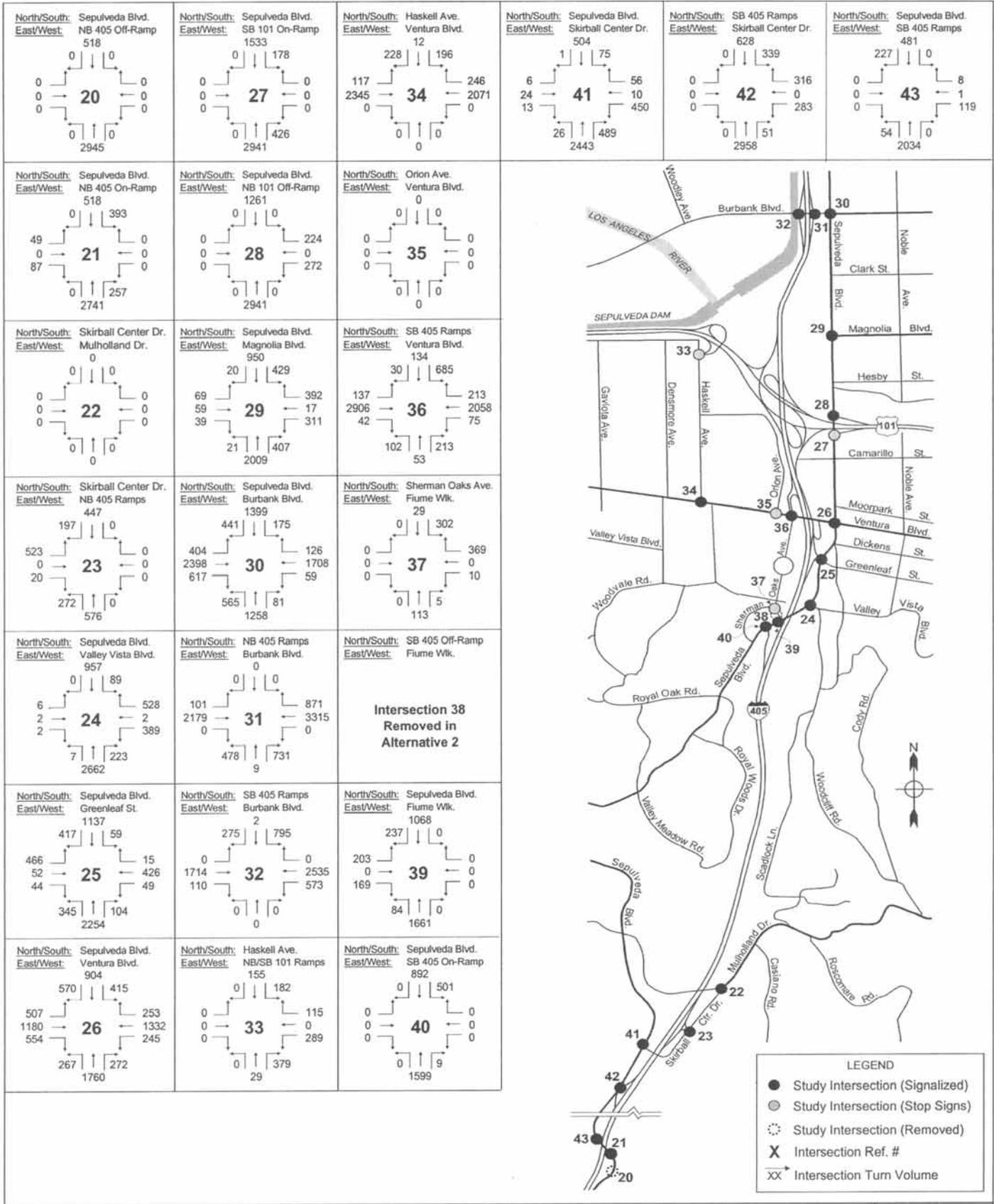


IBI GROUP | I-405 HOV Lane Over Sepulveda Pass (I-10 to US-101) Project | Figure 21B
 Alternative 2 (Year 2015) Turning Movement Volumes - AM Peak Hour (Northern Area)



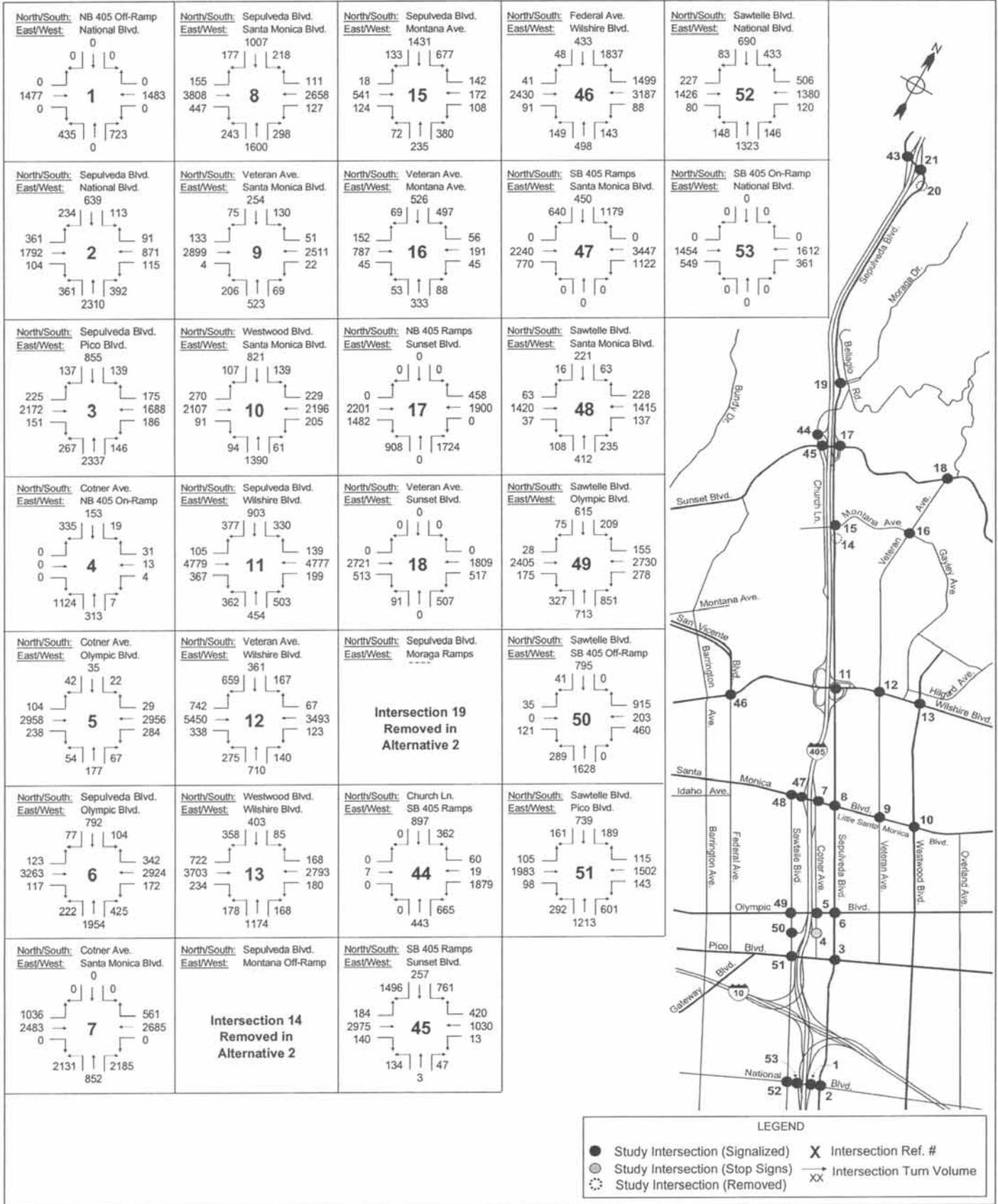
IBI GROUP I-405 HOV Lane Over Sepulveda Pass (I-10 to US-101) Project Figure 22A

Alternative 2 (Year 2015) Turning Movement Volumes - PM Peak Hour (Southern Area)



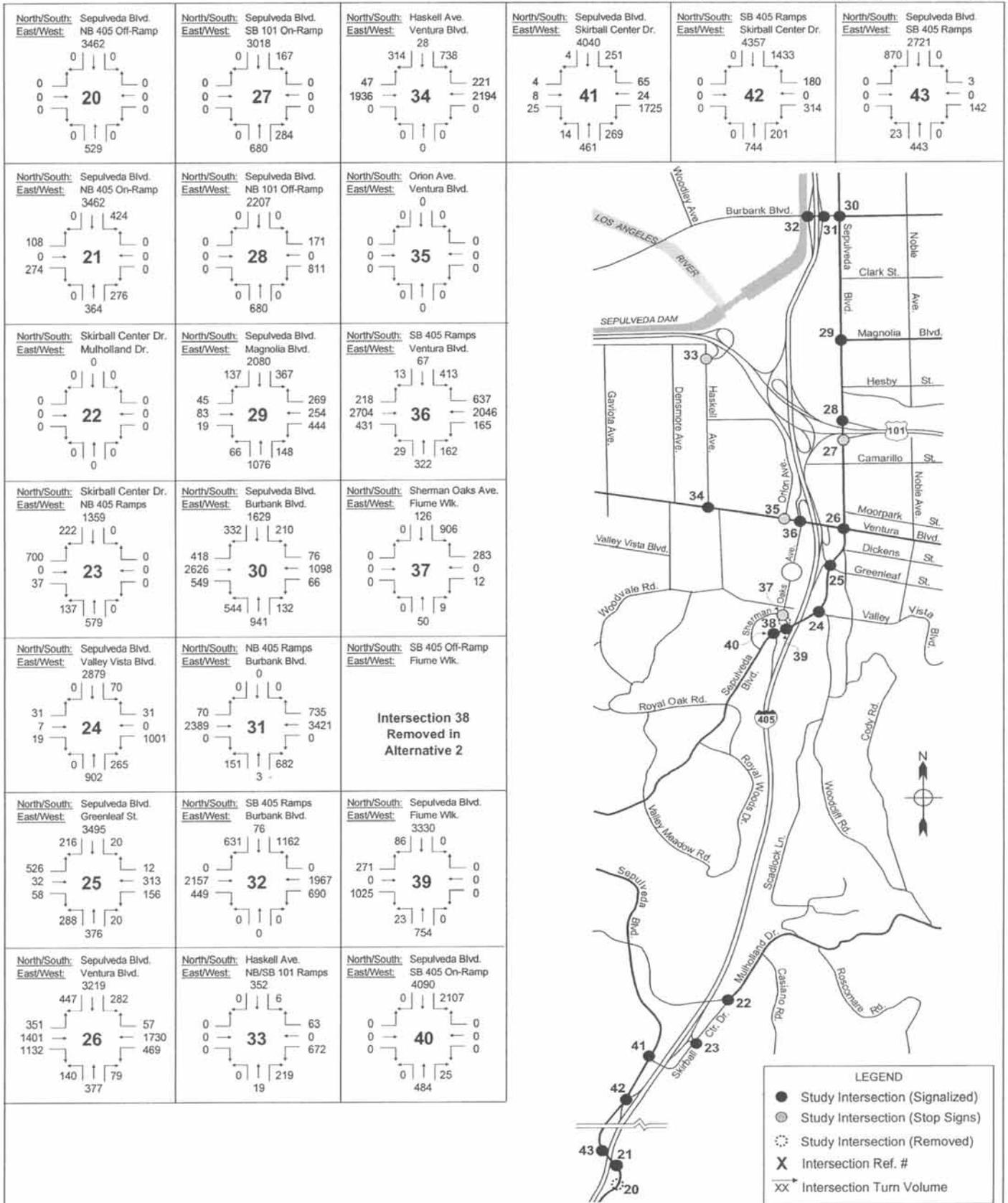
I-405 HOV Lane Over Sepulveda Pass (I-10 to US-101) Project
Alternative 2 (Year 2015) Turning Movement Volumes - PM Peak Hour (Northern Area)

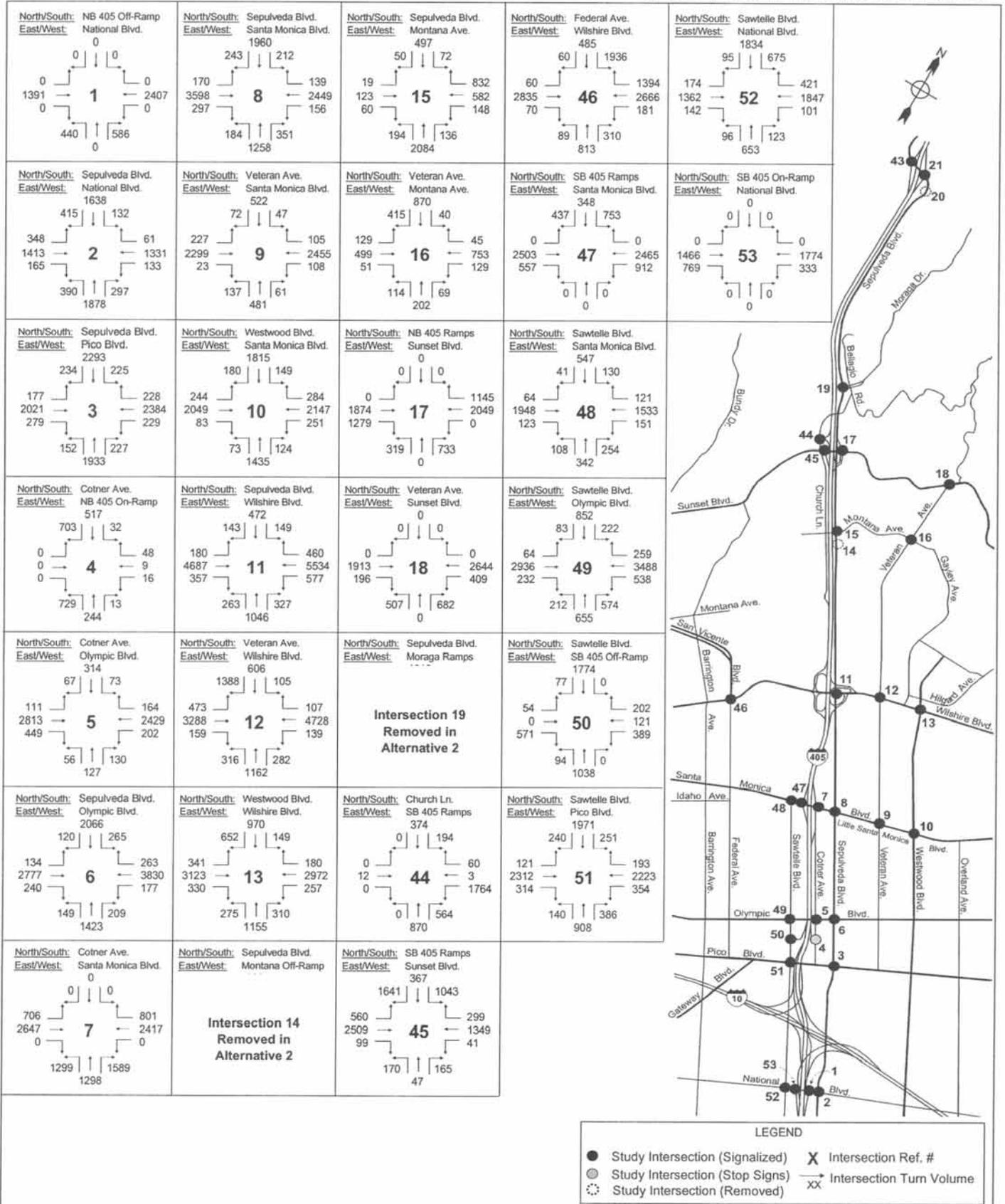
Figure 22B



I-405 HOV Lane Over Sepulveda Pass (I-10 to US-101) Project
Alternative 2 (Year 2031) Turning Movement Volumes - AM Peak Hour (Southern Area)

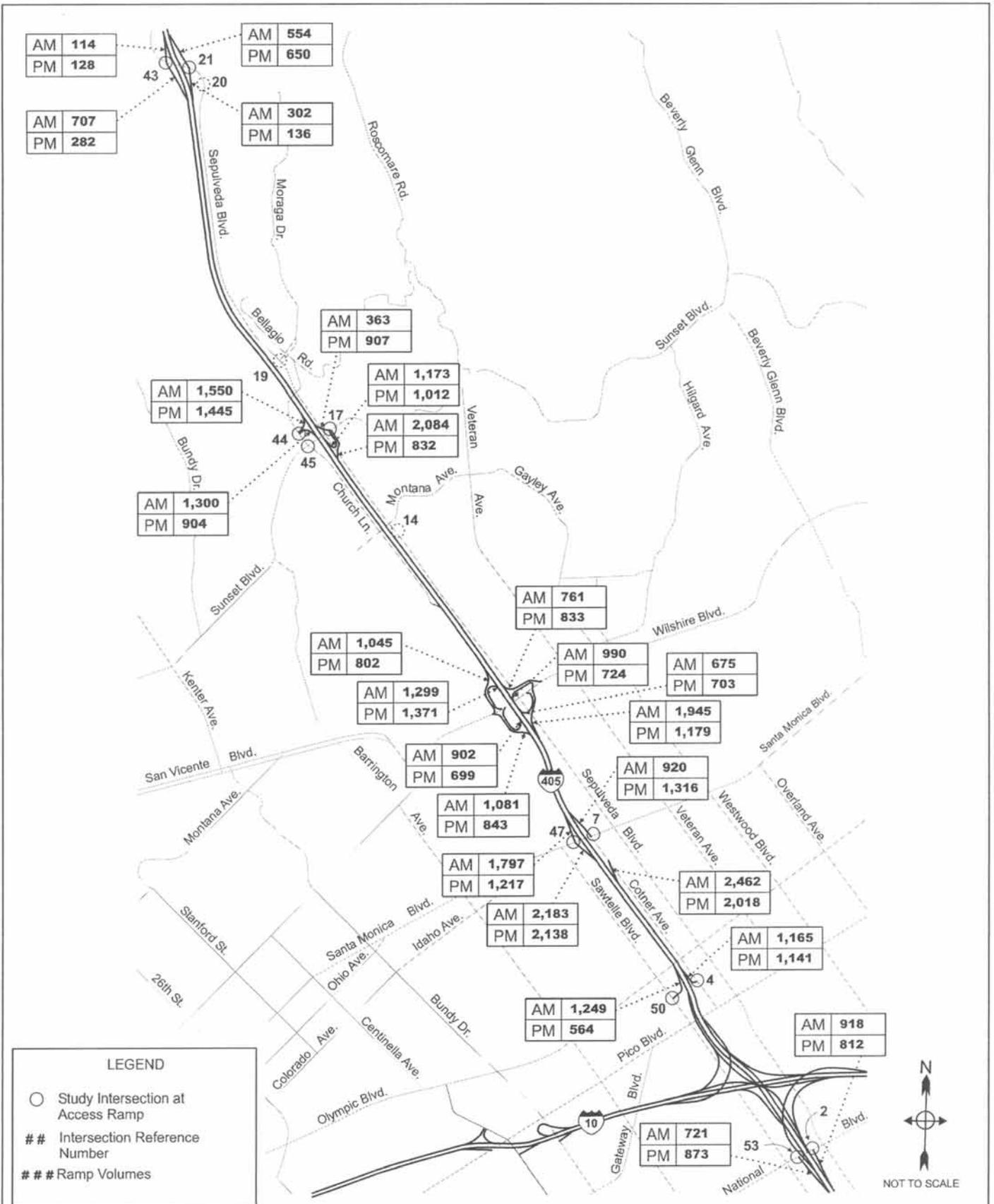
Figure 23A





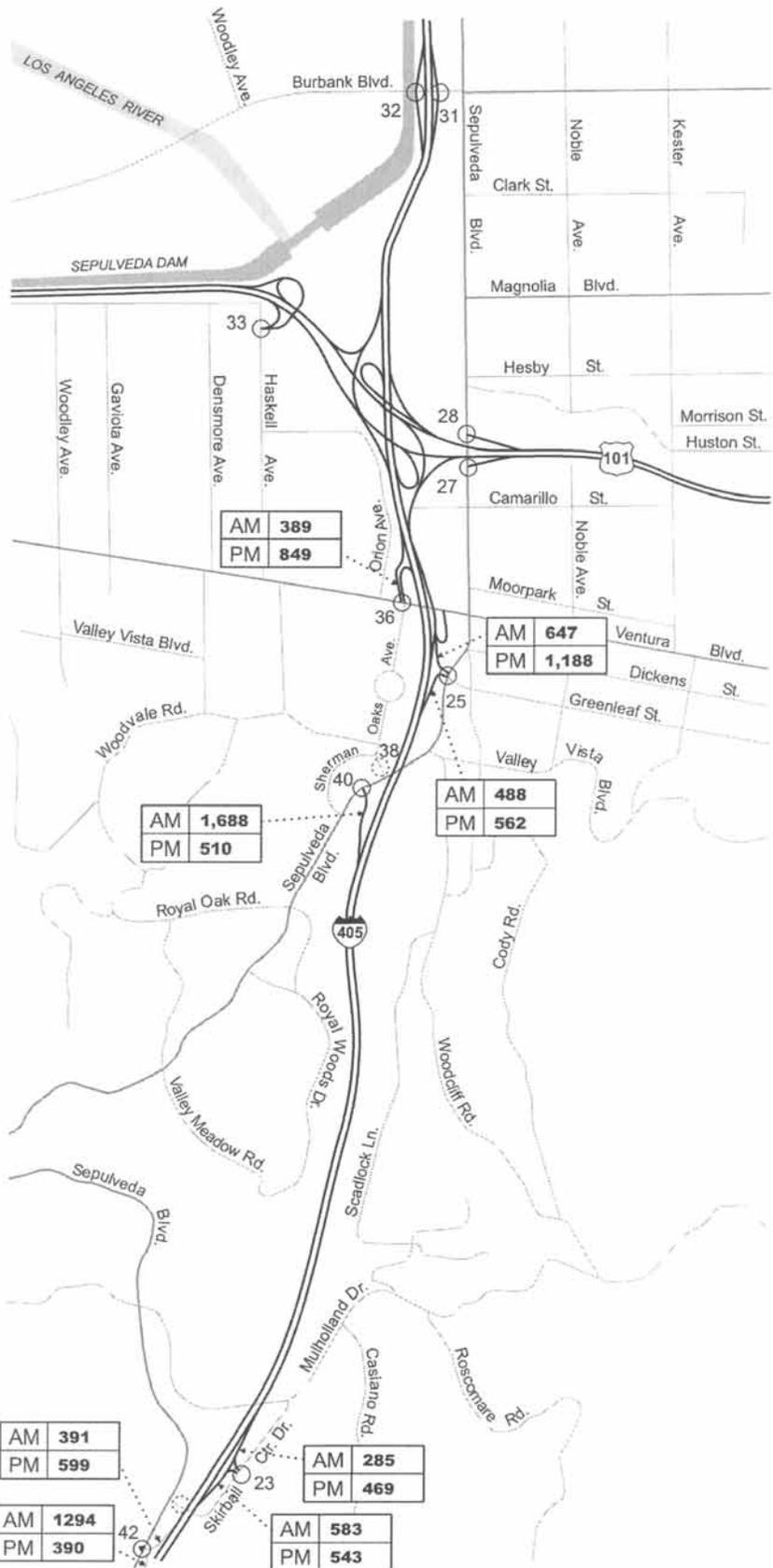
I-405 HOV Lane Over Sepulveda Pass (I-10 to US-101) Project
 Alternative 2 (Year 2031) Turning Movement Volumes - PM Peak Hour (Southern Area)

Figure 24A



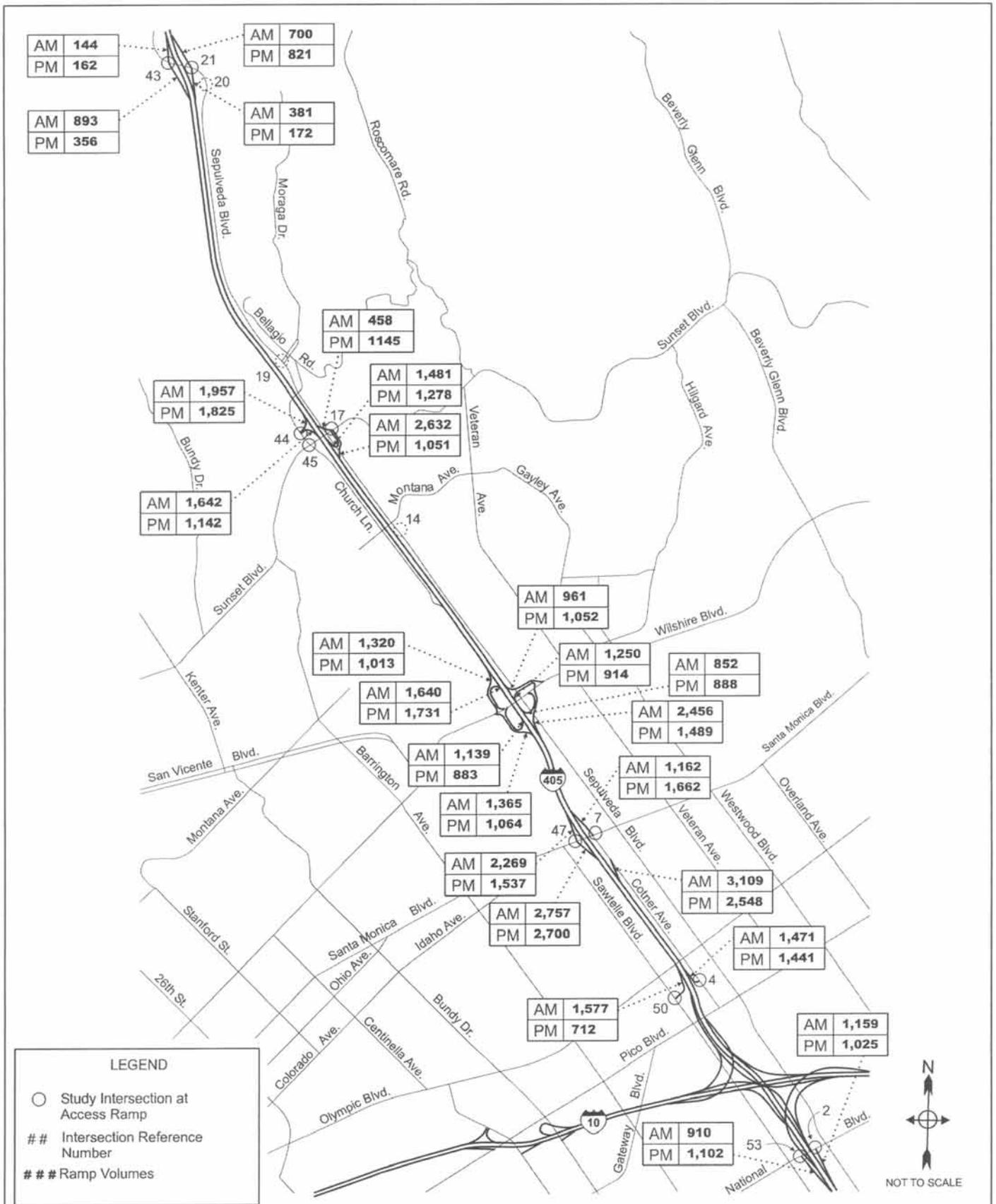
I-405 HOV Lane Over Sepulveda Pass (I-10 to US-101) Project
 Alternative 3 Year 2015 Peak Hour Access Ramp Volumes - Southern Area

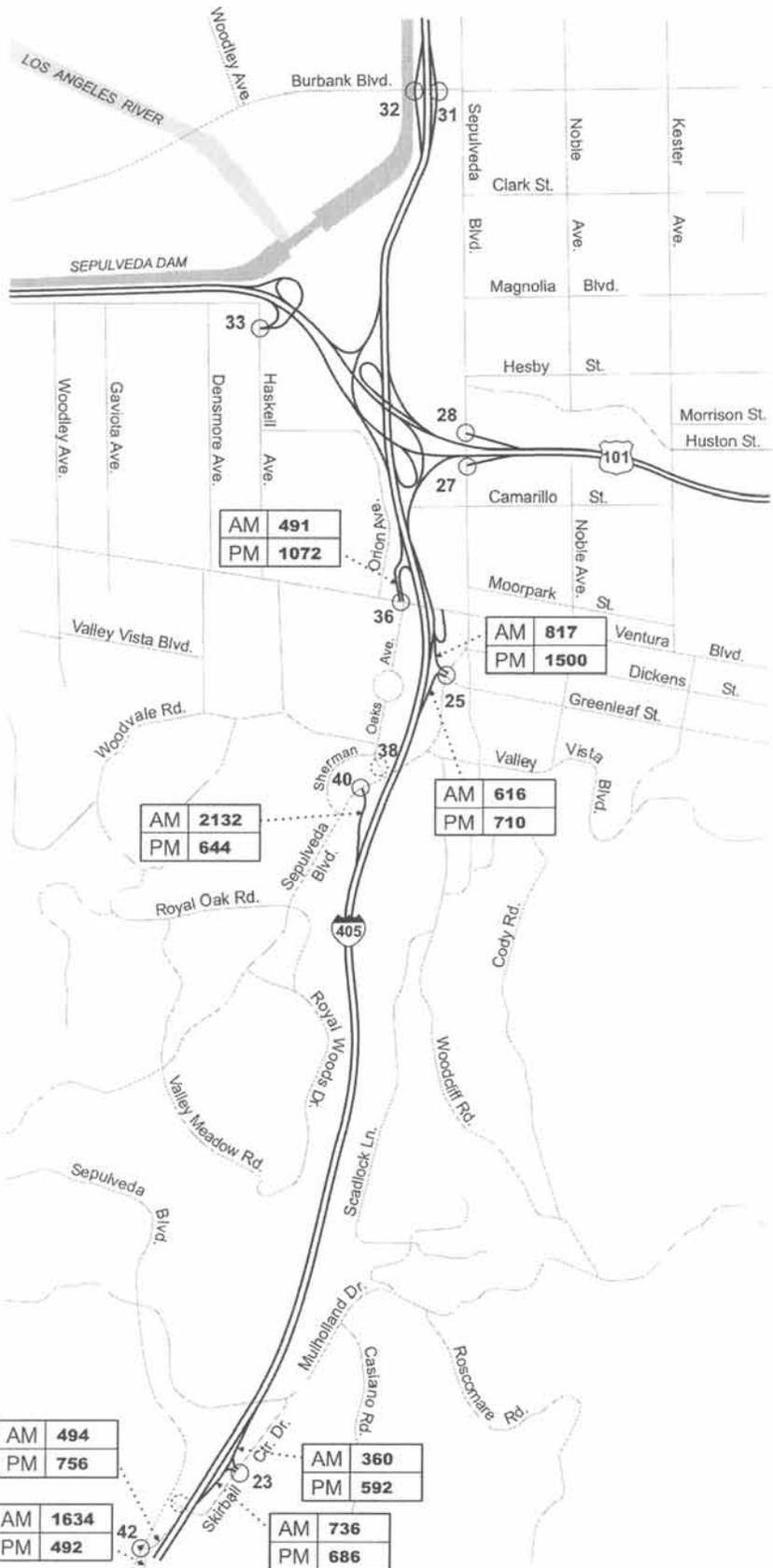
Figure 26A

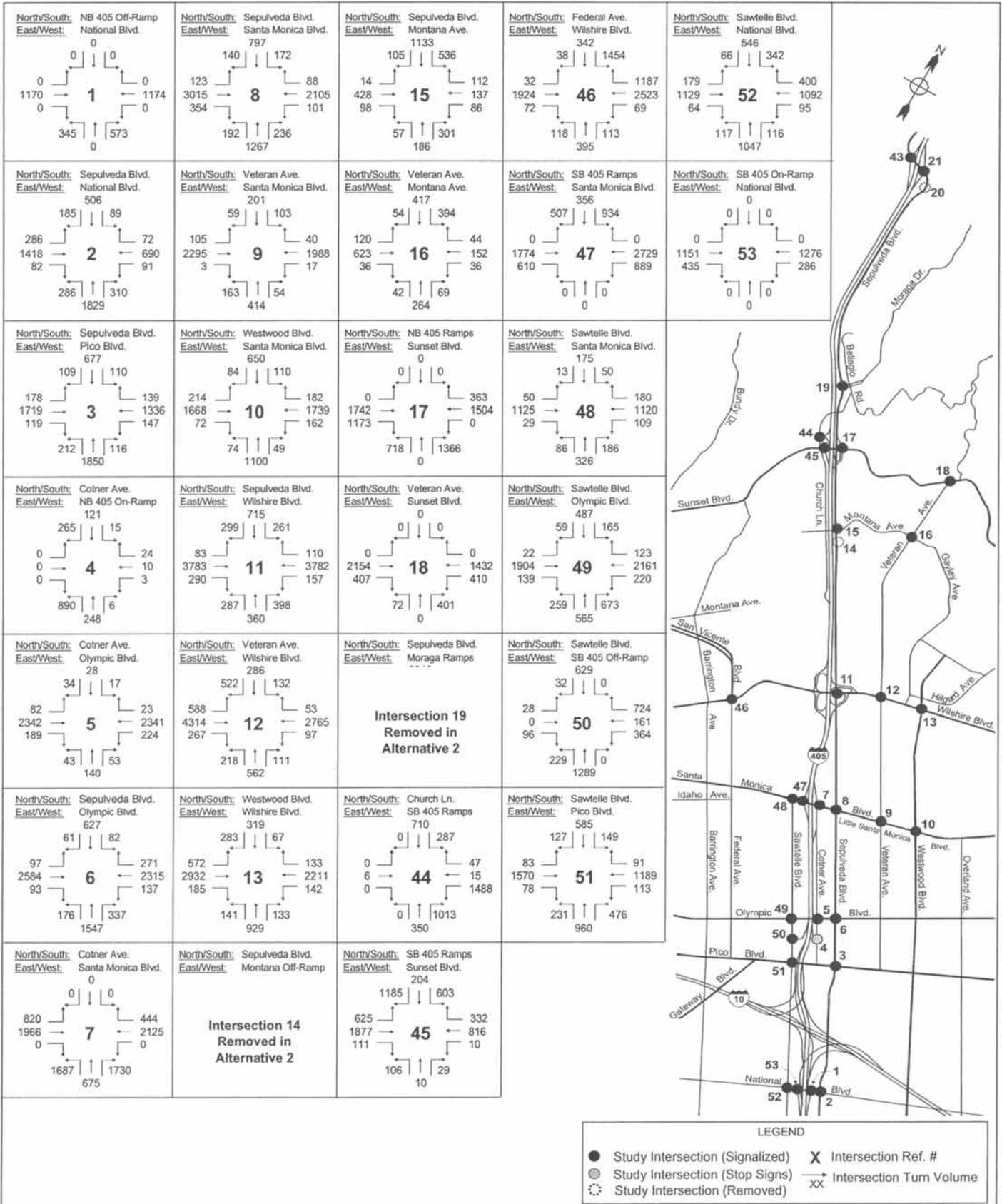


LEGEND	
○	Study Intersection at Ramp Location
##	Intersection Reference Number
###	Ramp Volumes



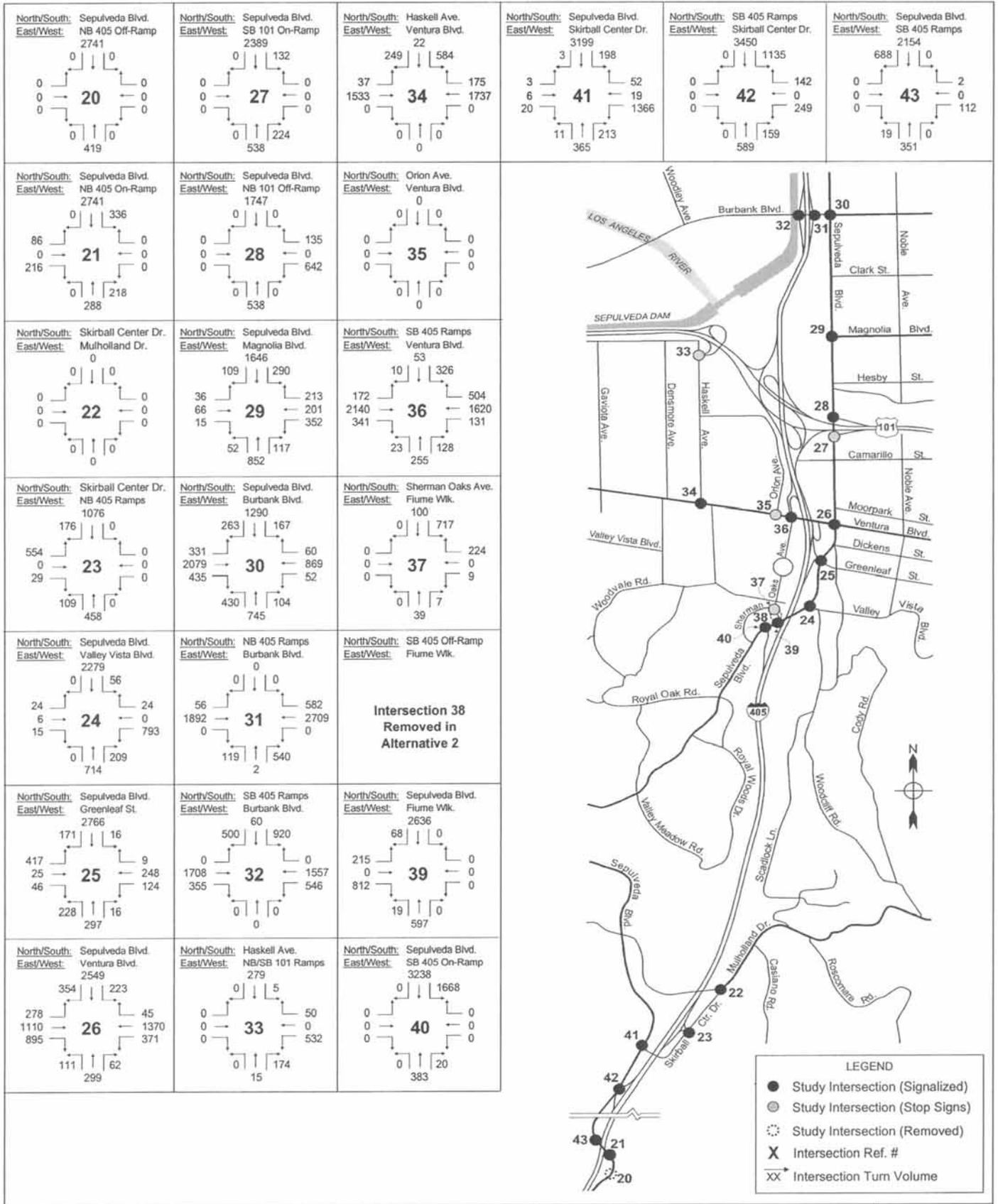




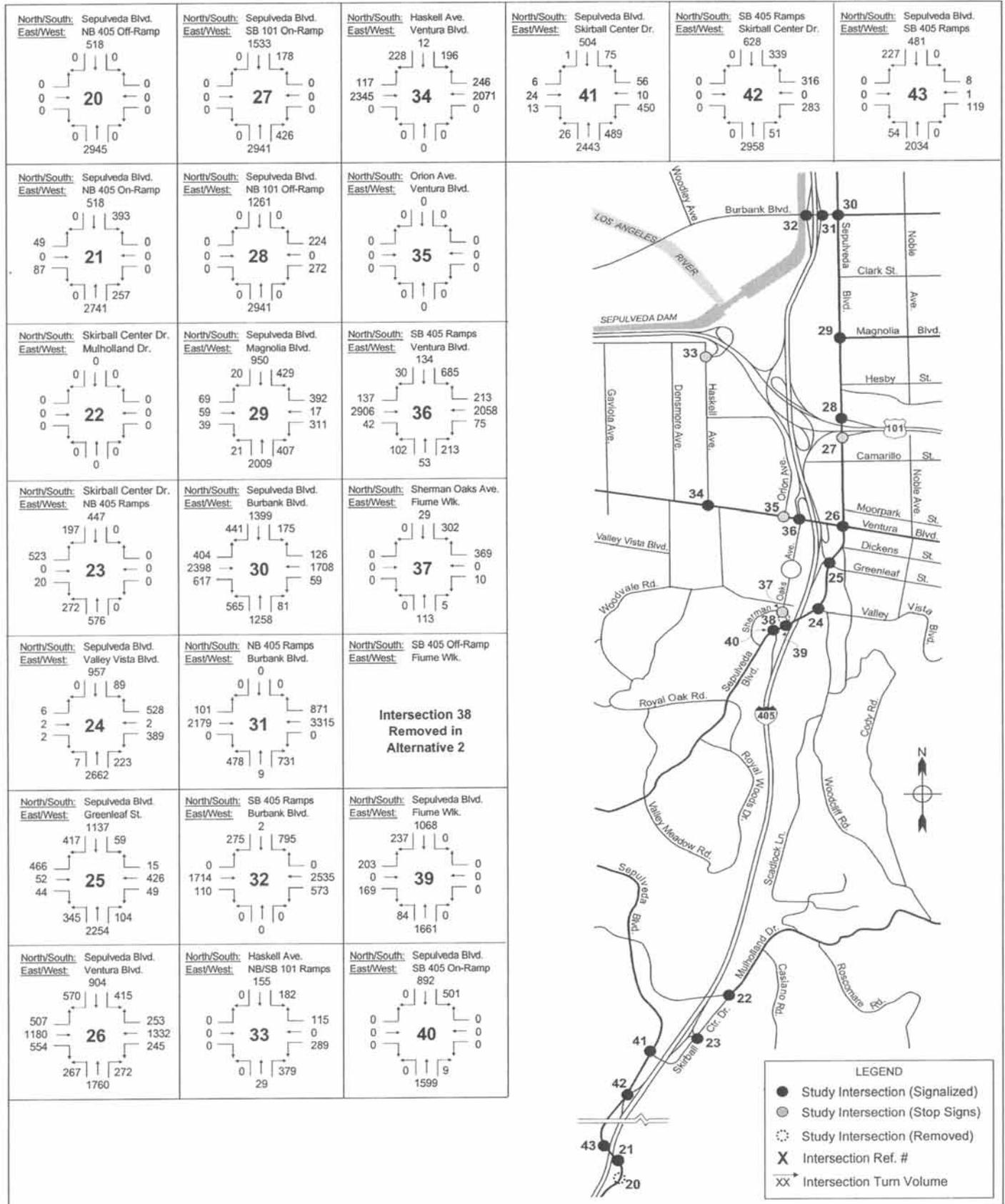


I-405 HOV Lane Over Sepulveda Pass (I-10 to US-101) Project
Alternative 3 (Year 2015) Turning Movement Volumes - AM Peak Hour (Southern Area)

Figure 29A

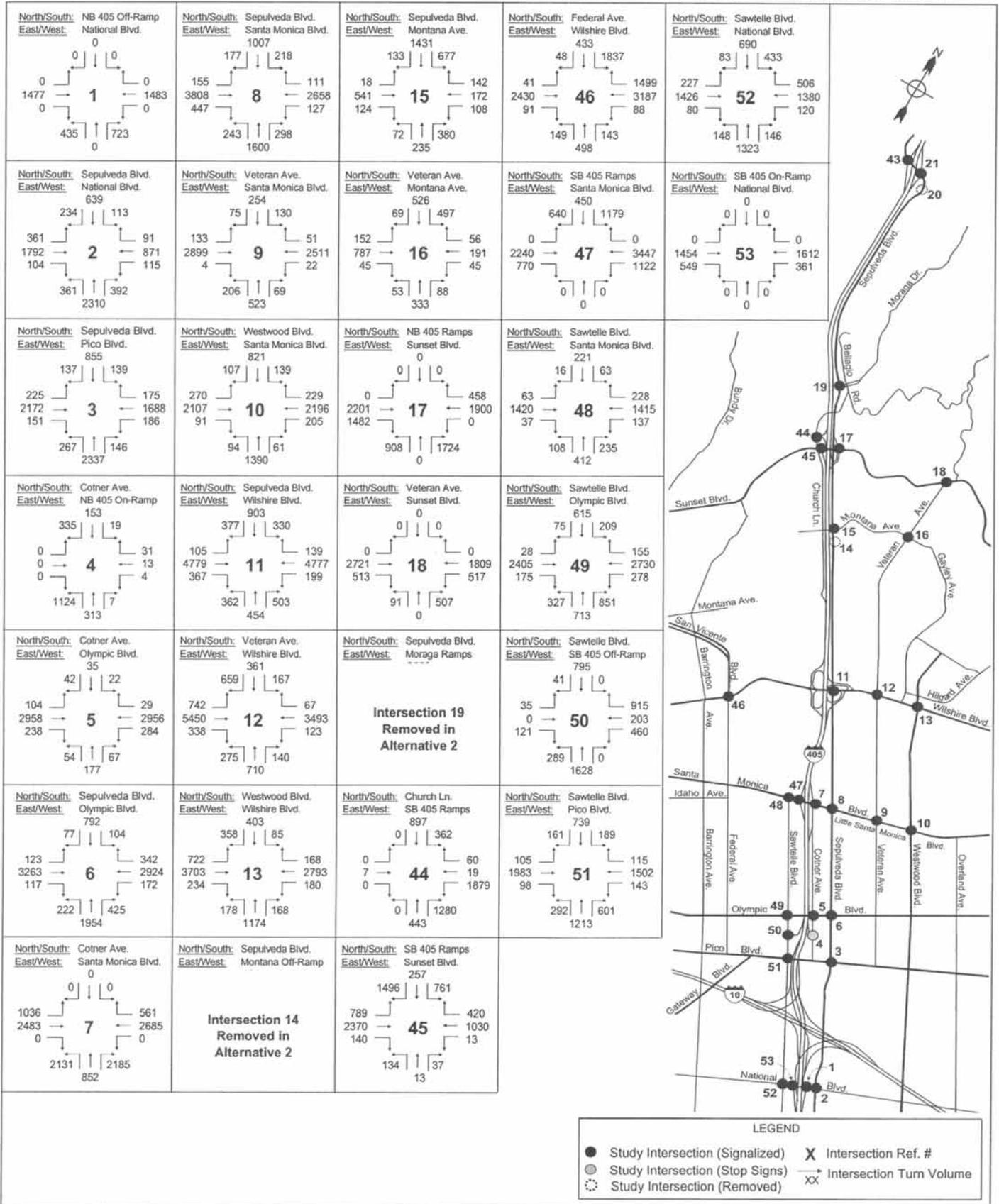


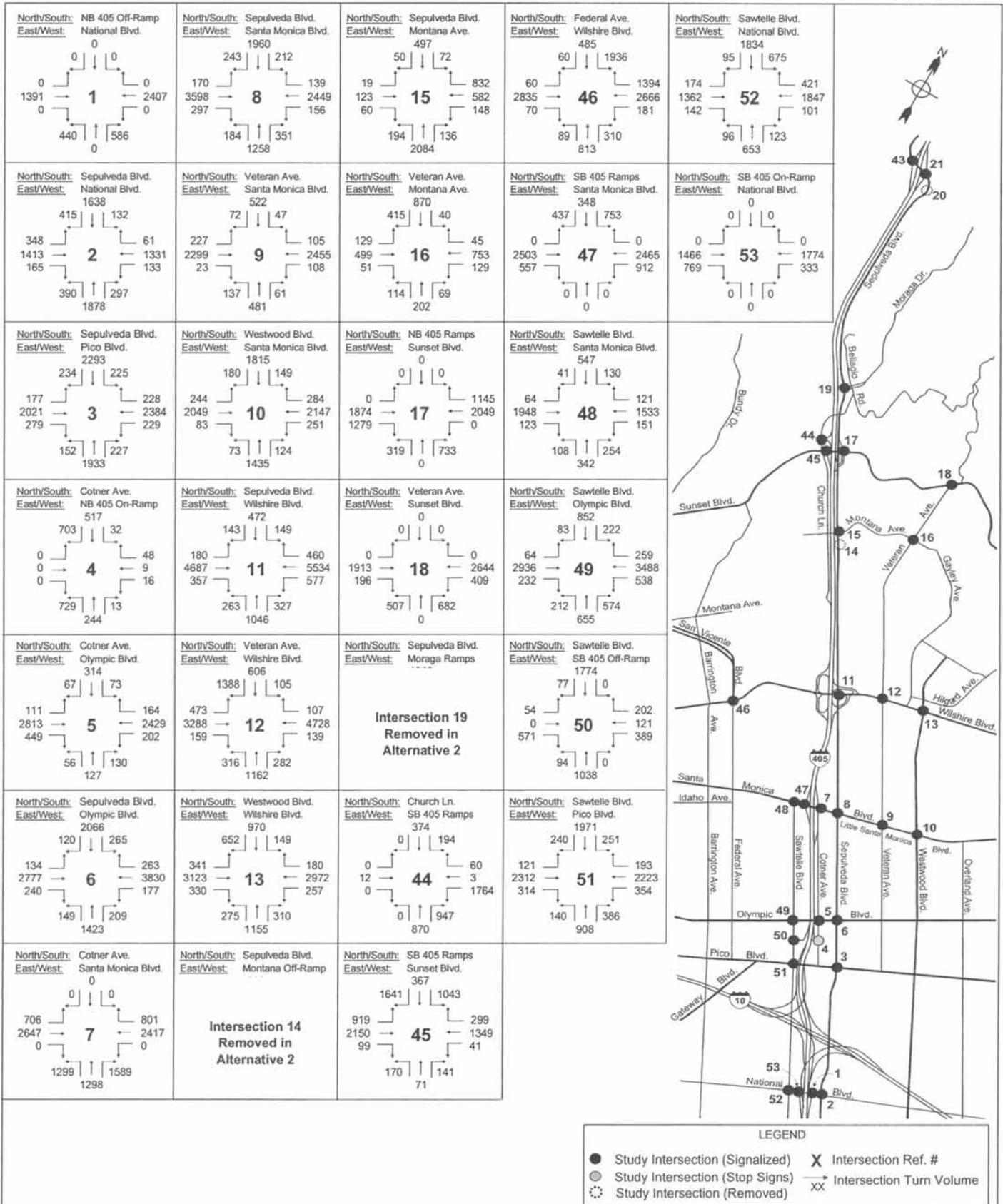
IBI GROUP I-405 HOV Lane Over Sepulveda Pass (I-10 to US-101) Project Figure 29B
 Alternative 3 (Year 2015) Turning Movement Volumes - AM Peak Hour (Northern Area)



I-405 HOV Lane Over Sepulveda Pass (I-10 to US-101) Project
Alternative 3 (Year 2015) Turning Movement Volumes - PM Peak Hour (Northern Area)

Figure 30B





IBI GROUP I-405 HOV Lane Over Sepulveda Pass (I-10 to US-101) Project Figure 32A
 Alternative 3 (Year 2031) Turning Movement Volumes - PM Peak Hour (Southern Area)

