## TRAFFIC IMPACT STUDY FOR OFFICE, COMMERCIAL AND CULTURAL USE PROJECT AT 2000 AVENUE OF THE STARS, CENTURY CITY

Prepared for:	
	TRAMMELL CROW COMPANY

Prepared by:

Crain & Associates 2007 Sawtelle Boulevard, Suite 4 Los Angeles, California 90025 (310) 473-6508

## **TABLE OF CONTENTS**

	<u>Page</u>
Introduction	1
Project Description	2
Project Parking and Vehicular Access	2
Environmental Setting	6
Streets and Highways	6
Existing (2001) Traffic Volumes	11
Existing Public Transportation	11
Analysis of Existing (2001) Traffic Conditions	17
Project Traffic	23
Trip Generation	23
Trip Distribution	31
Trip Assignment	32
Future Traffic Conditions	37
Traffic Growth and Related Projects	37
Highway System Improvements	38
Analysis of Future (2005) Traffic Conditions	48
Regional Traffic Impacts	55
Residential Street Traffic Impacts	56
Project Mitigation	58
Appendix A Existing and Future Parking Supplies and Requirements	
Appendix B Study Intersection Geometric and Traffic Control Condition Diagrams	
Appendix C Various Project Trip Generation Formulas and Rates	
Appendix D Related Projects Trip Generation Formulas and Rates	
Appendix E Traffic Count Sheets	
Appendix F Critical Movement Analysis (CMA) Worksheets	
Appendix G Preliminary Project Transportation Demand Management (TDM) Program	

## **LIST OF FIGURES**

Figure No.		<u>Page</u>
1	Project Site Vicinity Map	3
2	Project Site Plan	4
3	Existing (2001) Traffic Volumes, AM and PM Peak Hours	12
4	Project Trip Assignment Percentages	33
5	Project Traffic Volumes (Net), AM and PM Peak Hours	35
6	Related Projects Location Map	42
7	Future (2005) Traffic Volumes, Without Project, AM and PM Peak Hours	43
8	Future (2005) Traffic Volume, With Project, AM and PM Peak Hours	50
	LIST OF TABLES	
<u>Table No</u> .		<u>Page</u>
Table No.	Critical Movement Volume Ranges - Levels of Service	<b>Page</b> 20
	Critical Movement Volume Ranges - Levels of Service  Levels of Service (LOS) - CMA Values	
1	·	20
1 2	Levels of Service (LOS) - CMA Values	20 21
1 2 3	Levels of Service (LOS) - CMA Values  Project Trip Generation Per CCNSP	20 21 25
1 2 3 4	Levels of Service (LOS) - CMA Values	20 21 25 27
1 2 3 4 5	Levels of Service (LOS) - CMA Values	20 21 25 27 29
1 2 3 4 5 6	Levels of Service (LOS) - CMA Values	20 21 25 27 29
1 2 3 4 5 6	Levels of Service (LOS) - CMA Values  Project Trip Generation Per CCNSP  Project Trip Generation Per WLA TIMP  Project Trip Generation Per Standard LADOT Methodology  Project Trip Generation Per Revised LADOT Methodology Using Internal Trip Adjustments  Comparison of Results of Project Trip Generation Methodologies	20 21 25 27 29 30 31

## INTRODUCTION

This study by Crain & Associates has been conducted to determine and evaluate the possible traffic impacts attributable to the proposed 2000 Avenue of the Stars redevelopment project located in Century City, City of Los Angeles. The project site occupies the western portion of the block bounded by Avenue of the Stars, Constellation Boulevard, Century Park East and Olympic Boulevard.

Thirty-eight study intersections in the surrounding area were analyzed to determine project impacts during the weekday morning and afternoon peak hours. Volume-to-capacity ratios were calculated and associated Levels of Service were determined for these intersections. Project impacts were also examined at Congestion Management Plan monitoring locations in the area. Included in the future analyses was the implementation of the Santa Monica Boulevard Transit Parkway project for which construction is scheduled to start in early 2003 and end approximately in mid-2005.

The analysis presented in this report examines existing and future traffic conditions, without and with the project; assesses project impacts at the study intersections and their significance; and recommends traffic mitigation measures, as appropriate.

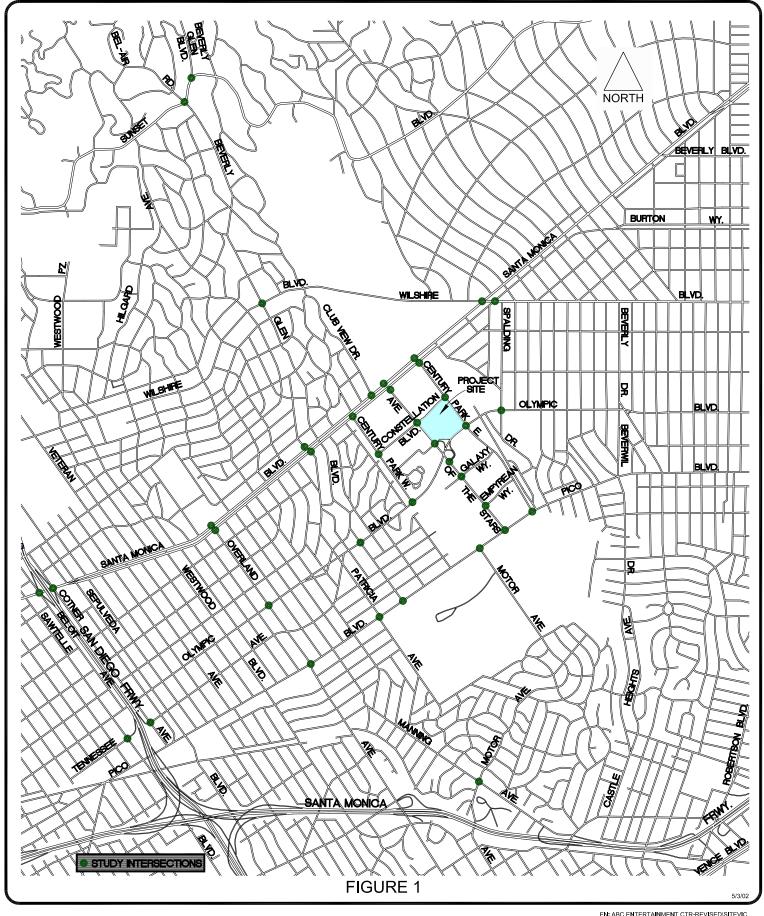
## PROJECT DESCRIPTION

The project site consists of 9.20 acres and is part of a large block of 14.02 acres in Century City in the West Los Angeles area of the City of Los Angeles. Figure 1 shows the site and the general vicinity. The block is bounded by Avenue of the Stars on the west, Constellation Boulevard on the north, Century Park East on the east and Olympic Boulevard on the south. The site comprises the western portion of the block and currently has 2020 and 2040 Avenue of the Stars addresses.

Existing uses on the site include office, live theater (Shubert), movie theater, restaurant, retail, and health club totaling approximately 757,996 gross square feet. The 2000 Avenue of the Stars project (hereafter referred to as 2000 AOS) proposes to remove the existing buildings and uses at 2020-2040 Avenue of the Stars, and redevelop the site in one phase with new office, restaurant, retail, and cultural uses of approximately 825,812 total gross square feet. The two existing Century Plaza Towers (2029 and 2049 Century Park East), located immediately to the east on the same block, share common ownership with the project but would remain unchanged. (A detailed breakdown of proposed and existing project uses is provided in Table 5.) It is anticipated that the project would be completed in 2005. The conceptual site plan is depicted in Figure 2.

## **Project Parking and Vehicular Access**

Presently, there is a total of 5,922 parking spaces serving the overall site. This is comprised of 5,471 spaces in the subterranean garage underneath the site and 451 spaces in the parking structure behind the Century Plaza Hotel which are covenanted for use by 2020-2040 Avenue of the Stars. As documented by International Parking Design, Inc., in Appendix A, the code parking requirement for 2000 AOS is 1,860 spaces and for the Century Plaza Towers, 4,205 spaces. Combined, the total code parking requirement for all of the site uses would be 6,065 spaces.



FN: ABC ENTERTAINMENT CTR-REVISED\SITEVIC

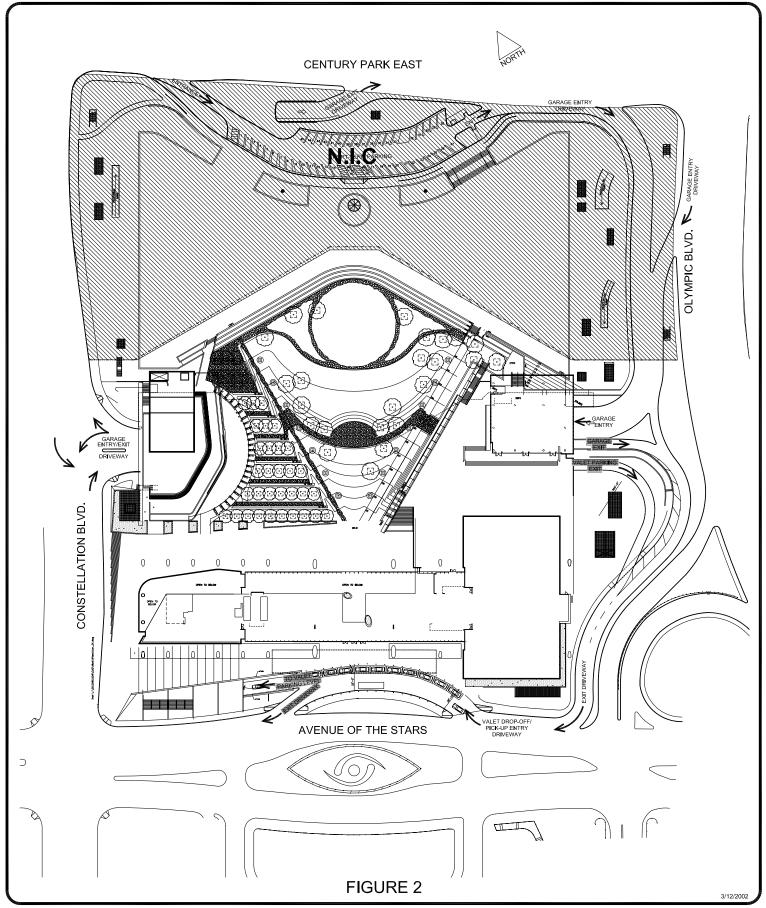
PROJECT SITE VICINITY MAP



## **CRAIN & ASSOCIATES**

2007 Sawtelle Boulevard Los Angeles, California 90025 (310) 473-6508

Transportation Planning • Traffic Engineering



:FN ABC ENTERTAINMENT CENTER\PROJ-SITE-PLAN

PROJECT SITE PLAN



## **CRAIN & ASSOCIATES**

2007 Sawtelle Boulevard Los Angeles, California 90025 (310) 473-6508

Transportation Planning • Traffic Engineering

Development of the project would remove all of the existing uses on the site except for the Century Plaza Towers and the subterranean garage. Due to the structural improvements to the subterranean columns, parking spaces in the garage would be modified. The preferred parking plan would provide all code required parking on-site. After project completion, there would be 45 spaces at grade, 172 spaces on parking Level A, 597 spaces on Level B, 1,222 spaces on Level C, 1,233 spaces on Level D, 1,229 spaces on Level E and 1,264 spaces on Level F. Additionally, parking would be provided on portions of two levels currently without parking. This would include 409 spaces on the Parking level and 187 spaces on the Plaza level. Therefore, as a result of the project, a total of 6,358 parking spaces would be provided on-site.

Alternatively, all code required parking for the project and the Century Plaza Towers would be satisfied by on-site and off-site parking. Under this plan, after project completion, there would be 45 spaces at grade, 177 spaces on Level A, 595 spaces on Level B, 1,112 spaces on Level C, 1,123 spaces on Level D, 1,119 spaces on Level E and 1,154 spaces on Level F. Parking would also be provided on portions of two levels that currently do not have parking. Included would be 372 spaces on the Parking level and 170 spaces on the Plaza level, resulting in a total of 5,867 on-site spaces. Together with the 451 spaces provided off-site, there would be a total of 6,318 spaces under this alternative.

Vehicular access to the subterranean garage would continue to be provided by driveways on the south side of Constellation Boulevard, the west side of Century Park East and the north side of Olympic Boulevard. The new valet drop-off/pick-up area has been designed to provide maximum efficiency and convenience. It will be served by one entry and one exit driveway on the east side of Avenue of the Stars, and will directly access the garage. The parking spaces on the Plaza level would be allocated to valet services. All of these access points are illustrated in Figure 2. In addition, there is an

exit only driveway connecting to Century Park East south of Olympic Boulevard, via a subterranean roadway from the garage.

Security check-in measures for the entire site were instituted last fall. Except for some occasional periods lasting no more than several seconds, no vehicular queuing onto public streets has been observed due to the security measures. This situation is not expected to worsen with the project as the operation of the security checks has become more efficient and should adequately handle any foreseeable increase in site traffic.

## **ENVIRONMENTAL SETTING**

The project site is located in Century City in the West Los Angeles area of the City of Los Angeles, and is near the western boundary of the City of Beverly Hills. The site is situated between Constellation and Olympic Boulevards and along the east side of Avenue of the Stars. The surrounding area is developed with a mixture of commercial, residential, studio and recreational uses. The streets and highways in this area serve many high activity centers, resulting in high traffic volumes within and through the area. Access to the project site is expected to be provided mostly by the San Diego Freeway, Santa Monica Freeway, and the surface streets and highways discussed below.

## **Streets and Highways**

The <u>San Diego Freeway (Interstate 405)</u> is approximately two miles west of the site. It extends from the northern part of the San Fernando Valley, through Los Angeles County and into Orange County. It generally provides four lanes in each direction and also has high-occupancy vehicle (HOV) lanes along much of its route. In the study area, the San Diego Freeway runs north-south, interchanges with the Santa Monica Freeway, and has full or partial ramp connections at Sunset Boulevard, Wilshire Boulevard, Santa Monica Boulevard, Olympic/Pico Boulevards and National Boulevard.

The <u>Santa Monica Freeway (Interstate 10)</u> is approximately two miles south of the site. This east-west facility runs from the City of Santa Monica, through Downtown Los Angeles and continues easterly as the San Bernardino Freeway. The Santa Monica Freeway generally has four lanes per direction (no HOV lanes) in the vicinity of the study area. It interchanges with the San Diego Freeway, and has full or partial ramp connections at Overland Avenue, National Boulevard/Manning Avenue and Robertson Boulevard.

Santa Monica Boulevard, Olympic Boulevard, Pico Boulevard, Wilshire Boulevard, and Constellation Boulevard are the east-west arterials providing primary access to the project site. Except for Constellation Boulevard, they extend from the City of Santa Monica, through Century City and Beverly Hills and into Downtown Los Angeles. These surface streets are further described below.

Santa Monica Boulevard is a Major Highway and a State highway (State Route 2) in this vicinity. It consists of two, two-way roadways separated by a median strip which previously served as a railroad right-of-way. The north roadway is the more major of the two roadways. This roadway provides two to three lanes in each direction, plus left-turn channelization at all major street intersections. The south roadway largely consists of one lane in each direction. In the vicinity of Century City, it becomes wider and has up to five total lanes, along with left-turn channelization.

Beginning in early 2003, the Santa Monica Boulevard Transit Parkway project is scheduled to begin construction. This improvement project will combine the north and south roadways into one roadway with three lanes in each direction between the San Diego Freeway and the City of Beverly Hills. Other transportation amenities, such as bicycle lanes and an exclusive bus transit lane in Century City, are included in the project. Completion of this project is expected by approximately mid-2005.

Olympic Boulevard is a Major Highway which runs along the south side of the site. It provides three lanes in the eastbound direction and four lanes westbound near the site. Olympic Boulevard has left-turn channelization at all intersections. At Avenue of the Stars, it is grade-separated, connecting to Avenue of the Stars via cloverleaf type ramps.

<u>Pico Boulevard</u>, a Major Highway, provides up to three lanes both eastbound and westbound. Left-turn channelization is available at most intersections along Pico Boulevard.

<u>Wilshire Boulevard</u>, farther to the north, is a Major Highway and also a significant public transportation route. Wilshire Boulevard has three to four lanes per direction and left-turn channelization.

Constellation Boulevard is a Secondary Highway and limited to Century City, extending from Century Park West to Century Park East. Constellation Boulevard forms the northern boundary of the site. It has three lanes in each direction, along with left-turn channelization.

North-south streets providing immediate or nearby access to the project site include Overland Avenue, Beverly Glen Boulevard, Century Park West, Avenue of the Stars, Century Park East and Motor Avenue. Their descriptions are as follows:

Overland Avenue is a Major Highway from Pico Boulevard southerly and provides a direct connection to the Santa Monica Freeway. It has two lanes per direction, plus left-turn channelization along this route. North of Pico Boulevard, Overland Avenue becomes a two-lane local street, terminating at Santa Monica Boulevard.

<u>Beverly Glen Boulevard</u>, a Major Highway, extends from the San Fernando Valley, across the Santa Monica Mountains, and terminates at Pico Boulevard. It provides two lanes in each direction and left-turn channelization. At Sunset Boulevard, Beverly Glen Boulevard has jogged intersections.

<u>Century Park West</u> is a Secondary Highway in Century City. It runs between Santa Monica Boulevard (south roadway) and Olympic Boulevard. It provides two to four lanes, including turn lanes, in each direction.

Avenue of the Stars, a divided Major Highway in Century City, forms the western boundary of the site. It extends from Santa Monica Boulevard to Pico Boulevard and generally has three lanes per direction, plus left-turn channelization. Avenue of the Stars is grade-separated over Olympic Boulevard.

<u>Century Park East</u>, a Secondary Highway, also extends from Santa Monica Boulevard to Pico Boulevard in Century City. Century Park East runs along the east side of the block containing the project site. It provides three lanes in each direction, as well as left-turn channelization.

Motor Avenue is designated a Collector Street from Pico Boulevard to Manning Avenue, and a Secondary Highway south of Manning Avenue. This variable width roadway is striped with two lanes in each direction between Pico Boulevard and Monte Mar Drive, and one lane in each direction thereafter to Manning Avenue.

Other streets or their intersections expected to be involved with project access include the following:

- <u>Sunset Boulevard</u>: East-west Modified Major Highway.
- Galaxy Way: East-west Collector Street in south Century City.
- <u>Empyrean Way</u>: East-west Collector Street in south Century City.
- <u>Manning Avenue</u>: East-west Collector Street west of Motor Avenue and Secondary Highway to the east.
- <u>Sawtelle Boulevard</u>: North-south Collector Street north of Olympic Boulevard and Secondary Highway to the south.
- Beloit Avenue: North-south Collector Street.
- Cotner Avenue: North-south Collector Street.
- <u>Patricia Avenue</u>: North-south local street north of Pico Boulevard and Collector Street to the south.
- Spalding Drive: North-south local street in City of Beverly Hills.

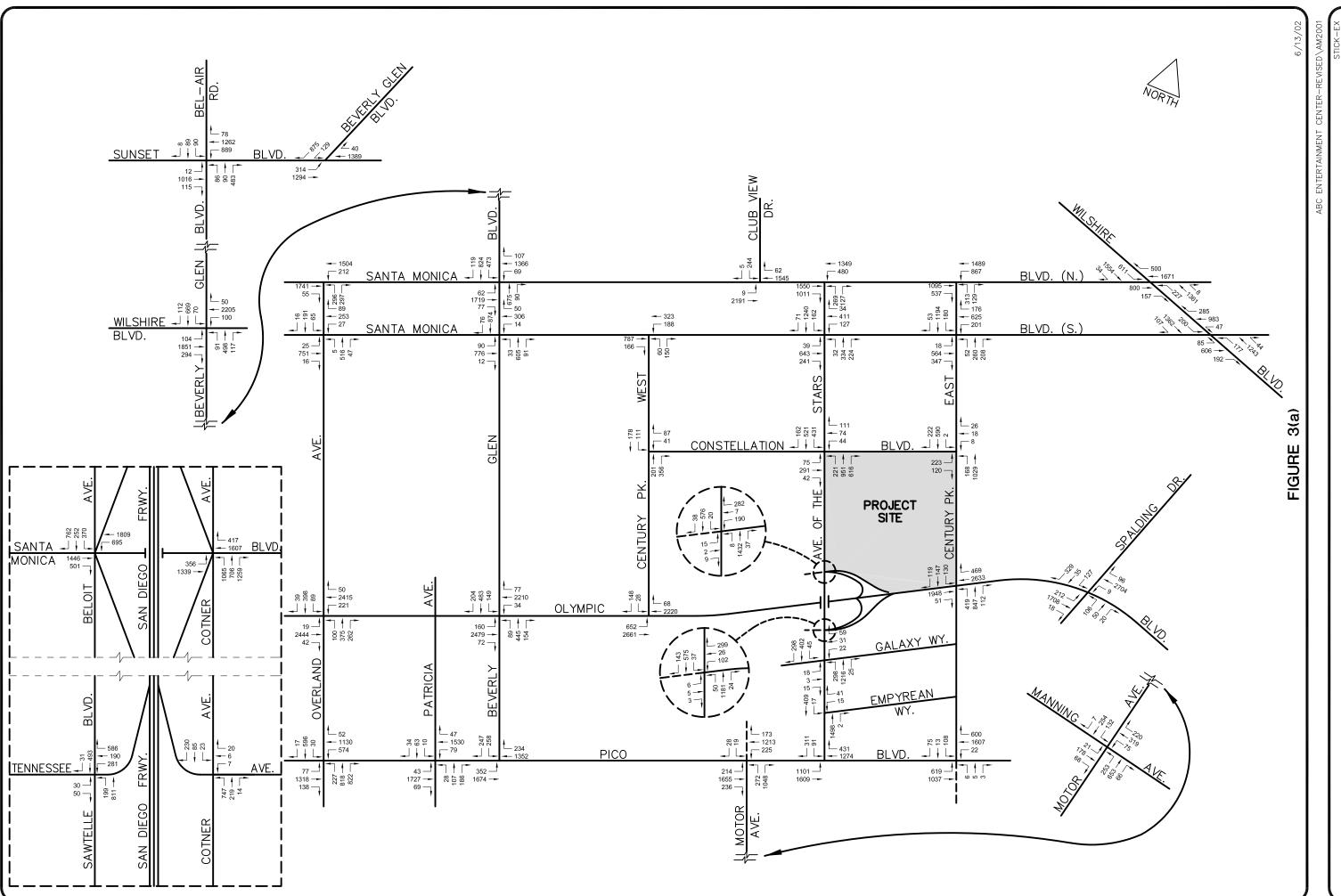
## **Existing (2001) Traffic Volumes**

Traffic count information for existing conditions at the 38 study intersections were obtained from manual traffic counts conducted in 2000, 2001 and 2002, with the great majority of them being done in 2001, and at a time the site was fully occupied. Where 2000 counts were used, they were growth-factored by 1.5 percent to reflect existing conditions for 2001, the selected base year. Counts taken in 2002 were also assumed valid for the base year with no adjustment. Figures 3(a) and 3(b) depict the existing (2001) AM and PM peak-hour traffic volumes at the study intersections. (The traffic count sheets are included in Appendix E.)

## **Existing Public Transportation**

Century City and the immediate project vicinity are served by a number of public transit operators. These include the Los Angeles County Metropolitan Transportation Authority (MTA), Santa Monica Municipal Bus Lines (SMMBL) and Culver CityBus, which generally provide local bus service, and the Los Angeles Department of Transportation (LADOT), Santa Clarita Transit and Antelope Valley Transit, which provide express bus services. Most of the bus routes that access Century City allow for stops at a minimum of one of three project site-adjacent intersections: 1)

Constellation Boulevard and Avenue of the Stars, 2) Constellation Boulevard and Century Park East, and/or 3) Olympic Boulevard and Century Park East. Together, the bus routes described below render the project accessible from the surrounding areas of Santa Monica, Brentwood, Westwood, Beverly Hills, Rancho Park, Culver City, Palms, Fox Hills, Downtown Los Angeles, Encino, Santa Clarita, Lancaster and Palmdale. When transfer opportunities are considered, much of the Los Angeles metropolitan area is connected to the project via public transit. The bus routes serving Century City and the project vicinity are as follows:

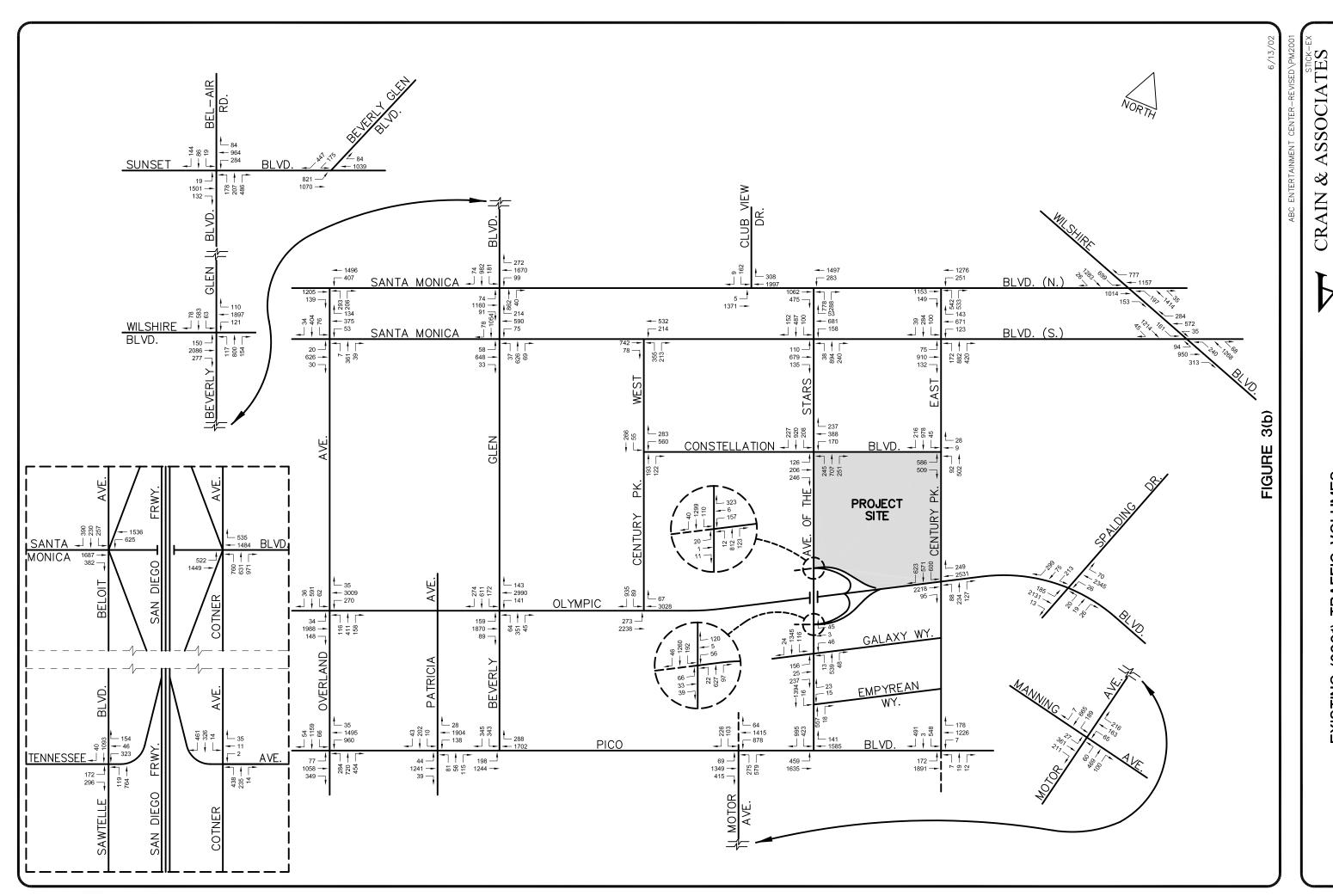


EXISTING (2001) TRAFFIC VOLUMES AM PEAK HOUR



# CRAIN & ASSOCIATES 2007 Sawtelle Boulevard Los Angeles, California 90025 (310) 473-6508

Transportation Planning. Traffic Engineering



## EXISTING (2001) TRAFFIC VOLUMES PM PEAK HOUR

Transportation Planning · Traffic Engineering

2007 Sawtelle Boulevard Los Angeles, California 90025 (310) 473-6508

- O Culver City Line 3 operates between Century City and Fox Hills Mall to the south.

  In Century City, Line 3 travels a loop route of Century Park West to Constellation

  Boulevard to Century Park East to Olympic Boulevard, and en route serves three

  stops adjacent to the project: 1) Constellation Boulevard at Avenue of the Stars,

  2) Constellation Boulevard and Century Park East, and 3) Olympic Boulevard and

  Century Park East.
- o SMMBL Line 5 provides service between downtown Santa Monica and the Pico-Rimpau Transit Center, following a general alignment of Colorado Avenue, Olympic Boulevard and Pico Boulevard. In Century City, Line 5 travels by way of Century.
- Park West to Constellation Boulevard to Century Park East, and serves three stops adjacent to the project: 1) Constellation Boulevard at Avenue of the Stars, 2)

  Constellation Boulevard and Century Park East, and 3) Olympic Boulevard and Century Park East.
- o SMMBL Line 13 originates from the Veterans Administration Hospital in Westwood, travels southeast through West Los Angeles by primarily Sawtelle Boulevard and Pico Boulevard, and terminates further east at the Pico-Rimpau Transit Center. During weekday peak hours, Line 13 extends into Century City by way of Century Park West to Constellation Boulevard to Century Park East, and serves three project-adjacent stops in the process: 1) Constellation Boulevard at Avenue of the Stars, 2) Constellation Boulevard and Century Park East, and 3) Olympic Boulevard and Century Park East. The service into Century City is limited to the eastbound direction in the morning and the westbound direction in the afternoon.

- o MTA Line 4/304 operates between Santa Monica and Downtown Los Angeles, with limited-stop service provided by Line 304 during peak hours. Line 4/304 travels Santa Monica Boulevard in the vicinity of Century City, and serves all local bus stops through that area.
- o <u>MTA Line 22</u> also serves Santa Monica Boulevard in the vicinity of Century City, as it travels between the Santa Monica Municipal Pier area and Beverly Hills.
- o MTA Line 27 operates between Century City and Downtown Los Angeles, primarily by way of Santa Monica Boulevard, Burton Way, Olympic Boulevard and Spring Street. A stop is provided adjacent to the project at Constellation Boulevard and Avenue of the Stars.
- o MTA Line 28/328 also operates between Century City and Downtown Los Angeles, with peak period express bus service provided by Line 328. Line 28/328 travels primarily by way of Olympic Boulevard and Spring Street. En route it serves two project-adjacent stops: 1) Constellation Boulevard and Avenue of the Stars, and 2) Olympic Boulevard and Century Park East.
- o <a href="MTA Line 316">MTA Line 316</a> offers a "shortline" extension to Century City from Beverly Hills to provide weekday peak period service. Aside from this extension service, Line 316 provides limited-stop service between Cedars Sinai Hospital in Beverly Hills and Downtown Los Angeles. The "shortline" extension loops into Century City from Santa Monica Boulevard, via Century Park West to Constellation Boulevard to Avenue of the Stars. A project-adjacent stop is provided on Avenue of the Stars at Constellation Boulevard.
- LADOT Commuter Express Line 534 provides peak-period express bus service between Union Station/Downtown Los Angeles and Century City on weekdays.
   Once in Century City, Line 534 travels by way of Olympic Boulevard and Century

Park East, and serves two project-adjacent stops: 1) Olympic Boulevard and Century Park East, and 2) Constellation Boulevard and Century Park East. Line 534 provides westbound service to West Los Angeles during the morning peak period and eastbound service to Union Station and Downtown Los Angeles in the afternoon.

- between Mission Hills and Encino on the north side of the Sepulveda pass, and
  Westwood and Century City on the south side of the pass. Line 573 loops into
  Century City from Santa Monica Boulevard and serves two stops adjacent to the
  project: 1) Century Park East at Constellation Boulevard, and 2) Constellation
  Boulevard at Avenue of the Stars. Line 573 primarily operates southbound to West
  Los Angeles in the morning and northbound to Encino and Mission Hills in the
  afternoon.
- o Santa Clarita Line 797 provides peak period express bus service for those who live in Santa Clarita but commute to West Los Angeles, with southbound morning service and northbound afternoon service to/from UCLA, Westwood and Century City. Line 797 travels by way of Constellation Boulevard in the project vicinity, and serves a stop adjacent to the project site at Avenue of the Stars and Century Park East.
  - Santa Clarita Line 792 also serves Century City, but is scheduled to provide reverse commute service for those who reside in West Los Angeles but work in Santa Clarita. Therefore, it is less useful to the project than the other services described herein, because it offers peak period service that departs Century City and West Los Angeles in the morning and returns in the late afternoon and evening.

o Antelope Valley Transit Line 786 provides peak period express bus service between Lancaster and Palmdale in the Antelope Valley, and West Los Angeles, including Century City. Line 786 serves two stops adjacent to the project: 1) Century Park East at Constellation Boulevard, and 2) Constellation Boulevard at Avenue of the Stars.

## **Analysis of Existing (2001) Traffic Conditions**

The analysis of existing traffic conditions was performed through the use of established traffic engineering techniques. Peak-hour traffic volume count data discussed previously and presented in Figures 3(a) and 3(b) were utilized so as to reflect any recent changes in traffic demand patterns. Other information pertaining to intersection widths and geometrics, bus stop locations, on-street parking restrictions, and traffic signal operations were obtained from field checks. A traffic analysis was then made of existing conditions at the 38 intersections listed below. These intersections, which were selected in consultation with the Los Angeles Department of Transportation (LADOT), are the intersections which could be most affected by additional traffic generated by the project. The last four intersections were included to address potential impacts involving the San Diego Freeway ramps likely to be used by project traffic. Diagrams illustrating the existing geometric and traffic control conditions for these intersections are in Appendix B.

- 1. Sunset Boulevard and Beverly Glen Boulevard (E)
- 2. Sunset Boulevard and Beverly Glen Boulevard (W)
- 3. Wilshire Boulevard and Beverly Glen Boulevard
- 4. Santa Monica Boulevard (N) and Overland Avenue
- 5. Santa Monica Boulevard (S) and Overland Avenue
- 6. Santa Monica Boulevard (N) and Beverly Glen Boulevard

- 7. Santa Monica Boulevard (S) and Beverly Glen Boulevard
- 8. Santa Monica Boulevard (S) and Century Park West
- 9. Santa Monica Boulevard (N) and Club View Drive
- 10. Santa Monica Boulevard (N) and Avenue of the Stars
- 11. Santa Monica Boulevard (S) and Avenue of the Stars
- 12. Santa Monica Boulevard (N) and Century Park East
- 13. Santa Monica Boulevard (S) and Century Park East
- 14. Santa Monica Boulevard (N) and Wilshire Boulevard
- 15. .Santa Monica Boulevard (S) and Wilshire Boulevard
- 16. Constellation Boulevard and Century Park West
- 17. Constellation Boulevard and Avenue of the Stars
- 18. Constellation Boulevard and Century Park East
- 19. Olympic Boulevard and Overland Avenue
- 20. Olympic Boulevard and Beverly Glen Boulevard
- 21. Olympic Boulevard and Century Park West
- 22. Olympic Boulevard Westbound Ramps and Avenue of the Stars
- 23. Olympic Boulevard Eastbound Ramps and Avenue of the Stars
- 24. Olympic Boulevard and Century Park East
- 25. Olympic Boulevard and Spalding Drive
- 26. Galaxy Way and Avenue of the Stars
- 27. Empyrean Way and Avenue of the Stars
- 28. Pico Boulevard and Overland Avenue

- 29. Pico Boulevard and Patricia Avenue
- 30. Pico Boulevard and Beverly Glen Boulevard
- 31. Pico Boulevard and Motor Avenue
- 32. Pico Boulevard and Avenue of the Stars
- 33. Pico Boulevard and Century Park East
- 34. Manning Avenue and Motor Avenue
- 35. Santa Monica Boulevard and 405 Freeway Southbound Ramps/Beloit Avenue
- 36. Santa Monica Boulevard and 405 Freeway Northbound Ramps/Cotner Avenue
- 37. 405 Freeway Southbound Off-Ramp/Tennessee Avenue and Sawtelle Boulevard
- 38. 405 Freeway Northbound On-Ramp/Tennessee Avenue and Cotner Avenue

All of these are signalized intersections except for Empyrean Way/Avenue of the Stars (no. 27) and 405 Freeway Northbound On-Ramp/Tennessee Avenue/Cotner Avenue (no. 38).

The methodology used for the analysis and evaluation of traffic operations at each study intersection is based on procedures outlined in the Transportation Research Board Circular 212,<sup>1</sup> Interim Materials on Highway Capacity. In the discussion of the Critical Movement Analysis (CMA) for signalized intersections, procedures were developed for determining operating characteristics of an intersection in terms of the "Level of Service" (LOS) provided for different levels of traffic volume and other variables, such as the number of traffic signal phases. Level of Service describes the quality of traffic flow. Levels of Service A to C denote conditions in which traffic operations are proceeding quite well, with no interruptions in traffic flow due to traffic volumes. Level D, a more

19

Interim Materials on Highway Capacity, Circular Number 212, Transportation Research Board, Washington, D.C., 1980.

constrained condition, is the level for which a metropolitan area street system is typically designed. Level E represents volumes at or near roadway capacity, which will result in possible stoppages of momentary duration and occasional unstable flow. Level F is a forced-flow condition, occurring when a facility is overloaded and vehicles experience stop-and-go traffic with delays of long duration.

A determination of the LOS at an intersection, where traffic volumes are known or have been projected, can be obtained through a summation of the critical movement volumes at that intersection. Once the sum of critical movement volumes has been obtained, the values indicated in Table 1 can be used to determine the applicable LOS.

Table 1
Critical Movement Volume Ranges\*
For Determining Levels of Service

	Maximum S	um of Critica	I Volumes (VPH)
Level of Service	Two <u>Phase</u>	Three <u>Phase</u>	Four or More Phases
Α	900	855	825
В	1,050	1,000	965
С	1,200	1,140	1,100
D	1,350	1,275	1,225
E	1,500	1,425	1,375
F		Not Applicable	e

<sup>\*</sup> For planning applications only, i.e., not appropriate for operations and design applications. Also, a computerized traffic signal coordination system, such as Automated Traffic Surveillance and Control (ATSAC), increases these values by approximately seven percent. With the addition of a further upgrade, such as Adaptive Traffic Control System (ATCS), an additional three percent increase in these values occurs.

Capacity is defined to represent the maximum total hourly movement volume which has a reasonable expectation of passing through an intersection under prevailing roadway

and traffic conditions. For planning purposes, capacity equates to the maximum value of Level of Service E, as indicated in Table 2. (It should be noted that for study intersections where no traffic signal exists, the CMA "capacity" volume was assumed to be 1,200 vehicles per hour (VPH).) The CMA indices used in this study were calculated by dividing the sum of critical movement volumes by the appropriate capacity value for the type of signal control present or proposed at the study intersections. The Level of Service corresponding to a range of CMA values is shown in Table 2.

Table 2

Level of Service

As a Function of CMA Values

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

By applying this analysis procedure to the study intersections, the CMA values and the corresponding Levels of Service for existing traffic conditions were determined. The "Existing" condition results of the Critical Movement Analysis for the study intersections are included in Table 9, page 52. These results indicate that the study intersections are operating at Levels of Service ranging from A to F, with 12 intersections at LOS E or F

in one or both peak hours. (The CMA worksheets for the Existing (2001) Conditions are included in Appendix E.)

## **PROJECT TRAFFIC**

The primary purpose of this study is to determine the impacts attributable to the additional traffic generated by the 2000 AOS project. The following sections describe the methodology used to determine the trip generation, distribution and assignment for the project. This methodology is consistent with standard LADOT traffic study policies and procedures.

## **Trip Generation**

The vehicular trip generation of projects in the Century City area is typically analyzed according to three methodologies. These methodologies and the associated trip generation rates are contained or referenced in the Century City North Specific Plan, West Los Angeles Transportation Improvement and Mitigation Specific Plan, and LADOT Traffic Study Policies and Procedures manual, and are described below. In addition, LADOT has required a fourth methodology to analyze project impacts, as discussed further below, to provide a more conservative analysis.

## 1. Century City North Specific Plan (CCNSP)

The CCNSP is one of two Specific Plans that cover the Century City area (the other being the Century City South Specific Plan). Adopted in November 1981, the CCNSP affects "any building, structure or addition to any building or structure excluding any construction or renovation activity which does not add to [Cumulative Automobile Trip Generation Potential] CATGP. Also affected is a change of use which increases CATGP." The intent of the CCNSP is to impose regulations that assist in assuring orderly development and redevelopment, and provides adequate transportation and other public facilities.

Development rights for a property within the CCNSP are determined by the number of CATGP or other trips<sup>2</sup> assigned to or transferred to a parcel. CATGP trips are the cumulative total daily trips generated by all projects on commercially zoned lots within the Specific Plan area for which building permits are issued subsequent to November 15, 1981. Based on the total number of daily trips generated within the CCNSP, development has been broken down into two phases. The initial phase (Phase I) allows for development permits of up to 15,226.606 CATGP trips. The second phase (Phase II) allows for development not to exceed 30,156.789 trips, including projects developed under Phase I. Projects developed under Phase I require an administrative approval. Phase II projects require approval of a Project Permit from the City Planning Commission. Upon receiving approval of a Project Permit, Phase II development can only commence when all public improvements set forth in Section 3B1(b) of the CCNSP have been completed. New development is also permitted under the CCNSP if trips are created through the demolition of existing buildings, thereby creating replacement trips. Replacement trips are not considered Phase I or Phase II trips under the CCNSP and do not count towards the CATGP limits. The 2000 AOS project will utilize replacement trips created by the demolition of the existing buildings.

Under the CCNSP, the project will generate less trips than the existing uses. The demolition of the existing uses provide a total of 19,161 replacement trips, while the project has a generation of 12,450 trips. The difference in daily trip generation is, therefore, –6,711 trips (i.e., 12,450 proposed use trips minus 19,161 existing use trips). The CCNSP trip generation analysis for the project is presented in Table 3. The CCNSP trip rates used in this analysis are contained in Appendix C.

\_

Trips are defined uniquely by the CCNSP as "unit of real property development rights pursuant to this Specific Plan and means a calculation of daily arrivals at and daily departures from a building or structure by motor vehicles of four or more wheels. The number of Trips generated by any Project or existing building or structure shall be calculated utilizing the table set forth in the definition of Cumulative Automobile Trip Generation Potential." (CCNSP section 2, pg 5)

Table 3
Project Trip Generation
Per Century City North Specific Plan (CCNSP)

Proposed Uses	Daily
Office, 763,900 gsf (719,924 sf FAR)	10,079
High-Turnover Restaurant, 16,012 gsf (15,264 sf FAR)	687
Quality Restaurant, 16,011 gsf (15,263 sf FAR)	687
Retail, 19,214 gsf (18,318 sf FAR)	641
Cultural, 10,675 gsf (10,178 sf FAR)	356
Subtotals	12,450
Existing Uses (To Be Removed)	
Office, 332,856 gsf (287,701 sf FAR)	4,028
Cinema, 1,751 st (39,695 sf FAR)	1,389
Shubert, 2,250 st (108,786 sf FAR)	3,808
High-Turnover Restaurant, 117,212 gsf (108,292 sf FAR)	4,873
Quality Restaurant, 39,071 gsf (36,098 sf FAR)	1,624
Retail, 61,970 gsf (57,316 sf FAR)	2,006
Health Club, 44,277 gsf (40,934 sf FAR)	1,433
Subtotals	19,161
Net Project Trips	(6,711)

Note: FAR = Floor Area Ratio

## West Los Angeles Transportation Improvement and Mitigation Specific Plan WLA TIMP)

The City also requires a traffic analysis pursuant to the West Los Angeles

Transportation Improvement and Mitigation Specific Plan (WLA TIMP) for projects in the

West Los Angeles area, including Century City. The WLA TIMP (Ordinance 171,492)

sets forth required methodology for the analysis of PM peak-hour trips. Utilizing this

methodology, the project would generate –1,937 net PM peak-hour trips, as shown in

Table 4. The WLA TIMP trip rates used in this analysis, which were approved by

LADOT, are also in Appendix C.

## 3. Standard LADOT Methodology - Traffic Study Policies and Procedures Manual

LADOT also requires that traffic impacts be analyzed according to its Traffic Study Policies and Procedures Manual (the "Standard LADOT Methodology"). The Standard LADOT Methodology requires the use of the most current <u>Trip Generation handbook</u> (6th Edition), published by the Institute of Transportation Engineers (ITE), unless the project is within a Transportation Specific Plan area. If such is the case, then the trip generation formulas and rates are to be applied according to the Specific Plan procedures. If necessary, other trip generation formulas or rates may also be permitted pursuant to LADOT approval.

As discussed above, the 2000 AOS project is within a Transportation Specific Plan area covered by the WLA TIMP. As the WLA TIMP contains only PM peak-hour trip rates, those rates were used to calculate the project's PM peak-hour trips, which are the same as those already presented in Table 4. The AM peak-hour and daily project trip generations were calculated from ITE formulas and rates as required by the Standard LADOT Methodology. These formulas and rates were approved by LADOT and are

Table 4
Project Trip Generation
Per West Los Angeles Transportation Improvement and
Mitigation Specific Plan (WLA TIMP)

	PM Pea	ak Hour
Proposed Uses	I/B	O/B
Office, 763,900 gsf	145	688
High-Turnover Restaurant, 16,012 gsf	124	83
Quality Restaurant, 16,011 gsf	79	39
Retail, 19,214 gsf	89	96
Cultural, 10,675 gsf	36	39
Subtotals	473	945
Existing Uses (To Be Removed)		
Office, 332,856 gsf	77	383
Cinema, 1,751 st	158	105
Shubert, 2,250 st	23	22
High-Turnover Restaurant, 117,212 gsf	908	606
Quality Restaurant, 39,071 gsf	193	95
Retail, 61,970 gsf	286	309
Health Club, 44,277 gsf	116	74
Subtotals	1,761	1,594
Net Project Trips	(1,288)	(649)
	(1,9	37)

also included in Appendix C. Under the Standard LADOT Methodology, the project would generate -588 net AM peak-hour trips, -1,937 net PM peak-hour trips and -20,570 net daily trips, as shown in Table 5.

## 4. Revised LADOT Methodology Using Internal Trip Adjustments

To provide a more conservative analysis than under its Standard Methodology, LADOT has required a fourth analysis that incorporates adjustments for internal trip-making (i.e., trips made between uses on the same site without requiring use of the surrounding streets). This "capture" of trips internal to the site has the net effect of reducing the trips generated between the overall development site and the external street system. The following are the LADOT recommended internal trip reduction percentages that were applied to the proposed and existing uses:

Uses	Internal Trip Reduction Percentages
High-Turnover Restaurant	50%
Quality Restaurant	50%
Retail	50%
Health Club	50%

Under this conservative approach, the additional trips expected to be generated by the project were calculated and presented in Table 6. The project is estimated to have a net generation of -80 AM peak-hour trips, -899 PM peak-hour trips, and -11,357 daily trips. These are the trips were used to determine project traffic impacts.

Table 5
Project Trip Generation
Per Standard LADOT Methodology

		AM Peak Hour		PM Peak Hour	
Proposed Uses	Daily	I/B	O/B	I/B	O/B
Office, 763,900 gsf	6,325	830	113	145	688
High-Turnover Restaurant, 16,012 gsf	2,087	77	71	124	83
Quality Restaurant, 16,011 gsf	1,440	11	2	79	39
Retail, 19,214 gsf	825	12	8	89	96
Cultural, 10,675 gsf	576	8	3	36	39
Subtotals	11,253	938	197	473	945
Existing Uses (To Be Removed)					
Office, 332,856 gsf	3,342	428	58	77	383
Cinema, 1,751 st	3,152	18	0	158	105
Shubert, 2,250 st	2,550	23	0	23	22
High-Turnover Restaurant, 117,212 gsf	15,277	565	522	908	606
Quality Restaurant, 39,071 gsf	3,514	26	6	193	95
Retail, 61,970 gsf	2,660	39	25	286	309
Health Club, 44,277 gsf	1,328	6	7	116	74
Subtotals	31,823	1,105	618	1,761	1,594
Net Project Trips	(20,570)	(167)	(421) 	(1,288)	(649)
		(58	38)	(1,9	937)

Table 6
Project Trip Generation
Per Revised LADOT Methodology
Using Internal Trip Adjustments

		AM Pea	ak Hour	PM Pe	ak Hour
Proposed Uses	Daily	I/B	O/B	I/B	O/B
Office, 763,900 gsf	6,325	830	113	145	688
High-Turnover Restaurant, 16,012 gsf	2,087	77	71	124	83
Quality Restaurant, 16,011 gsf	1,440	11	2	79	39
Retail, 19,214 gsf	825	12	8	89	96
Cultural, 10,675 gsf	576	8	3	36	39
Subtotals	11,253	938	197	473	945
Less Internal Trip Adjustments					
High-Turnover Restaurant (50%)	(1,044)	(39)	(36)	(62)	(42)
Quality Restaurant (50%)	(720)	(6)	(1)	(40)	(20)
Retail (50%)	(413)	(6)	(4)	(45)	(48)
Total Adjustments	(2,177)	(51)	(41)	(147)	(110)
Net Proposed Uses	9,076	887	156	326	835
		1,0	43	1,1	61
Existing Uses (To Be Removed)					
Office, 332,856 gsf	3,342	428	58	77	383
Cinema, 1,751 st	3,152	18	0	158	105
Shubert, 2,250 st	2,550	23	0	23	22
High-Turnover Restaurant, 117,212 gsf	15,277	565	522	908	606
Quality Restaurant, 39,071 gsf	3,514	26	6	193	95
Retail, 61,970 gsf	2,660	39	25	286	309
Health Club, 44,277 gsf	1,328	6	7	116	74
Subtotals	31,823	1,105	618	1,761	1,594
Less Internal Trip Adjustments					
High-Turnover Restaurant (50%)	(7,639)	(283)	(261)	(454)	(303)
Quality Restaurant (50%)	(1,757)	(13)	(3)	(97)	(48)
Retail (50%)	(1,330)	(20)	(13)	(143)	(155)
Health Club (50%)	(664)	(3)	(4)	(58)	(37)
Total Adjustments	(11,390)	(319)	(281)	(752)	(543)
Net Existing Uses	20,433	786	337	1,009	1,051
		1,1	23	2,0	060
Net Project Trips	(11,357)	101	(181)	(683)	(216)
		(8	0)	(8)	99)

For comparison purposes, Table 7 shows the project trips calculated according to the four methodologies.

Table 7
Comparison of Results of Project Trip Generation Methodologies

		Per WLA TIMP	Per Standard LADOT	Per Revised LADOT Methodology Using Internal Trip
Time Period	Per CCNSP		Methodology	Adjustments
AM Peak Hour	N/A	N/A	-588	-80
PM Peak Hour	N/A	-1,937	-1,937	-899
Daily	-6,711	N/A	-20,570	-11,357

No weekend trip generation analysis was conducted as the overall trip generation for the proposed and existing uses would be less on Saturday and Sunday than on a weekday. In addition, traffic volumes on the surrounding street system are generally less on Saturday or Sunday as compared to a weekday. Therefore, the combination of weekday project trip generation with weekday street traffic volumes accounts for the largest total peak-hour volumes on the street system, which is the condition analyzed.

## **Trip Distribution**

Project generated traffic was assigned to the local roadway system based on a trip distribution pattern estimated by Crain & Associates in conjunction with LADOT staff. This traffic distribution pattern for the project was determined by considering the proposed land use, existing traffic movements, characteristics of the surrounding roadway system, nearby regional population and employment centers, the geographic location of the project site and its proximity to freeways, major travel routes, and the

residential communities and areas from which the great majority of employees and patrons would likely be attracted. Based on these factors and a review of traffic patterns in the area, the regional trip distributions shown below were estimated for the project. Approximately 60 percent were estimated as using surface streets for primary site access, with the remaining 40 percent using the San Diego Freeway (23 percent) and Santa Monica Freeway (17 percent) for primary site access.

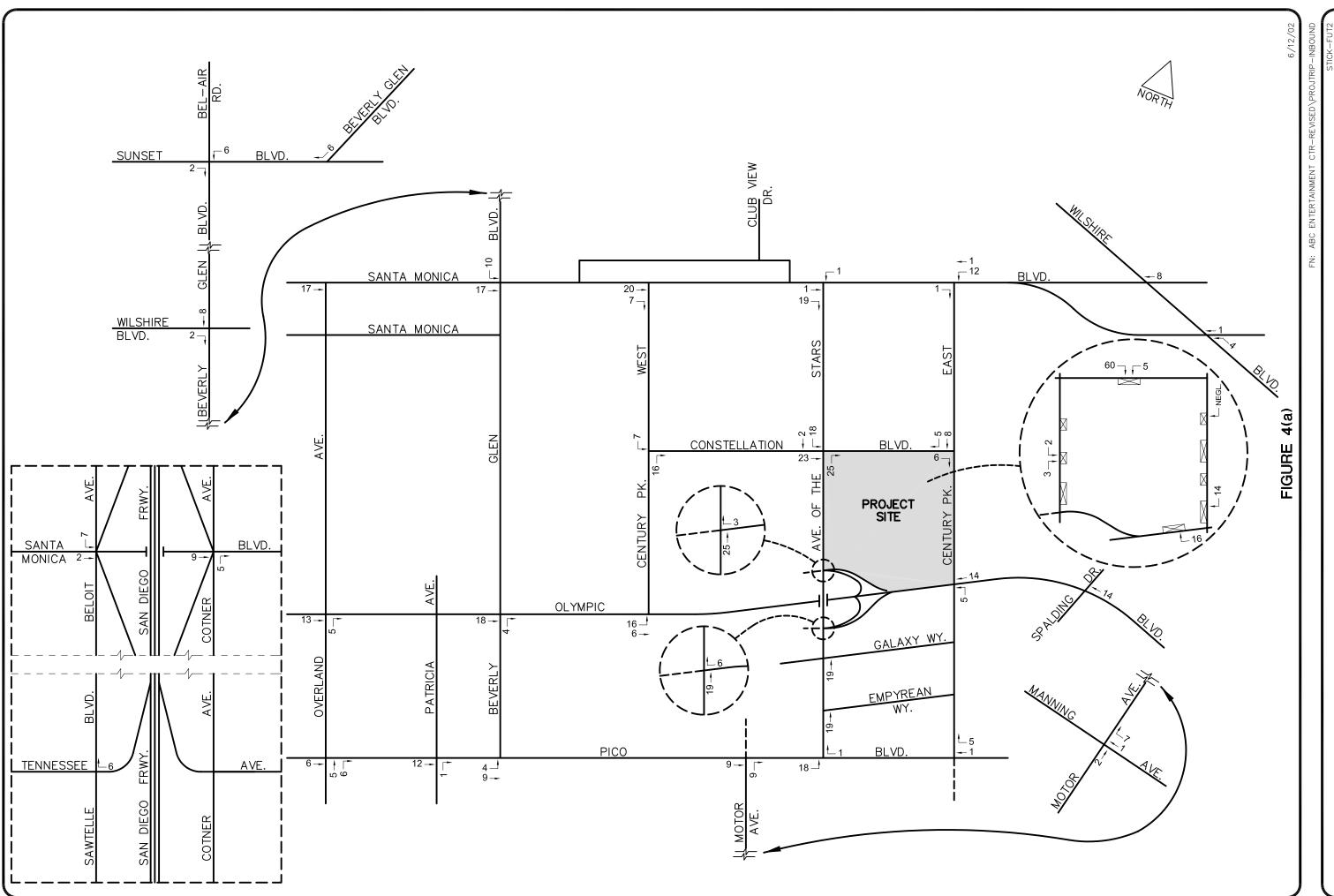
North: 25% South: 20%

East: 37% West: 18%

Due to the similarities in most of their uses, this distribution pattern was also assumed applicable to the existing project.

## **Trip Assignment**

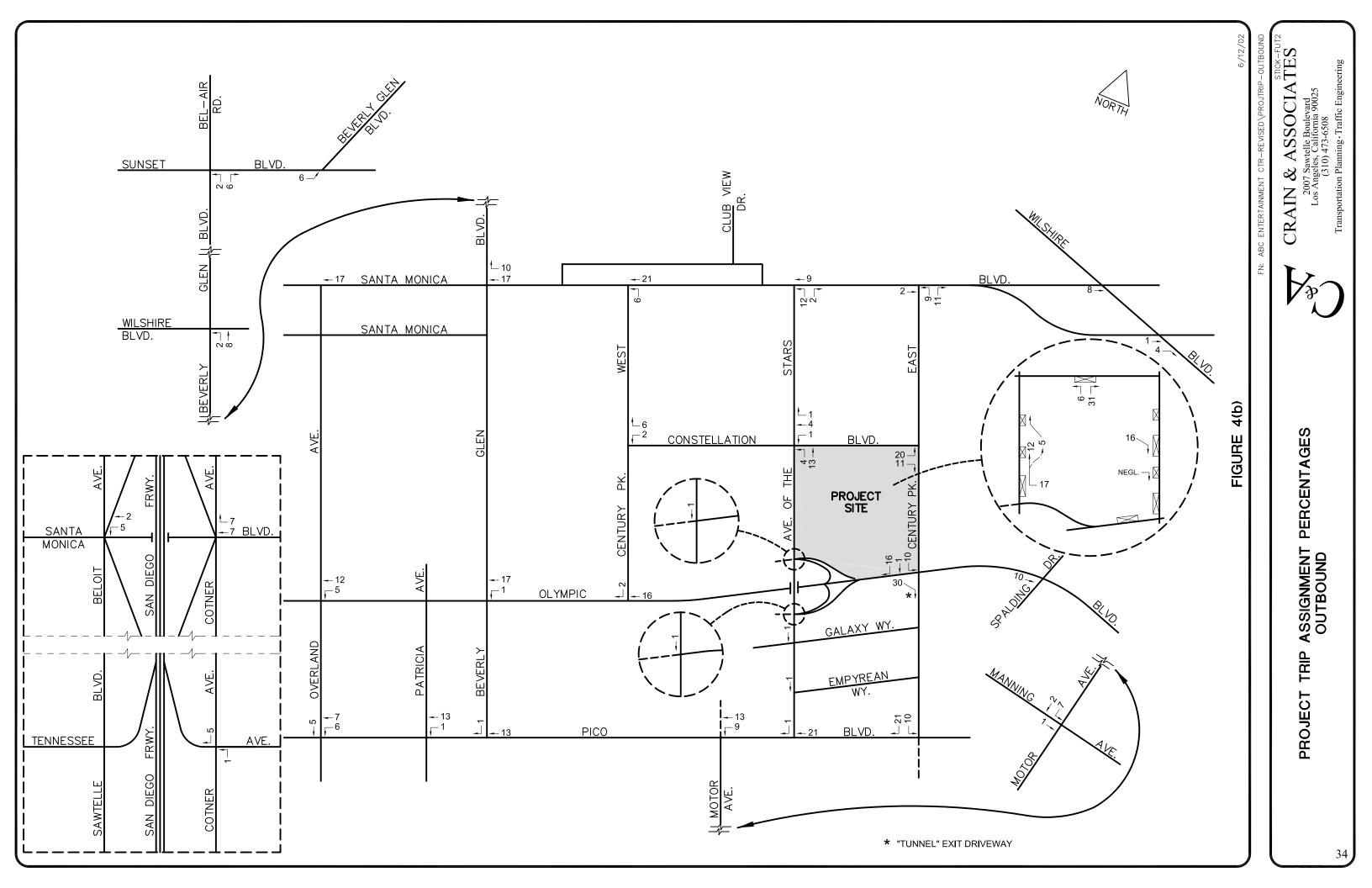
The assignment of project trips was accomplished in two steps. The number of trips associated with each direction was first calculated using the distribution percentages shown above. A more discrete trip assignment was then made to the street and freeway system expected to be used. These assignments considered the most likely routings to and from the site based on current traffic turning patterns, potential future congestion points, roadway geometrics and traffic signal controls. Figures 4(a) and 4(b) depict the estimated inbound and outbound project trip assignment percentages at the study intersections and site driveways as approved by LADOT. The net project AM and PM peak-hour volumes assigned to these locations are shown in Figures 5(a) and 5(b).

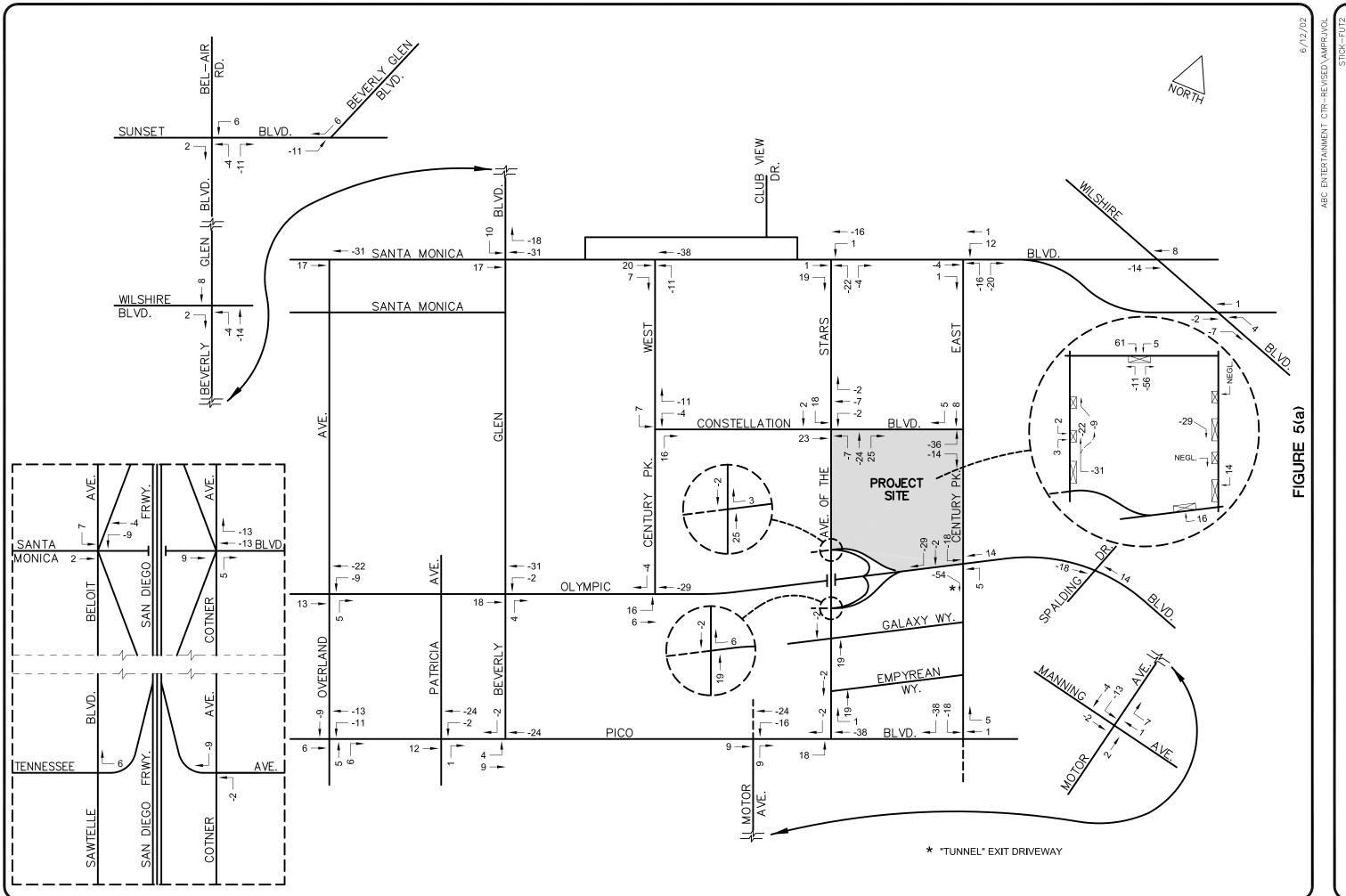


PROJECT TRIP ASSIGNMENT PERCENTAGES INBOUND

CRAIN & ASSOCIATES

Transportation Planning · Traffic Engineering 2007 Sawtelle Boulevard Los Angeles, California 90025 (310) 473-6508

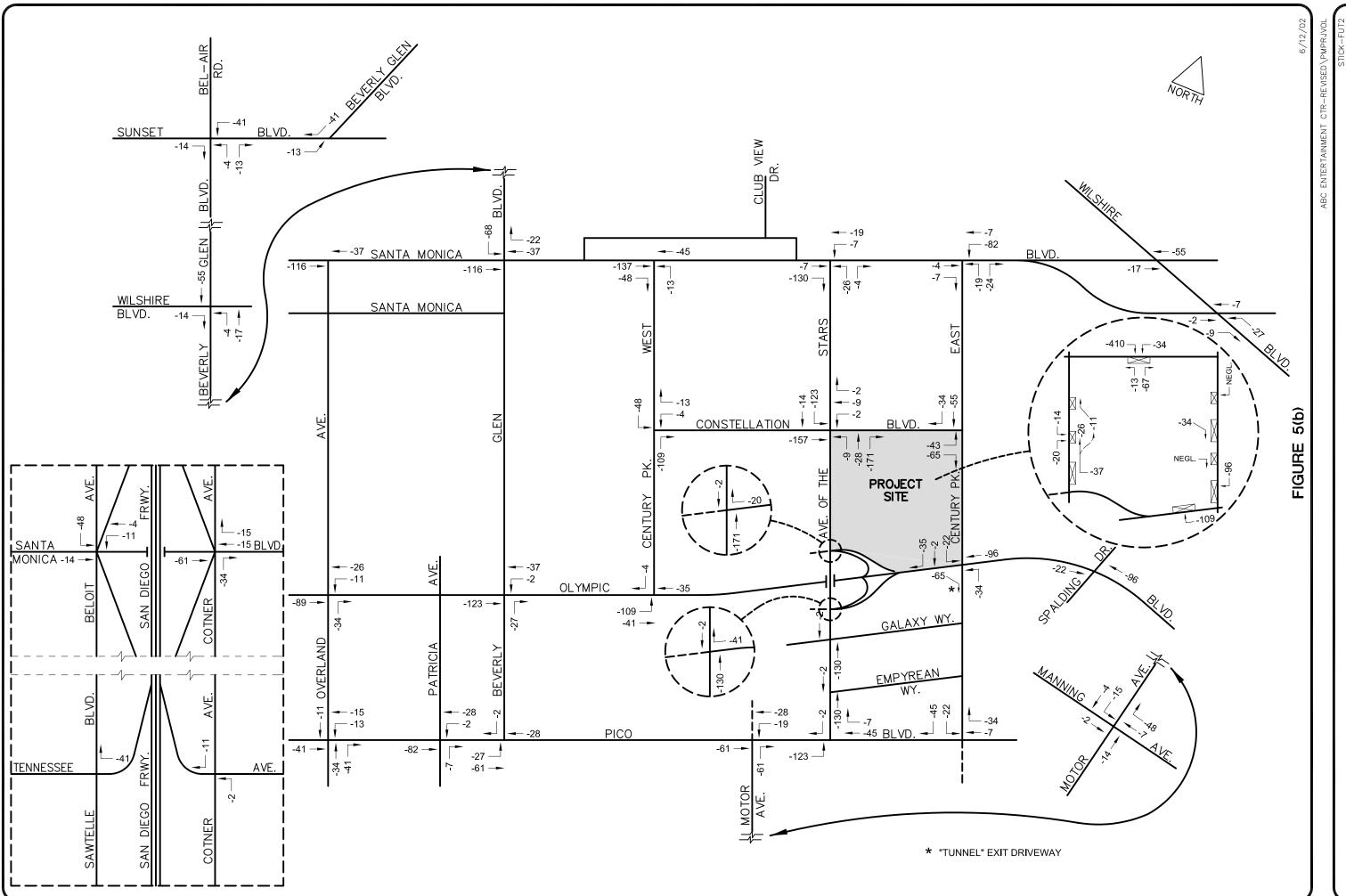




PROJECT TRAFFIC VOLUMES (NET) AM PEAK HOUR

CRAIN & ASSOCIATES 2007 Sawtelle Boulevard Los Angeles, California 90025 (310) 473-6508

35



PROJECT TRAFFIC VOLUMES (NET) PM PEAK HOUR

CRAIN & ASSOCIATES

JN & ASSOCIA 2007 Sawtelle Boulevard Los Angeles, California 90025 (310) 473-6508

3

## **FUTURE TRAFFIC CONDITIONS**

The area surrounding the project site has many projects either in the planning stage or under development. The analysis of future traffic conditions includes traffic that may be generated by these potential projects. Briefly, the methodology for estimating future traffic volumes is as follows: First, current traffic volumes are determined by traffic counts (as described in a preceding section). Next, a traffic growth factor of 1.5 percent compounded annually is applied to develop "baseline" volumes for the year 2005. This was selected as the future study year as it is the year the project is expected to be completed and leased. Traffic expected to be generated by "related projects" within this period is then added to the baseline traffic volumes to form the basis for the 2005 "Without Project" conditions. Finally, project traffic for the completed project is analyzed as an incremental addition to the 2005 Without Project volumes to arrive at the 2005 "With Project" conditions.

### Traffic Growth and Related Projects

Based on an analysis of trends in traffic growth in the area and as recommended by LADOT, an annual traffic growth factor of 1.5 percent was used. This growth factor accounts for increases in traffic resulting from small-sized projects and ambient traffic growth from outside the study area. This growth factor, compounded annually, was applied to the existing (2001) traffic volumes to develop estimates of 2005 baseline volumes. Also included in the future year analysis were projects proposed or under construction (referred to as "related projects"). Information regarding potential related projects within an approximate two-mile radius of the project site was obtained from the records of LADOT and the Department of City Planning, and from recent traffic studies in the vicinity.

It was determined that 42 related projects in the study area could potentially contribute significant traffic to the study intersections. A summary description of these related projects is provided in Table 8. The locations of the 42 related projects are shown in relationship to the project site in Figure 6.

The trips generated by these related projects were estimated by using the trip generation formulas and rates in Appendix D where applicable, or were obtained from previous traffic studies. The estimated traffic generations of the related projects are also included in Table 8. These trips were distributed and assigned using similar assumptions and rationale as applied to 2000 AOS project traffic. For purposes of a conservative analysis, it was assumed that all of these related projects would be completed by 2005.

To determine the 2005 Without Project traffic volumes, the related projects traffic was combined with the existing peak-hour traffic volumes increased by 1.5 percent per year. The resulting 2005 Without Project intersection traffic volume estimates are shown in Figures 7(a) and 7(b) for the AM and PM peak hours, respectively. These are the "benchmark" values used in analyzing project traffic impacts on the street system. They represent a conservative condition due to several factors, including: some projects may implement traffic reduction programs; transit usage may increase; the effect of internal trip linkages and pass-by/diverted trips have not been credited for all projects; and not all projects are expected to be built as described or within the study time frame. Thus, actual future traffic volumes in the study area could be significantly less than analyzed.

# **Highway System Improvements**

Two of the related projects included in the cumulative analysis, Constellation Place and the Fox Studios development, have recently implemented or will be implementing a number of traffic improvement measures involving several study intersections. These improvements, which have been suitably guaranteed, are summarized below and were assumed in the future year analyses.

Table 8
Related Projects Description, Location and Trip Generation

Мар			-		AN	l Peak Ho	ur	PM	l Peak Ho	ır
No.	<u>Size</u> <u>Uni</u>	<u>Description</u>	<u>Location</u>	Daily	<u>I/B</u>	O/B	Total	<u>I/B</u>	O/B	<u>Total</u>
1.	0.000 1.1	University of California, Los Angeles	UCLA Westwood Campus	4 404	(0.4)	470	4.4=	4.40		200
	2,000 bd	Southwest Campus Housing		1,461	(31)	178	147	143	57	200
	296,700 sf N/A	Northwest Campus Phase II Development		143	11 493	0 71	11 564	2 184	11 406	13 590
	N/A 191,900 sf	Intramural Field Parking Structure Physics and Astronomy Building		7,220 18	493 2	0	2	0	406	590 2
	95,000 sf	Luck Research Ctr., Thermal Energy		137	10	0	10	2	10	12
	95,000 81	Storage		137	10	U	10	2	10	12
	N/A	California NanoSystems Institute		325	16	0	16	0	16	16
	1,000 sf	The Center for Health Sciences		nom.	nom.	nom.	nom.	nom.	nom.	nom.
				9,304	501	249	750	331	502	833
2.	19,000 sf	Whole Foods Supermarket	1050 Gayley Av.	2,119	38	24	62	100	96	196
	(937) st	Movie Theater (Existing)	, ,	(1,687)	(9)	0	(9)	(73)	(68)	(141)
	(10,500) sf	Restaurant (Existing)		(1,369)	<u>(50)</u>	<u>(47)</u>	<u>(97)</u>	<u>(82)</u>	<u>(54)</u>	<u>(136)</u>
				(937)	(21)	(23)	(44)	(55)	(26)	(81)
		. [1]								
3.	115,000 sf	Shopping Center [1]	1001 Tiverton Av.	3,374	73	91	164	228	213	441
	350 du	Apartment								
4.	19 du	Apartment	10852 Lindbrook Av.	126	2	8	10	6	3	9
	6,100 sf	Specialty Retail		248	4	3	7	13	18	31
	(16,100) sf	Specialty Retail (Existing)		<u>(655)</u>	<u>(12)</u>	<u>(8)</u>	<u>(20)</u>	<u>(35)</u>	<u>(46)</u>	<u>(81)</u>
				(281)	(6)	3	(3)	(16)	(25)	(41)
5.	107 du	Condominium	10804 Wilshire Bl.	627	8	39	47	40	19	59
	•				0.0		00		=0	405
6.	6 pu	Gas Station w/ Convenience Market	10991 Santa Monica Bl.	977	30	30	60	53	52	105
7.	74,653 sf	General Office	11110 W. Pico Bl.	1,060	130	18	148	26	124	150
		[2]								
8.	N/A	Fast-Food Restaurant w/ Drive-Thru <sup>[2]</sup>	11021 W. Pico Bl.	1,150	48	46	94	46	43	89
0	100 000 of	Harvard-Westlake Middle School <sup>[3]</sup>	700 N. Foring Dd	72	20	0	27	2	0	11
9.	122,200 sf	24 students (net), 15 employees (net)	700 N. Faring Rd.	(est.)	28	9	37	2	9	11
		21 stadente (net), ne employees (net)		(001.)						
10.	71,000 sf	Century City Shopping Center	10250 Santa Monica Bl.	2,273	29	19	48	253	275	528
		[4]		4 000						
11.	508,600 sf	General Office [4]	Constellation Bl. & Av. of the Stars	4,628	600	82	682	105	515	620

Table 8
Related Projects Description, Location and Trip Generation

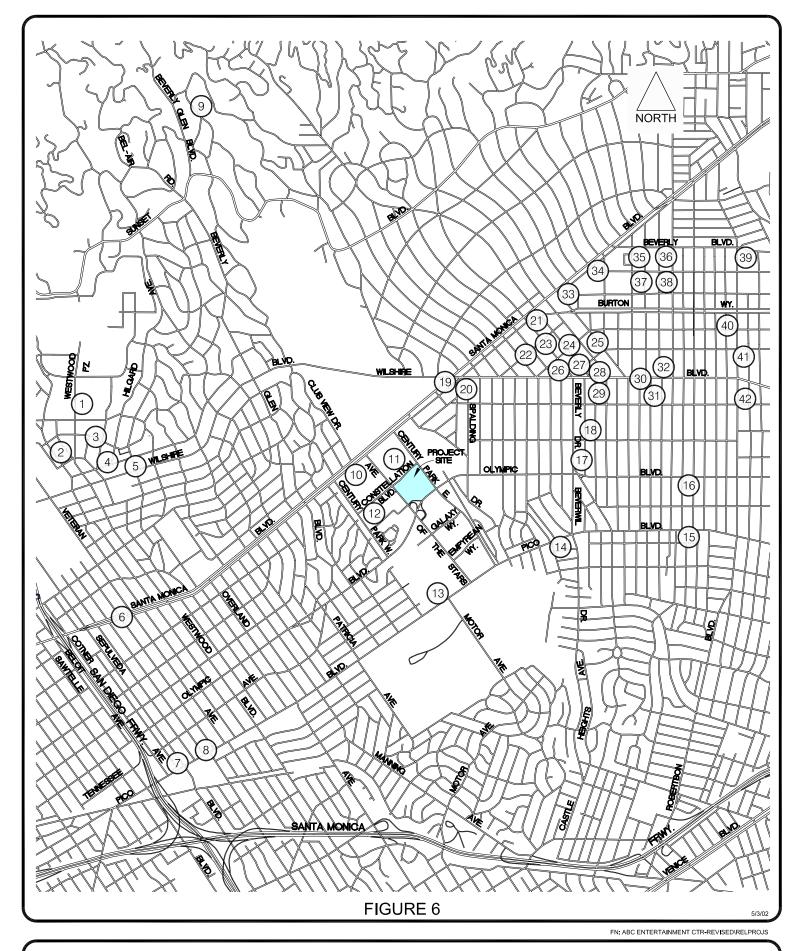
Мар					- AI	M Peak Ho	ur	PI	M Peak Ho	ur
No.	Size Uni	<u>Description</u>	<u>Location</u>	<u>Daily</u>	<u>I/B</u>	O/B	Total	<u>I/B</u>	O/B	Total
12.	791,000 sf	General Office <sup>[5]</sup>	10270 Constellation Bl.	7,868	993	123	1,116	171	833	1,287
13.	360,000 sf	Fox Studio Expansion (remainder est.) <sup>[6]</sup>	10201 W. Pico Bl.	4,086	420	30	450	54	226	280
14.	14,800 sf	High School Addition [2]	9760 W. Pico BI.	660	92	40	132	37	55	92
15.	42,000 sf	Private School	9051 W. Pico Bl.	760	94	55	149	65	166	231
16.	4,900 sf	Commercial/Retail	9000 Olympic BI.	199	4	2	6	6	7	13
17.	10 du	Condominium	345 S. Reeves Dr.	59	1	3	4	3	2	5
18.	23 du	Condominium	261-283 S. Reeves Dr.	135	2	8	10	8	4	12
19.	95,000 sf 9,633 sf	General Office (Beverly Hills Gateway) <sup>[7]</sup> Retail (Existing)	Wilshire Bl. & Santa Monica Bl.	1,050	131	4	127	21	140	161
20.	20 du	Condominium	137-147 Spalding Dr.	117	2	7	9	7	4	11
21.	15,000 sf 15,000 sf	Shopping Center [8] General Office	421-427 N. Beverly Dr.	2,013 <u>309</u> 2,322	32 <u>36</u> 68	20 <u>5</u> 25	52 <u>41</u> 93	86 <u>16</u> 102	94 <u>80</u> 174	180 <u>96</u> 276
22.	15,000 sf	Shopping Center	339 N. Rodeo Dr.	2,013	32	20	52	86	94	180
23.	5,000 sf	Shopping Center	360 N. Rodeo Dr.	993	16	11	27	42	45	87
24.	82,000 sf 38,000 sf	General Office Shopping Center	214-220 N. Beverly Dr. 203-221 N. Canon Dr.	1,140 <u>3,659</u> 4,799	140 <u>55</u> 195	19 <u>35</u> 54	159 <u>90</u> 249	29 <u>159</u> 188	142 <u>173</u> 315	171 <u>332</u> 503
25.	80 du	Senior Housing	201 N. Crescent Dr.	278	6	7	13	8	7	15
26.	41,500 sf	General Office	233-269 N. Beverly Dr.	675	82	11	93	21	105	126
27.	28,300 sf 16,700 sf	General Office Shopping Center	245-257 N. Canon Dr.	503 <u>2,157</u> 2,660	60 <u>34</u> 94	8 <u>21</u> 29	68 <u>55</u> 123	19 <u>93</u> 112	92 <u>100</u> 192	111 <u>193</u> 304

Table 8
Related Projects Description, Location and Trip Generation

Мар					AN	l Peak Hoւ	ır	PN	/I Peak Ho	ur
<u>No.</u>	Size Uni	<u>Description</u>	<u>Location</u>	Daily	<u>I/B</u>	O/B	Total	<u>I/B</u>	O/B	Total
28.	152,646 sf	Retail/General Office <sup>[8]</sup>	Crescent Dr. & Wilshire Bl.	5,880	317	152	469	250	365	615
29.	10 du	Condominium	132 S. Crescent Dr.	59	1	3	4	3	2	5
30.	133 rm	Hotel	9200 Wilshire Bl.	1,186	52	37	89	46	48	94
31.	16 du	Condominium	132 S. Maple Dr.	94	1	6	7	6	3	9
32.	32,000 sf	Medical Office	9100 Wilshire Bl.	1,094	62	16	78	29	77	106
33.	34,000 sf	Cultural Center <sup>[8]</sup>	469 N. Crescent Dr.	860	N/A	N/A	N/A	62	12	74
34.	7,600 sf	General Office	9350 Civic Center	183	21	3	24	15	73	88
35.	168,000 sf	General Office	407 N. Maple Dr.	1,977	248	34	282	46	222	268
36.	34 du	Condominium	411 N. Oakhurst Dr.	199	3	12	15	12	6	18
37.	74,000 sf	General Office	331 N. Maple Dr.	1,053	129	18	147	28	134	162
38.	6 du	Condominium	338 N. Palm Dr.	35	1	2	3	2	1	3
39.	N/A	Convenience Market <sup>[2]</sup>	145 S. Robertson Bl.	1,039	32	32	64	36	36	72
40.	64 du	Senior Housing	214-226 N. Clark Dr.	223	5	6	11	6	4	10
41.	23 du	Condominium	143-149 N. Arnaz Dr.	135	2	8	10	8	4	12
42.	16 du	Condominium	216-220 S. Arnaz Dr.	94	1	6	7	6	3	9

### Source:

- [1] Traffic Analysis for Palazzo Westwood Mixed-Use Development, by Crain & Associates, May 2001.
- 2] LADOT related projects database.
- [3] Traffic Analysis for Harvard-Westlake Middle School Project, by Crain & Associates, Revised January 2002.
- Based on "replacement", i.e., remaining project site CCNSP daily trips.
- [5] DEIR, Century City Project, October 1996.
- [6] DEIR, Fox Studio Historic Preservation and Expansion Project, December 1991.
- 7] Traffic Impact Study for Beverly Hills Gateway, by Crain & Associates, December 2001.
- [8] DEIR, Technical Appendices B-E, Triangle Gateway Project, December 2000.



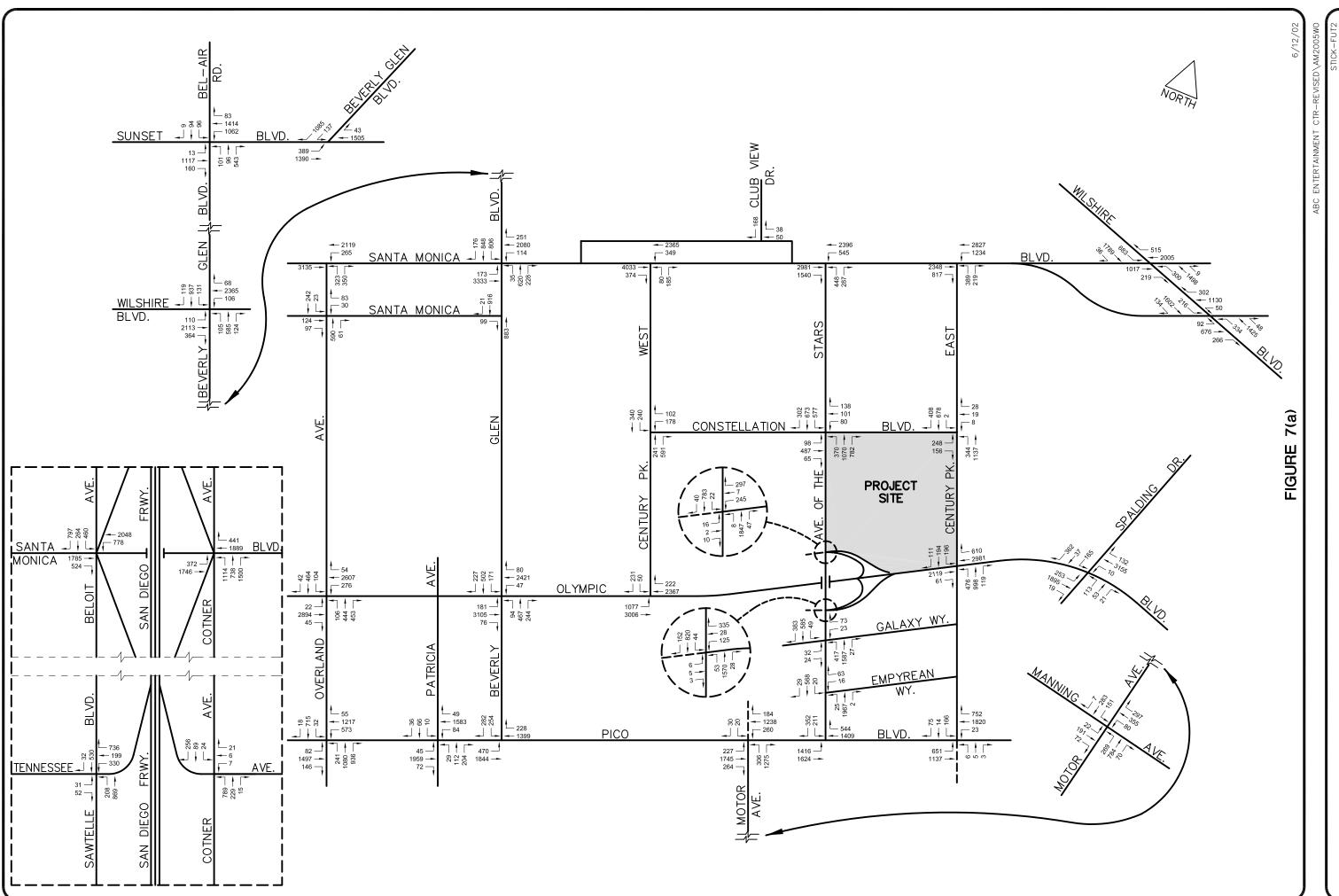
RELATED PROJECTS LOCATION MAP



# CRAIN & ASSOCIATES

2007 Sawtelle Boulevard Los Angeles, California 90025 (310) 473-6508

Transportation Planning • Traffic Engineering

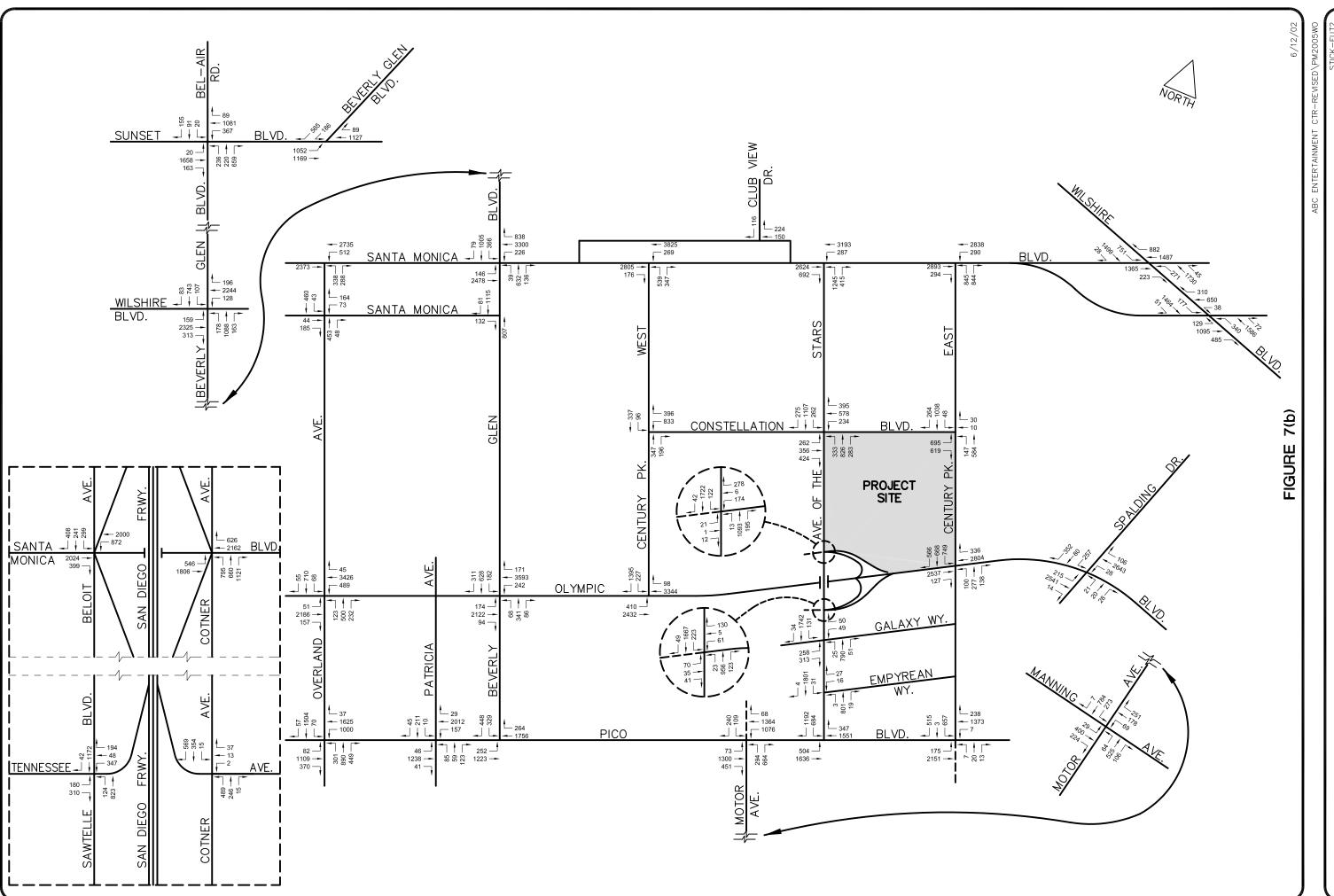


FUTURE (2005) TRAFFIC VOLUMES WITHOUT PROJECT AM PEAK HOUR



# CRAIN & ASSOCIATES

2007 Sawtelle Boulevard Los Angeles, California 90025 (310) 473-6508 ortation Planning. Traffic Engineering



FUTURE (2005) TRAFFIC VOLUMES WITHOUT PROJECT PM PEAK HOUR



CRAIN & ASSOCIATES

2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning. Traffic Engineering

## Constellation Place

This project, now under construction, has funded the installation of the state-of-the-art Adaptive Traffic Control System (ATCS) for an area generally bounded by the Santa Monica (I-10) Freeway, Sawtelle Boulevard, Wilshire Boulevard, Century Park East, Olympic Boulevard and La Cienega Boulevard (at approximately 73 locations). ATCS has been determined by LADOT to increase intersection capacity by at least three percent (which in combination with an Automated Traffic Surveillance and Control (ATSAC) intersection provides a cumulative 10 percent minimum increase in intersection capacity). This project is also responsible for installing the following intersection improvements:

- Constellation Blvd. & Ave. of the Stars A westbound right-turn lane;
- Olympic Blvd. & Century Park West An additional (second) eastbound left-turn lane; and
- Olympic Blvd. & Overland Ave. An eastbound right-turn lane.

In addition, Constellation Place will be constructing a transit center facility on the south side of Constellation Boulevard between Century Park West and Garden Lane, a private street.

# Fox Studios

The Fox Studios expansion project is expected to implement the following additional intersection improvements by 2005:

- <u>Constellation Blvd. & Ave. of the Stars</u> A shared northbound through/right-turn lane;
- Galaxy Wy. & Ave. of the Stars An additional (second) eastbound left-turn lane and measures to prohibit east-west through traffic across Avenue of the Stars;
- Pico Blvd. & Century Park East A westbound right-turn lane;

- Pico Blvd. & Ave. of the Stars An additional (third) eastbound left-turn lane;
- Pico Blvd. & Motor Ave. An additional (third) westbound through lane;
- <u>Pico Blvd. & Overland Ave.</u> An additional (second) northbound right-turn lane;
   and
- 405 Fwy. NB On-Ramp/Tennessee Ave. & Cotner Ave. Northbound and southbound left-turn lanes.

There are two other transportation improvements that are of regional significance and either are or will soon be underway. They are the addition/completion of high-occupancy vehicle (HOV) lanes on the San Diego Freeway and the Santa Monica Boulevard Transit Parkway project. Both of these improvements are described in greater detail below.

# San Diego Freeway (I-405) HOV Lanes

As part of an ongoing project, Caltrans is continuing to plan for and construct HOV lane segments on the San Diego Freeway, towards providing a continuous HOV system on this interstate. Several of these improvements are near the project area and can be expected to benefit and help stabilize overall traffic flow. Late last year, Caltrans completed and opened an eight-mile HOV lane for southbound travel over the Sepulveda Pass, between the Ventura Freeway (US-101) and Waterford Street. This recent improvement has served not only to increase freeway capacity, but to also add to the connectivity of the HOV system by linking to the pre-existing HOV lane segment north of the Sepulveda Pass. An extension of the recently completed southbound HOV lane is scheduled to begin construction in late 2003 and to be completed in summer of 2006. This HOV lane addition will span from Waterford Street, where the recently added lane ends, southerly to the Santa Monica Freeway. Finally, construction of a northbound HOV lane over the Sepulveda Pass is scheduled to begin construction in 2006.

# Santa Monica Boulevard Transit Parkway

The other regional improvement is the Santa Monica Boulevard Transit Parkway project, which is close to the project site. This improvement is expected to improve both traffic flow and transit service overall along the Santa Monica Boulevard corridor. It will extend approximately 2.5 miles, from the Beverly Hills City limit on the east to the San Diego Freeway on the west. The improvement will be based on the "Classic Boulevard" design alternative, with construction slated to begin in early 2003 and completion scheduled for the summer of 2005. The Classic Boulevard alternative is a multimodal transportation improvement which will consolidate "Big" or north Santa Monica Boulevard, "Little" or south Santa Monica Boulevard and the abandoned Southern Pacific Railroad right-of-way, and provide the following elements:

- Roadway Improvements -- A center roadway with three vehicular through lanes in each direction, plus a landscaped median. The existing double intersections for both north and south Santa Monica Boulevard will be replaced with single four-legged intersections at nearly all major cross streets. Left-turn lanes will also be installed on Santa Monica Boulevard, as will right-turn only lanes at most locations. On-ramp improvements will also be made at the San Diego Freeway interchange.
- <u>Bicycle Lanes</u> -- A Class II bicycle lane in each direction. The bicycle lanes will
  be separated from parked cars by landscaped medians on either side of the
  Boulevard that are designed to create primarily one-way frontage roads for local
  businesses and neighborhood street access.
- Bus Priority -- An eastbound transit lane through Century City and bus priority
  treatment at all signalized intersections, to facilitate timely bus movement through
  the corridor. Transit usage will be further enhanced via landscaping and bus
  stop improvements included as part of the Classic Boulevard treatment.

According to the Environmental Assessment/Draft Environmental Impact Report (March 1999) for this improvement project, specific measures will be taken during construction in order to avoid significant disruptions to local access and loss of parking affecting businesses and adjacent neighborhoods. A basic objective of the improvement project's traffic and parking mitigation plan will be to maintain three through lanes in each direction at all times, and to construct new facilities on an alternating-block basis so that there is always on-street parking for the block adjacent to where construction is occurring. With these measures in place, the Environmental Assessment/Draft Environmental Impact Report concludes that the Santa Monica Boulevard Transit Parkway project is not expected to have significant traffic impacts during its construction.

The revised study intersection configurations affected by the Santa Monica Boulevard Transit Parkway project have been incorporated into Figures 4, 5, 7 and 8. As noted earlier, this improvement, as well as the other improvements and measures described above, have been taken into account in the future year analyses. Diagrams illustrating the future geometric and traffic control conditions for the study intersections are included in Appendix B.

# **Analysis of Future (2005) Traffic Conditions (Without and With Project)**

The analysis of future traffic conditions at the study intersections was performed using the same Critical Movement Analysis procedures described previously in this report.

The improvements noted in the preceding section have been accounted for in these analyses.

The future traffic volumes were developed as follows:

o As described earlier, future benchmark traffic volumes for the 2005 Without Project conditions were determined by combining area traffic growth with new traffic generated by related projects, as illustrated in Figures 7(a) and 7(b).

Traffic volumes generated by the 2000 AOS project were then combined with the appropriate benchmark volumes to develop the 2005 With Project traffic volumes. These are shown in Figures 8(a) and 8(b), and were analyzed to determine the traffic impacts directly attributable to the project.

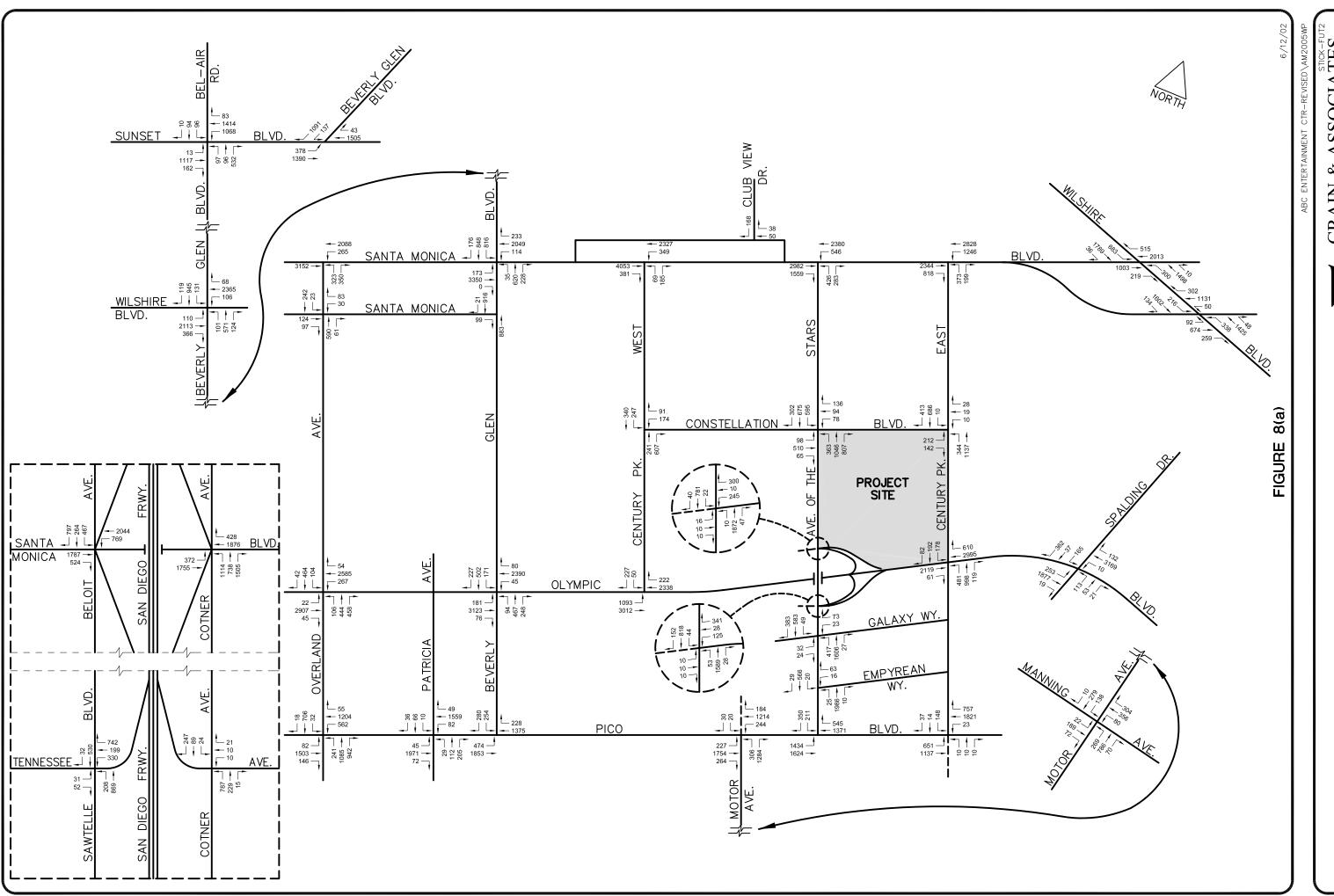
The results of the future year analyses are summarized in Table 9. Prior to the project (2005 Without Project), 20 study intersections would be operating at LOS E or F. Eighteen of these intersections would be at LOS E or F in both peak hours.

According to LADOT policy, a project is deemed to significantly impact an intersection based on the following V/C (volume/capacity) or CMA results:

# **Significant Project Traffic Impact**

<u>LOS</u>	Final V/C Ratio	Project-Related Increase in V/C
С	>0.700 - 0.800	equal to or greater than 0.040
D	>0.800 - 0.900	equal to or greater than 0.020
E, F	>0.900	equal to or greater than 0.010

Based on these criteria and as shown in Table 9, the project is expected to significantly impact one study intersection, Santa Monica Boulevard (N.)/Avenue of the Stars, in the AM peak hour. Mitigation for this impact is described in the Project Mitigation section. In general, compared to the Without Project conditions, With Project conditions are expected to worsen only very slightly during the AM peak hour and improve slightly during the PM

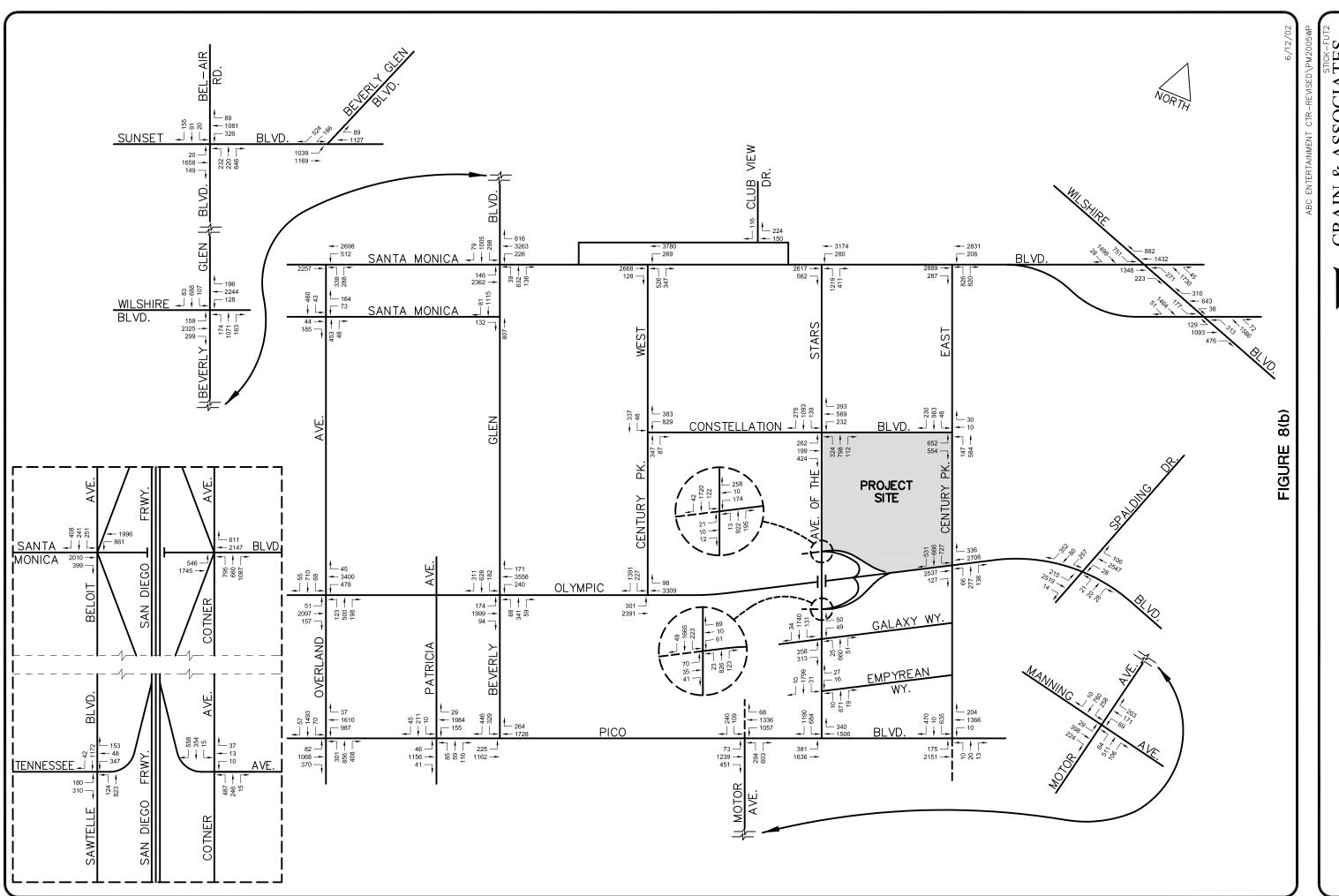


(2005) TRAFFIC VOLUMES WITH PROJECT AM PEAK HOUR FUTURE

CRAIN & ASSOCIATES

2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508

Transportation Planning Traffic Engineering



Day C

FUTURE (2005) TRAFFIC VOLUMES WITH PROJECT PM PEAK HOUR

CRAIN & ASSOCIATES

2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508

Transportation Planning-Traffic Engineering

Table 9
Intersection Critical Movement Analysis (CMA) and Level of Service (LOS) Summary
Existing (2001) and Future (2005) Conditions

	Peak Existing Without Project With Project						oct	With Project + Mitigation				
No.	Intersection	Hour	CMA	LOS	CMA	LOS	СМА	LOS	Impact	CMA	LOS	Impact
1.	Sunset Boulevard & Beverly Glen Boulevard (E.)	AM PM	0.894 1.023	D F	1.038 1.225	F F	1.037 1.216	F F	-0.001 -0.009	1.036 1.215	F F	-0.002 -0.010
2.	Sunset Boulevard & Beverly Glen Boulevard (W.)	AM PM	1.189 1.062	F F	1.385 1.264	F F	1.388 1.251	F F	0.003 -0.013	1.385 1.249	F F	0.000 -0.015
3.	Wilshire Boulevard & Beverly Glen Boulevard	AM PM	0.868 0.884	D D	1.030 1.140	F F	1.030 1.133	F F	0.000 -0.007	1.029 1.133	F F	-0.001 -0.007
4.	Santa Monica Boulevard (N.) & Overland Avenue	AM PM	0.861 0.814	D D	1.076 1.082	F F	1.080 1.054	F F	0.004 -0.028	1.078 1.054	F F	0.002 -0.028
5.	Santa Monica Boulevard (S.) & Overland Avenue	AM PM	0.478 0.428	A A	0.358 0.465	A A	0.358 0.465	A A	0.000 0.000	0.358 0.465	A A	0.000 0.000
6.	Santa Monica Boulevard (N.) & Beverly Glen Boulevard	AM PM	0.849 0.823	D D	1.099 1.139	F F	1.107 1.130	F F	0.008 -0.009	1.104 1.128	F F	0.005 -0.011
7.	Santa Monica Boulevard (S.) & Beverly Glen Boulevard	AM PM	0.849 0.884	D D	0.464 0.575	A A	0.464 0.575	A A	0.000 0.000	0.464 0.575	A A	0.000 0.000
8.	Santa Monica Boulevard (S.) & Century Park West	AM PM	0.325 0.397	A A	1.006 0.984	F E	1.007 0.969	F E	0.001 -0.015	1.005 0.966	F E	-0.001 -0.018
9.	Santa Monica Boulevard (N.) & Club View Drive	AM PM	0.613 0.707	B C	0.213 0.408	A A	0.213 0.408	A A	0.000 0.000	0.213 0.408	A A	0.000 0.000
10.	Santa Monica Boulevard (N.) & Avenue Of The Stars	AM PM	0.825 0.755	D C	1.191 0.967	F E	1.205 0.956	F E	0.014 * -0.011	1.199 0.955	F E	0.008 -0.012
11.	Santa Monica Boulevard (S.) & Avenue Of The Stars	AM PM	0.506 0.544	A A	NA NA		NA NA			NA NA		
12.	Santa Monica Boulevard (N.) & Century Park East	AM PM	0.759 0.666	C B	0.950 0.846	E D	0.955 0.805	E D	0.005 -0.041	0.953 0.804	E D	0.003 -0.042
13.	Santa Monica Boulevard (S.) & Century Park East	AM PM	0.771 0.648	C B	NA NA		NA NA			NA NA		
14.	Santa Monica Boulevard (N.) & Wilshire Boulevard	AM PM	1.096 1.046	F F	1.261 1.294	F F	1.263 1.288	F F	0.002 -0.006	1.263 1.287	F F	0.002 -0.007

Table 9
Intersection Critical Movement Analysis (CMA) and Level of Service (LOS) Summary
Existing (2001) and Future (2005) Conditions

		Peak	Exist	ing	Without	Project	W	ith Proj	ect	With Pro	oject + N	litigation
No.	Intersection	Hour	CMA	LOS	CMA	LOS	CMA	LOS	Impact	CMA	LOS	Impact
15.	Santa Monica Boulevard (S.) & Wilshire Boulevard	AM PM	1.144 0.977	F E	1.411 1.198	ТТ	1.413 1.176	F F	0.002 -0.022	1.412 1.175	F F	0.001 -0.023
16.	Constellation Boulevard & Century Park West	AM PM	0.265 0.260	A A	0.483 0.411	A A	0.499 0.381	A A	0.016 -0.030	0.493 0.380	A A	0.010 -0.031
17.	Constellation Boulevard & Avenue Of The Stars	AM PM	0.646 0.537	B A	0.696 0.780	B C	0.710 0.773	C C	0.014 -0.007	0.701 0.773	C C	0.005 -0.007
18.	Constellation Boulevard & Century Park East	AM PM	0.362 0.557	A A	0.483 0.625	A B	0.482 0.592	A A	-0.001 -0.033	0.480 0.589	A A	-0.003 -0.036
19.	Olympic Boulevard & Overland Avenue	AM PM	1.176 1.141	F F	1.484 1.414	F F	1.484 1.386	F F	0.000 -0.028	1.481 1.384	F F	-0.003 -0.030
20.	Olympic Boulevard & Beverly Glen Boulevard	AM PM	0.820 0.851	D D	0.981 0.989	E E	0.984 0.982	E E	0.003 -0.007	0.983 0.981	E E	0.002 -0.008
21.	Olympic Boulevard & Century Park West	AM PM	0.917 0.966	E E	0.941 1.195	E F	0.940 1.186	E F	-0.001 -0.009	0.938 1.184	E F	-0.003 -0.011
22.	Olympic Boulevard (WB) & Avenue Of The Stars	AM PM	0.461 0.415	A A	0.567 0.473	A A	0.575 0.467	A A	0.008 -0.006	0.571 0.467	A A	0.004 -0.006
23.	Olympic Boulevard (EB) & Avenue Of The Stars	AM PM	0.379 0.348	A A	0.492 0.443	A A	0.501 0.446	A A	0.009 0.003	0.498 0.446	A A	0.006 0.003
24.	Olympic Boulevard & Century Park East	AM PM	0.861 0.829	D D	0.998 0.958	E E	0.993 0.950	E E	-0.005 -0.008	0.991 0.948	E E	-0.007 -0.010
25.	Olympic Boulevard & Spalding Drive	AM PM	0.983 0.865	E D	1.134 0.993	F E	1.137 0.971	F E	0.003 -0.022	1.135 0.971	F E	0.001 -0.022
26.	Galaxy Way & Avenue Of The Stars	AM PM	0.381 0.427	A A	0.372 0.574	A A	0.373 0.574	A A	0.001 0.000	0.373 0.574	A A	0.001 0.000
27.	Empyrean Way & Avenue Of The Stars	AM PM	0.477 0.419	A A	0.636 0.541	B A	0.645 0.555	B A	0.009 0.014	0.643 0.555	B A	0.007 0.014
28.	Pico Boulevard & Overland Avenue	AM PM	0.894 1.234	D F	0.944 1.371	E F	0.942 1.347	E F	-0.002 -0.024	0.941 1.346	E F	-0.003 -0.025

Table 9
Intersection Critical Movement Analysis (CMA) and Level of Service (LOS) Summary
Existing (2001) and Future (2005) Conditions

		Peak	Exist	ing	Without	Project	W	ith Proj	ect	With Pro	oject + N	litigation
No.	Intersection	Hour	CMA	LOS	CMA	LOS	CMA	LOS	Impact	CMA	LOS	Impact
29.	Pico Boulevard &	AM	0.729	С	0.736	С	0.729	С	-0.007	0.729	С	-0.007
	Patricia Avenue	PM	0.649	В	0.656	В	0.649	В	-0.007	0.648	В	-0.008
30.	Pico Boulevard &	AM	0.603	В	0.659	В	0.657	В	-0.002	0.655	В	-0.004
	Beverly Glen Boulevard	PM	0.635	В	0.661	В	0.640	В	-0.021	0.638	В	-0.023
31.	Pico Boulevard &	AM	0.934	Ε	0.943	Е	0.944	Ε	0.001	0.941	Е	-0.002
	Motor Avenue	PM	0.983	Е	1.048	F	1.025	F	-0.023	1.024	F	-0.024
32.	Pico Boulevard &	AM	0.837	D	0.802	D	0.799	С	-0.003	0.796	С	-0.006
	Avenue Of The Stars	PM	0.967	Ε	0.860	D	0.823	D	-0.037	0.821	D	-0.039
33.	Pico Boulevard &	AM	0.732	С	0.715	С	0.722	С	0.007	0.720	С	0.005
	Century Park East	PM	0.806	D	0.906	E	0.904	Ε	-0.002	0.903	E	-0.003
34.	Manning Avenue &	AM	0.877	D	1.056	F	1.054	F	-0.002	1.051	F	-0.005
	Motor Avenue	PM	0.843	D	0.962	Е	0.960	Е	-0.002	0.959	Е	-0.003
35.	Santa Monica Boulevard &	AM	0.768	С	0.844	D	0.842	D	-0.002	0.842	D	-0.002
	I-405 SB On/Off Ramps-Beloit Avenue	PM	0.658	В	0.791	С	0.777	С	-0.014	0.776	С	-0.015
36.	Santa Monica Boulevard &	AM	0.830	D	0.885	D	0.885	D	0.000	0.885	D	0.000
	I-405 NB On/Off Ramps-Cotner Avenue	PM	0.814	D	0.889	D	0.873	D	-0.016	0.871	D	-0.018
37.	I-405 SB Off Ramp/Tennessee Avenue &	AM	0.537	Α	0.584	Α	0.585	Α	0.001	0.585	Α	0.001
	Sawtelle Boulevard	PM	0.803	D	0.831	D	0.831	D	0.000	0.831	D	0.000
38.	I-405 NB On Ramp/Tennessee Avenue &	AM	0.932	Е	0.863	D	0.861	D	-0.002	0.861	D	-0.002
	Cotner Avenue	PM	1.072	F	0.844	D	0.842	D	-0.002	0.839	D	-0.005

<sup>\*</sup> Indicates significant project impact.

N/A: Intersection does not exist in future due to Santa Monica Boulevard Transit Parkway project.

peak hour. (The CMA worksheets for the Future Year 2005 Conditions are included in Appendix F.)

# Regional Traffic Impacts

To address the increasing public concern that traffic congestion was impacting the quality of life and economic vitality of the State of California, the Congestion

Management Program (CMP) was enacted by Proposition 111. The intent of the CMP is to provide the analytical basis for transportation decisions through the State

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

The Congestion Management Program (CMP) for the County of Los Angeles requires that all freeway segments where a project is expected to add 150 or more trips in any direction during the peak hours be analyzed. An analysis is also required at all CMP intersections where a project would likely add 50 or more trips during the peak hours.

The two nearest CMP freeway monitoring locations, and hence the freeway segments expected to experience the most project traffic, are: 1) the Santa Monica (I-10) Freeway east of Overland Avenue, and 2) the San Diego (I-405) Freeway north of Venice Boulevard. The estimated project trips on these segments are as follows:

- o <u>Santa Monica (I-10) Freeway e/o Overland Avenue</u>: 10 vehicles westbound and -18 vehicles eastbound in the AM peak hour; -68 vehicles westbound and -22 vehicles eastbound in the PM peak hour.
- o San Diego (I-405) Freeway n/o Venice Boulevard: 10 vehicles northbound and -18 vehicles southbound in the AM peak hour; -68 vehicles northbound and -22 vehicles southbound in the PM peak hour.

These project volumes are below the CMP threshold value for freeway segments and, therefore, no CMP analysis is required.

The two nearest CMP intersections are also study intersections. These are Wilshire Boulevard/Beverly Glen Boulevard and Santa Monica Boulevard/Wilshire Boulevard. The project's maximum net contributions are expected to be -9 trips (AM peak hour) to the intersection of Wilshire Boulevard/Beverly Glen Boulevard and -10 trips (AM peak hour) to the intersection of Santa Monica Boulevard/Wilshire Boulevard. These contributions are well below the CMP threshold value for intersections. Furthermore, the already conducted analysis for these two intersections determined there would be no significant project impacts. Therefore, no further CMP analysis is required of these two intersections.

# **Residential Street Traffic Impacts**

The WLA TIMP contains criteria for determining whether a project would have significant traffic impact on a local or residential street segment. This impact is based on the increase in average daily traffic attributable to the project, relative to all cumulative daily traffic on the street. Table 6, page 30, shows the net daily trip generation of the project to be -11,357 trips. This indicates that the proposed uses

would generate fewer trips per day than the existing uses being removed. Therefore, the project is not expected to have a significant local or residential street traffic impact.

### PROJECT MITIGATION

As indicated in the preceding analysis, assuming 50 percent internal trip adjustments, the 2000 AOS project may significantly impact the intersection of Santa Monica Boulevard (N.)/Avenue of the Stars. To mitigate this potential impact, the Applicant will implement a Transportation Demand Management (TDM) program for the project. The TDM program will be designed and operated to further encourage ridesharing, transit usage and bicycle usage among project employees. Among the services and amenities expected to be included in the TDM program are designated carpool and vanpool parking spaces; bicycle parking, clothes lockers and related facilities; centralized ridesharing and public transit information; on-site Transportation Coordinator providing assistance with carpool and vanpool matching; on-site sale of transit passes; and participation in the Century City Transportation Management Organization that is to be developed by the Constellation Place project. A more detailed description of the preliminary TDM program for the project is described in Appendix G. The final TDM program will be refined in consultation with LADOT and will also comply with all applicable TDM/trip reduction ordinances of the City of Los Angeles.

As shown in Table 6, page 30, the Office use of the proposed project is expected to generate 943 AM and 833 PM peak-hour trips. It is estimated that the project TDM program will achieve at least a five percent (5%) reduction in these trips amounting to 47 fewer AM peak-hour trips and 42 fewer PM peak-hour trips. Incorporating these reductions into the previously calculate net trips for the project uses (see Table 6, page 30), the adjusted net trips for the project uses due to the TDM mitigation measure are presented in Table 10 below.

Table 10
Project Uses Net Trip Generation With TDM Trip Reductions

	AM	PM
	Peak Hour	Peak Hour
Project Uses Within Internal Trip Adjustments	1,043	1,161
TDM Trip Reductions	47	<u>-42</u>
Adjusted Net Trips	996	1,119

The results of this mitigation measure at the significantly impacted intersection, as well as the other study intersections, are provided in Table 9, page 52. As indicated, the implementation of the project TDM program would effectively mitigate the project impact at the intersection of Santa Monica Boulevard (N.)/Avenue of the Stars to a level of insignificance. This measure would also further reduce non-significant project impacts at the other study intersections.

As part of the TDM program, the Applicant shall be required to monitor the project parking access driveways and measure their vehicular usage. These measurements shall be conducted on an annual basis and implemented no sooner than when the 2000 AOS project first has a minimum 80 percent floor area occupancy. The measurements shall cover the peak periods of 7:00 - 9:00 AM and 4:00 - 6:00 PM, Monday through Friday (excluding holidays), over a one- or two-week period as agreed to with LADOT. From this information, the average number of vehicles using those driveways during the highest 60 minutes in each peak-hour period and attributable to 2000 AOS shall be determined. As the project is on the same block and uses the same parking garage as the existing Century Plaza Towers, appropriate procedures will be established with LADOT to ensure that the trips generated by the 2000 AOS project are properly identified and evaluated.

The Applicant shall submit a minimum of five annual reports on the project TDM program and document its effectiveness to LADOT. If an annual report documents that

either the AM or PM peak-hour trips total in Table 10 for the project has been exceeded, then the Applicant shall have one year to achieve compliance. If the annual report subsequent to the noncompliance annual report shows that the project is still not in compliance, then LADOT may require additional operating improvements and/or modifications to the TDM measures. These may include requiring the Applicant to buy an annual bus pass for each excess trip occurring in the peak hour with the most excess trips up to a maximum of 47 annual bus passes, or requiring an increase in the number of reserved car and van pool preferential parking spaces in order to further encourage employee bus transit usage and ridesharing. As appropriate, the Applicant may submit additional reports or supplemental information for consideration that demonstrate measures which may have been additionally required by the City for noncompliance reasons can be rescinded. When the last three annual reports demonstrate continuous compliance with the peak-hour trip thresholds, the project shall be deemed to have satisfied the TDM mitigation measure requirement and no further action by the Applicant regarding this requirement will be necessary.

Based on the above project TDM program and accompanying analysis, no further traffic mitigation is necessary for the project.