

Appendix K

Transportation Assessment Report

TRANSPORTATION ASSESSMENT REPORT
1216 MENLO AVENUE RESIDENTIAL PROJECT
City of Los Angeles, California
July 22, 2020

Prepared for:

Cypress Equity Investments
12121 Wilshire Boulevard, Suite 801
Los Angeles, CA 90025

LLG Ref. 5-20-0497-1



Prepared by:

A handwritten signature in black ink, appearing to read 'AShankar'.

Amrita Shankar
Transportation Engineer I

Under the Supervision of:

A handwritten signature in black ink, appearing to read 'DShender'.

David S. Shender, P.E.
Principal

TABLE OF CONTENTS

SECTION	PAGE
1.0 Introduction	1
1.1 Transportation Assessment Overview	1
1.2 Study Area	3
2.0 Project Description.....	4
2.1 Project Site Location.....	4
2.2 Existing Project Site.....	4
2.3 Project Description.....	4
2.4 Vehicular Project Site Access.....	4
2.5 Project Parking.....	7
2.6 Project Loading.....	7
2.7 Project Traffic Generation and Distribution	7
2.7.1 Project Traffic Generation.....	7
2.7.2 Project Traffic Distribution and Assignment.....	8
3.0 Project Context.....	13
3.1 Non-Vehicle Transport System	13
3.1.1 Pedestrian Framework.....	13
3.1.2 Bicycle Network.....	18
3.2 Transit Framework.....	18
3.3 Vehicle Network	23
3.3.1 Regional Highway Access	23
3.3.2 Local Roadway System.....	23
3.3.3 Roadway Descriptions	23
3.3.4 City of Los Angeles High Injury Network	25
3.4 Traffic Counts	26
3.5 Cumulative Development Projects	28
3.5.1 Related Projects	28
3.5.2 Ambient Traffic Growth	28
4.0 CEQA Analysis of Transportation Impacts.....	36
4.1 Consistency with Adopted Plans and Policies (Threshold T-1).....	36
4.1.1 Screening Criteria.....	36
4.1.2 Impact Criteria and Methodology	37
4.1.3 Review of Project Consistency	38
4.1.4 Review of Cumulative Consistency	38
4.2 VMT Analysis (Threshold T-2.1).....	41
4.2.1 Impact Criteria and Methodology	42
4.2.2 Summary of Project VMT Analysis	42
4.2.3 Summary of Cumulative VMT Analysis.....	44
4.3 Geometric Design Threshold (T-3)	44
4.3.1 Screening Criteria.....	45
4.3.2 Impact Criteria and Methodology	45
4.3.3 Qualitative Review of Site Access Points.....	46

TABLE OF CONTENTS *(continued)*

SECTION	PAGE
4.4 CEQA Transportation Measures	47
4.4.1 Transportation Demand Management	47
4.4.2 CEQA Transportation Summary	47
5.0 Non-CEQA Analysis	48
5.1 Pedestrian, Bicycle, and Transit Access	48
5.1.1 Screening Criteria	48
5.1.2 Evaluation Criteria	49
5.1.3 Results of Qualitative Access Review	50
5.2 Project Access and Circulation Review	52
5.2.1 Screening Criteria	52
5.2.2 Evaluation Criteria	55
5.2.3 Project Operational and Passenger Loading Evaluation Methodology	56
5.3 Project Construction Effect on Nearby Mobility	64
5.3.1 Screening Criteria	64
5.3.2 Evaluation Criteria and Methodology	66
5.3.3 Recommended Project-Specific Action Items	69
6.0 Summary and Conclusions	71

TABLE OF CONTENTS *(continued)*

LIST OF FIGURES

SECTION—FIGURE #	PAGE
1-1 Vicinity Map	2
2-1 Project Site Aerial	5
2-2 Project Site Plan	6
2-3 Project Trip Distribution	10
2-4 Net New Project Traffic Volumes – Weekday AM Peak Hour	11
2-5 Net New Project Traffic Volumes – Weekday PM Peak Hour	12
3-1 Potential Pedestrian Destinations.....	14
3-2 Pedestrian Enhanced Districts.....	15
3-3 Existing Nearby Pedestrian and Transit Facilities.....	16
3-4 Bicycle Enhanced Network	19
3-5 Existing Public Transit Routes.....	21
3-6 Transit Enhanced Network	22
3-7 Existing Lane Configurations	24
3-8 High Injury Network.....	27
3-9 Existing Traffic Volumes – Weekday AM Peak Hour.....	29
3-10 Existing Traffic Volumes – Weekday PM Peak Hour	30
3-11 Location of Related Projects.....	32
3-12 Related Projects Traffic Volumes – Weekday AM Peak Hour.....	33
3-13 Related Projects Traffic Volumes – Weekday PM Peak Hour	34
5-1 Existing With Project Traffic Volumes – Weekday AM Peak Hour	58
5-2 Existing With Project Traffic Volumes – Weekday PM Peak Hour.....	59
5-3 Future Cumulative Baseline Traffic Volumes – Weekday AM Peak Hour.....	60
5-4 Future Cumulative Baseline Traffic Volumes – Weekday PM Peak Hour	61
5-5 Future Cumulative With Project Traffic Volumes – Weekday AM Peak Hour	62
5-6 Future Cumulative With Project Traffic Volumes – Weekday PM Peak Hour.....	63

TABLE OF CONTENTS *(continued)*

LIST OF TABLES

SECTION—TABLE #	PAGE
2-1 Project Trip Generation.....	9
3-1 Existing Public Transit Routes.....	20
3-2 Related Projects List and Trip Generation.....	31
4-1 Project Consistency with Plans, Programs, Ordinances, or Policies.....	39
4-2 City of Los Angeles VMT Impact Criteria.....	43
5-1 Project Evaluation of Pedestrian, Bicycle, and Transit Access.....	51
5-2 Project Delay, Levels of Service, and Vehicle Queuing Summary	53
5-3 Qualitative Review of Project Construction Activities	68

APPENDICES

APPENDIX

- A. Approved Transportation Assessment Memorandum of Understanding
- B. Manual Traffic Count Data
- C. VMT Calculator Output
- D. HCM and Levels of Service Explanation
HCM Data Worksheets – AM and PM Peak Hours

TRANSPORTATION ASSESSMENT REPORT
1216 MENLO AVENUE RESIDENTIAL PROJECT
City of Los Angeles, California
July 22, 2020

1.0 INTRODUCTION

1.1 Transportation Assessment Overview

This transportation assessment report has been conducted to identify and evaluate the potential transportation impacts of the proposed residential project at (the “Project”) at 1216-1224 Menlo Avenue (the “Project Site”) on the surrounding street system. The Project Site is located in the Wilshire Community Plan area of the City of Los Angeles, California. The Project Site is generally bounded by existing multi-family residential developments to the north, south, and east, and Menlo Avenue to the west. The Project Site location and general vicinity are shown in *Figure 1-1*.

The traffic analysis follows City of Los Angeles (the “City”) transportation assessment guidelines¹ (TAG). The City’s TAG are focused on transportation metrics that promote: the reduction of greenhouse gas emissions; the development of multimodal networks and access to diverse land uses; and safety, sustainability, and smart growth. In compliance with the California Environmental Quality Act (CEQA), the City’s TAG identify vehicle miles traveled (VMT) as the primary metric for evaluating a project’s transportation impacts along with whether the proposed project conflicts or is inconsistent with local plans and policies. In addition, the City’s TAG require evaluation of non-CEQA mobility elements such as pedestrian, bicycle and transit access, project access and circulation, project construction, and the potential for residential street intrusion.

This transportation assessment presents: (i) a CEQA assessment of Project-related VMT; (ii) a CEQA assessment of whether the Project conflicts or is inconsistent with local plans and policies; (iii) a non-CEQA assessment of pedestrian, bicycle and transit access; (iv) a non-CEQA evaluation of Project access, safety and circulation; (v) a non-CEQA review of Project construction activities; and (vi) improvement measures, if deemed necessary.

¹ *Transportation Assessment Guidelines*, City of Los Angeles Department of Transportation, July 2019.



- MAP SOURCE: GOOGLE MAPS
- ★ PROJECT SITE
 - ⓧ STUDY INTERSECTION

FIGURE 1-1
VICINITY MAP

LINSCOTT, LAW & GREENSPAN, engineers

1216 MENLO AVENUE RESIDENTIAL PROJECT

1.2 Study Area

The CEQA and non-CEQA analysis criteria for this transportation assessment were identified in consultation with City of Los Angeles Department of Transportation (LADOT) staff. The analysis criteria were determined based on the City's TAG, the Project description and location, and the characteristics of the surrounding transportation system. As defined by the City as Lead Agency under CEQA, LADOT confirmed the appropriateness of the analysis criteria when it entered into a transportation assessment Memorandum of Understanding (MOU) for the Project on April 15, 2020. The approved MOU is contained in *Appendix A*.

2.0 PROJECT DESCRIPTION

2.1 Project Site Location

The Project Site is located at 1216-1224 Menlo Avenue in the Wilshire Community Plan Area of the City of Los Angeles. The Project Site is generally bounded by existing multi-family residential developments to the north, south, and east, and Menlo Avenue to the west. The Project Site location and general vicinity are shown in *Figure 1-1*.

The Project Site is currently served by many local and regional/commuter public transit lines via stops located within convenient walking distance along Vermont Avenue and Pico Boulevard. The bus lines include Metro Local Lines 30/330, 204, and Metro Rapid 754.

2.2 Existing Project Site

The Project Site comprises of approximately 0.92 acres and is currently occupied by eight residential apartment dwelling units, 7,905 square feet of office floor area, and a 7,687 three-story historic structure.² Vehicular access to the Project Site is currently provided via one driveway located along the east side of Menlo Avenue at the northerly end of the Project Site and one driveway located along the east side of Menlo Avenue at the southerly end of the Project Site. The Project Site is highlighted in an aerial photograph presented in *Figure 2-1*.

2.3 Project Description

As currently proposed, the Project consists of the removal of the existing residential units, renovation of the existing three-story historic structure, and development of 131 affordable family housing dwelling units.³ The Project proposes to provide four parking spaces on-site. Construction and occupancy of the Project is planned to be completed by the year 2022. The site plan for the Project is illustrated in *Figure 2-2*.

2.4 Vehicular Project Site Access

Proposed vehicular access to the Project Site will be provided via the existing driveway located along east side of Menlo Avenue at the northerly end of the Project Site. The Project driveway will provide access to the Project's on-site parking spaces. The Project driveway is proposed to accommodate full vehicular access (i.e., left-turn and right-turn ingress and egress turning movements). The existing driveway at the southerly end of the Project Site will be removed as part of the Project.

² Note that the approved transportation assessment MOU states that the Project Site is currently occupied by nine residential apartment dwelling units and 7,905 square feet of office floor area. The historic structure will be renovated, not removed, as part of the Project.

³ Note that at the time this report was prepared, the Project included 131 dwelling units, but the final application submitted to the City for review includes 128 dwelling units. Therefore, this report provides a conservative assessment.



FIGURE 2-1
PROJECT SITE AERIAL

1216 MENLO AVENUE RESIDENTIAL PROJECT

MAP SOURCE: GOOGLE MAPS
PROJECT SITE

 **NOT TO SCALE**

LINSCOTT, LAW & GREENSPAN, engineers

c:\0497\dwg\2-2.dwg 04/22/2020 16:44:53 shankar lig exhibits color.ctb



SOURCE: OTTINGER ARCHITECTS

FIGURE 2-2

PROJECT SITE PLAN

GROUND FLOOR PLAN

LINSCOTT, LAW & GREENSPAN, engineers

1216 MENLO AVENUE RESIDENTIAL PROJECT

2.5 Project Parking

The Project Site is within an identified Transit Oriented Community (TOC) area and is eligible for TOC incentives. Specifically, the Project Site is in a Tier 3 TOC Area and is 100% affordable, and is therefore eligible for Tier 4 incentives, such as no required parking for residential units, pursuant to the City of Los Angeles TOC Guidelines.⁴ Therefore, the Project proposes to provide a total of four parking spaces within an on-site surface parking lot.

2.6 Project Loading

A dedicated, secure trash and recycling room will be located on the ground floor of the proposed building, with access for trash and recycling collection from Menlo Avenue at the southerly end of the Project Site. Loading zones are not required to be installed as part of the Project.

2.7 Project Traffic Generation and Distribution

2.7.1 Project Traffic Generation

Traffic generation is expressed in vehicle trip ends, defined as one-way vehicular movements, either entering or exiting the generating land use. Traffic volumes expected to be generated by the Project during the weekday AM and PM peak hours, as well as on a daily basis, were estimated using the affordable housing trip rates published in Table 3.3-2 of the TAG. The following trip generation rates were used to forecast the traffic volumes expected to be generated by the Project land use components:

- Affordable Family Housing: LADOT Affordable Housing (Family) trip generation average rates were used to forecast the traffic volumes expected to be generated by the affordable family housing component of the Project.

In addition to the trip generation forecasts for the proposed Project (which are essentially an estimate of the number of vehicles that could be expected to enter and exit the Project Site access points), an adjustment was made to the trip generation forecast based on the Project Site's existing land uses. The existing land uses to be removed include the eight residential apartment dwelling units and the 7,905 square feet of office floor area. The 7,687 square foot historic structure will remain and be renovated to provide residential amenities for the Project. The Institute of Transportation Engineers' (ITE) *Trip Generation Manual*⁵ Land Use Code 220 (Multifamily Housing [Low-Rise]) and Land Use Code 710 (General Office Building) trip generation average rates were used to estimate the trip reduction related to the removal of the existing uses from the Project Site.

Lastly, a forecast was also made of the transit trips that will be generated by the Project in lieu of trips by private automobile. The transit reduction is based on the Project Site's proximity to the various bus lines, as well as the land use characteristics of the Project. The bus lines include: Metro Local Lines 30/330, 204, and Metro Rapid 754. Further discussion of the transit

⁴ *Transit Oriented Communities Affordable Housing Incentive Program Guidelines (TOC Guidelines)*, City of Los Angeles Department of City Planning, February 2018.

⁵ Institute of Transportation Engineers, *Trip Generation Manual*, 10th Edition, Washington, D.C., 2017.

framework is provided in Section 3.2 herein. A transit adjustment of 10% has been utilized, consistent with guidance provided in the TAG.

The trip generation forecast for the Project was submitted for review and approval by LADOT staff. As presented in **Table 2-1**, the Project is expected to generate 56 net new vehicle trips (18 inbound trips and 38 outbound trips) during the AM peak hour. During the PM peak hour, the Project is expected to generate 37 net new vehicle trips (24 inbound trips and 13 outbound trips).

It is noted that the daily trip generation forecast for the Project is provided in **Appendix C**.

2.7.2 Project Traffic Distribution and Assignment

Project traffic volumes both entering and exiting the Project Site have been distributed and assigned to the adjacent street system based on the following considerations:

- The Project Site's proximity to major traffic corridors (i.e. Vermont Avenue, Pico Boulevard, I-10 Freeway, SR-110 Freeway, etc.);
- Expected localized traffic flow patterns based on adjacent roadway channelization and presence of traffic signals;
- Existing intersection traffic volumes;
- Ingress/egress availability at the Project Site assuming the site access and circulation scheme described in Section 2.4;
- The location of existing and proposed parking areas;
- Nearby population and employment centers as well as adjacent residential neighborhoods; and
- Input from LADOT staff.

The general, directional traffic distribution patterns for the Project are presented in **Figure 2-3**. The forecast net new weekday AM and PM peak hour Project traffic volumes at the study intersections associated with the Project are presented in **Figures 2-4** and **2-5**, respectively. The traffic volume assignments presented in **Figures 2-4** and **2-5** reflect the traffic distribution characteristics shown in **Figure 2-3** and the Project traffic generation forecast presented in **Table 2-1**.

Table 2-1
PROJECT TRIP GENERATION [1]

20-Jul-20

LAND USE	SIZE	AM PEAK HOUR VOLUMES [2]			PM PEAK HOUR VOLUMES [2]		
		IN	OUT	TOTAL	IN	OUT	TOTAL
<i>Proposed Project</i>							
Affordable Family Housing [3]	131 DU	<u>26</u>	<u>42</u>	<u>68</u>	<u>28</u>	<u>22</u>	<u>50</u>
Subtotal		26	42	68	28	22	50
Subtotal Project Driveway Trips		26	42	68	28	22	50
<i>Existing Site</i>							
Apartments [4]	(8) DU	(1)	(3)	(4)	(3)	(1)	(4)
General Office [5]	(7,905) GSF	(8)	(1)	(9)	(1)	(8)	(9)
Subtotal		(9)	(4)	(13)	(4)	(9)	(13)
<i>Existing Transit Trips [6]</i>							
Apartments (10%)		0	0	0	0	0	0
General Office (10%)		1	0	1	0	1	1
Subtotal		1	0	1	0	1	1
Subtotal Existing Driveway Trips		(8)	(4)	(12)	(4)	(8)	(12)
NET INCREASE DRIVEWAY TRIPS		18	38	56	24	14	38

[1] Source: ITE "Trip Generation Manual", 10th Edition, 2017.

- [1] Sources: the trip generation manual ; over London, 2007
- [2] Trips are one-way traffic movements, entering or leaving.

[3] City of Los Angeles Affordable Housing (Family) trip generation average rates.

- AM Peak Hour Trip Rate: 0.52 trips/dwelling unit; 38% inbound/62% outbound

- PM Peak Hour Trip Rate: 0.38 trips/dwelling unit; 55% inbound/45% outbound

[4] ITE Land Use Code 220 (Multifamily Housing (Low-Rise)) trip generation average rates. 1.00 car from trip rate, 0.50 trip from car, 55.00 minutes 15.00 outcome

-AM Peak Hour Trip Rate: 0.46 trips/dwelling unit; 23% inbound/77% outbound

- PM Peak Hour Trip Rate: 0.56 trips/dwelling unit; 63% inbound/37% outbound

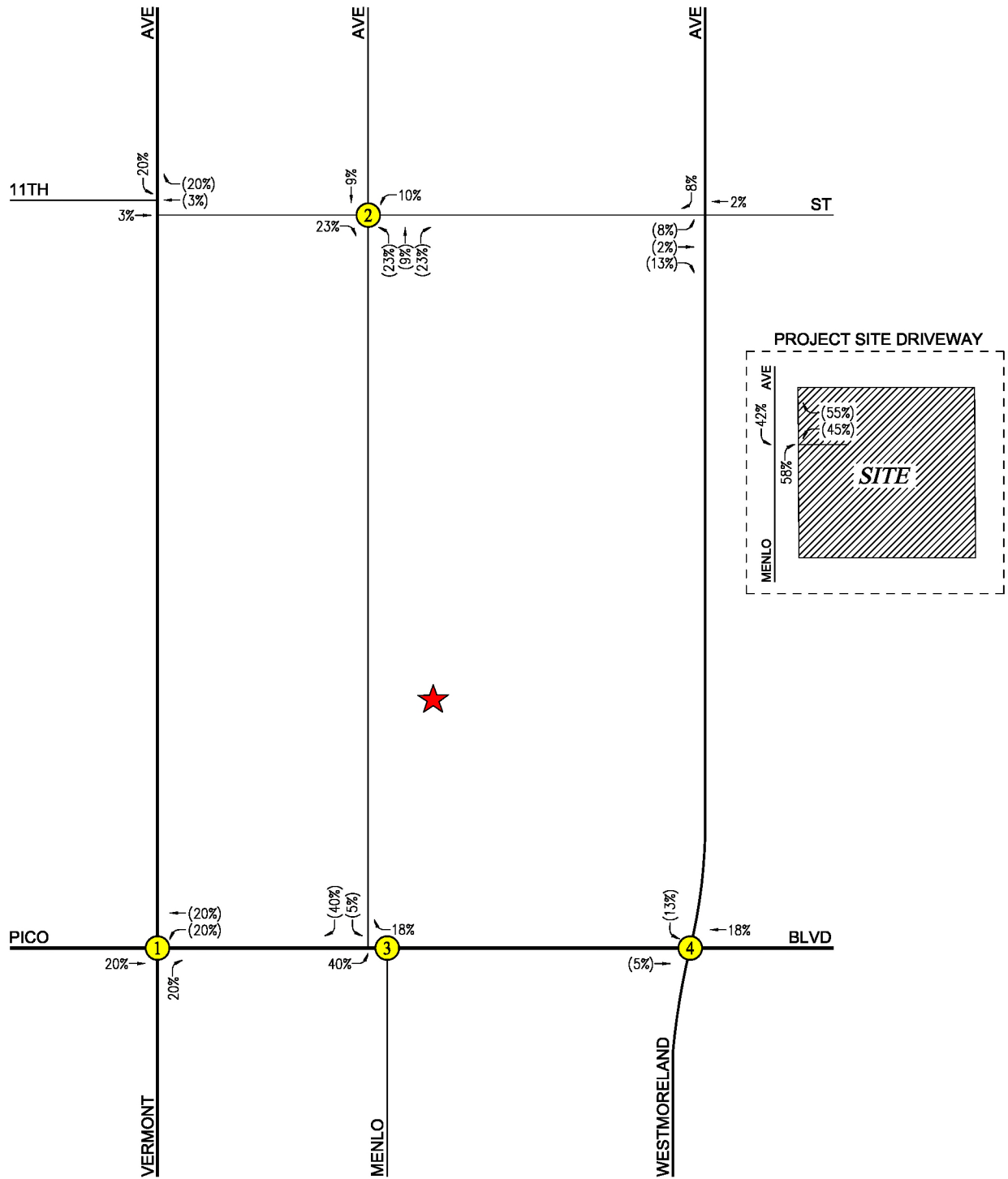
[5] ITE Land Use Code 710 (General Office Building) trip generation average rates. -1 mile can from trip rate. 0.50 trips/working unit, 0.50 minutes 710 Outbound

- AM Peak Hour Trip Rate: 1.16 trips/1,000 SF of floor area; 86% inbound/14% outbound

- PM Peak Hour Trip Rate: 1.15 trips/1,000 SF of floor area; 60.0% inbound/40.0% outbound
- PM Peak Hour Trip Rate: 1.15 trips/1,000 SF of floor area; 16% inbound/84% outbound

[6] The transit reduction is based on the site's proximity to Metro Red and Purple Line stops. Metro Rapid bus stops within 1 mile from trip rate, 1.15 trips/1,000 sq. ft. of floor area, 10% increase/84% Outbound

The transit recedent is based on the site's proximity to I-605 and I-10 and various bus lines, as well as the land use characteristics of the project.

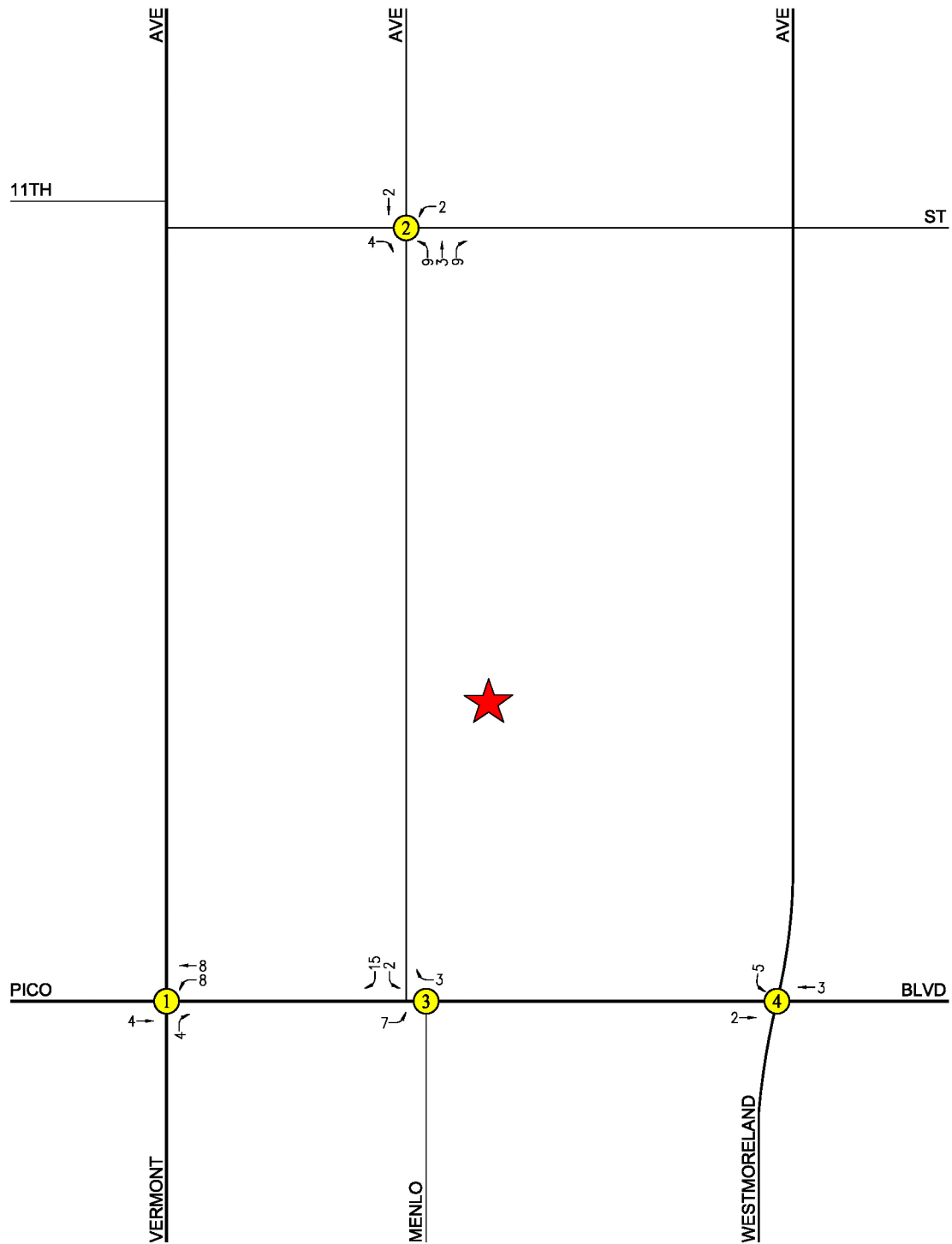


- ★ PROJECT SITE
- ⓧ STUDY INTERSECTION
- ## = INBOUND PERCENTAGES
- (##) = OUTBOUND PERCENTAGES

FIGURE 2-3
PROJECT TRIP DISTRIBUTION

LINSCOTT, LAW & GREENSPAN, engineers

1216 MENLO AVENUE RESIDENTIAL PROJECT



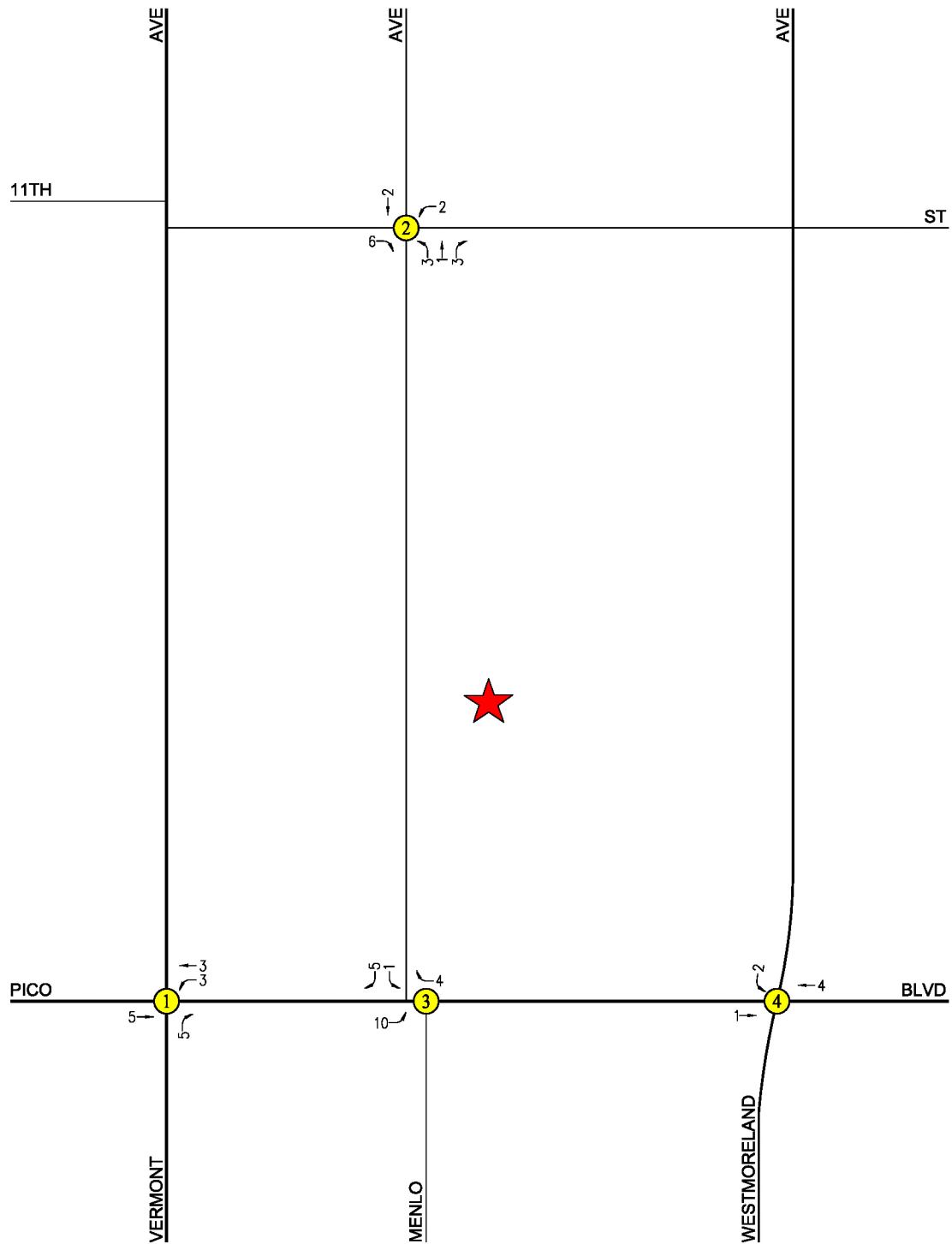
NOT TO SCALE

- ★ PROJECT SITE
- ② STUDY INTERSECTION

LINSCOTT, LAW & GREENSPAN, engineers

FIGURE 2-4 NET NEW PROJECT TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR
1216 MENLO AVENUE RESIDENTIAL PROJECT



NOT TO SCALE

- ★ PROJECT SITE
- ⓧ STUDY INTERSECTION

LINSCOTT, LAW & GREENSPAN, engineers

FIGURE 2-5 NET NEW PROJECT TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR
1216 MENLO AVENUE RESIDENTIAL PROJECT

3.0 PROJECT CONTEXT

3.1 Non-Vehicle Transport System

3.1.1 Pedestrian Framework

Public sidewalks and pedestrian facilities are provided on streets within the Project vicinity. A public sidewalk ranging in width from 8 feet to 15 feet is provided along the Menlo Avenue property frontage. Potential pedestrian destinations located within an approximately one-quarter mile radius (i.e., 1,320 feet) from the Project Site are noted in **Figure 3-1**, as stated in Section 3.2.4 of the TAG. Roadways designated by the City as Pedestrian Enhanced Districts in close proximity to the Project Site and in the surrounding area are shown in **Figure 3-2**. **Figure 3-3** shows the existing pedestrian and transit facilities in the direct vicinity of the Project Site. As presented in **Figure 3-3**, the following pedestrian facilities currently are provided in the direct vicinity of the Project Site:

- American With Disabilities Act (ADA) handicap ramps, including some with the yellow truncated domes, are provided at the following intersections located in the direct vicinity of the Project Site:
 - New Hampshire Avenue / 11th Street
 - New Hampshire Avenue / 12th Street
 - New Hampshire Avenue / Pico Boulevard
 - Vermont Avenue / 11th Street
 - Vermont Avenue / 12th Street
 - Vermont Avenue / Pico Boulevard
 - Menlo Avenue / 11th Street
 - Menlo Avenue / Pico Boulevard
 - Westmoreland Avenue / 11th Street
 - Westmoreland Avenue / Pico Boulevard
 - Elden Avenue / 11th Street
 - Elden Avenue / 12th Street
 - Elden Avenue / Pico Boulevard

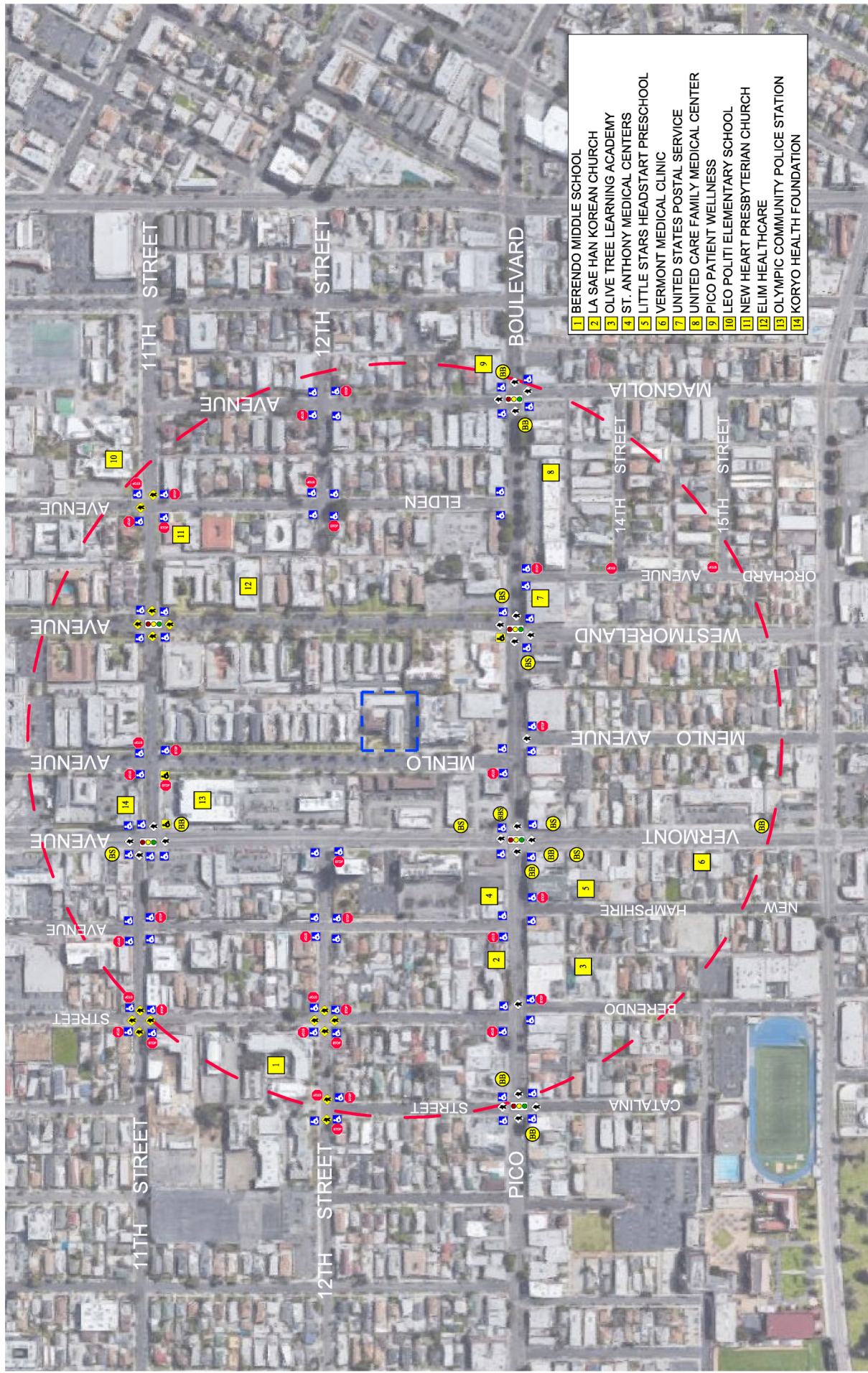


FIGURE 3-1
POTENTIAL PEDESTRIAN
DESTINATIONS NEAR PROJECT SITE
1216 MENLO AVENUE RESIDENTIAL PROJECT

- MAP SOURCE: GOOGLE MAPS
PROJECT SITE
QUARTER-MILE RADIUS
SIGNAL
STOP SIGN
- ADA CURB RAMP
ADA YELLOW TRUNCATED DOME
CROSSWALK
YELLOW CROSSWALK
- BUS STOP
BUS STOP WITH BENCH
BUS STOP WITH BENCH AND SHELTER
- BERENDO MIDDLE SCHOOL
LA SAE HAN KOREAN CHURCH
OLIVE TREE LEARNING ACADEMY
ST. ANTHONY MEDICAL CENTERS
LITTLE STARS HEADSTART PRESCHOOL
VERMONT MEDICAL CLINIC
UNITED STATES POSTAL SERVICE
UNITED CARE FAMILY MEDICAL CENTER
PICO PATIENT WELLNESS
LEO POLITI ELEMENTARY SCHOOL
NEW HEART PRESBYTERIAN CHURCH
ELIM HEALTHCARE
OLYMPIC COMMUNITY POLICE STATION
KORYO HEALTH FOUNDATION



NOT TO SCALE

MAP SOURCE: GOOGLE MAPS
PROJECT SITE
PEDESTRIAN ENHANCED DISTRICT

FIGURE 3-2
CITY OF LOS ANGELES
PEDESTRIAN ENHANCED DISTRICTS
1216 MENLO AVENUE RESIDENTIAL PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

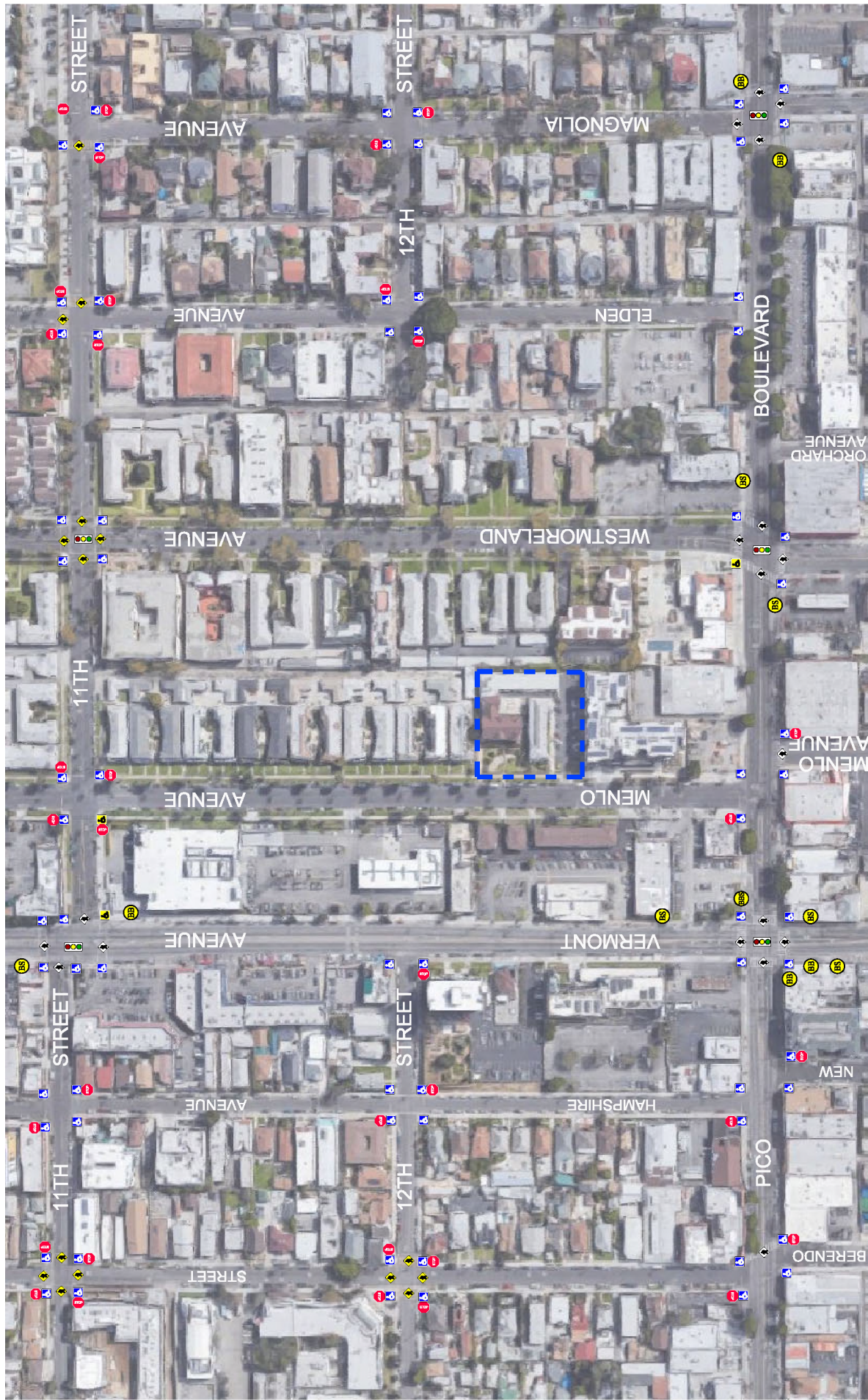


FIGURE 3-3 EXISTING NEARBY PEDESTRIAN AND TRANSIT FACILITIES

1216 MENLO AVENUE RESIDENTIAL PROJECT

MAP SOURCE: GOOGLE MAPS	PROJECT SITE	SIGNAL	STOP SIGN
			
ADA CURB RAMP	ADA YELLOW TRUNCATED DOME	CROSSWALK	YELLOW CROSSWALK
			
BUS STOP	BUS STOP WITH BUS BENCH	BUS STOP	WITH BENCH AND SHELTER
			
BUS STOP	BUS STOP WITH BUS BENCH	BUS STOP	WITH BENCH AND SHELTER

NOT TO SCALE



LINSCOTT, LAW & GREENSPAN, engineers

- Traditional parallel bar or continental style pedestrian crosswalks approximately 15 feet in width are provided at the following intersections located near the Project Site:
 - Vermont Avenue / Pico Boulevard
 - Menlo Avenue / Pico Boulevard
 - Westmoreland Avenue / Pico Boulevard
 - Elden Avenue / 11th Street
- Pedestrian crossing signals and push buttons are presently included as part of the traffic signal controls at the nearby signalized intersections that are noted in *Figure 3-3*.

The Project has been designed to encourage pedestrian activity and walking as a transportation mode.⁶ Walkways and entrances for pedestrians are planned for the Project and will connect to adjacent sidewalks in a manner that promotes walkability. Walkability is a term for the extent to which walking is readily available as a safe, connected, accessible and pleasant mode of transport. There are several criteria that are widely accepted as key aspects of the walkability of urban areas that should be satisfied. The underlying principle is that pedestrians should not be delayed, diverted, or placed in danger. The widely accepted characteristics of walkability are as follows:

- Connectivity: People can walk from one place to another without encountering major obstacles, obstructions, or loss of connectivity.
- Convivial: Pedestrian routes are friendly and attractive and are perceived as such by pedestrians.
- Conspicuous: Suitable levels of lighting, visibility, and surveillance over its entire length, with high quality delineation and signage.
- Comfortable: High quality and well-maintained footpaths of suitable widths, attractive landscaping and architecture, shelter and rest spaces, and a suitable allocation of roadspace to pedestrians.
- Convenient: Walking is a realistic travel choice, partly because of the impact of the other criteria set forth above, but also because walking routes are of a suitable length as a result of land use planning with minimal delays.

⁶ For example, refer to <http://www.walkscore.com/>, which generates a walkability score of approximately 91 (Walker's Paradise) out of 100 for the Project Site. Walk Score calculates the walkability of an address by locating nearby stores, restaurants, schools, parks, etc. Walk Score measures how easy it is to live a car-light lifestyle—not how aesthetically pleasing the area is for walking.

3.1.2 Bicycle Network

Bicycle access to the Project Site is facilitated by the City's bicycle roadway network. Walk Score calculates a bike score based on the topography, number and proximity of bike lanes, etc., and generates a bike score for the Project Site of approximately 74 (Very Bikeable) out of 100.⁷ Existing bicycle facilities (e.g., Class I Bicycle Path, Class II Bicycle Lanes, Class III Bicycle Routes, Proposed Bicycle Routes, Bicycle Friendly Streets, etc.) identified in the City's 2010 Bicycle Plan are located within an approximate one-mile radius from the Project Site.⁸ It is important to note that the 2010 Bicycle Plan goals and policies have been folded into the Mobility Plan 2035 to reflect a commitment to a balanced, multi-modal viewpoint.

Roadways within the City's Bicycle Enhanced Network (low stress network) in close proximity to the Project Site and in the surrounding area are shown in **Figure 3-4**.

The Federal and State transportation systems recognize three primary bikeway facilities: Bicycle Paths (Class I); Bicycle Lanes (Class II); and Bicycle Routes (Class III). Bicycle Paths (Class I) are exclusive car free facilities that are typically not located within a roadway area. Bicycle Lanes (Class II) are part of the street design that is dedicated only for bicycles and identified by a striped lane separating vehicle lanes from bicycle lanes. Bicycle Routes (Class III) are preferably located on collector and lower volume arterial streets.

3.2 Transit Framework

The Project Site is currently served by many local and regional public transit lines via stops within convenient walking distance along Vermont Avenue and Pico Boulevard. Public transit service in the immediate Project study area is currently provided by the Los Angeles County Metropolitan Transit Authority (Metro). The bus lines include: Metro Local Lines 30/330, 204, and Metro Rapid 754. Walk Score calculates a transit score based on the number and proximity of bus and rail routes, which generates a transit score of approximately 69 (Good Transit) out of 100⁹ for the Project Site. A summary of the existing transit service, including the transit route, destinations, and peak hour headways is presented in **Table 3-1**. The existing public transit routes in the Project Site vicinity are illustrated in **Figure 3-5**. Roadways within the City's Transit Enhanced Network in close proximity to the Project Site and in the surrounding area are shown in **Figure 3-6**. In addition, the locations of bus stops and amenities (e.g., bus benches, shelters, etc.) in the Project study area are displayed in **Figure 3-3**.

⁷ Refer to <http://www.walkscore.com/>, which generates the bike score for the Project Site. Walk Score calculates the bike score of an address by locating nearby bicycling facilities as well as connections to bus/rail transit routes and stops. Walk Score measures how easy it is to live a car-light lifestyle—not how aesthetically pleasing the area is for bicycling.

⁸ Sources: City of Los Angeles Mobility Plan 2035 (2015), and City of Los Angeles Bicycle Plan. As noted in the Mobility Plan 2035, the 2010 Bicycle Plan and policies have been folded into the Mobility Plan to reflect a commitment to a balanced, multi-modal viewpoint.

⁹ Refer to <http://www.walkscore.com/>, which generates the transit score for the Project Site. Walk Score calculates the transit score of an address by locating nearby bus/rail transit routes and stops. Walk Score measures how easy it is to live a car-light lifestyle—not how aesthetically pleasing the area is for using transit service.



NOT TO SCALE

MAP SOURCE: GOOGLE MAPS
PROJECT SITE

BICYCLE ENHANCED NETWORK

FIGURE 3-4
CITY OF LOS ANGELES
BICYCLE ENHANCED NETWORK

1216 MENLO AVENUE RESIDENTIAL PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

Table 3-1
EXISTING PUBLIC TRANSIT ROUTES [1]

15-May-20

ROUTE	DESTINATIONS	ROADWAY(S) NEAR SITE	NO. OF BUSES DURING PEAK HOUR		
			DIR	AM	PM
Metro 30/330	East Los Angeles to West Hollywood (via East 1st Street, Pico Boulevard, and San Vicente Boulevard)	Pico Boulevard	EB	10	8
			WB	8	10
Metro 204	Hollywood to Athens (via Vermont Avenue)	Vermont Avenue	NB	6	6
			SB	5	6
Metro Rapid 754	Hollywood to Athens (via Vermont Avenue)	Vermont Avenue	NB	8	6
			SB	8	8
Total				45	44

[1] Sources: Los Angeles County Metropolitan Transportation Authority (Metro) website, 2020.

c:\0497\dwg\F3-5.dwg 05/15/2020 10:58:00 shankar llg exhibits color.ctb



SOURCE: METROPOLITAN TRANSPORTATION AUTHORITY
★ PROJECT SITE

LINSCOTT, LAW & GREENSPAN, engineers

FIGURE 3-5 EXISTING PUBLIC TRANSIT ROUTES

1216 MENLO AVENUE RESIDENTIAL PROJECT



NOT TO SCALE

MAP SOURCE: GOOGLE MAPS
PROJECT SITE
-- TRANSIT ENHANCED NETWORK

FIGURE 3-6
CITY OF LOS ANGELES
TRANSIT ENHANCED NETWORK
1216 MENLO AVENUE RESIDENTIAL PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

3.3 Vehicle Network

3.3.1 Regional Highway Access

Regional vehicular access to the Project Site is provided by the I-10 (Santa Monica) Freeway and SR-110 (Harbor) Freeway. Brief descriptions of the I-10 and SR-110 Freeways are provided in the following paragraphs.

I-10 (Santa Monica) Freeway is an east-west oriented freeway that extends across southern California. In the Project vicinity, four mixed-flow freeway lanes are provided in each direction on the I-10 Freeway. Eastbound and westbound ramps are provided on the I-10 Freeway at Vermont Avenue in the Project vicinity, and are located approximately 0.8 miles south of the Project Site.

SR-110 (Harbor) Freeway is a north-south oriented state highway that extends from Pasadena to San Pedro. In the Project vicinity, three to five mixed-flow freeway lanes are provided in each direction on the SR-110 Freeway. Northbound and southbound ramps are provided on the SR-110 Freeway at 9th Street and 8th Street, respectively, in the Project vicinity, and are located approximately 1.4 miles east of the Project Site.

3.3.2 Local Roadway System

The following intersections were selected in consultation with LADOT staff for analysis of potential traffic impacts due to the proposed Project:

1. Vermont Avenue / Pico Boulevard (signalized)
2. Menlo Avenue / 11th Street (unsignalized)
3. Menlo Avenue / Pico Boulevard (unsignalized)
4. Westmoreland Avenue / Pico Boulevard (signalized)

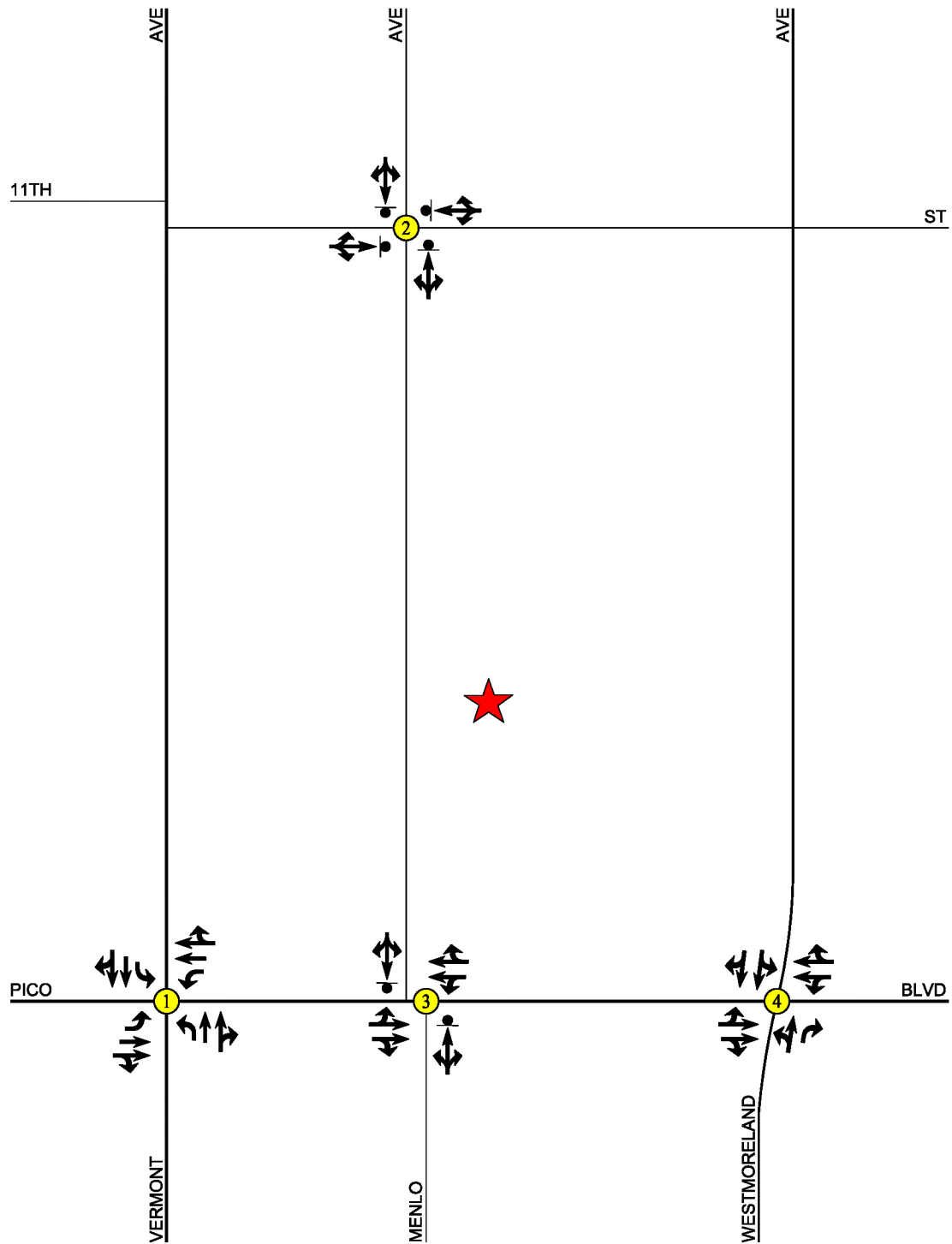
The Vermont Avenue / Pico Boulevard intersection and Westmoreland Avenue / Pico Boulevard intersection are presently controlled by traffic signals. The Menlo Avenue / 11th Street intersection is presently all-way stop controlled (i.e., stop signs facing all street approaches) while the Menlo Avenue / Pico Boulevard intersection is presently two-way stop-controlled (i.e., stop signs facing the minor street approaches). The existing lane configurations at the study intersections are displayed in **Figure 3–7**.

3.3.3 Roadway Descriptions

Immediate access to the Project Site is provided via Menlo Avenue. A brief description of the roadways in the Project vicinity is provided in the following paragraphs.

Vermont Avenue is a north-south oriented roadway located west of the Project Site. Within the Project study area, Vermont Avenue is designated as an Avenue I by the City. Two through travel lanes are generally provided in each direction on Vermont Avenue within the Project study

c:\0497\dwg\F3-7.dwg 06/16/2020 14:16:34 shankar lig exhibits color.ctb



- ★ PROJECT SITE
- ④ STUDY INTERSECTION
- STOP SIGN

FIGURE 3-7
EXISTING LANE CONFIGURATIONS

area. Separate exclusive left-turn lanes are provided in each direction on Vermont Avenue at the Pico Boulevard intersection. Vermont Avenue is posted for a speed limit of 35 miles per hour within the Project study area.

Menlo Avenue is a north-south oriented roadway that borders the Project Site to the west. Within the Project study area, Menlo Avenue is designated as a Local Street by the City. One through travel lane is generally provided in each direction on Menlo Avenue within the Project study area. There is no speed limit posted on Menlo Avenue in the Project study area, thus a prima facie speed limit of 25 miles per hour is assumed, consistent with California Vehicle Code Section 22352(b)(1).

Westmoreland Avenue is a north-south oriented roadway located east of the Project Site. Within the Project study area, Westmoreland Avenue is designated as a Collector Street by the City. One through travel lane is generally provided in each direction on Westmoreland Avenue north of Pico Boulevard within the Project study area. South of Pico Boulevard, two through travel lanes are generally provided in each direction on Westmoreland Avenue. There is no speed limit posted on Westlawn Avenue in the Project study area, thus a prima facie speed limit of 25 miles per hour is assumed, consistent with California Vehicle Code Section 22352(b)(1).

11th Street is an east-west oriented roadway located north of the Project Site. Within the Project study area, 11th Street is designated as a Collector Street by the City. One through travel lane is generally provided in each direction on 11th Street within the Project study area. There is no speed limit posted on 11th Street in the Project study area, thus a prima facie speed limit of 25 miles per hour is assumed, consistent with California Vehicle Code Section 22352(b)(1).

Pico Boulevard is an east-west oriented roadway located south of the Project Site. Within the Project study area, Pico Boulevard is designated as an Avenue II by the City. Two through travel lanes are generally provided in each direction on Pico Boulevard within the Project study area. Separate exclusive left-turn lanes are provided in each direction on Pico Boulevard at the Vermont Avenue intersection. Pico Boulevard is posted for a speed limit of 35 miles per hour within the Project study area.

3.3.4 City of Los Angeles High Injury Network

Vision Zero¹⁰ is a citywide initiative which prioritizes the safety of pedestrians and bicyclists on public streets, with the understanding that roads which are safe for vulnerable users will be safer for all users, in an effort to eliminate traffic fatalities. Key elements of the policy, such as reducing traffic speeds, are founded on the principles of engineering, education, enforcement, evaluation, and equity. Originating in Sweden, the policy has been adopted in numerous other North American cities, including California cities such as San Francisco and San Diego.

Mayor Eric Garcetti issued Executive Directive No. 10 in August 2015, formally launching the Vision Zero initiative in Los Angeles. Vision Zero is also a stated safety objective in the Mobility Plan 2035, which sets the goal of zero traffic deaths by 2035. Jointly directed by

¹⁰ *Vision Zero Los Angeles 2015-2025*, August 2015.

LADOT and the Police Department, Vision Zero takes a multi-disciplinary approach to identifying safety risk factors and implementing solutions on a citywide scale. Using a methodology originally developed by the San Francisco Public Health Department, the Vision Zero Task Force has identified streets where investments in safety will have the most impact in reducing severe injuries and traffic fatalities in the City. These roads are collectively known as the High Injury Network (HIN). The HIN will be reviewed by the LADOT's Vision Zero group for potential engineering re-design as well as educational and enforcement campaigns.

As shown in **Figure 3-8**, roadways in the immediate vicinity of the Project which have been identified on the HIN are noted below:

- 11th Street between Vermont Avenue and Elden Avenue
- Pico Boulevard
- Vermont Avenue

If a proposed project results in significant transportation impacts, LADOT's Vision Zero group will review those specific locations and immediate vicinity for potential safety enhancements that are consistent with the City's Vision Zero initiative. It is noted that further review of the HIN is regulatory in nature and will not alter the conclusions of this transportation assessment.

3.4 Traffic Counts

In April 2020, LADOT issued guidance¹¹ to transportation consultants related to traffic count data to be used in transportation assessments prepared in accordance with the City's TAG. Because traffic count data could not be collected at the study intersections due to the Covid-19 pandemic, LADOT has directed transportation consultants to use historical data, with appropriate modifications to represent current (pre-pandemic) traffic volume conditions. For this transportation assessment, the following techniques were used to estimate current year (2020) peak hour turning movement traffic volumes at the study intersections:

- Vermont Avenue / Pico Boulevard: Peak hour traffic volume data collected at this intersection in 2017 were increased by a 1.0% annual traffic growth rate through the year 2020 to estimate current year traffic volumes. Further discussion of the annual traffic growth rate is provided in Section 3.5.
- Menlo Avenue / 11th Street: Peak hour traffic volume data collected at the adjacent Vermont Avenue / 11th Street intersection in 2015 were increased by a 1.0% annual traffic growth rate through the year 2020 to estimate current year traffic volumes. The volumes at the Vermont Avenue / 11th Street intersection were then used to forecast through traffic volumes on 11th Street at the Menlo Avenue intersection. Turning movements at the intersection were estimated from the through volumes.

¹¹ *Pandemic-related updates to LADOT's Transportation Assessment Requirements*, LADOT, April 17, 2020.



NOT TO SCALE

MAP SOURCE: GOOGLE MAPS
PROJECT SITE
HIGH INJURY NETWORK

FIGURE 3-8
CITY OF LOS ANGELES
HIGH INJURY NETWORK

1216 MENLO AVENUE RESIDENTIAL PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

- Menlo Avenue / Pico Boulevard: The traffic count data and subsequent adjustments to year 2020 conditions at the Vermont Avenue / Pico Boulevard intersection were used to forecast through traffic volumes on Pico Boulevard at the Menlo Avenue intersection. Turning movements at the intersection were estimated from the through volumes.
- Westmoreland Avenue / Pico Boulevard: Peak hour traffic volume data collected at this intersection in 2015 were increased by a 1.0% annual traffic growth rate through the year 2020 to estimate current year traffic volumes.

The existing traffic volumes at the study intersections during the weekday AM and PM peak hours are shown in *Figures 3–9* and *3–10*, respectively. Summary data worksheets of the manual traffic counts at the study intersections are contained in *Appendix B*.

3.5 Cumulative Development Projects

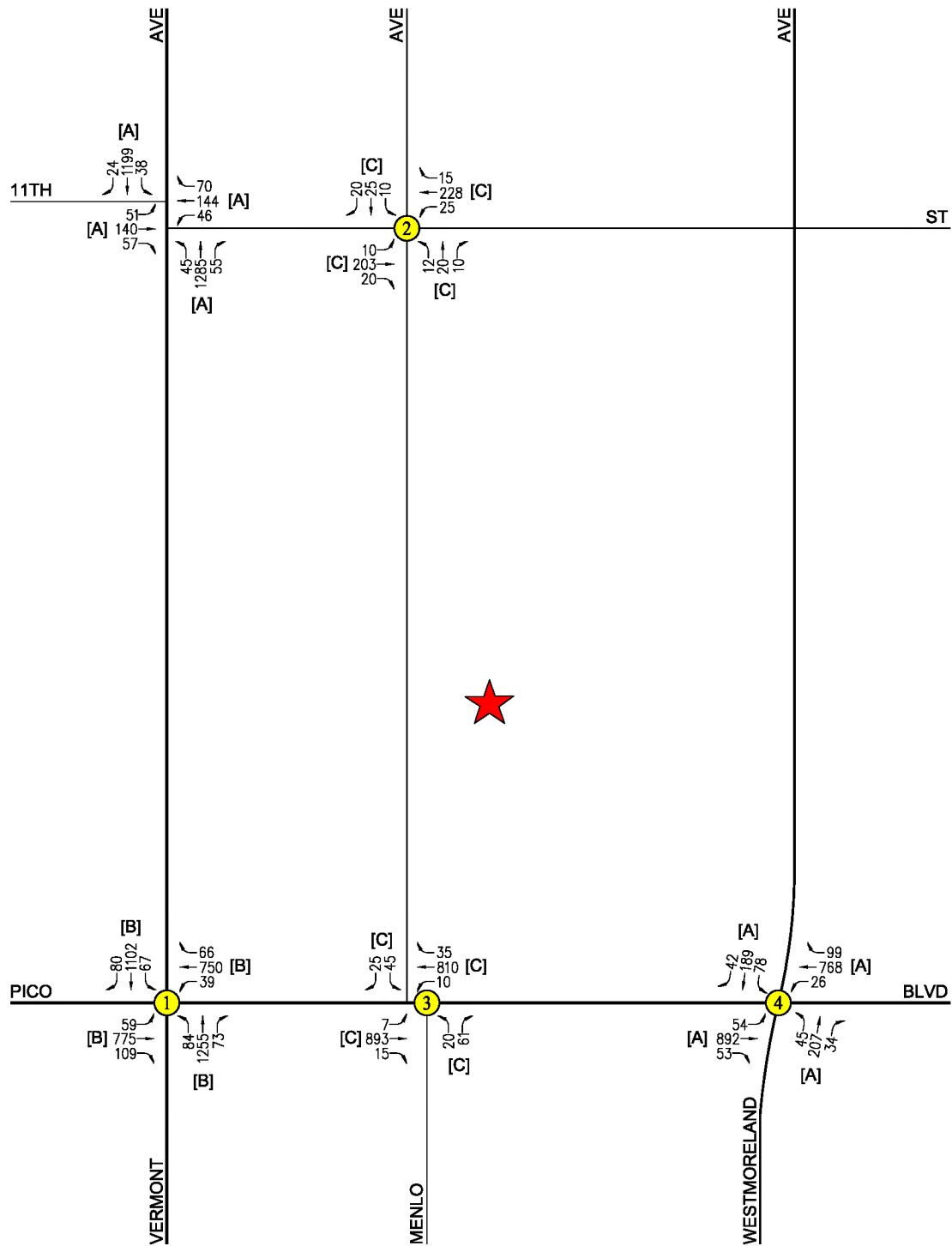
3.5.1 Related Projects

A forecast of on-street traffic conditions prior to occupancy of the Project was prepared by incorporating the potential trips associated with other known development projects (related projects) in the area. With this information, the potential impact of the Project can be evaluated within the context of the cumulative impact of all ongoing development. The related projects research was based on information on file at LADOT within a 0.5-mile radius of the Project Site. The list of related projects in the Project Site area is presented in *Table 3–2*. The location of the related projects is shown in *Figure 3–11*.

Traffic volumes expected to be generated by the related projects were calculated using rates provided in the Institute of Transportation Engineers’ (ITE) *Trip Generation Manual*. The related projects’ respective traffic generation for the weekday AM and PM peak hours, as well as on a daily basis for a typical weekday, is summarized in *Table 3–2*. The distribution of the related projects traffic volumes to the study intersections during the weekday AM and PM peak hours are displayed in *Figures 3–12* and *3–13*, respectively.

3.5.2 Ambient Traffic Growth

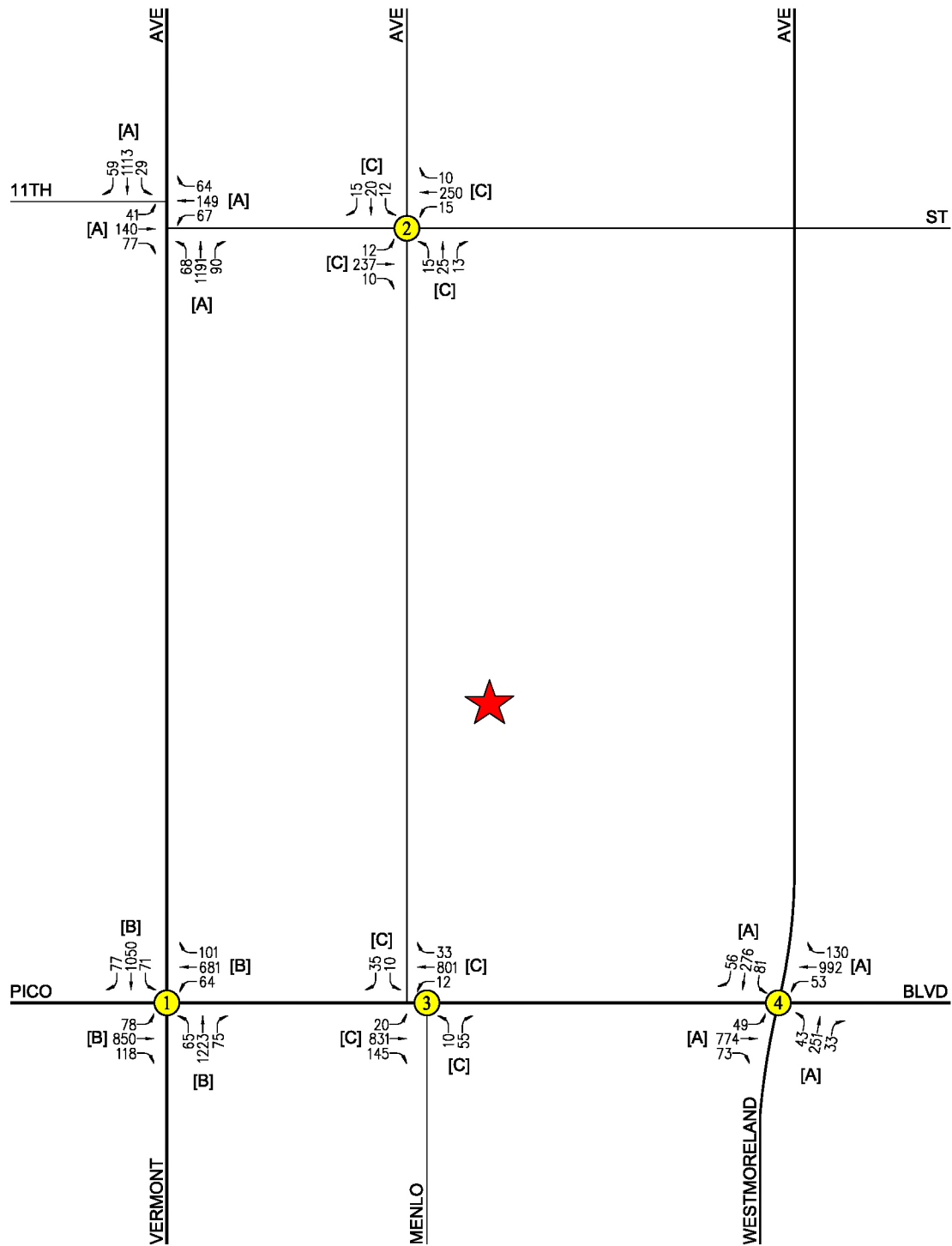
In order to account for unknown related projects not included in this analysis, the existing traffic volumes were increased at an annual rate of 1.0 percent (1.0%) per year to and including the year 2022 (i.e., the anticipated year of Project build-out). The ambient growth factor was based on general traffic growth factors provided in the *2010 Congestion Management Program for Los Angeles County* (“CMP manual”) and determined in consultation with LADOT staff. It is noted that based on review of the general traffic growth factors provided in the CMP manual for the Downtown Los Angeles area (i.e., Regional Statistical Area [RSA] 23), it is anticipated that the existing traffic volumes are expected to increase at an annual rate of approximately 0.23% per year between the years 2020 and 2025. Thus, application of an annual growth factor of 1.0% annual growth provides a conservative, worst case forecast of future traffic volumes in the area as it substantially exceeds the annual traffic growth rate published in the CMP manual. Further, it is noted that the CMP manual’s traffic growth rate is intended to anticipate future traffic



- ★ PROJECT SITE
- ③ STUDY INTERSECTION
- [A] 2015 TURNING MOVEMENT COUNTS WITH 1.0% GROWTH FACTOR THROUGH 2020
- [B] 2017 TURNING MOVEMENT COUNTS WITH 1.0% GROWTH FACTOR THROUGH 2020
- [C] TRAFFIC VOLUMES DERIVED FROM ADJACENT INTERSECTION COUNTS

FIGURE 3-9 EXISTING TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR
1216 MENLO AVENUE RESIDENTIAL PROJECT
LINS COTT, LAW & GREENSPAN, engineers



- ★ PROJECT SITE
- ③ STUDY INTERSECTION
- [A] 2015 TURNING MOVEMENT COUNTS WITH 1.0% GROWTH FACTOR THROUGH 2020
- [B] 2017 TURNING MOVEMENT COUNTS WITH 1.0% GROWTH FACTOR THROUGH 2020
- [C] TRAFFIC VOLUMES DERIVED FROM ADJACENT INTERSECTION COUNTS

FIGURE 3-10 EXISTING TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR
1216 MENLO AVENUE RESIDENTIAL PROJECT
LINSYCOTT, LAW & GREENSPAN, engineers

Table 3-2
RELATED PROJECTS LIST AND TRIP GENERATION [1]

03-Jun-20

MAP NO.	PROJECT NAME/ PROJECT NUMBER	PROJECT STATUS [2]	ADDRESS/ LOCATION	LAND USE DATA		PROJECT DATA SOURCE	DAILY TRIP ENDS [3] VOLUMES	AM PEAK HOUR VOLUMES [3]		PM PEAK HOUR VOLUMES [3]	
				LAND-USE	SIZE			IN	OUT	IN	OUT
1	2789 W. Olympic Boulevard Mixed-Use Project	Proposed	2789 W. Olympic Boulevard	Retail Office	20,607 GSF 2,781 GSF		612	16	8	25	29
2	Elden Elms	Proposed	1255 E. Elden Avenue	Affordable Apartments	93 DU		376	0	32	28	10
3	Hannam Place	Proposed	1000 S. Vermont Avenue	Apartments Retail	236 DU 60,300 GSF		2,655	39	94	137	102
4	Olympic and Hoover Mixed-Use Development	Proposed	2501 W. Olympic Boulevard	Apartments Retail	173 DU 36,180 GSF	[4]	1,911	27	72	100	73
5	966 S. Dewey Avenue Hotel Project	Proposed	966 S. Dewey Avenue	Hotel	99 Rooms		677	28	15	24	24
6	2250-2270 W. Pico Boulevard Hotel Project	Proposed	2250 W. Pico Boulevard	Hotel	125 Rooms	[5]	409	26	19	10	9
7	1810 Venice Boulevard Self-Storage Facility	Proposed	1810 W. Venice Boulevard	Self Storage	154,024 GSF	[6]	385	12	10	20	20
8	950 S. Berendo Street Residential Project	Proposed	950 S. Berendo Street	Apartments Affordable Apartments	67 DU 8 DU		346	7	18	18	10
9	2870 W. Olympic Boulevard Mixed-Use Project	Proposed	2870 W. Olympic Boulevard	Apartments Retail	126 DU 6,000 GSF		825	8	44	47	22
TOTAL							8,196	163	312	409	299
									475		708

[1] Source: City of Los Angeles Department of Transportation Related Projects List.

[2] Project status reported as of the year 2015.

[3] Trips are one-way traffic movements, entering or leaving.

[4] Source: Traffic Study for the Olympic and Hoover Mixed-Use Development, prepared by Rifkin Transportation Planning Group, September 2016.

[5] Source: Traffic Impact Study for the 2250-2270 W. Pico Boulevard Hotel Project, prepared by Linscott, Law, & Greenspan, Engineers, February 2017.

[6] Source: Transportation Impact Study Memorandum of Understanding, prepared by LSA Associates, Inc., June 2017.

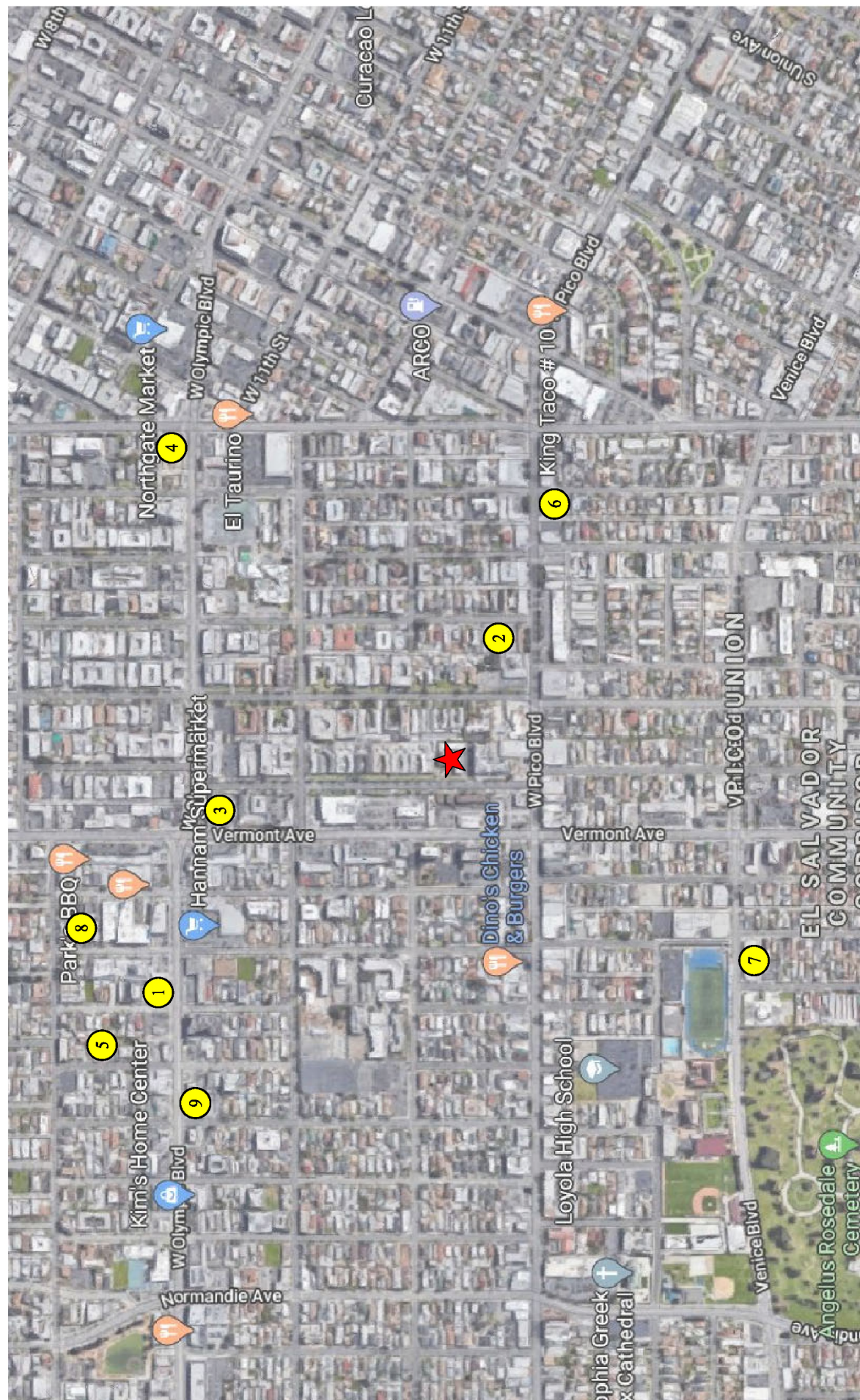


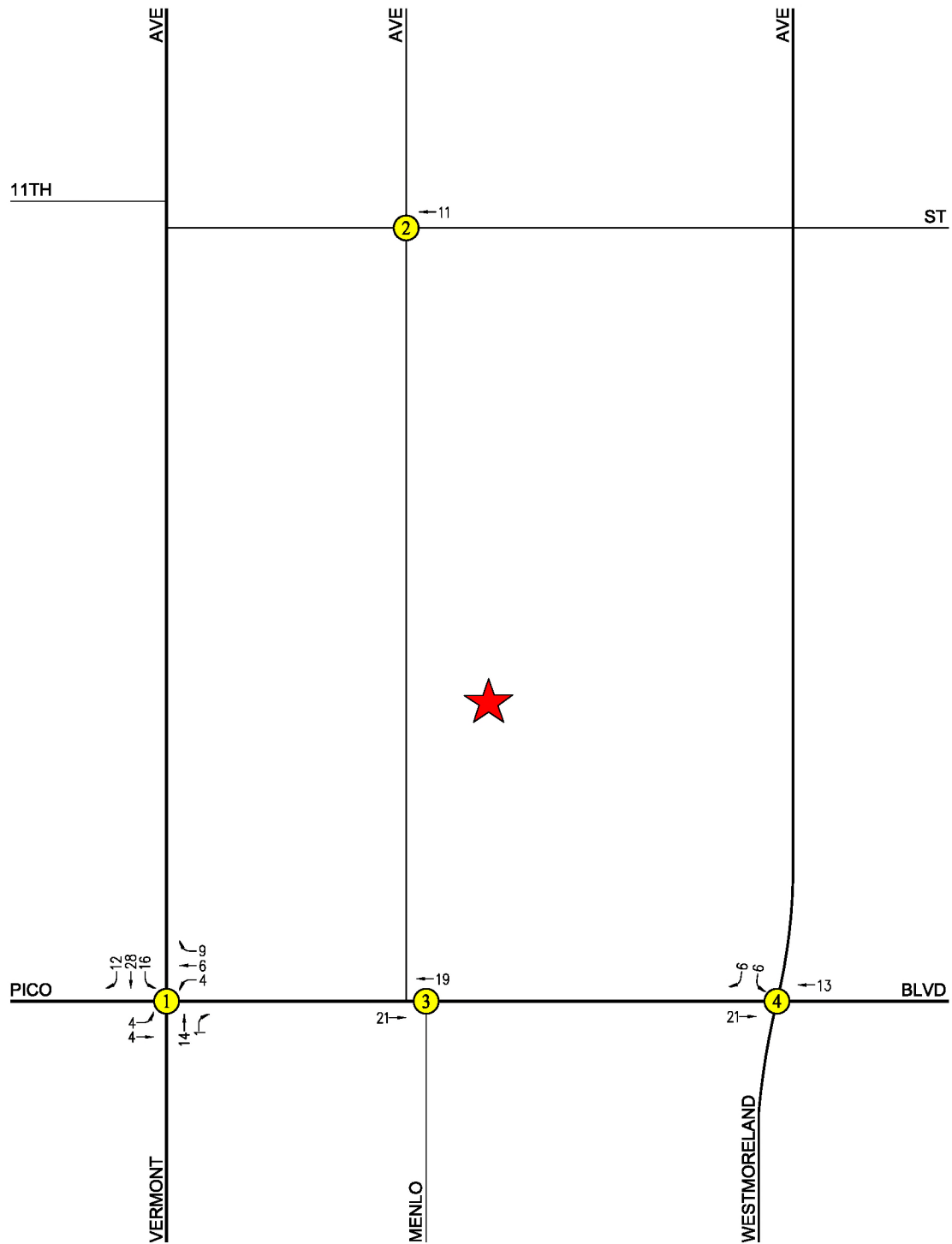
FIGURE 3-11
LOCATION OF RELATED PROJECTS

MAP SOURCE: GOOGLE MAPS
★ PROJECT SITE
⑨ RELATED PROJECT

NOT TO SCALE

LINSCOTT, LAW & GREENSPAN, engineers

1216 MENLO AVENUE RESIDENTIAL PROJECT



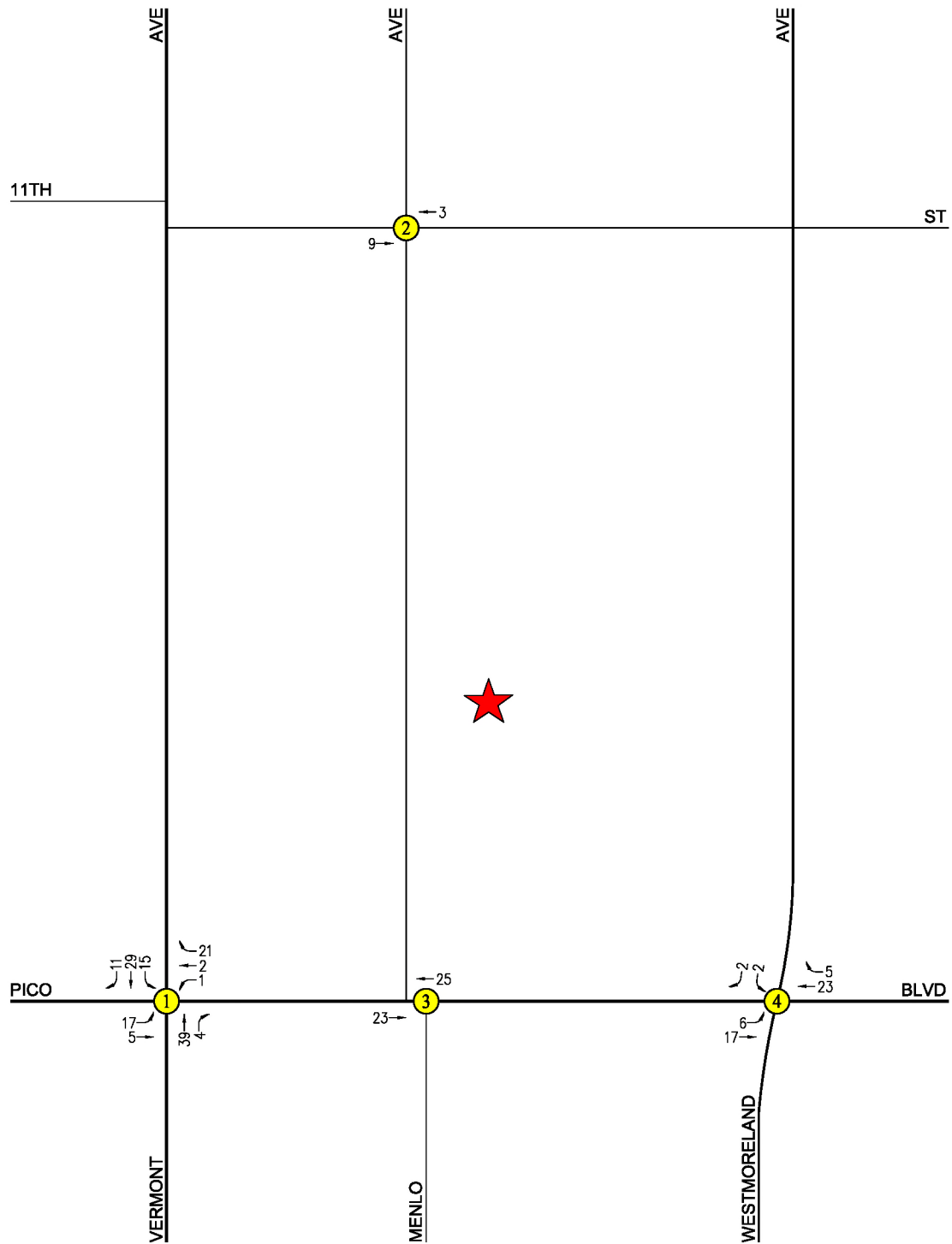
NOT TO SCALE

- ★ PROJECT SITE
- ⓧ STUDY INTERSECTION

LINSCOTT, LAW & GREENSPAN, engineers

FIGURE 3-12 RELATED PROJECTS TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR
1216 MENLO AVENUE RESIDENTIAL PROJECT



NOT TO SCALE

- ★ PROJECT SITE
- ④ STUDY INTERSECTION

LINSCOTT, LAW & GREENSPAN, engineers

FIGURE 3-13 RELATED PROJECTS TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR
1216 MENLO AVENUE RESIDENTIAL PROJECT

generated by development projects in the Project vicinity. Thus, the inclusion in this traffic analysis of both a forecast of traffic generated by known related projects plus the use of an ambient growth traffic factor based on CMP traffic model data results in a conservative estimate of future traffic volumes at the study intersections.

4.0 CEQA ANALYSIS OF TRANSPORTATION IMPACTS

4.1 Consistency with Adopted Plans and Policies (Threshold T-1)

The City of Los Angeles aims to achieve an accessible and sustainable transportation system that meets the needs of all users. The City's adopted transportation-related plans and policies affirm that streets should be safe and convenient for all users of the transportation system, including pedestrians, bicyclists, motorists, public transit riders, disabled persons, senior citizens, children, and movers of commercial goods. Therefore, the transportation requirements for proposed developments should be consistent with the City's transportation goals and policies.

Proposed projects shall be analyzed to identify potential conflicts with adopted City plans and policies and, if there is a conflict, improvements that prioritize access for and improve the comfort of people walking, bicycling, and riding transit in order to provide safe and convenient streets for all users should be identified. Projects designed to encourage sustainable travel help to reduce vehicle miles traveled. This section provides a review of the screening criteria and a summary of the consistency of the Project with the City's adopted plans and policies.

4.1.1 Screening Criteria

If the project requires a discretionary action, and the answer is yes to any of the following questions, further analysis is required to assess whether the proposed project would conflict with adopted City plans, programs, ordinances, or policies that establish the transportation planning framework for all travel modes:

- Would the project generate a net increase of 250 or more daily vehicle trips?
 - Yes, the Project will generate a net increase of 250 or more daily vehicle trips (not considering any TDM measures). The net daily vehicle trips were forecast using the Screening Tab contained within Version 1.3 of the City's VMT Calculator tool. Copies of the detailed City of Los Angeles VMT Calculator worksheets for the Project are contained in *Appendix C*. As indicated on the Screening Tab of the VMT Calculator (Page 1), the Project would generate 397 net new daily vehicle trips.
- Is the project proposing to, or required to make any voluntary or required, modifications to the public right-of-way (i.e., street dedications, reconfigurations of curb line, etc.)?
 - Per the City's Bureau of Engineering (BOE) Planning and Case Referral Form (PCRF), no street dedications or improvements are required by the Project.
- Is the project on a lot that is 0.5-acre or more in total gross area, or is the project's frontage along a street classified as an Avenue or Boulevard (as designated in the City General Plan), 250 linear feet or more, or is the project's building frontage encompassing an entire block along a street classified as an Avenue or Boulevard by the City's General Plan?

- Yes, the Project Site comprises approximately 0.92 acres. The Project Site's frontage along Menlo Avenue, which is designated as a Local Street, is approximately 200 linear feet. The Project Site's frontage does not encompass an entire block along an Avenue or Boulevard.

As the answer is yes to two out of the three screening criteria questions, further analysis is required to assess whether the Project would conflict with adopted City plans, programs, ordinances, or policies.

4.1.2 Impact Criteria and Methodology

The impact criteria set forth in Appendix G of the CEQA Guidelines, as well as the City's TAG for conflicts with plans, programs, ordinances, or policies (referred to Threshold T-1) is defined as follows:

- Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities?

The threshold test is to assess whether a project would conflict with an adopted program, policy, plan, or ordinance that is adopted to protect the environment. In general, transportation policies or standards adopted to protect the environment are those that support multimodal transportation options and a reduction in VMT. Conversely, a project would not be shown to result in an impact merely based on whether or not it would implement a particular program, plan, policy, or ordinance. Many of these programs must be implemented by the City itself over time, and over a broad area, and it is the intention of this threshold test to ensure that proposed development projects and plans do not preclude the City from implementing adopted programs, plans and policies. This determination may require consultation with the City's Department of City Planning (LADCP) and LADOT.

The methodology for determining project impacts associated with conflicts with plans, programs, ordinances, or policies is defined per the City's TAG as follows:

- A project that generally conforms with and does not obstruct the City's development policies and standards will generally be considered to be consistent. The Project Applicant should review the documents and ordinances identified in the TAG (refer to Table 2.1-1 on pages 10 and 11) for City plans, policies, programs, ordinances and standards relevant to determining project consistency. A specific list of questions (refer to Table 2.1-2 on pages 12 through 14 of the TAG) shall be answered in order to help guide whether the project conflicts with City circulation system policies. A "yes" or "no" answer to these questions does not determine a conflict. Rather, as indicated in the list of questions (i.e., Table 2.1-2 of the TAG), the Project Applicant shall review relevant policies and programs corresponding to the questions to assess whether the proposed project precludes the City's implementation of any adopted policy and/or program.

- If vacation of a public right-of-way, or relief from a required street dedication is sought as part of a proposed project, an assessment should be made as to whether the right-of-way in question is necessary to serve a long-term mobility need, as defined in the Mobility Plan 2035, transportation specific plan, or other planned improvement in the future.

The analysis of cumulative impacts may be quantitative or qualitative. Each of the plans, ordinances, and policies reviewed to assess potential conflicts with proposed projects should be reviewed to assess cumulative impacts that may result from the proposed project in combination with other development projects in the study area. In addition, the cumulative analysis should also consider planned transportation system improvements within the study area as identified in consultation with LADOT.

Related projects considered in the cumulative analysis are known development projects located within a one-half mile radius of the Project Site. The list of related projects and location of related projects in relation to the Project Site are identified in *Table 3–2* and *Figure 3–11*.

4.1.3 Review of Project Consistency

This section provides a summary of the consistency review comparing the characteristics of the Project and site design features (i.e., including the site access and circulation scheme) with the City’s adopted plans and policies. *Table 4–1* summarizes the City’s guiding questions contained in the TAG (TAG Table 2.1-1), the responses applicable to the Project, the relevant and supporting City plans, policies and programs, as well as the determination of whether or not the Project is consistent with the corresponding City plans, programs, ordinances or policies. As shown in *Table 4–1*, the Project has been found to be consistent with the relevant City plans, policies and programs, and does not include any features that would preclude the City from completing and complying with these guiding documents and policy objectives. Therefore, a determination of “less than significant” can be made for the Project. Further, the Project Applicant will comply with existing applicable City ordinances (e.g., the City’s existing TDM Ordinance, referred to in the City of Los Angeles Municipal Code (LAMC) Section 12.26.J) and other requirements pursuant to the City’s Municipal Code.

4.1.4 Review of Cumulative Consistency

This section requires consultation and confirmation with City of Los Angeles Departments of City Planning and Transportation (i.e., with LADCP and LADOT). Based on the above Project consistency conclusion and review of the guiding language contained in the City’s TAG, it can be concluded that this is sufficient documentation to demonstrate that there is also no cumulative inconsistency with the City’s plans, policies, ordinances and programs, and therefore, the Project’s cumulative impacts would be less than significant. In addition, since the Project does not include any features that would preclude the City from completing and complying with these guiding documents and policy objectives, there is no cumulative inconsistency that can be determined.

Table 4-1
PROJECT CONSISTENCY WITH PLANS, PROGRAMS, ORDINANCES, OR POLICIES

17-May-20

NO.	GUIDING QUESTIONS	RESPONSE TO GUIDING QUESTIONS	DESCRIPTION	RELEVANT PLAN, POLICIES, AND PROGRAMS	SUPPORTING/COMPLEMENTARY CITY PLANS, POLICIES, AND PROGRAMS TO CONSULT	PROJECT CONSISTENCY?
<i>EXISTING PLAN APPLICABILITY</i>						
1	Does the project include additions or new construction along a street designated as a Boulevard I, and II, and/or Avenue I, II, or III on property zoned for R3 or less restrictive zone? (screening question)	NO	The Project Site has frontage directly on Menlo Avenue, which is designated as a Local Street under the Mobility Plan 2035 Street Standards Plan. The Project Site is zoned within a Multiple Dwelling Zone (R4-1VL) per the City of Los Angeles Municipal Code (LAMC).	LAMC Section 12.37		YES
2	Is project site along any network identified in the City's Mobility Plan?	NO	Menlo Avenue is not identified within any network in the City's Mobility Plan.	MP 2.3 through 2.7		YES
3	Are dedications or improvements needed to serve long-term mobility needs identified in the Mobility Plan 2035?	NO	No street dedications or improvements are required by the Project on the streets adjacent to the Project Site.	MP - Street Classifications; MP - Street Designations and Standard Roadway Dimensions	MP - 2.17 Street Widening	YES
4	Does the project require placement of transit furniture in accordance with City's Coordinated Street Furniture and Bus Bench Program?	The Project will improve transit furniture as required in accordance with the City's Coordinated Street Furniture and Bus Bench Program.				YES
5	Is project site in an identified Transit Oriented Community (TOC)?	YES	Transit Oriented Communities (TOC) are applicable to housing developments that include on-site restricted affordable units. The Project Site is in TOC Affordable Housing Incentive Area Tier 3 and is 100% affordable. Per the City of Los Angeles TOC Guidelines, the Project is eligible for Tier 4.	MP - TEN; MP - PED; MP - BEN; TOC Guidelines		YES
6	Is project site on a roadway identified in City's High Injury Network?	NO	The Project Site has frontage directly on Menlo Avenue, which is not identified in the City's High Injury Network.	Vision Zero	Mobility Plan 2035	YES
7	Does project propose repurposing existing curb space? (bike corral, car-sharing, parklet, electric vehicle charging, loading zone, curb extension, etc.)	NO		MP - 2.1 Adaptive Reuse of Streets; MP - 2.10 Loading Areas; MP - 3.5 Multi-Modal Features; MP - 3.8 Bicycle Parking; MP - 4.13 Parking and Land Use Management; MP - 5.4 Clean Fuels and Vehicles	MP - 2.3 Pedestrian Infrastructure; MP - 2.4 Neighborhood Enhanced Network; MP - 3.2 People with Disabilities; MP - 4.1 New Technologies; MP 5.1 Sustainable Transportation; MP - 5.5 Green Streets	YES
8	Does project propose narrowing or shifting existing sidewalk placement?	NO		MP 2.3 Pedestrian Infrastructure; MP 3.1 - Access for All; MP -PED; MP - ENG 19; MP 2.17 Street Widening	Healthy LA; Vision Zero; Sustainability pLAn	YES
9	Does project propose paving, narrowing, shifting or removing an existing parkway?	NO		MP - 5.5 Green Streets; Sustainability pLAn		YES
10	Does project propose modifying, removing or otherwise affect existing bicycle infrastructure? (ex: driveway proposed along street with bicycle facility)	NO		MP - BEN; MP - 4.15 Public Hearing Process	Vision Zero	YES
11	Is project site adjacent to an alley? If yes, will project make use of, modify, or restrict alley access?	NO		MP - 3.9 Increased Network Access; MP - ENG 9; MP - PL 1; MP - PL 13; MP - PS 3		YES
12	Does project create a cul-de-sac or is project site located adjacent to existing cul-de-sac? If yes, is cul-de-sac consistent with design goal in Mobility Plan 2035 (maintain through bicycle and pedestrian access)?	NO		MP - 3.10 Cul-de-sacs		YES

Table 4-1 (Continued)
PROJECT CONSISTENCY WITH PLANS, PROGRAMS, ORDINANCES, OR POLICIES

NO.	GUIDING QUESTIONS	RESPONSE TO GUIDING QUESTIONS	DESCRIPTION	RELEVANT PLAN, POLICIES, AND PROGRAMS	SUPPORTING/COMPLEMENTARY CITY PLANS, POLICIES, AND PROGRAMS TO CONSULT	PROJECT CONSISTENCY?
<i>ACCESS: DRIVEWAYS AND LOADING</i>						
13	Does project site introduce a new driveway or loading access along an arterial (Avenue or Boulevard)?	NO	The Project does not propose any new driveways or loading access along an arterial. Vehicular access to the Project Site is proposed via one existing driveway located along the east side of Menlo Avenue (a Local Street).	MP - PL-1; MP - PK-10, CDG 4.1.02	Vision Zero	YES
14	If yes to 13, Is a non-arterial frontage or alley access available to serve the driveway or loading access needs?	N/A		MP - PL-1; MPP 321	Vision Zero	N/A
15	Does project site include a corner lot? (avoid driveways too close to intersections)	NO		CDG 4.1.01		YES
16	Does project propose driveway width in excess of City standard?	NO	Per LADOT's Manual of Policies and Procedures, Section 321, it is recommended that two-way driveways serving multi-family residential uses (less than 5 spaces) are no more than 18 feet in width. The existing driveway serving the Project Site is approximately 16 feet in width.	MPP Sec. 321	Vision Zero, Sustainability pLAN, MP - PED, MP - BEN CDG 4.1.04	YES
17	Does project propose more driveways than required by City maximum standard?	NO	Per LADOT's Manual of Policies and Procedures, Section 321, a maximum of one driveway is allowed along an arterial frontage between 0 and 200 feet. The Project proposes to utilize one existing driveway along Menlo Avenue, which is a Local Street.	MPP - Sec No. 321 Driveway Design	Vision Zero, MP, Healthy LA	YES
18	Are loading zones proposed as a part of the project?	NO		MP - 2.10 Loading Areas; MP - PK-1; MP - PK-7; MP - PK-8; MPP 321		YES
19	Does project include "drop-off" zones or areas? If yes, are such areas located to the side or rear of the building?	NO		MP - 2.10 Loading Areas		YES
20	Does project propose modifying, limiting/restricting, or removing public access to a public right-of-way (e.g., vacating public right-of-way?)	NO		MP - 2.3 Pedestrian Infrastructure; MP - 3.9 Increased Network Access		YES

4.2 VMT Analysis (Threshold T-2.1)

The State of California Governor's Office of Planning and Research (OPR) issued proposed updates to the CEQA guidelines in November 2017 and an accompanying technical advisory guidance in April 2018 (*OPR Technical Advisory*) that amends the Appendix G question for transportation impacts to delete reference to vehicle delay and level of service and instead refer to Section 15064.3, subdivision (b)(1) of the CEQA Guidelines asking if the project will result in a substantial increase in vehicle miles traveled (VMT). Section 15064.3, subdivision (b)(1) states the following:

- Land Use Projects. Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be considered to have a less than significant transportation impact.

The California Natural Resources Agency certified and adopted the CEQA Guidelines in December 2018, which are now in effect. Accordingly, the City of Los Angeles has adopted significance criteria for transportation impacts based on VMT for land use projects and plans in accordance with the amended Appendix G question:

- Threshold T-2.1: For a land use project, would the project conflict or be inconsistent with CEQA guidelines Section 15064.3, subdivision (b)(1)?

For land use projects, the intent of this threshold is to assess whether a land use project or plan causes substantial vehicle miles traveled. The City has developed the following screening and impact criteria to address this question. The criteria below are based on the OPR technical advisory but reflects local considerations.

If the project requires discretionary action, and the answer is no to either T-2.1-1 or T-2.1-2, further analysis will not be required for CEQA Threshold T-2.1, and a "no impact" determination can be made for that threshold:

- T-2.1-1: Would the land use project generate a net increase of 250 or more daily vehicle trips?

For purposes of screening the daily vehicle trips, a proposed project's daily vehicle trips should be estimated using the City's VMT Calculator tool or the most recent edition of the ITE *Trip Generation Manual*. TDM strategies should not be considered for the purposes of screening. If existing land uses are present on the project site or there were previously terminated land uses that meet the criteria for trip credits described in the trip generation methodology discussion (refer to Subsection 3.3.4.1 of the TAG), the daily vehicle trips generated by the existing or qualified terminated land uses can be estimated using the VMT Calculator tool and subtracted from the proposed project's daily vehicle trips to determine the net increase in daily vehicle trips.

- T-2.1-2: Would the project generate a net increase in daily VMT?

For the purpose of screening the VMT, a project's daily VMT should be estimated using the City's VMT Calculator tool or the City's Travel Demand Forecasting (TDF) model. TDM strategies should not be considered for the purpose of screening. If existing land uses are present on the project site or there were previously terminated land uses that meet the criteria for trip credits description in the trip generation methodology discussion (refer to Subsection 3.3.4.1 of the TAG), the daily VMT generated by the existing or qualified terminated land uses can be estimated using the City VMT Calculator tool and subtracted from the project's daily VMT to determine the net increase in daily VMT.

4.2.1 Impact Criteria and Methodology

For development projects, the proposed project will have a potential VMT impact if the project meets the following:

- For residential projects, the project would generate household VMT per capita exceeding 15% below the existing average household VMT per capita for the Area Planning Commission (APC) area in which the project is located.

The City's TAG establishes different VMT significance thresholds have been established for each of the seven Area Planning Commission (APC) areas as the characteristics of each are distinct in terms of land use, density, transit availability, employment, etc. The City's significance thresholds (i.e., provided on a daily household VMT per capita basis and a daily work VMT per employee basis) for each of the seven (7) APC boundary areas are presented in **Table 4-2**. As the Project Site is located in the Central APC, the VMT impact criteria (i.e., 15% below the APC average) applicable to the Project is 6.0 daily Household VMT per Capita.

4.2.2 Summary of Project VMT Analysis

The daily vehicle trips and VMT expected to be generated by the Project were forecast using Version 1.3 of the City's VMT Calculator tool. Copies of the detailed City of Los Angeles VMT Calculator worksheets for the proposed Project are contained in *Appendix C*. As indicated in the summary VMT Calculator worksheet, the Project is forecast to generate the following:

- The Project is estimated to generate a total of 496 daily vehicle trips.
- The estimated daily household VMT per capita for the Project's residential land use component is 3.3 daily household VMT per capita, which is less than the Central APC significance threshold of 6.0 VMT per capita.

As the Project will generate a daily household VMT per Capita that is less than the Central APC significance threshold, the Project is not expected to result in a significant VMT impact. Therefore, no further mitigation is necessary as it relates to VMT.

Table 4-2
CITY OF LOS ANGELES VMT IMPACT CRITERIA [1]

AREA PLANNING COMMISSION	15 PERCENT (15%) BELOW APC CRITERIA [2]	
	DAILY HOUSEHOLD VMT PER CAPITA	DAILY WORK VMT PER EMPLOYEE
Central	6.0	7.6
East Los Angeles	7.2	12.7
Harbor	9.2	12.3
North Valley	9.2	15.0
South Los Angeles	6.0	11.6
South Valley	9.4	11.6
West Los Angeles	7.4	11.1

[1] Source: LADOT *Transportation Assessment Guidelines*, July 2019.

[2] The development project will have a potential impact if the project meets the following:

- For residential projects, the project would generate household VMT per capita exceeding 15% below the existing average household VMT per capita for the APC area in which the project (refer to above [source: Table 2.2-1 of the TAG]).
- For office projects, the project would generate work VMT per employee exceeding 15% below the existing average work VMT per employee for the APC in which the project is located (refer to above [source: Table 2.2-1 of the TAG]).
- For retail projects, the project would result in a net increase in VMT.
- For other land use types, measure VMT impacts for the work trip element using the criteria for office project above [source: Table 2.2-1 of the TAG].

4.2.3 Summary of Cumulative VMT Analysis

As stated in the City's TAG document (refer to page 20 of the TAG), analyses should consider both short-term and long-term project effects on VMT. Short-term effects are evaluated in the detailed project-level VMT analysis summarized above. Long-term, or cumulative, effects are determined through a consistency check with the Southern California Association of Government's (SCAG's) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The RTP/SCS is the regional plan that demonstrates compliance with air quality conformity requirements and greenhouse gas (GHG) reduction targets. As such, projects that are consistent with this plan in terms of development, location, density, and intensity, are part of the regional solution for meeting air pollution and GHG goals. Projects that are deemed to be consistent would have a less than significant cumulative impact on VMT. Development in a location where the RTP/SCS does not specify any development may indicate a significant impact on transportation. However, as noted in the City's TAG document, for projects that do not demonstrate a project impact by applying an efficiency-based impact threshold (i.e., VMT per capita or VMT per employee) in the analysis, a less than significant project impact conclusion is sufficient in demonstrating there is no cumulative VMT impact. Projects that fall under the City's efficiency-based impact thresholds are already shown to align with the long-term VMT and GHG reduction goals of SCAG's RTP/SCS.

Based on the above project-related VMT analysis and the conclusions reported in Subsection 4.2.2 (i.e., which conclude that the Project falls under the City's efficiency-based impact thresholds and thus are already shown to align with the long-term VMT and GHG reduction goals of SCAG's RTP/SCS), no cumulative VMT impacts are anticipated. Therefore, the Project's cumulative VMT impact can be deemed less than significant.

4.3 Geometric Design Threshold (T-3)

As stated in the City's TAG document (refer to page 27 of the TAG), impacts regarding the potential increase of hazards due to a geometric design feature generally relate to the design of access points to and from the project site, and may include safety, operational, or capacity impacts. Impacts can be related to vehicle/vehicle, vehicle/bicycle, or vehicle/pedestrian conflicts as well as to operational delays caused by vehicles slowing and/or queuing to access a project site. These conflicts may be created by the driveway configuration or through the placement of project driveway(s) in areas of inadequate visibility, adjacent to bicycle or pedestrian facilities, or too close to busy or congested intersections. Evaluation of access impacts require details relative to project land use, size, design, location of access points, etc. These impacts are typically evaluated for permanent conditions after project completion but can also be evaluated for temporary conditions during project construction. Project access can be analyzed in qualitative and/or quantitative terms, and in conjunction with the review of internal site circulation and access to parking areas. All proposed site access points should be evaluated.

4.3.1 Screening Criteria

If the project requires a discretionary action, and the answer is “yes” to either of the following questions, further analysis will be required to assess whether the project would result in impacts due to geometric design hazards or incompatible uses:

- Is the project proposing new driveways, or introducing new vehicle access to the property from the public right-of-way?
 - No, the Project does not propose new driveways or introduce new vehicle access to the property from the public right-of-way. Vehicular access to the Project is proposed via one existing driveway along the east side of Menlo Avenue. The existing Menlo Avenue driveway is located approximately 480 feet north of the Menlo Avenue / Pico Boulevard intersection.
- Is the project proposing to, or required to make any voluntary or required, modifications to the public right-of-way (i.e., street dedications, reconfigurations of curb line, etc.)?

As stated in the City’s TAG document (refer to page 28 of the TAG), for the purpose of the screening for projects that are making physical changes to the public right-of-way, determine the street designation and improvement standard for any project frontage along streets classified as an Avenue or Boulevard (as designated in the City’s General Plan) using the Mobility Plan 2035, or NavigateLA. If any street fronting the project site is an Avenue or Boulevard and it is determined that additional dedication, or physical modifications to the public right-of-way are proposed or required, the answer to this question is yes. For projects not subject to dedication and improvement requirements under the Los Angeles Municipal Code, though the project does propose dedications or physical modifications to the public right-of-way, the answer to this question is yes. Based on a review of the proposed project, the following answer is provided:

- Per the City’s Bureau of Engineering (BOE) Planning and Case Referral Form (PCRF), no street dedications or improvements are required by the Project.

4.3.2 Impact Criteria and Methodology

The impact criteria set forth in Appendix G of the CEQA Guidelines, as well as the City’s TAG for substantially increasing hazards due to a geometric design feature or incompatible use (referred to a Threshold T-3) is defined as follows:

- Threshold T-3: Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
 - No, the Project would not substantially increase hazards due to a geometric design feature.

Preliminary project access plans are to be reviewed in light of commonly accepted traffic engineering design standards to ascertain whether any deficiencies are apparent in the site access plans which would be considered significant. The determination of significance shall be on a case-by-case basis, considering the following factors:

- The relative amount of pedestrian activity at project access points.
- Design features/physical configurations that affect the visibility of pedestrians and bicyclists to drivers entering and exiting the site, and the visibility of cars to pedestrians and bicyclists.
- The type of bicycle facilities the project driveway(s) crosses and the relative level of utilization.
- The physical conditions of the site and surrounding area, such as curves, slopes, walks, landscaping or other barriers, that could result in vehicle/pedestrian, vehicle/bicycle, or vehicle/vehicle impacts.
- The project location, or project-related changes to the public right-of-way, relative to proximity to the High Injury Network or a Safe Routes to School program area.
- Any other conditions, including the approximate location of incompatible uses that would substantially increase a transportation hazard.

For vehicle, bicycle and pedestrian safety impacts, the City's TAG (refer to page 28) indicate that a review of all project access points, internal circulation, and parking access from an operational and safety perspective (for example, turning radii, driveway queuing, and line of sight for turns into and out of project driveway[s]) should be conducted. Where project driveways would cross pedestrian facilities or bicycle facilities (bike lanes or bike paths), operational and safety issues related to the potential for vehicle/pedestrian and vehicle/bicycle conflicts and the severity of consequences that could result should be considered. In areas with moderate to high levels of pedestrian or bicycle activity, the collection of pedestrian or bicycle count data may be required.

4.3.3 Qualitative Review of Site Access Points

LADOT's Manual of Policies and Procedures (MPP) Section 321 recommends two-way driveways serving multi-family residential uses serving less than five parking spaces should be no more than 18 feet in width. The Project driveway along Menlo Avenue that will serve the Project Site is approximately 16 feet in width and therefore complies with MPP Section 321. As the Menlo Avenue driveway is located approximately 480 feet north of the Menlo Avenue / Pico Boulevard intersection, and based on a review of the forecast net new weekday AM and PM peak hour project traffic volumes (i.e., those traffic volumes summarized in Section 2.7 herein), no safety concerns related to geometric design are noted. Therefore, it can be determined that the Project will not substantially increase hazards due to a geometric design feature or incompatible use, and a less than significant impact determination can be reached.

4.4 CEQA Transportation Measures

4.4.1 *Transportation Demand Management*

The Project Applicant will comply with existing applicable City ordinances (e.g., the City's existing TDM Ordinance, referred to in LAMC Section 12.26.J) and the other requirements per the City's Municipal Code.

4.4.2 *CEQA Transportation Summary*

Based on the findings above, it can be determined that the Project will not conflict with City plans, policies, ordinances and programs, will not result in a significant VMT impact, and will not substantially increase hazards due to a geometric design feature. Therefore, a "less than significant" determination can be made as related to the CEQA analysis.

5.0 NON-CEQA ANALYSIS

The authority for requiring non-CEQA transportation analysis and potentially requiring improvements to address identified deficiencies lies in the City of Los Angeles' Site Plan Review authority as established in LAMC Section 16.05. As provided in Section 16.05:

“The purposes of site plan review are to promote orderly development, evaluate and mitigate significant environmental impacts, and promote public safety and the general welfare by ensuring that development projects are properly related to their sites, surrounding properties, traffic circulation, sewers, other infrastructure and environmental setting; and to control or mitigate the development of projects which are likely to have a significant adverse effect on the environment as identified in the City's environmental review process, or on surrounding properties by reason of inadequate site planning or improvements.”

Additional authority is found in other City ordinances, such as certain transportation specific plans. The impacts, also referred to as deficiencies, discussed in the City's TAG are not intended to be interpreted as thresholds of significance, or significance criteria for purposes of CEQA review unless otherwise specifically identified (refer to Section 4.0).

5.1 Pedestrian, Bicycle, and Transit Access

The assessment of pedestrian, bicycle, and transit facilities is intended to determine a project's potential effect on pedestrian, bicycle, and transit facilities in the vicinity of the Project. The deficiencies could be physical (through removal, modification, or degradation of facilities) or demand-based (by adding pedestrian or bicycle demand to inadequate facilities).

5.1.1 Screening Criteria

- Would the project generate a net increase of 250 or more daily vehicle trips?
 - Yes, the Project will generate a net increase of 250 or more daily vehicle trips. As indicated on the Screening Tab of the City's VMT Calculator (Page 1 of *Appendix C*), the Project would generate 397 net new daily vehicle trips.
- Does the land use project include the construction, or addition of 50 dwelling units or guest rooms or combination thereof, or 50,000 square feet of non-residential space?
 - Yes, the Project proposes the development of 131 affordable family housing dwelling units.
- Is the project on a lot that is 0.5-acre or more in total gross area, or is the project's frontage along a street classified as an Avenue or Boulevard (as designated in the City General Plan), 250 linear feet or more, or is the project's building frontage encompassing an entire block along a street classified as an Avenue or Boulevard by the City's General Plan?

- Yes, the Project Site comprises of approximately 0.92 acres. The Project Site's frontage along Menlo Avenue, which is designated as a Local Street, is approximately 200 linear feet. The Project Site's frontage does not encompass an entire block along an Avenue or Boulevard.

As the answer is yes to all of the screening criteria, further analysis is required to assess whether the Project would negatively affect existing pedestrian, bicycle, or transit facilities.

5.1.2 Evaluation Criteria

Factors to consider when assessing a project's potential effect on pedestrian, bicycle, and transit facilities, include, but are not limited to, the following:

- Would a project directly or indirectly result in a permanent removal or modification that would lead to the degradation of pedestrian, bicycle, or transit facilities, such as:
 - Removal or degradation of existing sidewalks, crosswalks, pedestrian refuge islands, and/or curb extensions/bulbouts.
 - Removal or degradation of existing bikeways and/or supporting facilities (e.g., bikeshare stations, on-street bike racks/parking, bike corrals, etc.).
 - Removal or degradation of existing transit and/or local circulator facilities including stop, bench, shelter, concrete pad, bus lane, or other amenities.
 - Removal of other existing transportation system elements supporting sustainable mobility.
 - Increase street crossing distance for pedestrians; increase in number of travel/turning lanes; increase in turning radius or turning speeds.
 - Removal, degradation, or narrowing of an existing sidewalk, path, crossing, or pedestrian access way.
 - Removal or narrowing of existing sidewalk-street buffering elements (e.g., curb extension, parkway, planting strip, street trees, etc.).
- Would a project intensify use of existing pedestrian, bicycle, or transit facilities, such as:
 - Increase in pedestrian or vehicle volume, and thereby increase the need or attraction to cross a street at unmarked pedestrian crossings or unsignalized or uncontrolled intersections where a crossing is not available without significant rerouting. Refer to the Guidelines for Marked Crosswalks Across Uncontrolled Locations, in LADOT's Manual of Policies and Procedures (MPP) Section 344, or Guidelines for Traffic Signals in MPP Section 353 to determine approval and warrant criteria for an additional crossing.

- Result in new pedestrian demand between project site entries/exits and major destinations or transit stops expected to serve the development where there are missing pedestrian facilities (e.g., gaps in the sidewalk network) or substandard pedestrian facilities (e.g., narrow or uneven sidewalks, no crosswalks at intersections or mid-block, no marked crossing, or push button crossing rather than actuated, etc.).
- Increase transit demand at bus stops that lack marked crossings, with insufficient sidewalks, or are in isolated, or unlit areas.

The locations and descriptions of pedestrian, bicycle and transit facilities in the Project vicinity that could be affected by Project-related traffic or by users traveling between the Project and nearby destinations is presented in Section 3.0 herein. Potential pedestrian destinations located within an approximately one-quarter mile (i.e., 1,320 feet) radius from the Project Site are noted in *Figure 3-1*. Pedestrian facilities currently located near the Project Site also are provided in *Figure 3-3*.

5.1.3 Results of Qualitative Access Review

Table 5-1 summarizes the City's criteria associated with the two guiding questions regarding the pedestrian, bicycle, and transit access assessment and the determination of potential Project-related effect on the subject facilities in the vicinity of the Project. The determination is based on whether the Project would create deficiencies that could be physical (through removal, modification, or degradation of facilities) or demand-based (by adding pedestrian or bicycle demand to inadequate facilities). As indicated in *Table 5-1*, it is determined the Project does not include any features that would permanently remove, adversely modify, or degrade pedestrian, bicycle, and transit facilities in the Project vicinity. As also noted in *Table 5-1*, it is determined that it is possible that the Project may intensify use of pedestrian, bicycle, and transit facilities in the Project vicinity; however, such use is not expected to result in a deficient condition caused by the Project. The Project has the potential to increase pedestrian activity to an existing unmarked crossing (e.g., at the Menlo Avenue / Pico Boulevard intersection). Additionally, a qualitative assessment of the existing pedestrian, bicycle, and transit facilities in the Project vicinity is included in *Table 5-1* (i.e., as part of the responses to the criteria questions). Based on this analysis, no Project-specific actions or improvements are recommended as it relates to pedestrian, bicycle, and transit access.

It is noted that though the Project Site is located in close proximity to roadways (Vermont Avenue, portions of 11th Street, Pico Boulevard) included on the HIN. As such, it is understood that LADOT staff may coordinate internal review with the Vision Zero Programs Bureau to determine if safety-related measures are needed to support safe access to and/or from the development site for vulnerable road users (i.e., pedestrians and bicyclists).

**Table 5-1
PROJECT EVALUATION OF PEDESTRIAN, BICYCLE, AND TRANSIT ACCESS**

18-May-20

CRITERIA	PROJECT RESPONSE	FURTHER QUANTITATIVE ASSESSMENT?
<i>PERMANENT REMOVAL OR MODIFICATION OF FACILITIES</i>		
Removal or degradation of existing sidewalks, crosswalks, pedestrian refuge islands, and/or curb extensions/bulbouts.	No	No
Removal or degradation of existing bikeways and/or supporting facilities (e.g., bikeshare stations, on-street bike racks/parking, bike corrals, etc.).	No	No
Removal or degradation of existing transit and/or local circulator facilities including stop, bench, shelter, concrete pad, bus lane, or other amenities.	No	No
Removal of other existing transportation system elements supporting sustainable mobility.	No	No
Increase street crossing distance for pedestrians; increase in number of travel/turning lanes; increase in turning radius or turning speeds.	No	No
Removal, degradation, or narrowing of an existing sidewalk, path, crossing, or pedestrian access way.	No	No
Removal or narrowing of existing sidewalk-street buffering elements (e.g., curb extension, parkway, planting strip, street trees, etc.).	No	No
<i>INTENSIFY USE OF FACILITIES</i>		
Increase in pedestrian or vehicle volume, and thereby increase the need or attraction to cross a street at unmarked pedestrian crossings or unsignalized or uncontrolled intersections where a crossing is not available without significant rerouting. Refer to the Guidelines for Marked Crosswalks Across Uncontrolled Locations, in LADOT's Manual of Policies and Procedures (MPP) Section 344, or Guidelines for Traffic Signals in MPP Section 353 to determine approval and warrant criteria for an additional crossing.	The Project may increase pedestrians attempting to cross Pico Boulevard at Menlo Avenue. Signalized crossings are available within 300 feet of the Menlo Avenue / Pico Boulevard intersection at Vermont Avenue. Therefore, the need for a marked crosswalk is not warranted per LADOT MPP Section 344.	No
Result in new pedestrian demand between project site entries/exits and major destinations or transit stops expected to serve the development where there are missing pedestrian facilities (e.g., gaps in the sidewalk network) or substandard pedestrian facilities (e.g., narrow or uneven sidewalks, no crosswalks at intersections or mid-block, no marked crossing, or push button crossing rather than actuated, etc.).	The Project may increase pedestrians walking to local destinations and/or transit stops. Nearby intersections, such as Vermont Avenue / 11th Street, Vermont Avenue / Pico Boulevard, and Vermont Avenue / Westmoreland Avenue, provide crosswalks and pedestrian phasing. There are no observed missing pedestrian facilities in the Project vicinity.	No
Increase transit demand at bus stops that lack marked crossings, with insufficient sidewalks, or are in isolated, unshaded, or unlit areas.	The Project may increase pedestrians walking to local transit stops. Transit stops for Metro Lines 30, 204, and 754 are provided at the Vermont Avenue / Pico Boulevard intersection and transit stops for Metro Line 30 are provided at the Westmoreland Avenue / Pico Boulevard intersection. Both intersections are signalized and provide crosswalks with pedestrian phasing. Bus benches are provided for both northbound and southbound transit riders and for eastbound and westbound transit riders on Vermont Avenue and Pico Boulevard, respectively.	No

5.2 Project Access and Circulation Review

Project access and circulation constraints relate to the provision of access to and from the project site, and may include safety, operational, or capacity constraints. Constraints can be related to vehicular/vehicular, vehicular/bicycle, or vehicular/pedestrian constraints as well as to operational delays. These conflicts may be created by the driveway configuration or through the placement of project driveway(s) in areas of inadequate visibility, adjacent to bicycle or pedestrian facilities, or too close to an intersection or crosswalk. The Project access and circulation has been evaluated for permanent conditions after Project completion. **Table 5-2** summarizes the vehicle queuing analysis prepared for each of the study locations for the representative intersection traffic movements for the weekday AM and PM peak hours. **Appendix D** contains the analysis data worksheets for the study intersections.

5.2.1 Screening Criteria

For land use projects, if the answer is yes to all of the following questions, further analysis will be required to assess whether the project would negatively affect project access and circulation:

- Does the land use project involve a discretionary action that would be under review by the Department of City Planning?
 - Yes, the Project will require a discretionary action that would be under review by the Department of City Planning.
- Would the land use project generate a net increase of 250 or more daily vehicle trips?
 - Yes, the Project will generate a net increase of 250 or more daily vehicle trips. As indicated on the Screening Tab of the City's VMT Calculator (Page 1 of *Appendix C*), the Project would generate 397 net new daily vehicle trips.

As the answer is yes to both of the screening criteria questions (i.e., the Project will require a discretionary action and the Project will generate more than 250 daily trips), further analysis is required to evaluate Project access, safety and circulation.

It is noted that the City issued an interim guidance on the preparation of a freeway safety analysis for land use projects.¹² If the answer is yes to the following question, a freeway safety analysis will be required to assess whether the project would lengthen a forecasted off-ramp queue and create speed differentials between vehicles exiting freeway off-ramps and vehicles operating on the freeway mainline:

- Does the land use project add 25 or more trips to any nearby freeway off-ramp serving the project site in either the morning or afternoon peak hour?

¹² *LADOT Transportation Assessments – Interim Guidance for Freeway Safety Analysis*, City of Los Angeles Department of Transportation, May 2020.

Table 5-2
SUMMARY OF DELAYS, LEVELS OF SERVICE, AND VEHICLE QUEUING (1)
WEEKDAY AM AND PM PEAK HOURS

12-Jan-20

NO.	INTERSECTION	TRAFFIC MOVEMENT	PEAK HOUR	YEAR 2020 EXISTING				YEAR 2020 EXISTING W/ PROJECT				YEAR 2022 FUTURE W/O PROJECT				YEAR 2022 FUTURE W/ PROJECT				CHANGE IN QUEUE [5]
				DELAY [2]	LOS [3]	QUEUE [4]		DELAY [2]	LOS [3]	QUEUE [4]		DELAY [2]	LOS [3]	QUEUE [4]		DELAY [2]	LOS [3]	QUEUE [4]		
1	Vernont Avenue / Pico Boulevard (Signalized)	NB Left	AM	30.3	C	82.8		30.3	C	82.8	0.0	33.8	C	91.2		33.8	C	91.2		0.0
			PM	24.2	C	53.5		24.2	C	53.5	0.0	26.2	C	57.3		26.2	C	57.3		0.0
		NB Through	AM	17.8	B	385.1		17.8	B	387.1	2.0	18.4	B	402.7		18.4	B	404.7		2.0
			PM	16.8	B	357.4		16.9	B	359.5	2.1	17.7	B	384.7		17.8	B	386.9		2.2
		NB Right	AM	17.9	B	381.6		18.0	B	383.3	1.7	18.5	B	399.4		18.6	B	401.2		1.8
			PM	17.0	B	353.4		17.0	B	355.3	1.9	17.9	B	380.9		18.0	B	382.8		1.9
		SB Left	AM	33.7	C	71.2		33.9	C	71.6	0.4	40.8	D	101.1		41.1	D	101.7		0.6
			PM	30.8	C	68.8		31.1	C	69.2	0.4	37.9	D	96.7		38.3	D	97.3		0.6
		SB Through	AM	16.0	B	329.9		16.0	B	329.9	0.0	16.7	B	354.5		16.7	B	354.5		0.0
			PM	15.1	B	298.7		15.1	B	298.7	0.0	15.7	B	320.1		15.7	B	320.1		0.0
		SB Right	AM	16.1	B	325.1		16.1	B	325.1	0.0	16.9	B	349.2		16.9	B	349.2		0.0
			PM	15.1	B	294.0		15.1	B	294.0	0.0	15.8	B	314.8		15.8	B	314.8		0.0
		EB Left	AM	59.3	E	85.3		70.5	E	94.3	9.0	78.8	E	108.6		110.2	F	132.2		23.6
			PM	147.0	F	180.7		147.0	F	180.7	0.0	227.0	F	260.7		227.0	F	260.7		0.0
		EB Through	AM	35.3	D	386.7		35.5	D	389.1	2.4	36.3	D	400.6		36.5	D	403.1		2.5
			PM	38.1	D	421.8		38.4	D	425.0	3.2	39.6	D	438.3		39.9	D	442.1		3.8
		EB Right	AM	35.7	D	374.6		35.8	D	377.0	2.4	36.7	D	388.2		36.9	D	390.7		2.5
			PM	38.5	D	408.9		38.8	D	412.0	3.1	40.0	D	425.0		40.4	D	428.9		3.9
		WB Left	AM	41.7	D	329.8		48.0	D	336.6	6.8	48.4	D	343.9		56.7	E	352.6		8.7
			PM	61.9	E	254.5		67.3	E	251.0	-3.5	71.1	E	251.8		77.2	E	247.9		-3.9
		WB Through	AM	45.9	D	458.3		54.3	D	523.7	65.4	55.7	E	534.0		68.7	E	622.0		88.0
			PM	68.1	E	617.7		75.7	E	666.6	48.9	84.6	F	722.1		93.8	F	779.8		57.7
		WB Right	AM	21.5	C	48.3		21.5	C	48.3	0.0	21.7	C	56.0		21.7	C	56.0		0.0
			PM	22.3	C	73.5		22.3	C	73.5	0.0	22.9	C	92.1		22.9	C	92.1		0.0
2	Menlo Avenue / 11th Street (Unsignalized)	NB Left/Through/Right	AM	8.5	A	5.0		8.8	A	7.5	2.5	8.6	A	5.0		8.8	A	7.5		2.5
			PM	8.7	A	7.5		8.8	A	7.5	0.0	8.8	A	7.5		8.9	A	7.5		0.0
		SB Left/Through/Right	AM	8.5	A	7.5		8.6	A	7.5	0.0	8.6	A	7.5		8.7	A	7.5		0.0
			PM	8.6	A	5.0		8.7	A	7.5	2.5	8.7	A	5.0		8.8	A	7.5		2.5
		EB Left/Through/Right	AM	9.6	A	35.0		9.8	A	35.0	0.0	9.7	A	35.0		9.9	A	37.5		2.5
			PM	10.1	B	40.0		10.2	B	42.5	2.5	10.3	B	45.0		10.5	B	45.0		0.0
		WB Left/Through/Right	AM	10.0	A	42.5		10.3	B	42.5	0.0	10.3	B	45.0		10.6	B	47.5		2.5
			PM	10.3	B	45.0		10.4	B	45.0	0.0	10.5	B	47.5		10.6	B	47.5		0.0

Table 5-2 (Continued)
SUMMARY OF DELAYS, LEVELS OF SERVICE, AND VEHICLE QUEUING [1]
WEEKDAY AM AND PM PEAK HOURS

NO.	INTERSECTION	TRAFFIC MOVEMENT	PEAK HOUR	YEAR 2020 EXISTING				YEAR 2020 EXISTING W/ PROJECT				YEAR 2022 FUTURE W/O PROJECT				YEAR 2022 FUTURE W/ PROJECT			
				DELAY [2]	LOS [3]	QUEUE [4]		DELAY [2]	LOS [3]	QUEUE [4]	CHANGE IN QUEUE [5]	DELAY [2]	LOS [3]	QUEUE [4]		DELAY [2]	LOS [3]	QUEUE [4]	CHANGE IN QUEUE [5]
3	Menlo Avenue / Pico Boulevard (Unsignalized)	NB Left/Through/Right	AM	30.8	D	42.5		33.0	D	47.5	5.0	34.6	D	50.0		37.5	E	52.5	2.5
			PM	23.7	C	27.5		24.9	C	27.5	0.0	26.0	D	30.0		27.5	D	32.5	2.5
		SB Left/Through/Right	AM	81.8	F	85.0		88.7	F	107.5	22.5	104.3	F	100.0		116.4	F	125.0	25.0
			PM	24.1	C	20.0		25.6	D	22.5	2.5	26.4	D	22.5		28.4	D	27.5	5.0
		EB Left/Through	AM	9.9	A	0.0		10.0	A	2.5	2.5	10.1	B	0.0		10.2	B	2.5	2.5
			PM	10.0	A	2.5		10.1	B	2.5	0.0	10.2	B	2.5		10.3	B	2.5	0.0
4	Westmoreland Avenue / Pico Boulevard (Signalized)	NB Left/Through	AM	10.3	B	0.0		10.3	B	0.0	0.0	10.5	B	0.0		10.5	B	0.0	0.0
			PM	10.6	B	2.5		10.6	B	2.5	0.0	10.9	B	2.5		10.9	B	2.5	0.0
		NB Right	AM	28.8	C	226.5		28.9	C	227.5	1.0	29.7	C	235.4		29.8	C	236.3	0.9
			PM	31.4	C	259.0		31.5	C	259.5	0.5	32.9	C	270.4		33.1	C	271.4	1.0
		SB Left/Through	AM	24.0	C	27.1		24.0	C	27.1	0.0	24.0	C	27.9		24.0	C	27.9	0.0
			PM	23.9	C	24.6		23.9	C	24.6	0.0	23.9	C	25.4		23.9	C	25.4	0.0
		SB Left/Through	AM	27.3	C	136.4		27.6	C	139.1	2.7	28.0	C	144.7		28.4	C	147.1	2.4
			PM	28.3	C	170.6		28.4	C	171.3	0.7	28.9	C	173.9		29.1	C	174.4	0.5
		SB Through/Right	AM	26.6	C	138.6		26.7	C	142.7	4.1	27.0	C	152.9		27.1	C	157.4	4.5
			PM	27.9	C	187.4		27.9	C	189.7	2.3	28.4	C	198.8		28.5	C	201.1	2.3
		EB Left/Through	AM	11.4	B	236.3		11.4	B	236.7	0.4	11.7	B	247.5		11.8	B	248.4	0.9
			PM	10.9	B	194.3		10.9	B	194.5	0.2	12.0	B	202.6		12.0	B	202.8	0.2
		EB Through/Right	AM	12.2	B	255.5		12.2	B	256.0	0.5	12.6	B	269.1		12.6	B	270.1	1.0
			PM	11.0	B	213.0		11.0	B	213.3	0.3	11.5	B	229.5		11.5	B	229.8	0.3
		WB Left/Through	AM	10.6	B	217.8		10.6	B	218.9	1.1	10.8	B	225.8		10.8	B	226.4	0.6
			PM	12.3	B	274.9		12.3	B	275.7	0.8	12.8	B	290.3		12.8	B	291.8	1.5
		WB Through/Right	AM	11.1	B	212.4		11.1	B	213.0	0.6	11.3	B	221.6		11.4	B	222.2	0.6
			PM	13.2	B	281.1		13.2	B	282.5	1.4	13.7	B	298.6		13.8	B	300.0	1.4

[1] Pursuant to LADOT's *Transportation Assessment Guidelines*, July 2019, the Highway Capacity Manual (HCM) methodology for

signalized and unsignalized intersections was utilized to calculate vehicle queuing.

[2] Control delay reported in seconds per vehicle.

[3] Unsignalized Intersection Levels of Service were based on the following criteria:

Control Delay (s/veh)

LOS

A

B

C

D

E

F

Signalized Intersection Levels of Service were based on the following criteria:

Control Delay (s/veh)

LOS

A

B

C

D

E

F

[4] The 95th percentile queue is the maximum back of queue with 95th percentile traffic volumes. The HCM 6th Edition methodology worksheets report queues in number of vehicles, however an average vehicle length of 25 feet was assumed for analysis purposes.

The reported queues therefore represent the calculated maximum back of queue in feet.

[5] Represents the change in calculated maximum back of queue (in feet) due to the addition of project-related traffic.

- No, the Project does not add 25 or more trips to any nearby freeway off-ramp serving the Project Site in either the morning or afternoon peak hour. As indicated in *Table 2-1*, the Project is expected to generate 18 inbound trips during the AM peak hour and 24 inbound trips during the PM peak hour. Therefore, if 100% of inbound Project trips were assumed to utilize freeway off-ramps serving the Project Site, the Project would still add less than 25 trips to the off-ramps.

As the answer is no to the screening criteria question (i.e., the Project does not add 25 or more trips to nearby freeway off-ramps serving the Project Site during either the AM or PM peak hour), a freeway safety analysis is not required.

5.2.2 Evaluation Criteria

For operational evaluation of land use projects, the City's TAG requires a quantitative evaluation of the Project's expected access and circulation operations. Project access is considered constrained if the Project's traffic would contribute to unacceptable queuing on an Avenue or Boulevard (as designated in the Mobility Plan 2035) at Project driveway(s) or would cause or substantially extend queuing at nearby signalized intersections. Unacceptable or extended queuing may be defined as follows:

- Spill over from turn pockets into through lanes.
- Block cross streets or alleys.
- Contribute to gridlock congestion. For the purposes of this section, "gridlock" is defined as the condition where traffic queues between closely-spaced intersections and impedes the flow of traffic through upstream intersections.

The City's TAG acknowledges that demand for curbside space has substantially increased due to the continued expansion of driver-for-hire transportation network companies (TNCs) and shared mobility services. As such, the TAG states that a transportation assessment should characterize the on-site loading demand of the project frontage and answer the following questions:

- Would the project result in passenger loading demand that could not be accommodated within any proposed on-site passenger loading facility?
 - Not Anticipated. While it is envisioned that passenger loading would occur in the proposed parking area, it is envisioned that some curbside loading/unloading would likely occur along the Project Site's Menlo Avenue frontage.
- Would accommodating the passenger loading demand create pedestrian or bicycle conflicts? Which curbside management options should be explored to better address passenger loading needs in the public right-of-way?
 - No pedestrian or bicycle conflicts due to potential loading/unloading activities are anticipated to occur. For any curbside loading/unloading zones that may be proposed

by the Project Applicant, appropriate signage and pavement/curb markings will be required by the City and installed by the Applicant. Any installations that fall within the City's (public) right-of-way will require prior review and approval by LADOT.

5.2.3 Project Operational and Passenger Loading Evaluation Methodology

Based on coordination with LADOT staff and as presented in the transportation assessment MOU, the following four study intersections were identified for operational evaluation of whether the Project's traffic would contribute to unacceptable queuing on an Avenue or Boulevard:

1. Vermont Avenue / Pico Boulevard (signalized)
2. Menlo Avenue / 11th Street (unsignalized)
3. Menlo Avenue / Pico Boulevard (unsignalized)
4. Westmoreland Avenue / Pico Boulevard (signalized)

The study locations were based on proximity to the Project Site and the importance of the intersections in terms of the Project's site access and circulation scheme.

The operational analysis was prepared based on the *Highway Capacity Manual*¹³ (HCM) operational analysis methodology pursuant to the City's TAG. Intersection analyses were prepared utilizing the *HCS7* software package, which implements the Highway Capacity Manual operational methods. In addition, specifics such as traffic volume data, lane configurations, crosswalk locations, posted speed limits, traffic signal timing and phasing for signalized locations, etc., were coded in the *HCS7* software. The operational analysis was prepared utilizing the following data previously presented herein:

- Project Peak Hour Traffic Generation: Refer to Subsection 2.7.1
- Project Trip Distribution and Assignment: Refer to Subsection 2.7.2
- Existing Roadway Network: Refer to Section 3.3
- Existing Weekday AM and PM Hour Traffic Count Data: Refer to Section 3.4
- Related Projects (i.e., within a one-half mile radius) and Ambient Traffic Growth: Refer to Section 3.5

LADOT confirmed the appropriateness of the above data when it entered into a transportation assessment MOU for the Project. The transportation assessment MOU prepared by LLG for the screening criteria set forth in the TAG is in *Appendix A*.

¹³ *Highway Capacity Manual 6th Edition*, Transportation Research Board of the National Academies of Sciences-Engineering-Medicine, 2016.

The operational analysis of vehicle queuing at the study intersections was prepared for the following conditions:

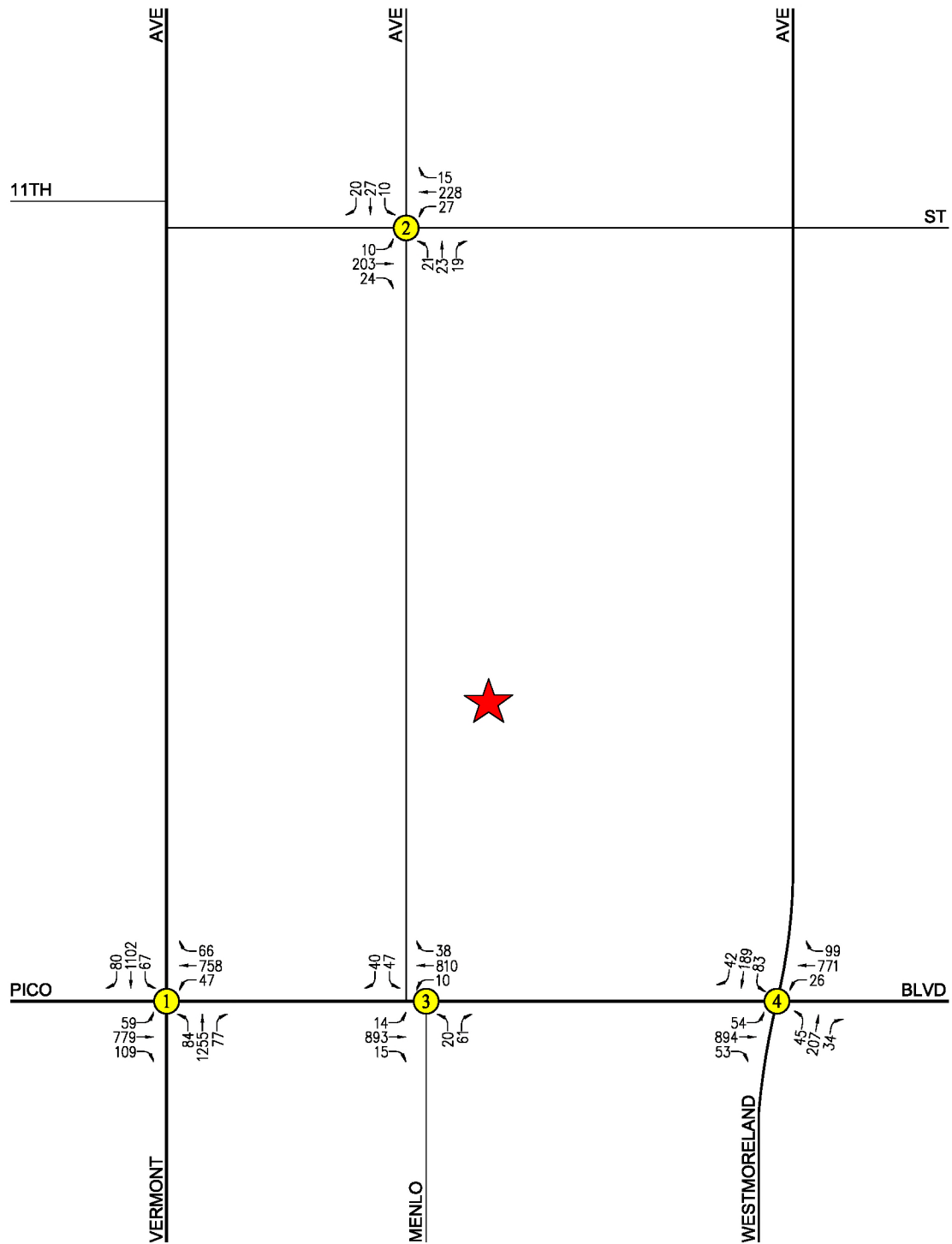
- (a) Existing (2020) conditions.
- (b) Condition (a) with completion and occupancy of the Project.
- (c) Condition (a) plus one percent (1.0%) annual ambient traffic growth through year 2022 and with completion and occupancy of the related projects (i.e., future cumulative baseline).
- (d) Condition (c) with completion and occupancy of the Project.

Pursuant to the City's TAG, the HCM methodology for signalized and unsignalized intersections was utilized to calculate vehicle queuing. The operation analysis reports the control delay (in seconds), Levels of Service (LOS), and 95th percentile queues (in feet) for all approaches for the signalized intersections and the most constrained approaches for the unsignalized intersections. The 95th percentile queue is the maximum back of queue with 95th percentile traffic volumes. The HCM 6th Edition methodology worksheets report queues in number of vehicles. As such, an average vehicle length of 25 feet, which includes the length of the vehicle and spacing between vehicles, was assumed for analysis purposes. The reported queues therefore represent the calculated maximum back of queue in feet. The summary of the operational analysis of the study intersections is provided in *Table 5-2*. The HCM methodology worksheets for the analyzed intersections are contained in *Appendix D*.

The existing traffic volumes at the study intersections during the weekday AM and PM peak hours are displayed in *Figures 3-9* and *3-10*, respectively. The "Existing with Project" traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in *Figures 5-1* and *5-2*, respectively. The "Future Cumulative Baseline" (existing, ambient growth and related projects) traffic volumes at the study intersections during the weekday AM and PM peak hours are presented in *Figures 5-3* and *5-4*, respectively. The "Future Cumulative with Project" (existing, ambient growth, related projects, and Project) traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in *Figures 5-5* and *5-6*, respectively.

As presented in *Table 5-2*, it is concluded the Project will not cause or substantially extend vehicle queuing at the two signalized study intersections (i.e., Vermont Avenue / Pico Boulevard and Westmoreland Avenue / Pico Boulevard) under the "Existing with Project" scenario. The change in queue length associated with the Project at the two signalized intersections ranges from a reduced queue length to a maximum of 65.4 feet (i.e., just over two vehicles) under the "Existing with Project" scenario. It is noted that there is substantial queuing forecasted at the two signalized intersections under the "Future Cumulative without Project" scenario. However, the Project will not cause or substantially extend vehicle queuing at the signalized intersections under the "Future Cumulative with Project" scenario. The change in queue length associated

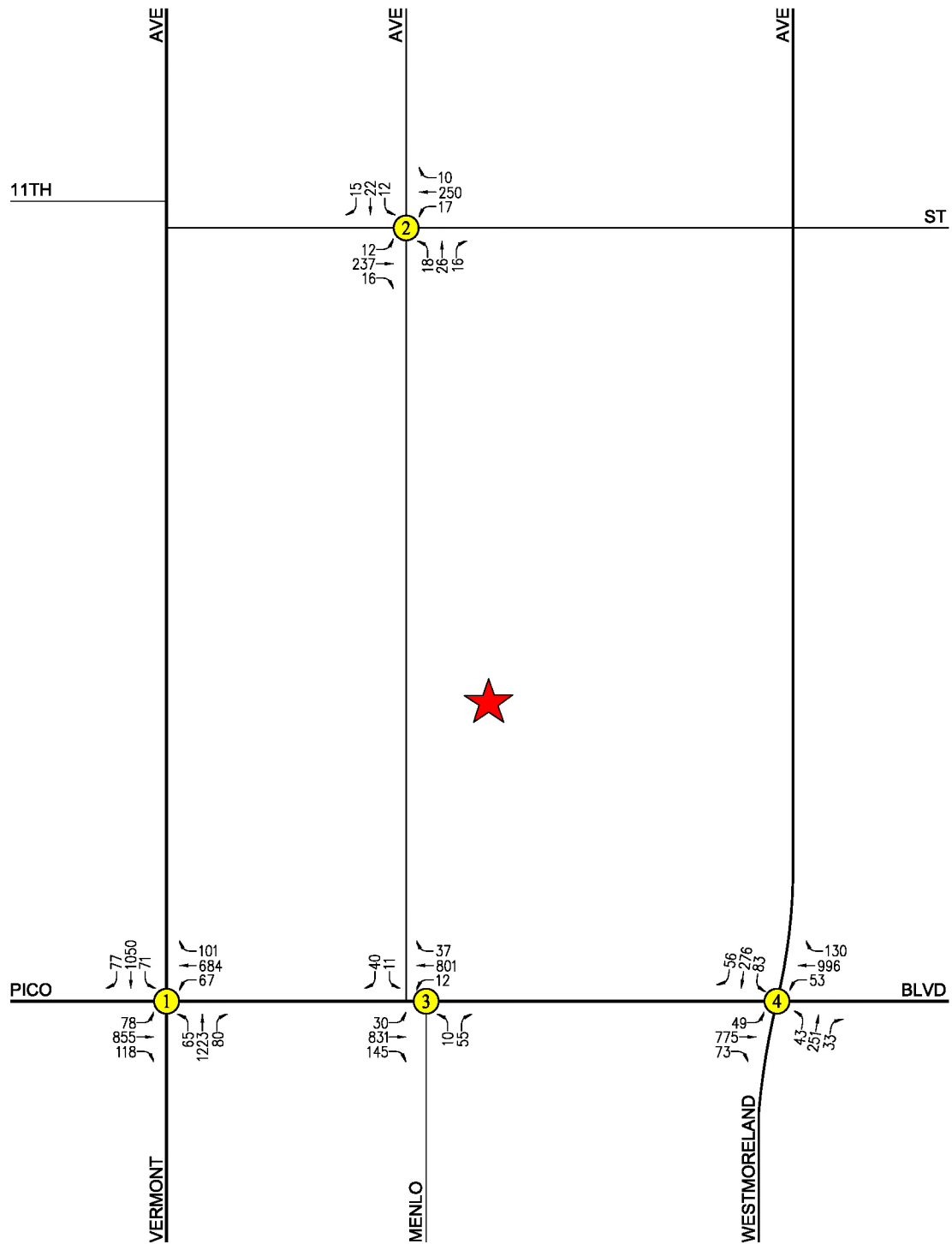
c:\0497\dwg\F5-1.dwg 06/12/2020 13:56:44 shankar llg exhibits color.ctb



- ★ PROJECT SITE
- ⓧ STUDY INTERSECTION

LINSCOTT, LAW & GREENSPAN, engineers

FIGURE 5-1
EXISTING WITH PROJECT
TRAFFIC VOLUMES
 WEEKDAY AM PEAK HOUR
 1216 MENLO AVENUE RESIDENTIAL PROJECT

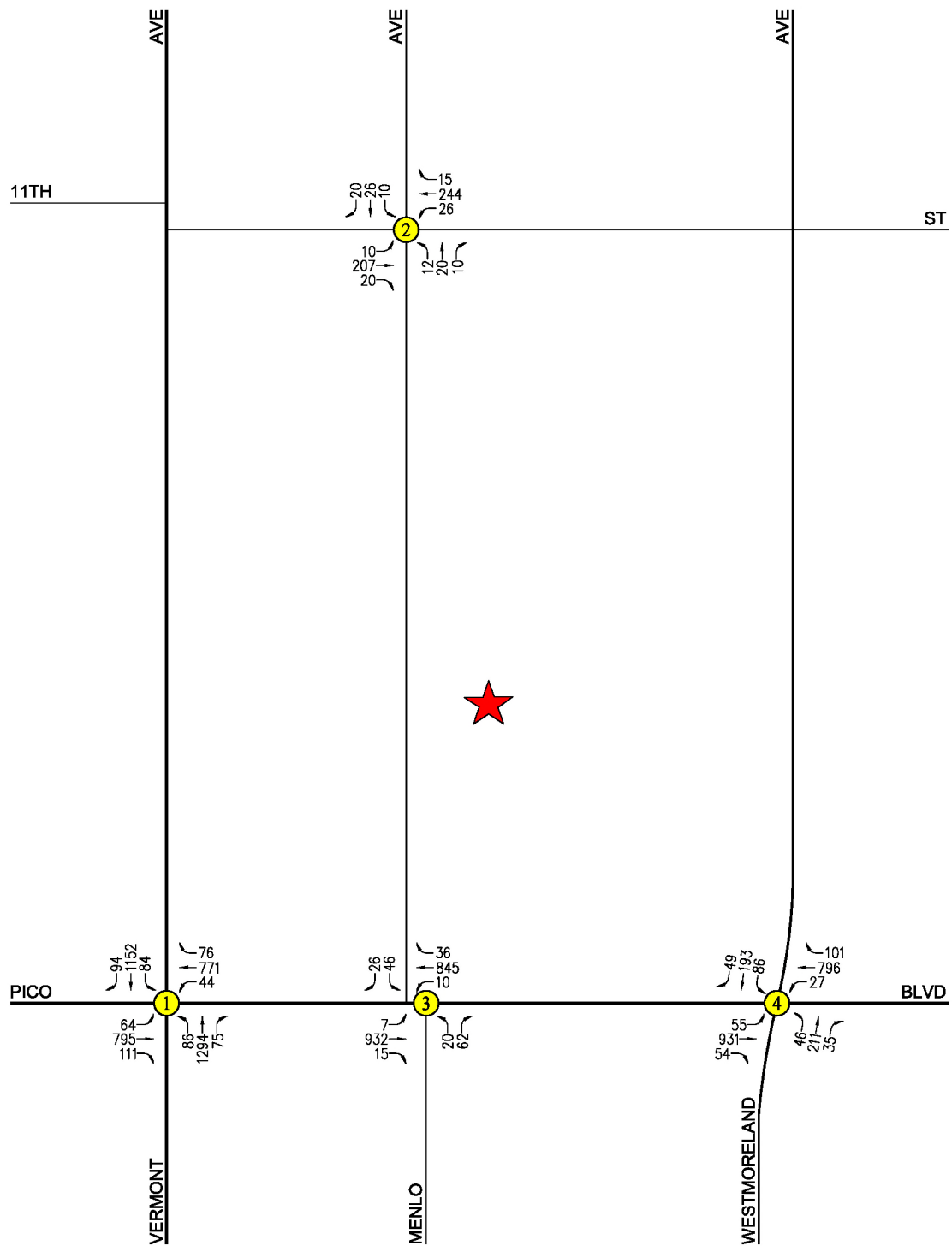


- ★ PROJECT SITE
- ⓧ STUDY INTERSECTION

FIGURE 5-2
EXISTING WITH PROJECT
TRAFFIC VOLUMES
 WEEKDAY PM PEAK HOUR
 1216 MENLO AVENUE RESIDENTIAL PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

c:\0497\dwg\F5-3.dwg 06/12/2020 14:29:40 shankar llg exhibits color.ctb

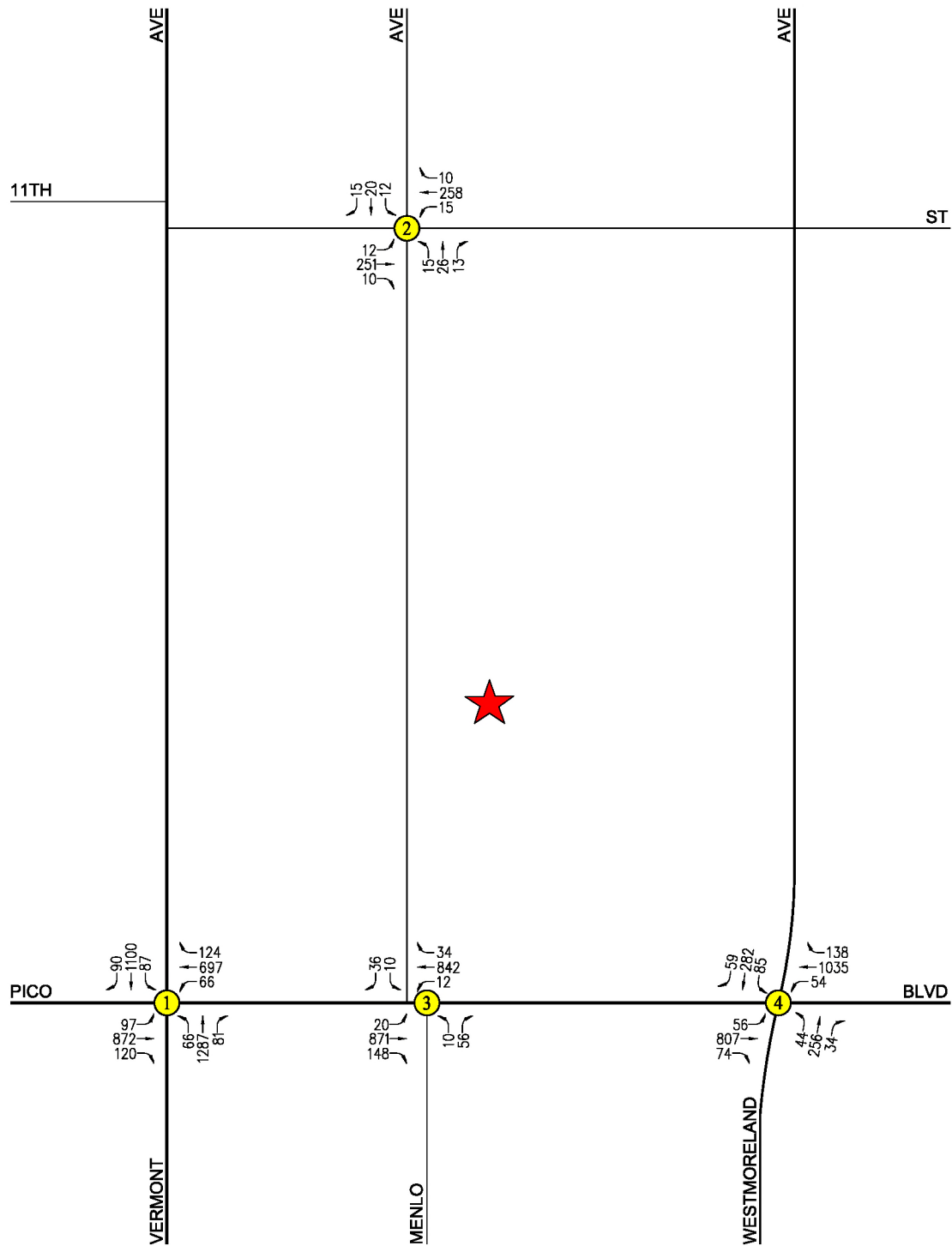


- ★ PROJECT SITE
- ⊗ STUDY INTERSECTION

FIGURE 5-3 FUTURE CUMULATIVE BASELINE TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR
1216 MENLO AVENUE RESIDENTIAL PROJECT

LINSCOTT, LAW & GREENSPAN, engineers



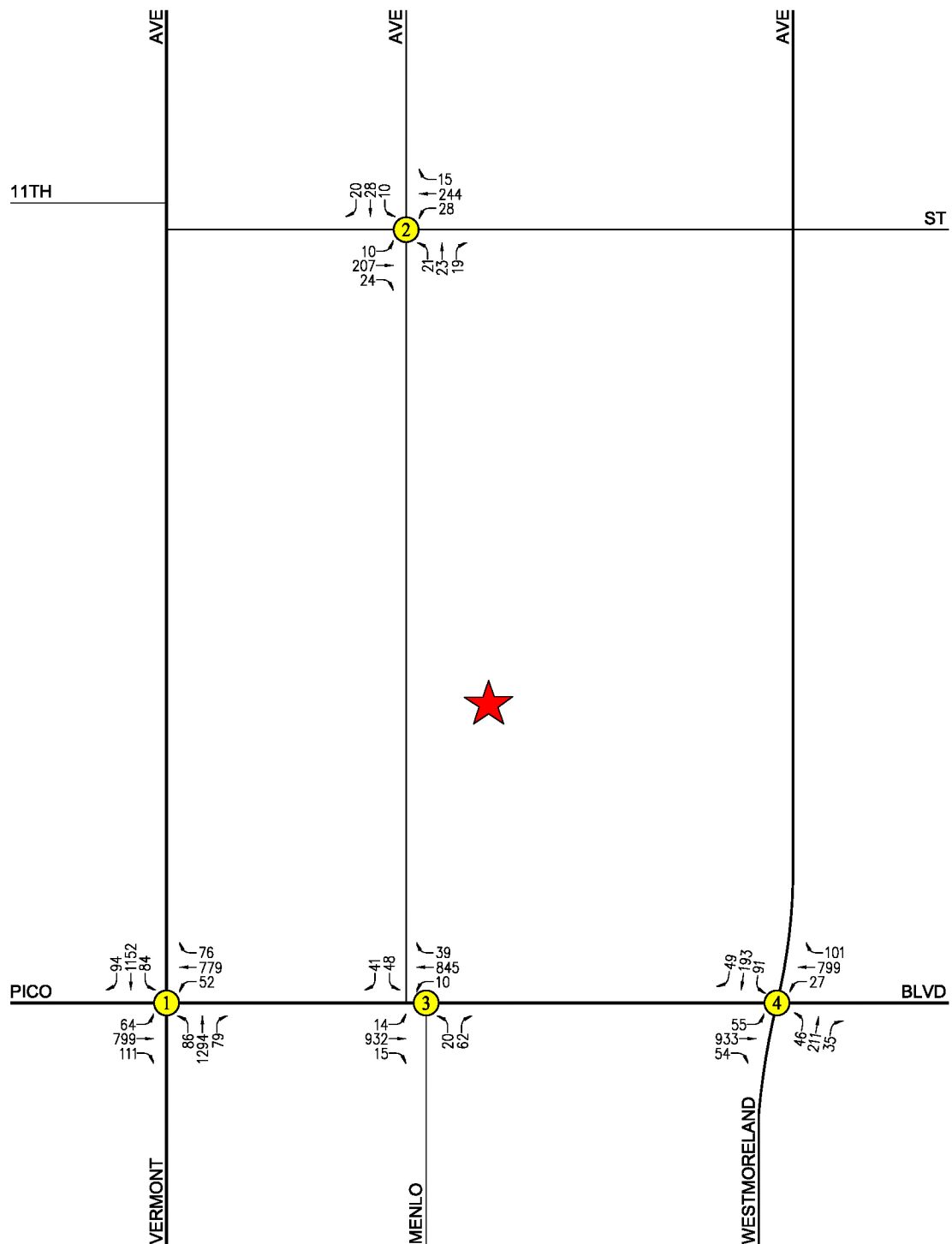
- ★ PROJECT SITE
- ⓧ STUDY INTERSECTION

FIGURE 5-4 FUTURE CUMULATIVE BASELINE TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR
1216 MENLO AVENUE RESIDENTIAL PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

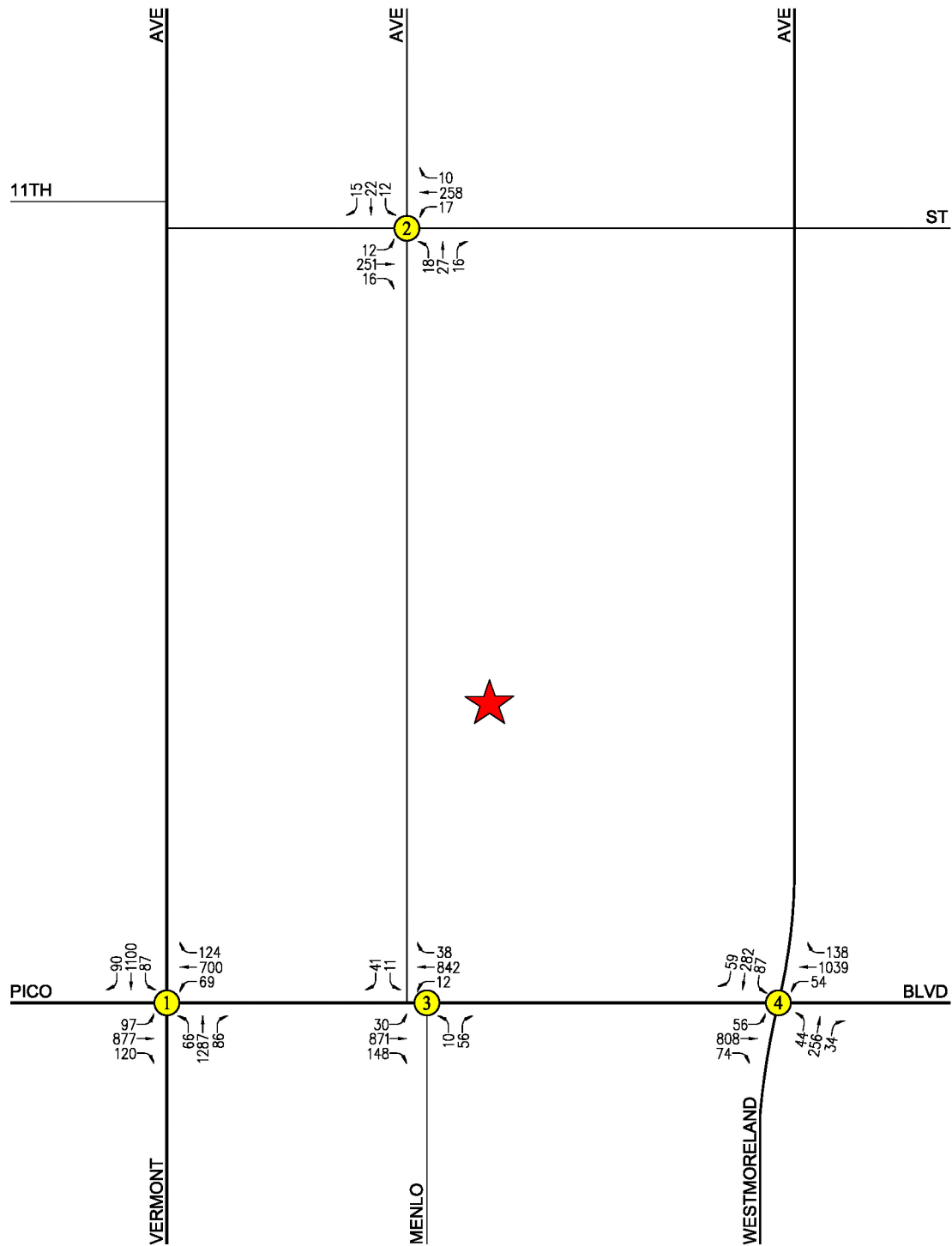
c:\0497\dwg\F5-5.dwg 06/12/2020 14:43:16 shankar llg exhibits color.ctb



- ★ PROJECT SITE
- ⓧ STUDY INTERSECTION

LINSCOTT, LAW & GREENSPAN, engineers

FIGURE 5-5
FUTURE CUMULATIVE WITH
PROJECT TRAFFIC VOLUMES
 WEEKDAY AM PEAK HOUR
 1216 MENLO AVENUE RESIDENTIAL PROJECT



- ★ PROJECT SITE
- ⓧ STUDY INTERSECTION

FIGURE 5-6
FUTURE CUMULATIVE WITH
PROJECT TRAFFIC VOLUMES
 WEEKDAY PM PEAK HOUR
 1216 MENLO AVENUE RESIDENTIAL PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

with the Project at the signalized intersections ranges from a reduced queue length to a maximum of 88.0 feet (i.e., just over three vehicles).

Additionally, it is concluded that the Project's weekday AM and PM peak hour traffic volumes will have a nominal effect on vehicle queuing at the two unsignalized study intersections (i.e., Menlo Avenue / 11th Street and Menlo Avenue / Pico Boulevard) under the "Existing with Project" scenario. The change in queue length associated with the Project at the unsignalized intersections ranges from no change to a maximum queue length of 22.5 feet (i.e., just under one vehicle) under the "Existing + Project" scenario. Further, the Project will not cause or substantially extend vehicle queuing at the unsignalized intersection under the "Future Cumulative with Project" scenario. The change in queue length associated with the Project at the unsignalized intersections ranges from no change to a maximum of 25.0 feet (i.e., one vehicle).

While it is envisioned that passenger loading/unloading would occur within the Project's parking areas, it is envisioned that some curbside loading/unloading would likely occur along the Project Site's frontage. No pedestrian or bicycle conflicts due to potential loading/unloading activities are anticipated to occur. For any curbside loading/unloading zones that may be proposed by the Project Applicant, appropriate signage and pavement/curb markings will be required by the City and installed by the Applicant. Any installations that fall within the City's (public) right-of-way will require prior review and approval by LADOT. Thus, it is envisioned that should any curbside loading/unloading zones be proposed by the Project Applicant, on-street parking along the direct Project frontages will not be allowed and some or most of the curbside space would be repurposed for loading/unloading operations.

5.3 Project Construction Effect on Nearby Mobility

The project construction evaluation addresses activity associated with project construction and major in-street construction of infrastructure projects.

5.3.1 Screening Criteria

For land use projects, if the answer is yes to any of the following questions, further analysis will be required to assess whether project construction would negatively affect pedestrian, bicycle, transit, or vehicle circulation:

- Would a project that requires construction activities to take place within the right-of-way of a Boulevard or Avenue (as designated in the Mobility Plan 2035) which would necessitate temporary lane, alley, or street closures for more than one day (including day and evening hours, and overnight closures if on a residential street)?
 - No. Construction activities are not planned to require the closure of any vehicle travel lanes on roadways designated as a Boulevard or Avenue, such as Vermont Avenue and Pico Boulevard. This is due primarily to the availability of parking "lanes" adjacent to the Project Site on Menlo Avenue (designated as a Local Street), which precludes the need to use travel lanes on Vermont Avenue and Pico Boulevard.

The street parking spaces adjacent to the Project Site on Menlo Avenue would likely be reserved for use by construction vehicles for the duration of construction.

- Would a project require construction activities to take place within the right-of-way of a Collector or Local Street (as designated in the Mobility Plan 2035) which would necessitate temporary lane, alley, or street closures for more than seven days (including day and evening hours, and including overnight closures if on a residential street)?
 - No. Construction activities are not planned to require the closure of any vehicle travel lanes on roadways designated as a Collector or Local Street, such as Menlo Avenue, Westmoreland Avenue, and 11th Street. This is due primarily to the availability of parking “lanes” adjacent to the Project Site on Menlo Avenue which precludes the need to use the adjacent travel lanes. The street parking spaces adjacent to the Project Site on Menlo Avenue are likely associated with the existing uses on the Project Site and would likely be reserved for use by construction vehicles for the duration of construction.
- Would in-street construction activities result in the loss of regular vehicle, bicycle, or pedestrian access, including loss of existing bicycle parking to an existing land use for more than one day, including day and evening hours and overnight closures if access is lost to residential units?
 - Yes. Temporary closures of the sidewalks adjacent to the Project Site on Menlo Avenue may be required during portions of the construction period. However, signs would be posted advising pedestrians of temporary sidewalk closures and providing alternative routes. No bicycle routes/lanes in the Project study area are anticipated to require temporary closure. Additionally, the Project Applicant would prepare and implement a Construction Staging and Traffic Management Plan that would show the location of any temporary street parking or sidewalk closures and would detail alternate routing.
- Would in-street construction activities result in the loss of regular ADA pedestrian access to an existing transit station, stop, or facility (e.g., layover zone) during revenue hours?
 - No.
- Would in-street construction activities result in the temporary loss for more than one day of an existing bus stop or rerouting of a bus route that serves the project site?
 - No.

As the answer is yes to one of the screening criteria questions (i.e., the Project may require construction activities that may result in temporary loss of pedestrian access), further analysis is required to evaluate whether Project construction would negatively affect pedestrian, bicycle, transit, or vehicle circulation.

5.3.2 Evaluation Criteria and Methodology

The evaluation criteria for project construction is focused on whether the proposed project would adversely affect mobility in the project vicinity during the construction process. Specifically, the City's TAG asks the following question: "Would construction of a project substantially interfere with pedestrian, bicycle, transit, or vehicle circulation and accessibility to adjoining areas?" Factors to be considered are the location of the project site, the functional classification of the adjacent street(s), the availability of alternate routes or additional capacity, temporary loss of bicycle parking, temporary loss of bus stops or rerouting of transit lines, the duration of temporary loss of access, the affected land uses, and the magnitude of the temporary construction activities.

Factors to consider when assessing a project construction's potential effect on mobility in the project area include the following:

- Temporary transportation constraints:
 - The length of time of temporary street closures or closures of two or more travel lanes;
 - The classification of the street (major arterial, state highway) affected;
 - The existing congestion levels on the affected street segments and intersections;
 - Whether the affected street directly leads to a freeway on- or off-ramp or other state highway;
 - Potential safety issues involved with street or lane closures; and
 - The presence of emergency services (fire, hospital, etc.) located nearby that regularly use the affected street.
- Temporary loss of access:
 - The length of time of any loss of pedestrian or bicycle circulation past a construction area;
 - The length of time of any loss of vehicular, bicycle, or pedestrian access to a parcel fronting the construction area;
 - The length of time of any loss of ADA pedestrian access to a transit station, stop, or facility;
 - The availability of nearby vehicular or pedestrian access within ¼ mile of the lost access; and

- The type of land uses affected, and related safety, convenience, and/or economic issues.
- Temporary Loss of Bus Stops or Rerouting of Bus Lines:
 - The length of time that an existing bus stop would be unavailable or that existing service would be interrupted;
 - The availability of a nearby location (within ¼ mile) to which the bus stop or route can be temporarily relocated;
 - The existence of other bus stops or routes with similar routes/destinations within a ¼-mile radius of the affected stops or routes; and
 - Whether the interruption would occur on a weekday, weekend or holiday, and whether the existing bus route typically provides service that/those day(s).

Descriptions of the Project Site location and physical setting are provided in Section 2.1 and Section 3.0 herein for reference purposes in the Project construction evaluation. The evaluation of the Project construction includes a review of whether construction activity within the street right-of-way would require any of the following:

- Street, sidewalk, or lane closures.
- Block existing vehicle, bicycle, or pedestrian access along a street or to parcels fronting the street.
- Modification of access to transit stations, stops, or facilities during revenue hours.
- Closure or movement of an existing bus stop or rerouting of an existing bus line.
- Creation of transportation hazards.

The City's TAG notes that a comparison of the results to the evaluation criteria are to be provided in order to determine the level of impact. The summary of the Project construction evaluation criteria review in order to determine level of impact is provided in **Table 5-3**.

As presented in *Table 5-3*, it is concluded that Project construction would not result in the closure of two or more travel lanes, would not relocate existing bus transit stops or routes, and would not impede emergency access. It is noted that signs would be posted advising pedestrians of temporary sidewalk closures and providing alternative routes. Additionally, the street parking spaces adjacent to the Project Site on Menlo Avenue would likely be reserved for use by construction vehicles for the duration of construction. As these street parking spaces are likely associated with the existing uses on the Project Site (which will be removed as part of the Project), the temporary unavailability of these street parking spaces is not expected to cause an adverse effect to adjacent land uses.

**TABLE 5-3
QUALITATIVE REVIEW OF PROJECT CONSTRUCTION ACTIVITIES**

19-May-20

CRITERIA	PROJECT RESPONSE	DESCRIPTION
TEMPORARY TRANSPORTATION CONSTRAINTS		
The length of time of temporary street closures or closures of two or more travel lanes.	N/A	Project construction will not require street closures or closures of two or more travel lanes.
The classification of the street (major arterial, state highway) affected.	Local Street (Menlo Avenue)	Temporary closures of the sidewalks adjacent to the Project Site on Menlo Avenue may be required.
The existing congestion levels on the affected street segments and intersections.	Acceptable LOS	
Whether the affected street directly leads to a freeway on- or off-ramp or other state highway	N/A	N/A
Potential safety issues involved with street or lane closures.	N/A	While safety issues are not anticipated, the Project Applicant will prepare a Construction Staging and Traffic Management Plan (CSTMP) which would detail any potential safety issues.
The presence of emergency services (fire, hospital, etc.) located nearby that regularly use the affected street.	None	Medical clinics and fire stations located along Vermont Avenue and Pico Boulevard are not anticipated to regularly use Menlo Avenue.
TEMPORARY LOSS OF ACCESS		
The length of time of any loss of pedestrian or bicycle circulation past a construction area.	Unknown	The Project Applicant will prepare a CSTMP which would detail any loss of pedestrian or bicycle circulation past the construction of the Project.
The length of time of any loss of vehicular, bicycle, or pedestrian access to a parcel fronting the construction area.	Unknown	The Project Applicant will prepare a CSTMP which would detail any loss of vehicular, bicycle, or pedestrian access to a parcel fronting the construction area.
The length of time of any loss of ADA pedestrian access to a transit station, stop, or facility.	None	N/A
The availability of nearby vehicular or pedestrian access within ¼ mile of the lost access.	Signs indicating alternative routes will be provided.	The Project Applicant will prepare a CSTMP which would detail alternate routing.
The type of land uses affected, and related safety, convenience, and/or economic issues.	None	Access will be maintained for adjacent parcels in the Project vicinity.
TEMPORARY LOSS OF BUS STOPS OR REROUTING OF BUS LINES		
The length of time that an existing bus stop would be unavailable or that existing service would be interrupted.	N/A	No relocations proposed.
The availability of a nearby location (within ¼ mile) to which the bus stop or route can be temporarily relocated.	N/A	N/A
The existence of other bus stops or routes with similar routes/destinations within a ¼-mile radius of the affected stops or routes.	N/A	N/A
Whether the interruption would occur on a weekday, weekend or holiday, and whether the existing bus route typically provides service that/those day(s).	N/A	N/A

5.3.3 Recommended Project-Specific Action Items

Due to the short-term nature of construction activities and the variable characteristics and needs of a specific project's construction phase(s), it is recommended that a construction work site traffic control plan be submitted to LADOT's Citywide Temporary Traffic Control Section or Permit Plan Review Section for review and approval prior to the start of construction activity. The construction work site traffic control plan is required to identify the location of all temporary roadway lane and/or sidewalk closures needed during project construction. Additionally, if pedestrian detours and/or temporary travel lane closures are proposed, LADOT requires submission and approval of a traffic control/management plan prior to the issuance of building permits.

Consistent with LADOT's recommendation and requirements, the Project Applicant would prepare a detailed Construction Staging and Traffic Management Plan (CSTMP), which would include any applicable street/lane/sidewalk closure information, a detour plan, haul route(s), and a staging plan. The plan would be based on the nature and timing of the Project's specific construction activities and would consider other projects under construction in the immediate vicinity of the Project Site. The CSTMP also would include features such as notification to adjacent project owners and occupants of upcoming construction activities, advance notification regarding any temporary transit stop relocations, and limitation of any potential roadway lane closure(s) to off-peak travel periods, to the extent feasible.

Specifically, the CSTMP will include, but not be limited to, the following measures:

- Advance notification of adjacent property owners and occupants of upcoming construction activities, including durations and daily hours of operation.
- Temporary traffic control during all construction activities adjacent to public rights-of-way to improve traffic flow on public roadways (e.g., flag men).
- Scheduling of construction activities to reduce the effect on traffic flow on surrounding arterial streets.
- Potential sequencing of construction activity for the Project to reduce the amount of construction-related traffic on arterial streets.
- Containment of construction activity within the Project Site boundaries, per the Worksite Traffic Control Plan.
- Prohibition on construction-related vehicles/equipment parking on surrounding public streets.
- Coordination with Metro to address any potential conflicts with existing transit service.
- Safety precautions for pedestrians and bicyclists through such measures as alternate routing and protection barriers shall be implemented as appropriate.

- Schedule delivery of construction materials and hauling/transport of oversize loads to non-peak travel periods, to the extent possible. No hauling or transport shall be allowed during nighttime hours, Sundays, or federal holidays unless required by Caltrans or LADOT.
- Installation of appropriate traffic signs around the Project Site to ensure pedestrian, bicycle, and vehicle safety, as may be necessary.
- Installation of truck crossing signs within 300 feet of the exit of the Project Site in each direction.
- Securing of loads by trimming and watering or covering to prevent the spilling or blowing of the earth material.
- Cleaning of trucks and loads at the export site to prevent blowing dirt and spilling of loose earth.
- Identification of a construction manager and provision of a telephone number for any inquiries or complaints from residents regarding construction activities. The telephone number shall be posted at the site readily visible to any interested party during site preparation, grading, and construction.
- Obtain a Caltrans transportation permit for use of oversized transport vehicles on Caltrans facilities, if needed.

Any lane closures are expected to occur outside of the weekday AM and PM commute peak hours, however, so as to maintain roadway capacity when the street system is typically most heavily constrained.

In addition to the CSTMP, approvals required by the City of Los Angeles for implementation of the Project include a Truck Haul Route program. The proposed haul routes would require review and approval by the City of Los Angeles. It is noted that any approvals as it relates to construction are regulatory and will not alter the conclusions of the transportation assessment.

6.0 SUMMARY AND CONCLUSIONS

- ***Project Description*** – The Project consists of the removal of the existing land uses and developing 131 affordable family housing dwelling units. The Project proposes to provide a total of four parking spaces on-site.
- ***Study Scope*** – This transportation assessment (i) presents a CEQA assessment of Project-related VMT, (ii) provides a CEQA assessment of whether the Project conflicts or is inconsistent with local plans and policies, (iii) presents a non-CEQA assessment of pedestrian, bicycle and transit access, (iv) provides a non-CEQA evaluation of Project access, safety and circulation, (v) provides a non-CEQA review of Project construction activities, and (vi) recommends mitigation and improvement measures, where necessary. As defined by the City as Lead Agency under CEQA, LADOT confirmed the appropriateness of the analysis criteria when it entered into a transportation assessment MOU for the Project.
- ***Project Trip Generation*** – The Project is expected to generate 56 net new vehicle trips (18 inbound trips and 38 outbound trips) during the weekday AM peak hour. During the weekday PM peak hour, the Project is expected to generate 37 net new vehicle trips (24 inbound trips and 13 outbound trips).
- ***CEQA Analysis***
 - ***Project Consistency with Local Plans and Policies:*** The Project has been found to be consistent with the relevant City plans, policies, and programs and does not include any features that would preclude the City from completing and complying with these guiding documents and policy objectives. Therefore, a determination of “less than significant” can be made for the Project. Further, the Applicant will comply with existing applicable City ordinances (e.g., the City’s existing TDM Ordinance) and the other requirements pursuant to the LAMC.
 - ***VMT Analysis:*** The Project is not expected to result in a significant VMT impact. Further, based on the Project-related VMT analysis and the conclusions reported in Subsection 4.2.3 (i.e., which conclude that the Project falls under the City’s efficiency-based impact thresholds and thus are already shown to align with the long-term VMT and GHG reduction goals of SCAG’s RTP/SCS), no cumulative VMT impacts are anticipated.
 - ***Geometric Design Review:*** As the existing driveway complies with MPP Section 321 to meet the standard driveway width criteria and based on a review of the forecast net new weekday AM and PM peak hour Project traffic volumes (i.e., those traffic volumes summarized in Section 2.7 herein), no safety concerns have been noted related to geometric design, and a determination of “less than significant” can be made for the Project.

- *CEQA Transportation Measures:* The Project is not expected to result in a significant VMT impact. Therefore, no mitigation is necessary as it relates to VMT or geometric design. However, the Applicant will comply with existing applicable City ordinances (e.g., the City's existing TDM Ordinance, referred to in the City of Los Angeles Municipal Code Section 12.26.J) and the other requirements per the City's Municipal Code.
- ***Non-CEQA Analysis***
 - *Pedestrian, Bicycle, and Transit Access:* It is determined the Project does not include any features that would permanently remove, adversely modify, or degrade pedestrian, bicycle, and transit facilities in the Project vicinity. As noted herein, it is determined that it is possible that the Project may intensify use of pedestrian, bicycle, and transit facilities in the Project vicinity, however, such use is not expected to result in a deficient condition caused by the Project.
 - *Project Access and Circulation Review:* It is concluded the Project weekday AM and PM peak hour traffic volumes will not cause or substantially extend vehicle queuing at the seven study intersections analyzed (i.e., as summarized in Subsection 5.2.3 herein).
 - *Project Construction Effect on Nearby Mobility:* While it is concluded the Project would not result in the closure of two or more travel lanes, would not relocate existing bus transit stops or routes, and would not impede emergency access, it is recommended that a construction work site traffic control plan be submitted to LADOT's Citywide Temporary Traffic Control Section or Permit Plan Review Section for review and approval prior to the start of construction activity should any lane closure(s) be proposed. Consistent with LADOT's recommendation and requirements, the Project Applicant would also prepare a detailed CSTMP, which includes any applicable street/lane/sidewalk closure information, a detour plan, haul route(s), and a staging plan.
 - *Non-CEQA Transportation Measures:* For any curbside loading/unloading zones that may be proposed by the Applicant, appropriate signage and pavement/curb markings will be required by the City and installed by the Applicant. Any installations that fall within the City's (public) right-of-way will require prior review and approval by LADOT.

APPENDIX A

APPROVED TRANSPORTATION ASSESSMENT MEMORANDUM OF UNDERSTANDING

Transportation Assessment Memorandum of Understanding (MOU)

This MOU acknowledges that the Transportation Assessment for the following Project will be prepared in accordance with the latest version of LADOT's Transportation Assessment Guidelines:

I. PROJECT INFORMATION

Project Name: 1224 Menlo Avenue Residential

Project Address: 1216-1224 Menlo Avenue

Project Description: Development of 131 affordable family housing dwelling units.

LADOT Project Case Number: _____ Project Site Plan attached? (Required) ☒ Yes ☐ No

II. TRIP GENERATION

Geographic Distribution: N 25 % S 25 % E 25 % W 25 %

Illustration of Project trip distribution percentages at Study intersections attached? (Required) ☒ Yes ☐ No

Trip Generation Rate(s): ITE 10th Edition / Other ITE 10th Edition and LADOT "Transportation Assessment Guidelines" Affordable Housing Trip Rates

Trip Generation Adjustment (Exact amount of credit subject to approval by LADOT)	Yes	No
Transit Usage	☐	☒
Transportation Demand Management	☐	☒
Existing Active Land Use	☒	☐
Previous Land Use	☐	☒
Internal Trip	☐	☒
Pass-By Trip	☐	☒

Trip generation table including a description of the proposed land uses, ITE rates, estimated morning and afternoon peak hour volumes (ins/outs/totals), proposed trip credits, etc. attached? (Required) ☒ Yes ☐ No

	IN	OUT	TOTAL
AM Trips	<u>18</u>	<u>38</u>	<u>56</u>
PM Trips	<u>24</u>	<u>13</u>	<u>37</u>

NET Daily Trips 349
(From VMT Calculator
version 1.2)

III. STUDY AREA AND ASSUMPTIONS

Project Buildout Year: 2022 Ambient Growth Rate: 1.0 % Per Yr.

Related Projects List, researched by the consultant and approved by LADOT, attached? (Required) ☒ Yes ☐ No
*Forthcoming

Map of Study Intersections/Segments attached? ☒ Yes ☐ No

STUDY INTERSECTIONS (May be subject to LADOT revision after access, safety and circulation analysis)

- | | |
|--|---|
| 1 <u>Vermont Avenue / Pico Boulevard</u> | 3 <u>Menlo Avenue / Pico Boulevard</u> |
| 2 <u>Menlo Avenue / 11th Street</u> | 4 <u>Westmoreland Avenue / Pico Boulevard</u> |

Is this Project located on a street within the High Injury Network? ☐ Yes ☒ No

IV. ACCESS ASSESSMENT

Is the project on a lot that is 0.5-acre or more in total gross area? ☒ Yes ☐ No

Is the project's frontage 250 linear feet or more along an Avenue or Boulevard as classified by the City's General Plan? ☐ Yes ☒ No

Is the project's building frontage encompassing an entire block along an Avenue or Boulevard as classified by the City's General Plan? ☐ Yes ☒ No

V. CONTACT INFORMATION

CONSULTANT

DEVELOPER

Name: Linscott, Law, & Greenspan, Engineers

Cypress Equity Investments

Address: 20931 Burbank Boulevard, Suite C

12121 Wilshire Boulevard, Suite 801

Woodland Hills, CA 91367

Los Angeles, CA 90025

Phone Number: 818.835.8648

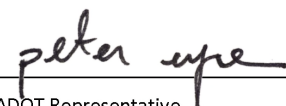
908.380.7652

E-Mail: shankar@llgengineers.com

tim@cypressequity.com

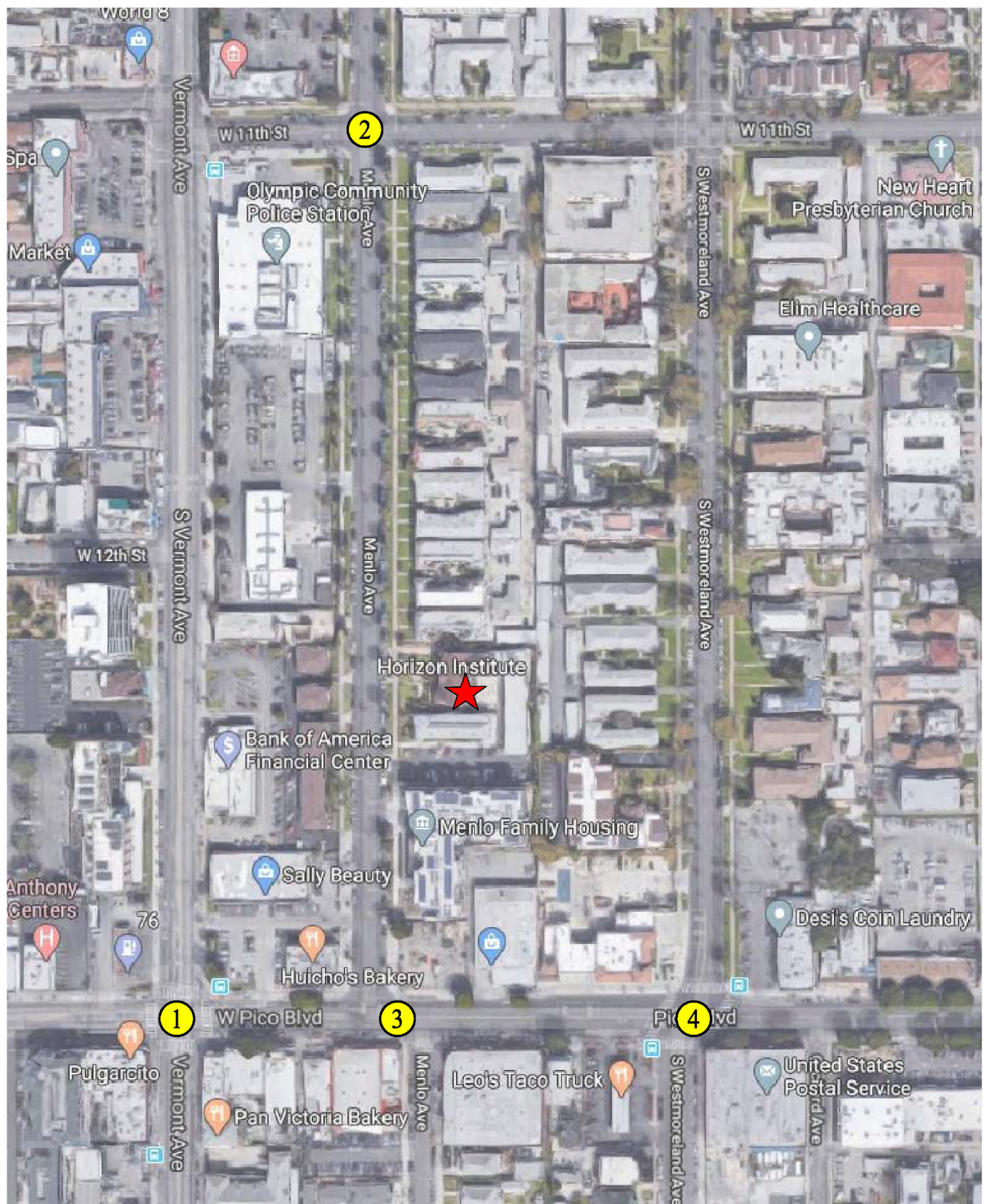
Approved by: x 
Consultant's Representative

3/17/2020
Date

x 
LADOT Representative

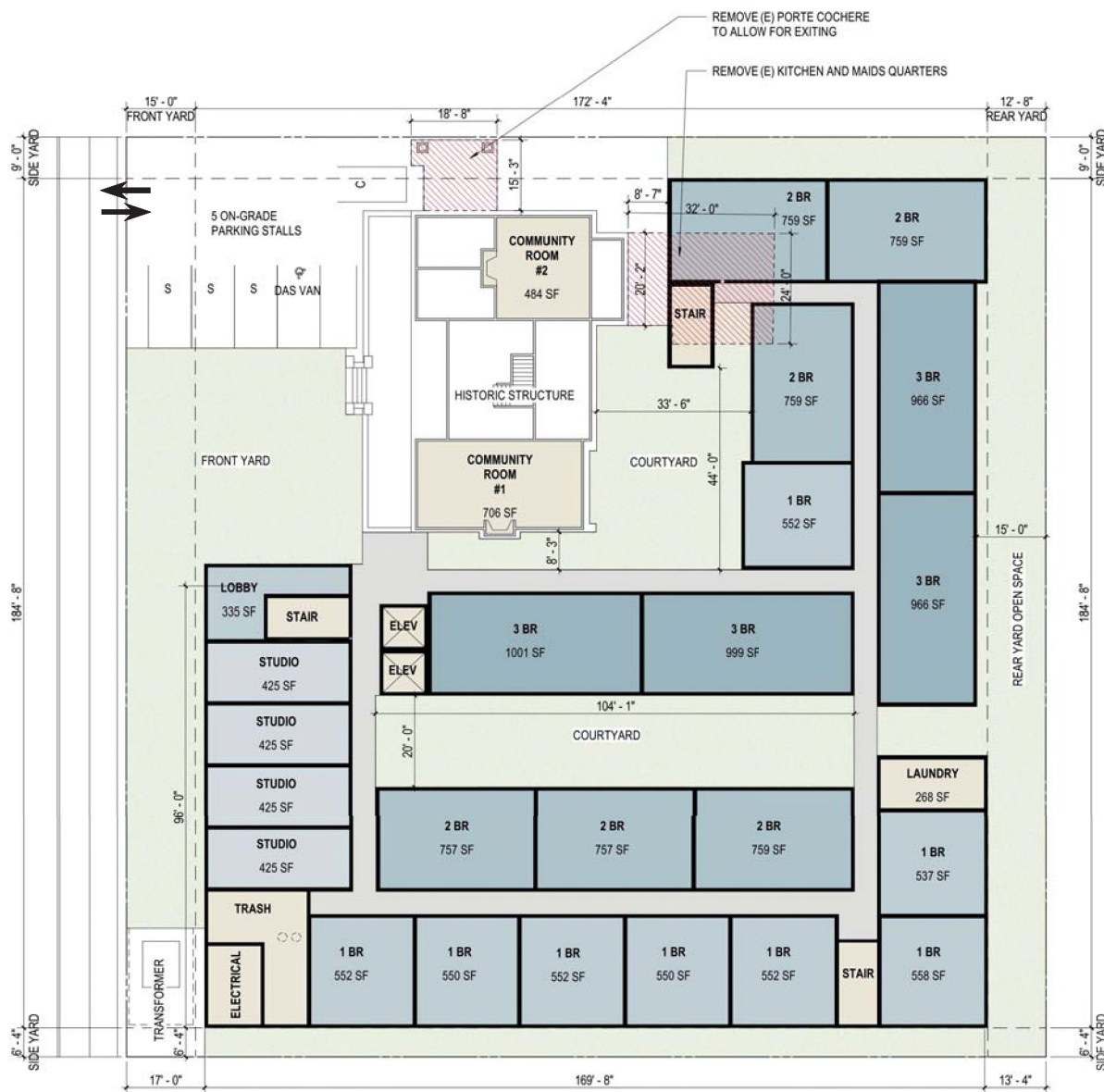
4/15/2020
*Date

*MOUs are generally valid for two years after signing. If after two years a transportation assessment has not been submitted to LADOT, the developer's representative shall check with the appropriate LADOT office to determine if the terms of this MOU are still valid or if a new MOU is needed.



MAP SOURCE: GOOGLE MAPS
 ★ PROJECT SITE
 (X) STUDY INTERSECTION

FIGURE 1
VICINITY MAP



NOT TO SCALE

SOURCE: OTTINGER ARCHITECTS

FIGURE 2
PROJECT SITE PLAN
GROUND FLOOR PLAN

LINSCOTT, LAW & GREENSPAN, engineers

1124 MENLO AVENUE RESIDENTIAL PROJECT

Table 1
PROJECT TRIP GENERATION [1]

27-Feb-20

LAND USE	SIZE	DAILY TRIP ENDS [2]	AM PEAK HOUR VOLUMES [2]		PM PEAK HOUR VOLUMES [2]	
			IN	OUT	IN	OUT
<i>Proposed Project</i>						
Affordable Family Housing [3]	131 DU	545	26	42	28	22
Subtotal		545	26	42	28	22
Subtotal Project Driveway Trips		545	26	42	28	22
<i>Existing Site</i>						
Apartments [4]	(9) DU	(66)	(1)	(3)	(3)	(2)
General Office [5]	(7,905) GSF	(77)	(8)	(1)	(1)	(8)
Subtotal		(143)	(9)	(4)	(4)	(10)
<i>Existing Transit Trips [6]</i>						
Apartments (10%)		7	0	0	0	0
General Office (10%)		8	1	0	0	1
Subtotal		15	1	0	0	1
Subtotal Existing Driveway Trips		(128)	(8)	(4)	(4)	(9)
NET INCREASE DRIVEWAY TRIPS		417	18	38	24	13
						37

[1] Source: ITE "Trip Generation Manual", 10th Edition, 2017.

[2] Trips are one-way traffic movements, entering or leaving.

[3] City of Los Angeles Affordable Housing (Family) trip generation average rates.

- Daily Trip Rate: 4.16 trips/dwelling unit; 50% inbound/50% outbound

- AM Peak Hour Trip Rate: 0.52 trips/dwelling unit; 38% inbound/62% outbound

- PM Peak Hour Trip Rate: 0.38 trips/dwelling unit; 55% inbound/45% outbound

[4] ITE Land Use Code 220 (Multifamily Housing [Low-Rise]) trip generation average rates.

- Daily Trip Rate: 7.32 trips/dwelling unit; 50% inbound/50% outbound

- AM Peak Hour Trip Rate: 0.46 trips/dwelling unit; 23% inbound/77% outbound

- PM Peak Hour Trip Rate: 0.56 trips/dwelling unit; 63% inbound/37% outbound

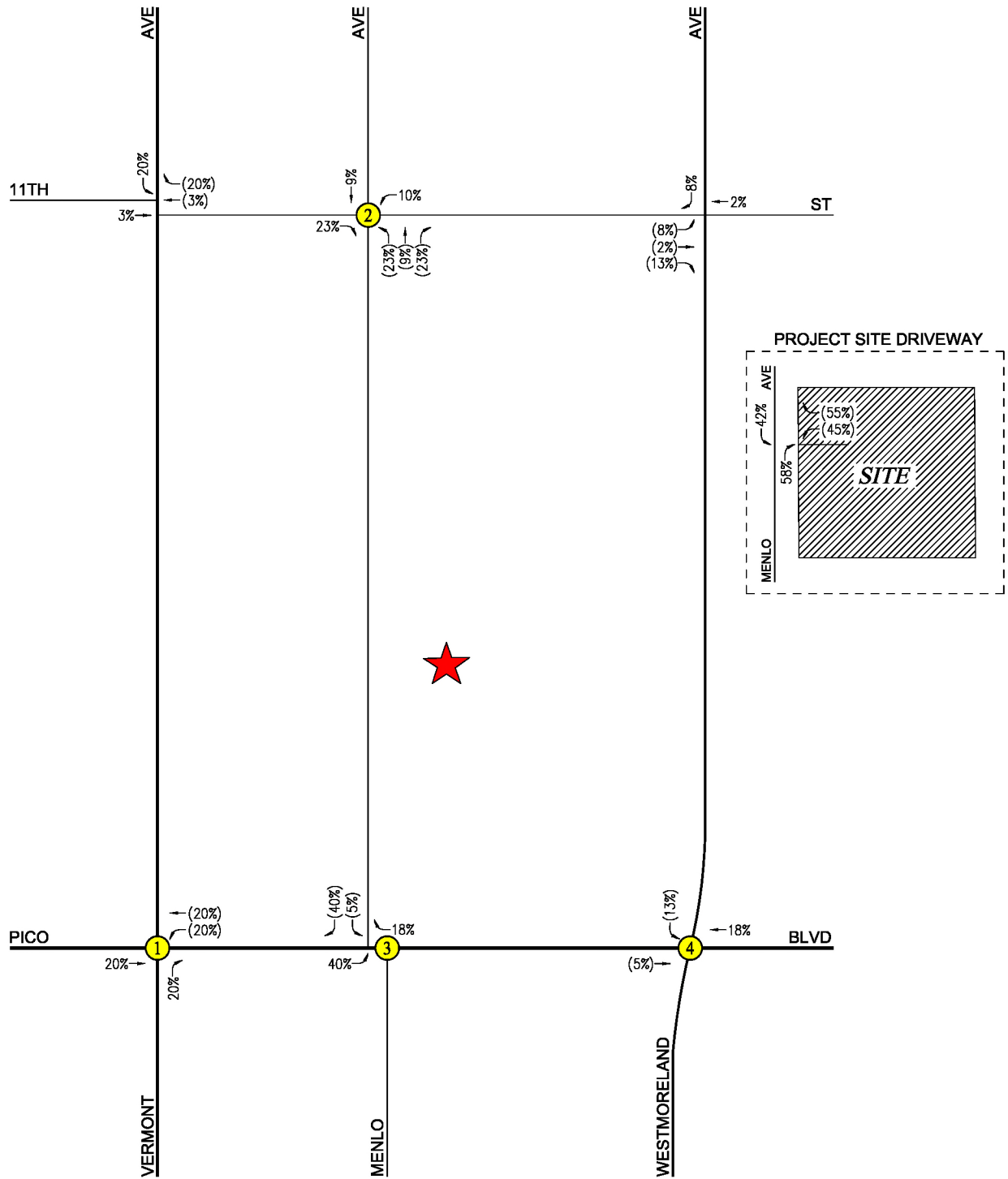
[5] ITE Land Use Code 710 (General Office Building) trip generation average rates.

- Daily Trip Rate: 9.74 trips/1,000 SF of floor area; 50% inbound/50% outbound

- AM Peak Hour Trip Rate: 1.16 trips/1,000 SF of floor area; 86% inbound/14% outbound

- PM Peak Hour Trip Rate: 1.15 trips/1,000 SF of floor area; 16% inbound/84% outbound

[6] The transit reduction is based on the site's proximity to Metro Red and Purple Line stops, Metro Rapid bus stops, and various bus lines, as well as the land use characteristics of the project.



- ★ PROJECT SITE
- ⓧ STUDY INTERSECTION
- ## = INBOUND PERCENTAGES
- (##) = OUTBOUND PERCENTAGES

FIGURE 3

PROJECT TRIP DISTRIBUTION

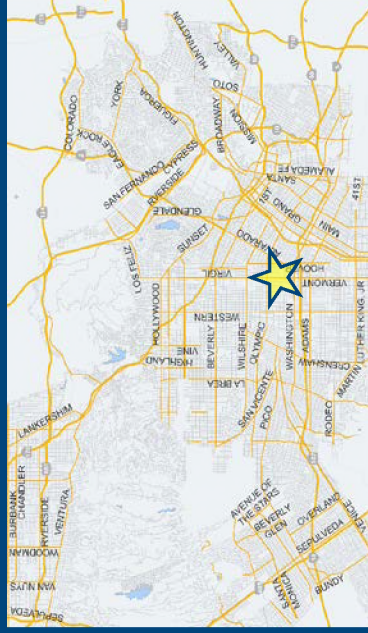
CITY OF LOS ANGELES VMT CALCULATOR Version 1.2



Project Screening Criteria: Is this project required to conduct a vehicle miles traveled analysis?

Project Information

Project: 1224 Menlo Avenue Residential
Scenario: Proposed Project
Address: 1224 S MENLO AVE, 90006



Existing Land Use

Land Use Type	Value	Unit
Office General Office	7,905	ksf
Housing Multi-Family Office General Office	9	DU
	7,905	ksf



☐ Click here to add a single custom land use type (will be included in the above list)

Proposed Project Land Use

Land Use Type	Value	Unit
Housing Affordable Housing - Family	131	DU
Housing Affordable Housing - Family	131	DU



If the project is replacing an existing number of residential units with a smaller number of residential units, is the proposed project located within one-half mile of a fixed-rail or fixed-guideway transit station?

☐ Yes ☒ No

☐ Click here to add a single custom land use type (will be included in the above list)

Project Screening Summary

Existing Land Use	Proposed Project
100 Daily Vehicle Trips	449 Daily Vehicle Trips
683 Daily VMT	2,540 Daily VMT

Tier 1 Screening Criteria

Project will have less residential units compared to existing residential units & is within one-half mile of a fixed-rail station. ☐

Tier 2 Screening Criteria

The net increase in daily trips < 250 trips	349 Net Daily Trips
The net increase in daily VMT ≤ 0	1,857 Net Daily VMT
The proposed project consists of only retail land uses ≤ 50,000 square feet total.	0.000 ksf

The proposed project is required to perform VMT analysis.



CITY OF LOS ANGELES VMT CALCULATOR Version 1.2

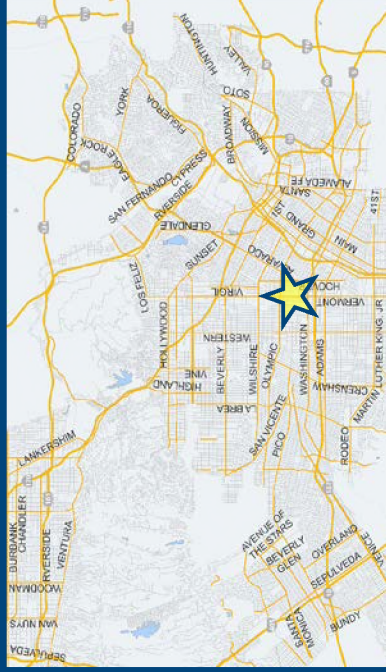


Project Information

Project: 1224 Menlo Avenue Residential

Scenario: Proposed Project

Address: 1224 S MENLO AVE, 90006



Proposed Project Land Use Type
Housing | Affordable Housing - Family

Value
131

Unit
DU

TDM Strategies

Select each section to show individual strategies
Use ☒ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

	Proposed Project	With Mitigation
Max Home Based TDM Achieved?	No	No
Max Work Based TDM Achieved?	No	No

A	
Parking	
Reduce Parking Supply	city code parking provision for the project site
☐ Proposed Prj ☐ Mitigation	
Unbundle Parking	actual parking provision for the project site
☐ Proposed Prj ☐ Mitigation	
Parking Cash-Out	monthly parking cost (dollar) for the project site
☐ Proposed Prj ☐ Mitigation	
Price Workplace Parking	percent of employees eligible
☐ Proposed Prj ☐ Mitigation	
Residential Area Parking	daily parking charge (dollar)
☐ Proposed Prj ☐ Mitigation	
Permits	percent of employees subject to priced parking
☐ Proposed Prj ☐ Mitigation	
	cost (dollar) of annual permit

B	Transit
C	Education & Encouragement
D	Commute Trip Reductions
E	Shared Mobility
F	Bicycle Infrastructure
G	Neighborhood Enhancement

Analysis Results

Proposed Project	With Mitigation
449 Daily Vehicle Trips	449 Daily Vehicle Trips
2,540 Daily VMT	2,540 Daily VMT
5.1 Household VMT per Capita	5.1 Household VMT per Capita
N/A Work VMT per Employee	N/A Work VMT per Employee

Significant VMT Impact?

Household: No Threshold = 6.0 15% Below APC	Household: No Threshold = 6.0 15% Below APC
Work: N/A Threshold = 7.6 15% Below APC	Work: N/A Threshold = 7.6 15% Below APC



CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: February 27, 2020
Project Name: 1224 Menlo Avenue Residential
Project Scenario: Proposed Project
Project Address: 1224 S MENLO AVE, 90006



Version 1.2

Project Information			
	Land Use Type	Value	Units
Housing	Single Family	0	DU
	Multi Family	0	DU
	Townhouse	0	DU
	Hotel	0	Rooms
	Motel	0	Rooms
Affordable Housing	Family	131	DU
	Senior	0	DU
	Special Needs	0	DU
	Permanent Supportive	0	DU
	General Retail	0.000	ksf
Retail	Furniture Store	0.000	ksf
	Pharmacy/Drugstore	0.000	ksf
	Supermarket	0.000	ksf
	Bank	0.000	ksf
	Health Club	0.000	ksf
	High-Turnover Sit-Down Restaurant	0.000	ksf
	Fast-Food Restaurant	0.000	ksf
	Quality Restaurant	0.000	ksf
	Auto Repair	0.000	ksf
	Home Improvement	0.000	ksf
	Free-Standing Discount	0.000	ksf
	Movie Theater	0	Seats
Office	General Office	0.000	ksf
	Medical Office	0.000	ksf
Industrial	Light Industrial	0.000	ksf
	Manufacturing	0.000	ksf
	Warehousing/Self-Storage	0.000	ksf
School	University	0	Students
	High School	0	Students
	Middle School	0	Students
	Elementary	0	Students
	Private School (K-12)	0	Students
Other		0	Trips

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: February 27, 2020

Project Name: 1224 Menlo Avenue Residential

Project Scenario: Proposed Project

Project Address: 1224 S MENLO AVE, 90006



Version 1.2

Analysis Results				
Total Employees: 0				
Total Population: 411				
Proposed Project			With Mitigation	
449	Daily Vehicle Trips	449	Daily Vehicle Trips	
2,540	Daily VMT	2,540	Daily VMT	
5.1	Household VMT per Capita	5.1	Household VMT per Capita	
N/A	Work VMT per Employee	N/A	Work VMT per Employee	
Significant VMT Impact?				
APC: Central				
Impact Threshold: 15% Below APC Average				
Household = 6.0				
Work = 7.6				
Proposed Project			With Mitigation	
VMT Threshold	Impact	VMT Threshold	Impact	
Household > 6.0	No	Household > 6.0	No	
Work > 7.6	N/A	Work > 7.6	N/A	

CITY OF LOS ANGELES VMT CALCULATOR

Report 2: TDM Inputs

Date: February 27, 2020

Project Name: 1224 Menlo Avenue Residential

Project Scenario: Proposed Project

Project Address: 1224 S MENLO AVE, 90006



Version 1.2

TDM Strategy Inputs			
Strategy Type	Description	Proposed Project	Mitigations
Parking	City code parking provision (spaces)	0	0
	Actual parking provision (spaces)	0	0
	Monthly cost for parking (\$)	\$0	\$0
	Employees eligible (%)	0%	0%
	Daily parking charge (\$)	\$0.00	\$0.00
	Employees subject to priced parking (%)	0%	0%
	Cost of annual permit (\$)	\$0	\$0
	(cont. on following page)		

CITY OF LOS ANGELES VMT CALCULATOR

Report 2: TDM Inputs

Date: February 27, 2020

Project Name: 1224 Menlo Avenue Residential

Project Scenario: Proposed Project

Project Address: 1224 S MENLO AVE, 90006



Version 1.2

TDM Strategy Inputs, Cont.

Strategy Type	Description	Proposed Project	Mitigations
Transit	Reduce transit headways	0%	0%
	Existing transit mode share (as a percent of total daily trips)	0%	0%
	Lines within project site improved (<50%, >=50%)	0	0
	Degree of implementation (low, medium, high)	0	0
Transit subsidies	Implement neighborhood shuttle	0%	0%
	Employees and residents eligible (%)	0%	0%
	Employees and residents eligible (%)	0%	0%
	Amount of transit subsidy per passenger (daily equivalent) (\$)	\$0.00	\$0.00
Education & Encouragement	Voluntary travel behavior change program	0%	0%
	Promotions and marketing	0%	0%
(cont. on following page)			

CITY OF LOS ANGELES VMT CALCULATOR

Report 2: TDM Inputs

Date: February 27, 2020

Project Name: 1224 Menlo Avenue Residential

Project Scenario: Proposed Project

Project Address: 1224 S MENLO AVE, 90006



Version 1.2

TDM Strategy Inputs, Cont.

Strategy Type	Description	Proposed Project	Mitigations
Commuter Trip Reductions	Required commute trip reduction program	0%	0%
	Alternative Work Schedules and Telecommute	0%	0%
	Employees participating (%)	0	0
	Degree of implementation (low, medium, high)	0	0
	Employer sponsored vanpool or shuttle	0%	0%
Shared Mobility	Ride-share program	0	0
	Car share	0	0
	Bike share	0	0
	School carpool program	0	0
	(cont. on following page)		

CITY OF LOS ANGELES VMT CALCULATOR

Report 2: TDM Inputs

Date: February 27, 2020

Project Name: 1224 Menlo Avenue Residential

Project Scenario: Proposed Project

Project Address: 1224 S MENLO AVE, 90006



Version 1.2

TDM Strategy Inputs, Cont.

Strategy Type	Description	Proposed Project	Mitigations
Bicycle Infrastructure	Implement/Improve on-street bicycle facility	0	0
	Include Bike parking per LAMC	0	0
	Include secure bike parking and showers	0	0
Neighborhood Enhancement	Traffic calming improvements	0%	0%
	Traffic calming improvements with intersections with traffic calming improvements (%)	0%	0%
	Included (within project and connecting off-site/within project only)	0	0

CITY OF LOS ANGELES VMT CALCULATOR

Report 3: TDM Outputs

Date: February 27, 2020

Project Name: 1224 Menlo Avenue Residential

Project Scenario: Proposed Project

Project Address: 1224 S MENLO AVE, 90006



Version 1.2

TDM Adjustments by Trip Purpose & Strategy

Place type: Urban

TDM Strategy Appendix														Source		
Home Based Work				Home Based Other				Non-Home Based Other				Non-Home Based Other				
Production		Attraction		Production		Attraction		Production		Attraction		Production			Attraction	
Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Parking	Reduce parking supply	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Unbundle parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Parking cash-out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Price workplace parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Residential area parking permits	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Transit	Reduce transit headways	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Implement neighborhood shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Transit subsidies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Education & Encouragement	Voluntary travel behavior change program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Promotions and marketing	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Commute Trip Reductions	Required commute trip reduction program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Alternative Work Schedules and Telecommute Program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Employer sponsored vanpool or shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Ride-share program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Shared Mobility	Car-share	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
	Bike share	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	School carpool program	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

CITY OF LOS ANGELES VMT CALCULATOR

Report 3: TDM Outputs

Date: February 27, 2020

Project Name: 1224 Menlo Avenue Residential

Project Scenario: Proposed Project

Project Address: 1224 S MENLO AVE, 90006



Version 1.2

TDM Adjustments by Trip Purpose & Strategy, Cont.

Place type: Urban

	Home Based Work Production			Home Based Work Attraction			Home Based Other Production			Home Based Other Attraction			Non-Home Based Other Production			Non-Home Based Other Attraction			Source
	Proposed	Mitigated		Proposed	Mitigated		Proposed	Mitigated		Proposed	Mitigated		Proposed	Mitigated		Proposed	Mitigated		
Bicycle Infrastructure	Implement/improve on-street bicycle facility	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%		0.0%	0.0%		0.0%	0.0%		0.0%	0.0%		TDM Strategy Appendix, Bicycle Infrastructure sections 1 - 3
	Include Bike parking per LAMC	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%		0.0%	0.0%		0.0%	0.0%		0.0%	0.0%		
	Include secure bike parking and showers	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%		0.0%	0.0%		0.0%	0.0%		0.0%	0.0%		
Neighborhood Enhancement	Traffic calming improvements	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%		0.0%	0.0%		0.0%	0.0%		0.0%	0.0%		TDM Strategy Appendix, Neighborhood Enhancement sections 1 - 2
	Pedestrian network improvements	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%		0.0%	0.0%		0.0%	0.0%		0.0%	0.0%		

Final Combined & Maximum TDM Effect

	Home Based Work Production			Home Based Work Attraction			Home Based Other Production			Home Based Other Attraction			Non-Home Based Other Production			Non-Home Based Other Attraction		
	Proposed	Mitigated		Proposed	Mitigated		Proposed	Mitigated		Proposed	Mitigated		Proposed	Mitigated		Proposed	Mitigated	
COMBINED TOTAL	0%	0%		0%	0%		0%	0%		0%	0%		0%	0%		0%	0%	
MAX. TDM EFFECT	0%	0%		0%	0%		0%	0%		0%	0%		0%	0%		0%	0%	

$$= \text{Minimum } (X\%, 1 - [(1-A) * (1-B)...])$$

where X%=

PLACE	urban	75%
TYPE	compact infill	40%
MAX:	suburban center	20%
	suburban	15%

Note: $(1 - [(1-A) * (1-B)...])$ reflects the dampened combined effectiveness of TDM Strategies (e.g., A, B,...). See the TDM Strategy Appendix (*Transportation Assessment Guidelines Attachment G*) for further discussion of dampening.

CITY OF LOS ANGELES VMT CALCULATOR

Report 4: MXD Methodology

Date: February 27, 2020
 Project Name: 1224 Menlo Avenue Residential
 Project Scenario: Proposed Project
 Project Address: 1224 S MENLO AVE, 90006



Version 1.2

MXD Methodology - Project Without TDM

	Unadjusted Trips	MXD Adjustment	MXD Trips	Average Trip Length	Unadjusted VMT	MXD VMT
Home Based Work Production	167	-21.6%	131	7.4	1,236	969
Home Based Other Production	448	-47.1%	237	4.7	2,106	1,114
Non-Home Based Other Production	0	0.0%	0	7.5	0	0
Home-Based Work Attraction	0	0.0%	0	8.6	0	0
Home-Based Other Attraction	81	-49.4%	41	5.0	405	205
Non-Home Based Other Attraction	45	-11.1%	40	6.3	284	252

MXD Methodology with TDM Measures

	Proposed Project			Project with Mitigation Measures		
	TDM Adjustment	Project Trips	Project VMT	TDM Adjustment	Mitigated Trips	Mitigated VMT
Home Based Work Production	0.0%	131	969	0.0%	131	969
Home Based Other Production	0.0%	237	1,114	0.0%	237	1,114
Non-Home Based Other Production	0.0%	0	0	0.0%	0	0
Home-Based Work Attraction	0.0%	0	0	0.0%	0	0
Home-Based Other Attraction	0.0%	41	205	0.0%	41	205
Non-Home Based Other Attraction	0.0%	40	252	0.0%	40	252

MXD VMT Methodology Per Capita & Per Employee

Total Population: 411
 Total Employees: 0
 APC: Central

	Proposed Project	Project with Mitigation Measures
Total Home Based Production VMT	2,083	2,083
Total Home Based Work Attraction VMT	0	0
Total Home Based VMT Per Capita	5.1	5.1
Total Work Based VMT Per Employee	N/A	N/A

VMT Calculator User Agreement

The Los Angeles Department of Transportation (LADOT), in partnership with the Department of City Planning and Fehr & Peers, has developed the City of Los Angeles Vehicle Miles Traveled (VMT) Calculator to estimate project-specific daily household VMT per capita and daily work VMT per employee for land use development projects. This application, the VMT Calculator, has been provided to You, the User, to assess vehicle miles traveled (VMT) outcomes of land use projects within the City of Los Angeles. The term “City” as used below shall refer to the City of Los Angeles. The terms “City” and “Fehr & Peers” as used below shall include their respective affiliates, subconsultants, employees, and representatives.

The City is pleased to be able to provide this information to the public. The City believes that the public is most effectively served when they are provided access to the technical tools that inform the public review process of private and public land use investments. However, in using the VMT Calculator, You agree to be bound by this VMT Calculator User Agreement (this Agreement).

VMT Calculator Application for the City of Los Angeles. The City’s consultant calibrated the VMT Calculator’s parameters in 2018 to estimate travel patterns of locations in the City, and validated those outcomes against empirical data. However, this calibration process is limited to locations within the City, and practitioners applying the VMT Calculator outside of the City boundaries should not apply these estimates without further calibration and validation of travel patterns to verify the VMT Calculator’s accuracy in estimating VMT in such other locations.

Limited License to Use. This Agreement gives You a limited, non-transferrable, non-assignable, and non-exclusive license to use and execute a copy of the VMT Calculator on a computer system owned, leased or otherwise controlled by You in Your own facilities, as set out below, provided You do not use the VMT Calculator in an unauthorized manner, and that You do not republish, copy, distribute, reverse-engineer, modify, decompile, disassemble, transfer, or sell any part of the VMT Calculator, and provided that You know and follow the terms of this Agreement. Your failure to follow the terms of this Agreement shall automatically terminate this license and Your right to use the VMT Calculator.

Ownership. You understand and acknowledge that the City owns the VMT Calculator, and shall continue to own it through Your use of it, and that no transfer of ownership of any kind is intended in allowing You to use the VMT Calculator.

Warranty Disclaimer. In spite of the efforts of the City and Fehr & Peers, some information on the VMT Calculator may not be accurate. The VMT Calculator, OUTPUTS AND ASSOCIATED DATA ARE PROVIDED “as is” WITHOUT WARRANTY OF ANY KIND, whether expressed, implied, statutory, or otherwise including but not limited to, the implied warranties of merchantability and fitness for a particular purpose.

Limitation of Liability. It is understood that the VMT Calculator is provided without charge. Neither the City nor Fehr & Peers can be responsible or liable for any information derived from its use, or for any delays, inaccuracies, incompleteness, errors or omissions arising out of your use of the VMT Calculator or with respect to the material contained in the VMT Calculator. You understand and agree that Your sole remedy against the City or Fehr & Peers for loss or damage caused by any defect or failure of the

VMT Calculator, regardless of the form of action, whether in contract, tort, including negligence, strict liability or otherwise, shall be the repair or replacement of the VMT Calculator to the extent feasible as determined solely by the City. In no event shall the City or Fehr & Peers be responsible to You or anyone else for, or have liability for any special, indirect, incidental or consequential damages (including, without limitation, damages for loss of business profits or changes to businesses costs) or lost data or downtime, however caused, and on any theory of liability from the use of, or the inability to use, the VMT Calculator, whether the data, and/or formulas contained in the VMT Calculator are provided by the City or Fehr & Peers, or another third party, even if the City or Fehr & Peers have been advised of the possibility of such damages.

This Agreement and License shall be governed by the laws of the State of California without regard to their conflicts of law provisions, and shall be effective as of the date set forth below and, unless terminated in accordance with the above or extended by written amendment to this Agreement, shall terminate on the earlier of the date that You are not making use of the VMT Calculator or one year after the beginning of Your use of the VMT Calculator.

By using the VMT Calculator, You hereby waive and release all claims, responsibilities, liabilities, actions, damages, costs, and losses, known and unknown, against the City and Fehr & Peers for Your use of the VMT Calculator.

Before making decisions using the information provided in this application, contact City LADOT staff to confirm the validity of the data provided.

Print and sign below, and submit to LADOT along with the transportation assessment Memorandum of Understanding (MOU).

You, the User	
By:	
Print Name:	Amrita Shankar
Title:	Transportation Engineer I
Company:	Linscott, Law, & Greenspan, Engineers
Address:	20931 Burbank Boulevard, Suite C Woodland Hills, CA 91367
Phone:	818.835.8648
Email Address:	shankar@llgengineers.com
Date:	02/27/2020

APPENDIX B

MANUAL TRAFFIC COUNT DATA



City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South

Vermont Ave

East/West

Pico Blvd

Day:

Thursday

Date:

February 16, 2017

Weather:

SUNNY

Hours:

7-10 & 3-6

Chckrs:

NDS

School Day:

YES

District:

I/S CODE

	N/B	S/B	E/B	W/B
DUAL-WHEELED	195	228	125	125
BIKES	0	0	0	0
BUSES	92	101	49	46

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	363	7.15	331	7.30	269	8.00	228	7.30
PM PK 15 MIN	363	17.15	347	15.15	313	17.30	235	17.30
AM PK HOUR	1398	7.00	1242	7.00	996	7.45	853	7.00
PM PK HOUR	1337	16.30	1251	15.00	1016	17.00	821	17.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	90	1255	53	1398
8-9	70	1196	72	1338
9-10	76	1209	62	1347
15-16	69	1089	83	1241
16-17	67	1125	91	1283
17-18	63	1187	73	1323
TOTAL	435	7061	434	7930

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	56	1103	83	1242
8-9	64	941	68	1073
9-10	52	966	67	1085
15-16	67	1124	60	1251
16-17	61	1091	64	1216
17-18	69	1019	75	1163
TOTAL	369	6244	417	7030

TOTAL

XING S/L

XING N/L

N-S	Ped	Sch	Ped	Sch
2640	0	0	0	0
2411	0	0	0	0
2432	0	0	0	0
2492	0	0	0	0
2499	0	0	0	0
2486	0	0	0	0
14960	0	0	0	0

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	53	641	91	785
8-9	67	770	90	927
9-10	68	485	62	615
15-16	72	640	106	818
16-17	83	752	94	929
17-18	76	825	115	1016
TOTAL	419	4113	558	5090

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	39	757	57	853
8-9	44	532	68	644
9-10	48	463	90	601
15-16	56	554	75	685
16-17	59	578	78	715
17-18	62	661	98	821
TOTAL	308	3545	466	4319

TOTAL

XING W/L

XING E/L

E-W	Ped	Sch	Ped	Sch
1638	0	0	0	0
1571	0	0	0	0
1216	0	0	0	0
1503	0	0	0	0
1644	0	0	0	0
1837	0	0	0	0
9409	0	0	0	0

ITM Peak Hour Summary

Prepared by:



National Data & Surveying Services

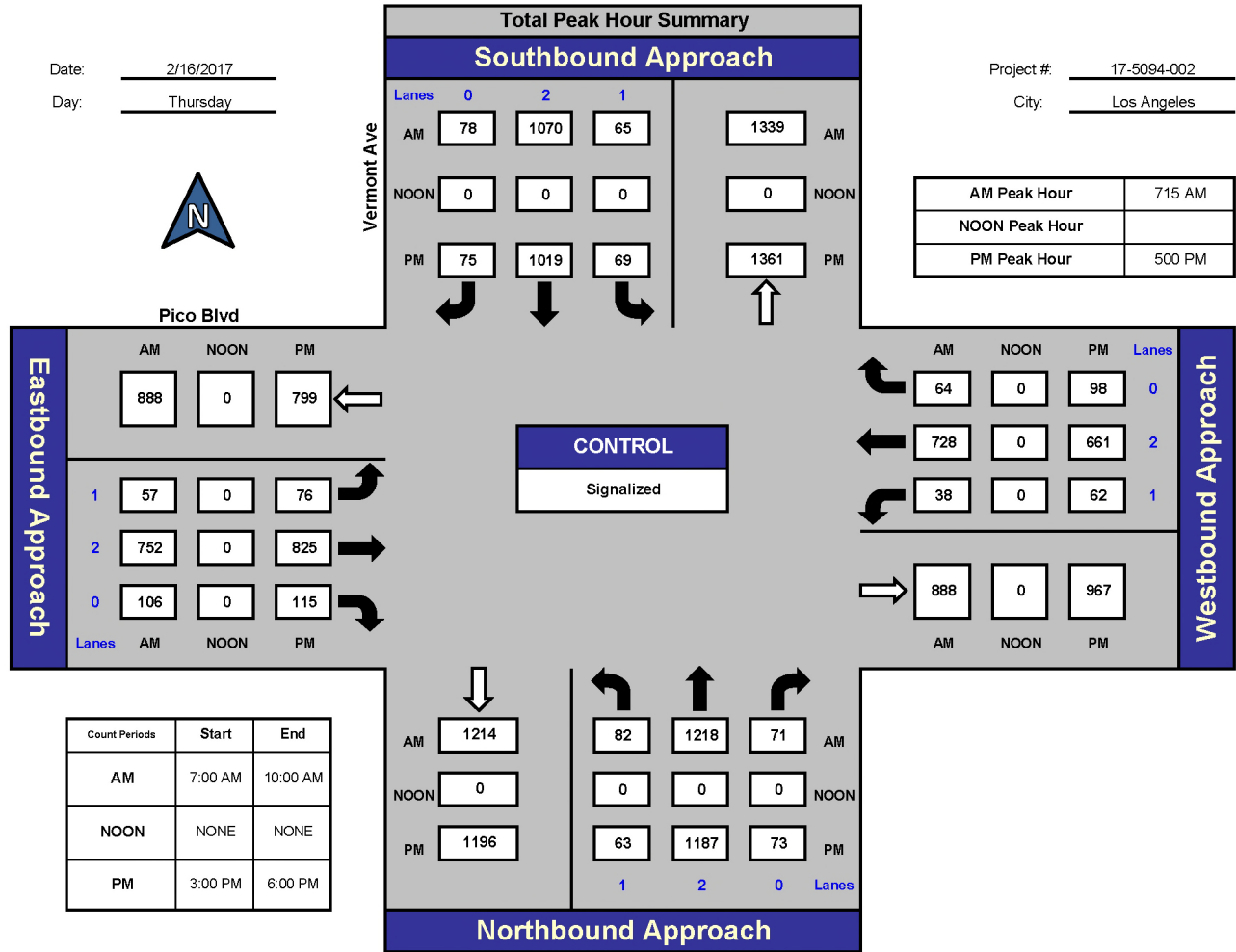
Vermont Ave and Pico Blvd, Los Angeles

Date: 2/16/2017

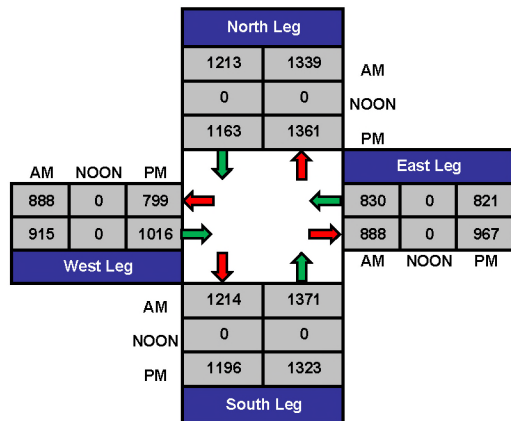
Day: Thursday

Project #: 17-5094-002

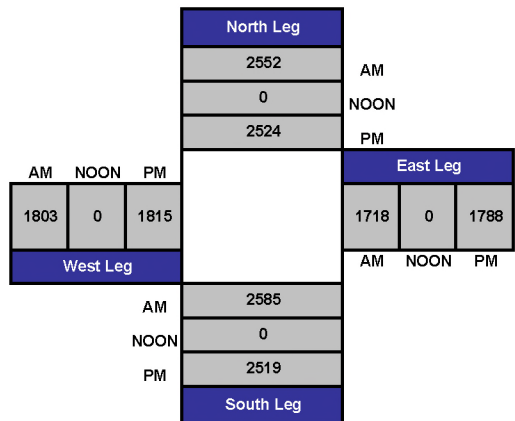
City: Los Angeles



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5094-002

Day: Thursday

City: Los Angeles

TOTALS

Date: 2/16/2017

AM													
NS/EW Streets:	Vermont Ave			Vermont Ave			Pico Blvd			Pico Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM	27	310	7	10	262	19	11	117	11	13	176	11	974
7:15 AM	26	328	9	12	269	21	10	127	16	8	178	15	1019
7:30 AM	16	298	20	15	295	21	13	197	25	8	206	14	1128
7:45 AM	21	319	17	19	277	22	19	200	39	10	197	17	1157
8:00 AM	19	273	25	19	229	14	15	228	26	12	147	18	1025
8:15 AM	12	310	21	12	251	16	15	184	21	12	136	17	1007
8:30 AM	17	306	16	19	214	20	18	203	28	8	122	16	987
8:45 AM	22	307	10	14	247	18	19	155	15	12	127	17	963
9:00 AM	20	260	17	17	220	13	16	155	15	17	143	26	919
9:15 AM	21	328	13	13	248	17	20	114	11	12	111	23	931
9:30 AM	20	301	13	12	261	16	16	119	17	10	116	16	917
9:45 AM	15	320	19	10	237	21	16	97	19	9	93	25	881
TOTAL VOLUMES :	236	3660	187	172	3010	218	188	1896	243	131	1752	215	11908
APPROACH %'s :	5.78%	89.64%	4.58%	5.06%	88.53%	6.41%	8.08%	81.48%	10.44%	6.24%	83.51%	10.25%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	82	1218	71	65	1070	78	57	752	106	38	728	64	4329
PEAK HR FACTOR :	0.944			0.916			0.850			0.910			0.935

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5094-002

Day: Thursday

City: Los Angeles

TOTALS

Date: 2/16/2017

PM													
NS/EW Streets:	Vermont Ave			Vermont Ave			Pico Blvd			Pico Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
3:00 PM	18	260	11	13	267	13	20	169	29	14	133	14	961
3:15 PM	16	264	30	25	308	14	17	153	25	10	123	15	1000
3:30 PM	17	258	21	11	245	19	14	166	20	14	162	21	968
3:45 PM	18	307	21	18	304	14	21	152	32	18	136	25	1066
4:00 PM	18	252	23	17	260	12	24	204	37	13	154	20	1034
4:15 PM	15	305	13	14	295	20	14	159	20	15	138	24	1032
4:30 PM	18	273	22	15	248	21	23	206	17	18	151	19	1031
4:45 PM	16	295	33	15	288	11	22	183	20	13	135	15	1046
5:00 PM	17	285	15	20	250	14	19	184	27	15	168	18	1032
5:15 PM	17	317	29	18	290	23	19	184	31	13	142	33	1116
5:30 PM	13	261	18	13	240	18	20	256	37	15	194	26	1111
5:45 PM	16	324	11	18	239	20	18	201	20	19	157	21	1064
TOTAL VOLUMES :	NL 199	NT 3401	NR 247	SL 197	ST 3234	SR 199	EL 231	ET 2217	ER 315	WL 177	WT 1793	WR 251	TOTAL 12461
APPROACH %'s :	5.17%	88.41%	6.42%	5.43%	89.09%	5.48%	8.36%	80.24%	11.40%	7.97%	80.73%	11.30%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	63	1187	73	69	1019	75	76	825	115	62	661	98	4323
PEAK HR FACTOR :	0.911			0.878			0.812			0.873			0.968

CONTROL : Signalized

ITM Peak Hour Summary

Prepared by:



National Data & Surveying Services

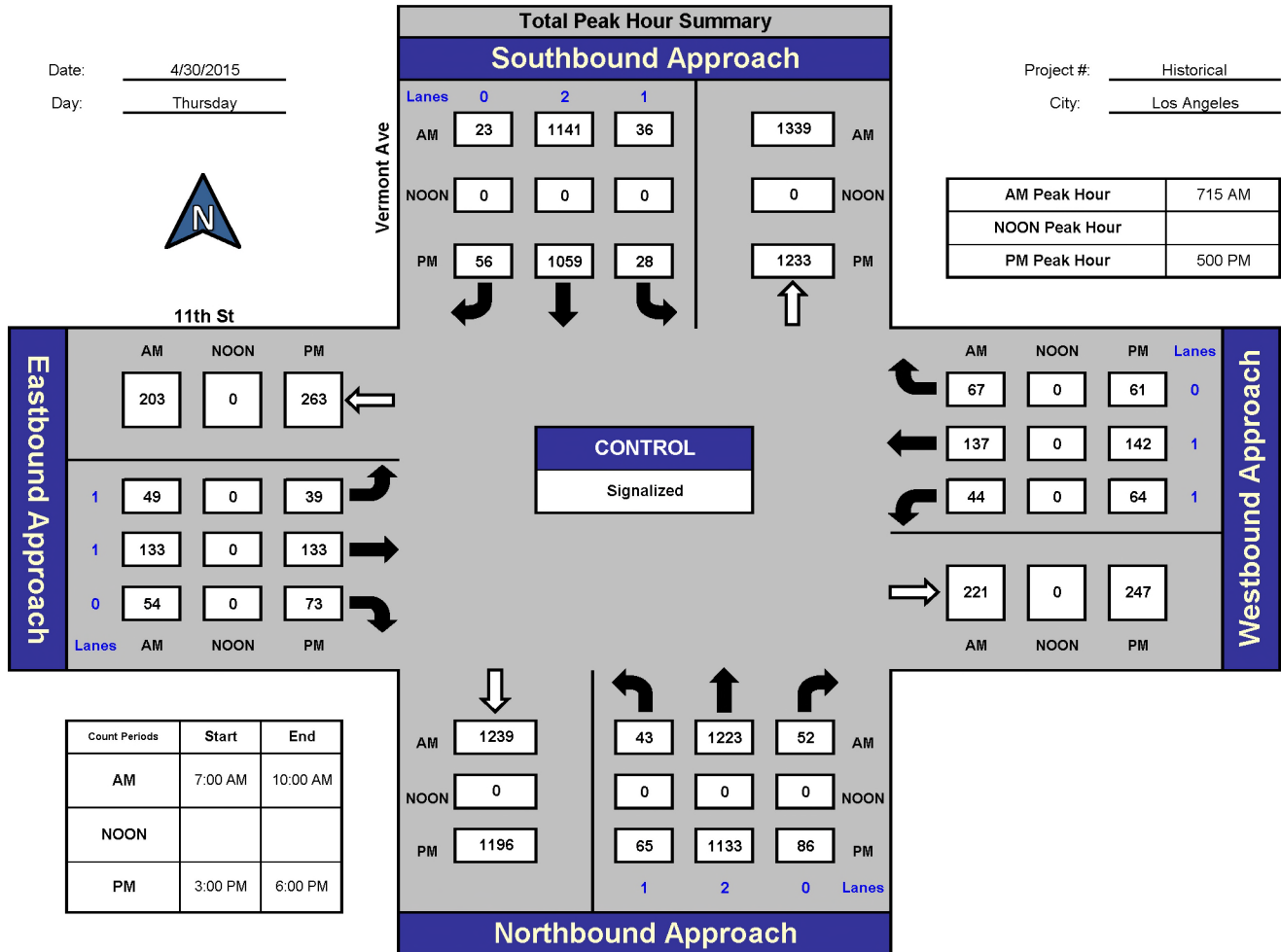
Vermont Ave and 11th St , Los Angeles

Date: 4/30/2015

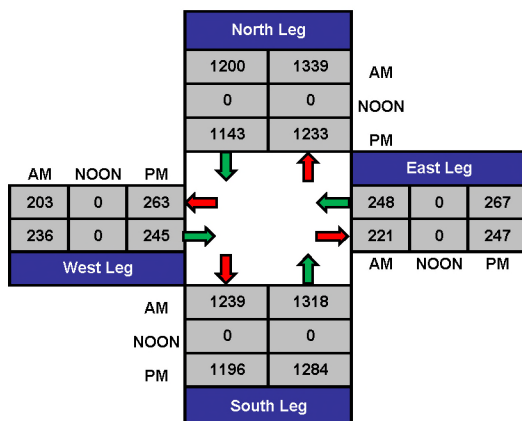
Day: Thursday

Project #: Historical

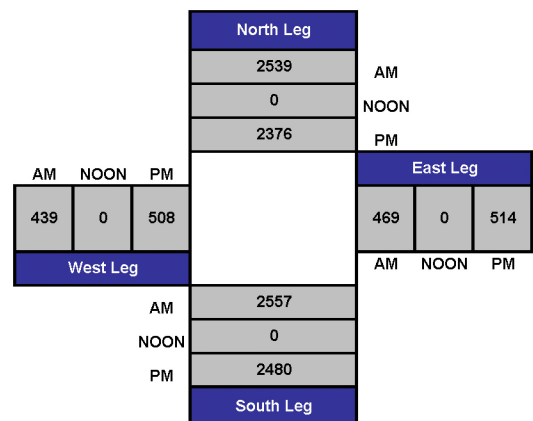
City: Los Angeles



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

City: Los Angeles

TOTALS

Date: 4/30/2015

AM

NS/EW Streets:		Vermont Ave			Vermont Ave			11th St			11th St			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 0	TOTAL
7:00 AM		11	327	12	1	244	7	12	10	9	10	24	19	686
7:15 AM		10	303	14	7	258	4	6	15	14	10	16	13	670
7:30 AM		9	312	14	6	306	5	11	29	10	10	32	24	768
7:45 AM		14	317	14	12	292	4	19	52	15	15	54	12	820
8:00 AM		10	291	10	11	285	10	13	37	15	9	35	18	744
8:15 AM		13	289	12	6	233	6	11	17	12	10	18	17	644
8:30 AM		4	304	11	2	229	10	13	15	9	10	11	15	633
8:45 AM		12	311	12	4	239	8	7	9	6	7	11	15	641
9:00 AM		13	315	12	9	245	12	11	10	12	12	6	14	671
9:15 AM		19	294	9	3	250	8	15	15	16	5	13	14	661
9:30 AM		10	281	18	4	260	9	4	9	9	6	16	14	640
9:45 AM		12	297	21	11	222	9	5	15	14	10	21	8	645
TOTAL VOLUMES :		NL 137	NT 3641	NR 159	SL 76	ST 3063	SR 92	EL 127	ET 233	ER 141	WL 114	WT 257	WR 183	TOTAL 8223
APPROACH %'s :		3.48%	92.48%	4.04%	2.35%	94.80%	2.85%	25.35%	46.51%	28.14%	20.58%	46.39%	33.03%	
PEAK HR START TIME :		715 AM												TOTAL
PEAK HR VOL :		43	1223	52	36	1141	23	49	133	54	44	137	67	3002
PEAK HR FACTOR :		0.955			0.946			0.686			0.765			0.915

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

City: Los Angeles

TOTALS

Date: 4/30/2015

AM

NS/EW Streets:		Vermont Ave			Vermont Ave			11th St			11th St			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 0	TOTAL
3:00 PM		5	227	13	5	268	19	10	15	21	16	22	12	633
3:15 PM		13	254	14	5	255	14	15	20	25	8	20	14	657
3:30 PM		20	241	17	10	253	6	7	19	15	6	15	7	616
3:45 PM		16	244	17	8	214	12	14	30	13	5	14	16	603
4:00 PM		24	241	24	9	188	19	16	26	14	6	23	19	609
4:15 PM		15	270	34	13	177	20	12	27	22	4	27	12	633
4:30 PM		18	285	20	13	278	12	9	30	16	10	25	23	739
4:45 PM		15	263	24	4	277	7	9	22	10	11	32	11	685
5:00 PM		13	280	22	7	263	15	10	30	22	10	29	16	717
5:15 PM		22	294	25	6	269	15	8	29	17	9	23	16	733
5:30 PM		13	288	19	10	272	5	13	34	19	27	34	14	748
5:45 PM		17	271	20	5	255	21	8	40	15	18	56	15	741
TOTAL VOLUMES :		NL 191	NT 3158	NR 249	SL 95	ST 2969	SR 165	EL 131	ET 322	ER 209	WL 130	WT 320	WR 175	TOTAL 8114
APPROACH %'s :		5.31%	87.77%	6.92%	2.94%	91.95%	5.11%	19.79%	48.64%	31.57%	20.80%	51.20%	28.00%	
PEAK HR START TIME :		500 PM												TOTAL
PEAK HR VOL :		65	1133	86	28	1059	56	39	133	73	64	142	61	2939
PEAK HR FACTOR :		0.941			0.985			0.928			0.750			0.982

CONTROL : Signalized

ITM Peak Hour Summary

Prepared by:

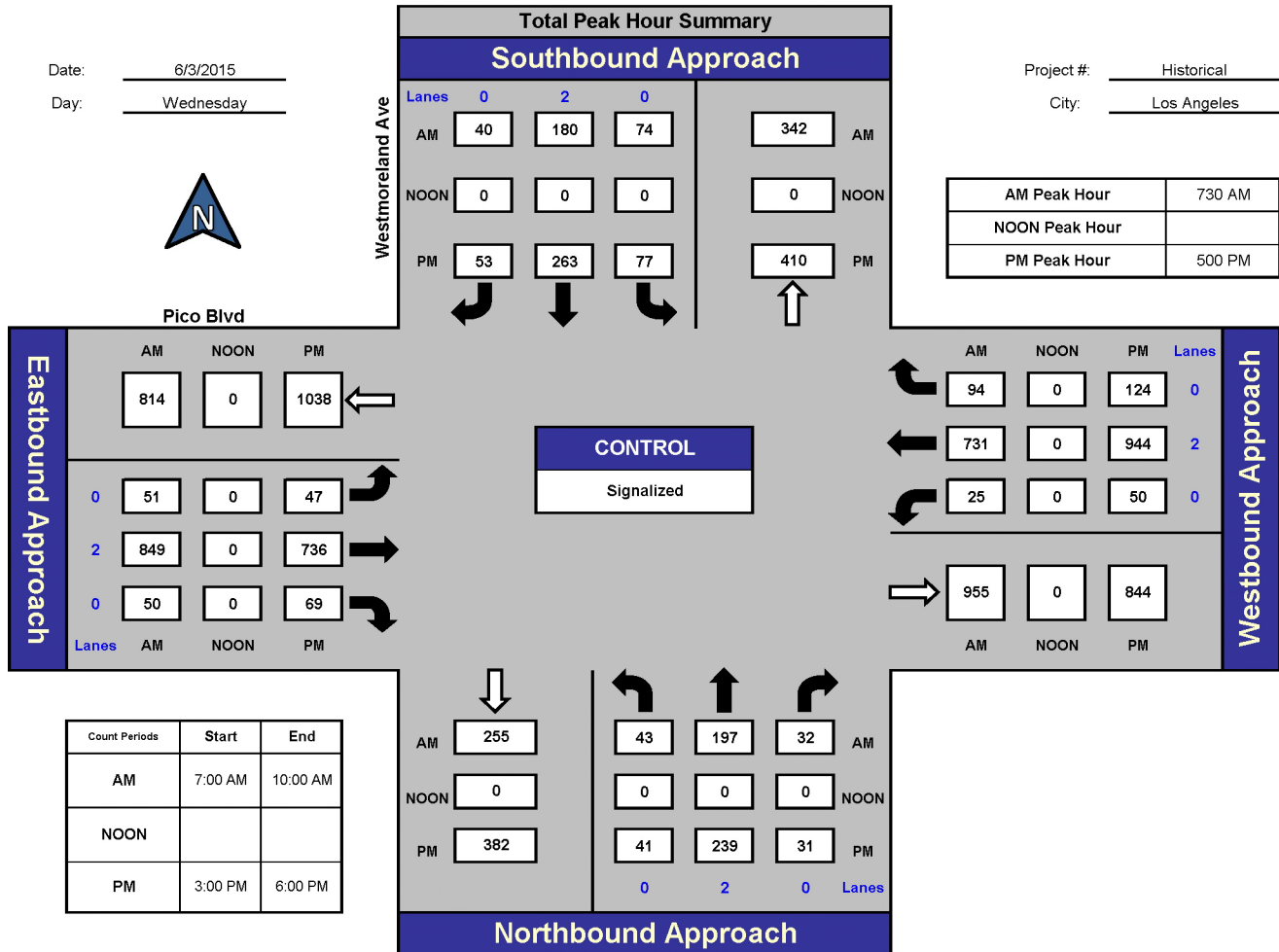


National Data & Surveying Services

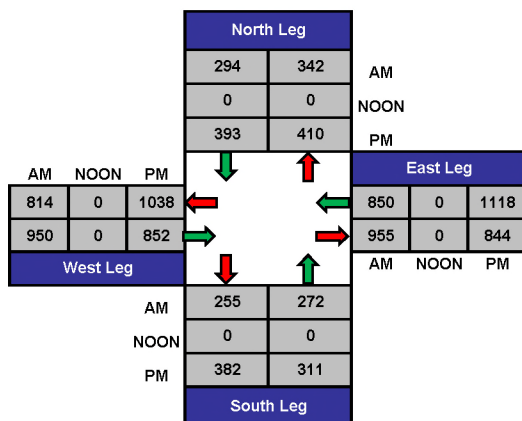
Westmoreland Ave and Pico Blvd, Los Angeles

Date: 6/3/2015
Day: Wednesday

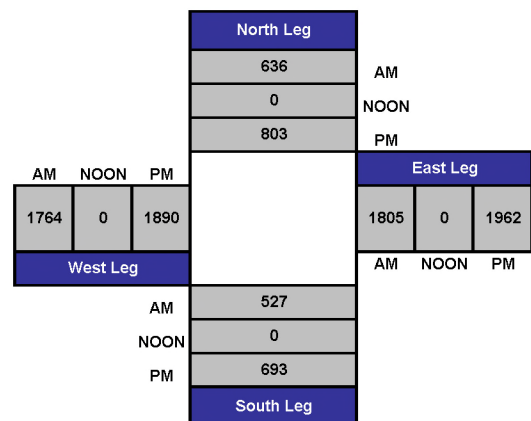
Project #: Historical
City: Los Angeles



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Wednesday

City: Los Angeles

TOTALS

Date: 6/3/2015

AM

NS/EW Streets:	Westmoreland Ave			Westmoreland Ave			Pico Blvd			Pico Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 2	NR 0	SL 0	ST 2	SR 0	EL 0	ET 2	ER 0	WL 0	WT 2	WR 0	TOTAL
7:00 AM	4	21	7	17	9	14	12	105	8	4	189	17	407
7:15 AM	4	37	7	18	24	14	12	139	6	5	184	23	473
7:30 AM	9	52	8	21	24	12	14	156	8	2	181	34	521
7:45 AM	14	54	8	16	48	10	16	214	18	9	186	22	615
8:00 AM	13	48	7	16	57	8	13	248	12	8	204	21	655
8:15 AM	7	43	9	21	51	10	8	231	12	6	160	17	575
8:30 AM	0	34	6	11	29	11	2	185	7	16	163	15	479
8:45 AM	2	33	12	11	22	9	11	189	6	10	162	5	472
9:00 AM	5	23	3	10	19	10	10	170	6	5	140	11	412
9:15 AM	8	15	2	6	22	15	9	150	2	8	147	10	394
9:30 AM	7	13	7	9	18	4	10	148	7	3	141	10	377
9:45 AM	2	14	5	5	16	10	13	141	7	3	141	9	366
TOTAL VOLUMES :	NL 75	NT 387	NR 81	SL 161	ST 339	SR 127	EL 130	ET 2076	ER 99	WL 79	WT 1998	WR 194	TOTAL 5746
APPROACH %'s :	13.81%	71.27%	14.92%	25.68%	54.07%	20.26%	5.64%	90.07%	4.30%	3.48%	87.98%	8.54%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	43	197	32	74	180	40	51	849	50	25	731	94	2366
PEAK HR FACTOR :	0.895			0.896			0.870			0.912			0.903

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Wednesday

City: Los Angeles

TOTALS

Date: 6/3/2015

PM

NS/EW Streets:		Westmoreland Ave			Westmoreland Ave			Pico Blvd			Pico Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 0	NT 2	NR 0	SL 0	ST 2	SR 0	EL 0	ET 2	ER 0	WL 0	WT 2	WR 0	TOTAL
3:00 PM		4	33	7	24	21	6	9	176	2	8	139	10	439
3:15 PM		4	20	9	16	34	4	8	176	13	7	163	15	469
3:30 PM		6	20	7	15	39	15	7	203	4	7	162	23	508
3:45 PM		6	23	7	18	31	12	5	207	10	5	170	23	517
4:00 PM		3	41	4	14	54	9	10	194	3	11	182	23	548
4:15 PM		7	36	9	12	44	7	9	219	5	12	175	24	559
4:30 PM		6	38	7	16	61	13	8	165	16	16	189	22	557
4:45 PM		3	44	5	25	60	10	15	215	10	17	204	30	638
5:00 PM		8	46	7	17	65	17	13	195	19	15	230	25	657
5:15 PM		9	51	8	20	62	9	8	179	19	11	244	31	651
5:30 PM		11	68	9	21	63	15	11	185	13	12	232	31	671
5:45 PM		13	74	7	19	73	12	15	177	18	12	238	37	695
TOTAL VOLUMES : APPROACH %'s :		80 12.12%	494 74.85%	86 13.03%	217 22.77%	607 63.69%	129 13.54%	118 4.64%	2291 90.16%	132 5.19%	133 4.83%	2328 84.50%	294 10.67%	6909
PEAK HR START TIME :		500 PM												TOTAL
PEAK HR VOL :		41	239	31	77	263	53	47	736	69	50	944	124	2674
PEAK HR FACTOR :		0.827			0.945			0.938			0.974			0.962

CONTROL : Signalized

APPENDIX C

VMT CALCULATOR OUTPUT

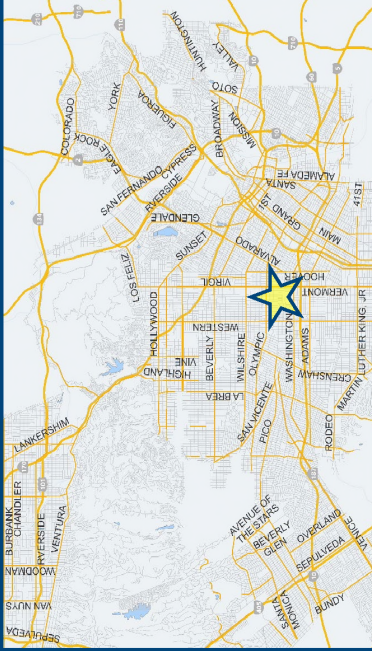
CITY OF LOS ANGELES VMT CALCULATOR Version 1.3



Project Screening Criteria: Is this project required to conduct a vehicle miles traveled analysis?

Project Information

Project: 1216 Menlo Avenue Residential
Scenario: Proposed Project
Address: 1224 S MENLO AVE, 90006



Existing Land Use

Land Use Type	Value	Unit
Office General Office	7,905	ksf
Housing Multi-Family Office General Office	9	DU
	7,905	ksf

Click here to add a single custom land use type (will be included in the above list)

Proposed Project Land Use

Land Use Type	Value	Unit
Housing Affordable Housing - Family	131	DU
Housing Affordable Housing - Family	131	DU

Click here to add a single custom land use type (will be included in the above list)

Is the project replacing an existing number of residential units with a smaller number of residential units AND is located within one-half mile of a fixed-rail or fixed-guideway transit station?

Yes No

Project Screening Summary

Existing Land Use	Proposed Project
99 Daily Vehicle Trips	496 Daily Vehicle Trips
711 Daily VMT	3,055 Daily VMT
Tier 1 Screening Criteria	
Project will have less residential units compared to existing residential units & is within one-half mile of a fixed-rail station.	
Tier 2 Screening Criteria	
The net increase in daily trips < 250 trips	397 Net Daily Trips
The net increase in daily VMT ≤ 0	2,344 Net Daily VMT
The proposed project consists of only retail land uses ≤ 50,000 square feet total.	0.000 ksf
The proposed project is required to perform VMT analysis.	



CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

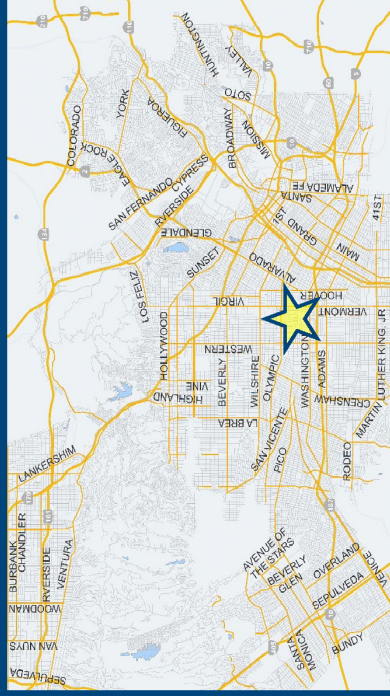


Project Information

Project: 1216 Menlo Avenue Residential

Scenario: Proposed Project

Address: 1224 S MENLO AVE, 90006



Proposed Project Land Use Type
Housing | Affordable Housing - Family

Value

131

Unit

DU

TDM Strategies

Select each section to show individual strategies
Use ☒ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

Max Home Based TDM Achieved? ☐ Proposed Project ☐ With Mitigation
Max Work Based TDM Achieved? ☐ No ☐ No

A

Parking

Reduce Parking Supply

☐ city code parking provision for the project site
☐ actual parking provision for the project site

☐ Proposed Prj ☐ Mitigation

Unbundle Parking

☐ monthly parking cost (dollar) for the project site
☐ percent of employees eligible

☐ Proposed Prj ☐ Mitigation

Parking Cash-Out

☐ daily parking charge (dollar)
☐ percent of employees subject to priced parking

☐ Proposed Prj ☐ Mitigation

Price Workplace Parking

☐ cost (dollar) of annual permit

☐ Proposed Prj ☐ Mitigation

Transit

B Education & Encouragement

C Commute Trip Reductions

D Shared Mobility

E Bicycle Infrastructure

F Neighborhood Enhancement

Analysis Results

Proposed Project	With Mitigation
496 Daily Vehicle Trips	496 Daily Vehicle Trips
3,055 Daily VMT	3,055 Daily VMT
3.3 Household VMT per Capita	3.3 Household VMT per Capita
N/A Work VMT per Employee	N/A Work VMT per Employee

Significant VMT Impact?

Household: No Threshold = 6.0 15% Below APC	Household: No Threshold = 6.0 15% Below APC
Work: N/A Threshold = 7.6 15% Below APC	Work: N/A Threshold = 7.6 15% Below APC

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: June 3, 2020
Project Name: 1216 Menlo Avenue Residential
Project Scenario: Proposed Project
Project Address: 1224 S MENLO AVE, 90006



Version 1.3

Project Information			
Land Use Type	Value	Units	
Housing	Single Family	0	DU
	Multi Family	0	DU
	Townhouse	0	DU
	Hotel	0	Rooms
	Motel	0	Rooms
Affordable Housing	Family	131	DU
	Senior	0	DU
	Special Needs	0	DU
	Permanent Supportive	0	DU
	General Retail	0.000	ksf
Retail	Furniture Store	0.000	ksf
	Pharmacy/Drugstore	0.000	ksf
	Supermarket	0.000	ksf
	Bank	0.000	ksf
	Health Club	0.000	ksf
	High-Turnover Sit-Down Restaurant	0.000	ksf
	Fast-Food Restaurant	0.000	ksf
	Quality Restaurant	0.000	ksf
	Auto Repair	0.000	ksf
	Home Improvement	0.000	ksf
	Free-Standing Discount	0.000	ksf
	Movie Theater	0	Seats
	General Office	0.000	ksf
	Medical Office	0.000	ksf
	Light Industrial	0.000	ksf
Industrial	Manufacturing	0.000	ksf
	Warehousing/Self-Storage	0.000	ksf
	University	0	Students
School	High School	0	Students
	Middle School	0	Students
	Elementary	0	Students
	Private School (K-12)	0	Students
Other		0	Trips

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: June 3, 2020

Project Name: 1216 Menlo Avenue Residential

Project Scenario: Proposed Project

Project Address: 1224 S MENLO AVE, 90006



Version 1.3

Analysis Results			
Total Employees: 0			
Total Population: 411			
Proposed Project		With Mitigation	
496	Daily Vehicle Trips	496	Daily Vehicle Trips
3,055	Daily VMT	3,055	Daily VMT
3.3	Household VMT per Capita	3.3	Household VMT per Capita
N/A	Work VMT per Employee	N/A	Work VMT per Employee
Significant VMT Impact?			
APC: Central			
Impact Threshold: 15% Below APC Average			
Household = 6.0			
Work = 7.6			
Proposed Project		With Mitigation	
VMT Threshold	Impact	VMT Threshold	Impact
Household > 6.0	No	Household > 6.0	No
Work > 7.6	N/A	Work > 7.6	N/A

CITY OF LOS ANGELES VMT CALCULATOR

Report 2: TDM Inputs

Date: June 3, 2020

Project Name: 1216 Menlo Avenue Residential

Project Scenario: Proposed Project

Project Address: 1224 S MENLO AVE, 90006



Version 1.3

TDM Strategy Inputs			
Strategy Type	Description	Proposed Project	Mitigations
Parking	Reduce parking supply	0	0
	City code parking provision (spaces)		
	Actual parking provision (spaces)	0	0
	Unbundle parking		
	Monthly cost for parking (\$)	\$0	\$0
	Parking cash-out		
	Employees eligible (%)	0%	0%
	Daily parking charge (\$)	\$0.00	\$0.00
Price workplace parking	Employees subject to priced parking (%)	0%	0%
	Cost of annual permit (\$)	\$0	\$0
(cont. on following page)			

CITY OF LOS ANGELES VMT CALCULATOR

Report 2: TDM Inputs

Date: June 3, 2020

Project Name: 1216 Menlo Avenue Residential

Project Scenario: Proposed Project

Project Address: 1224 S MENLO AVE, 90006



Version 1.3

TDM Strategy Inputs, Cont.			
Strategy Type	Description	Proposed Project	Mitigations
Reduce transit headways	Reduction in headways (increase in frequency) (%)	0%	0%
	Existing transit mode share (as a percent of total daily trips) (%)	0%	0%
	Lines within project site improved (<50%, >=50%)	0	0
	Degree of implementation (low, medium, high)	0	0
Transit	Implement neighborhood shuttle		
	Employees and residents eligible (%)	0%	0%
	Employees and residents eligible (%)	0%	0%
Transit subsidies	Amount of transit subsidy per passenger (daily equivalent) (\$)	\$0.00	\$0.00
	Employees and residents participating (%)	0%	0%
Education & Encouragement	Voluntary travel behavior change program		
	Promotions and marketing		
(cont. on following page)			

CITY OF LOS ANGELES VMT CALCULATOR

Report 2: TDM Inputs

Date: June 3, 2020

Project Name: 1216 Menlo Avenue Residential

Project Scenario: Proposed Project

Project Address: 1224 S MENLO AVE, 90006



Version 1.3

TDM Strategy Inputs, Cont.			
Strategy Type	Description	Proposed Project	Mitigations
Commuter Trip Reductions	Required commute trip reduction program	0%	0%
	Alternative Work Schedules and Telecommute	0%	0%
	Type of program	0	0
	Degree of implementation (low, medium, high)	0	0
	Employer sponsored vanpool or shuttle	0%	0%
Shared Mobility	Ride-share program	0	0
	Car share	0%	0%
	Car share project setting (Urban, Suburban, All Other)	0	0
	Within 600 feet of existing bike share station - OR- implementing new bike share station (Yes/No)	0	0
	Level of implementation (Low, Medium, High)	0	0
(cont. on following page)			

CITY OF LOS ANGELES VMT CALCULATOR

Report 2: TDM Inputs

Date: June 3, 2020

Project Name: 1216 Menlo Avenue Residential

Project Scenario: Proposed Project

Project Address: 1224 S MENLO AVE, 90006



Version 1.3

TDM Strategy Inputs, Cont.			
Strategy Type	Description	Proposed Project	Mitigations
Bicycle Infrastructure	Implement/Improve on-street bicycle facility	0	0
	Include Bike parking per LAMC	0	0
	Include secure bike parking and showers	0	0
Neighborhood Enhancement	Traffic calming improvements	0%	0%
	Traffic calming improvements with traffic calming	0%	0%
	Included (within project and connecting off-site/within project only)	0	0

CITY OF LOS ANGELES VMT CALCULATOR

Report 3: TDM Outputs

Date: June 3, 2020

Project Name: 1216 Menlo Avenue Residential

Project Scenario: Proposed Project

Project Address: 1224 S MENLO AVE, 90006



Version 1.3

TDM Adjustments by Trip Purpose & Strategy													
Place type: Urban													
	Home Based Work Production		Home Based Work Attraction		Home Based Other Production		Home Based Other Attraction		Non-Home Based Other Production		Non-Home Based Other Attraction		Source
	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Parking	Reduce parking supply	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Parking sections 1 - 5
	Unbundle parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Parking cash-out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Price workplace parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Residential area parking permits	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Transit	Reduce transit headways	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Transit sections 1 - 3
	Implement neighborhood shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Transit subsidies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Voluntary travel behavior change program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Education & Encouragement	Promotions and marketing	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Education & Encouragement sections 1 - 2
	Required commute trip reduction program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Alternative Work Schedules and Telecommute Program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Commute Trip Reductions	Employer sponsored vanpool or shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Commute Trip Reductions sections 1 - 4
	Ride-share program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Car-share	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	Bike share	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Shared Mobility	School carpool program	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	TDM Strategy Appendix, Shared Mobility sections 1 - 3

CITY OF LOS ANGELES VMT CALCULATOR

Report 3: TDM Outputs

Date: June 3, 2020

Project Name: 1216 Menlo Avenue Residential

Project Scenario: Proposed Project

Project Address: 1224 S MENLO AVE, 90006



Version 1.3

TDM Adjustments by Trip Purpose & Strategy, Cont.

Place type: Urban

	Home Based Work Production		Home Based Work Attraction		Home Based Other Production		Home Based Other Attraction		Non-Home Based Other Production		Non-Home Based Other Attraction		Source
	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Bicycle Infrastructure	Implement/ Improve on-street bicycle facility	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	TDM Strategy Appendix, Bicycle Infrastructure sections 1 - 3
	Include Bike parking per LAMC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
	Include secure bike parking and showers	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Neighborhood Enhancement	Traffic calming improvements	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	TDM Strategy Appendix, Neighborhood Enhancement
	Pedestrian network improvements	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Final Combined & Maximum TDM Effect

	Home Based Work Production		Home Based Work Attraction		Home Based Other Production		Home Based Other Attraction		Non-Home Based Other Production		Non-Home Based Other Attraction	
	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated
COMBINED TOTAL	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
MAX. TDM EFFECT	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

$$= \text{Minimum } (X\%, 1 - [(1-A) * (1-B)...])$$

where X%=

PLACE	urban	75%
TYPE	compact infill	40%
MAX:	suburban center	20%
	suburban	15%

Note: $(1 - [(1-A) * (1-B)...])$ reflects the dampened combined effectiveness of TDM Strategies (e.g., A, B,...). See the TDM Strategy Appendix (*Transportation Assessment Guidelines Attachment G*) for further discussion of dampening.

CITY OF LOS ANGELES VMT CALCULATOR

Report 4: MXD Methodology

Date: June 3, 2020

Project Name: 1216 Menlo Avenue Residential

Project Scenario: Proposed Project

Project Address: 1224 S MENLO AVE, 90006



Version 1.3

MXD Methodology - Project Without TDM

	Unadjusted Trips	MXD Adjustment	MXD Trips	Average Trip Length	Unadjusted VMT	MXD VMT
Home Based Work Production	111	-21.6%	87	7.3	810	635
Home Based Other Production	307	-49.2%	156	4.7	1,443	733
Non-Home Based Other Production	143	-4.2%	137	7.5	1,073	1,028
Home-Based Work Attraction	0	0.0%	0	9.2	0	0
Home-Based Other Attraction	146	-43.8%	82	5.3	774	435
Non-Home Based Other Attraction	35	-2.9%	34	6.6	231	224

MXD Methodology with TDM Measures

	Proposed Project			Project with Mitigation Measures		
	TDM Adjustment	Project Trips	Project VMT	TDM Adjustment	Mitigated Trips	Mitigated VMT
Home Based Work Production	0.0%	87	635	0.0%	87	635
Home Based Other Production	0.0%	156	733	0.0%	156	733
Non-Home Based Other Production	0.0%	137	1,028	0.0%	137	1,028
Home-Based Work Attraction	0.0%	0	0	0.0%	0	0
Home-Based Other Attraction	0.0%	82	435	0.0%	82	435
Non-Home Based Other Attraction	0.0%	34	224	0.0%	34	224

MXD VMT Methodology Per Capita & Per Employee

Total Population: 411

Total Employees: 0

APC: Central

	Proposed Project	Project with Mitigation Measures
Total Home Based Production VMT	1,368	1,368
Total Home Based Work Attraction VMT	0	0
Total Home Based VMT Per Capita	3.3	3.3
Total Work Based VMT Per Employee	N/A	N/A

VMT Calculator User Agreement

The Los Angeles Department of Transportation (LADOT), in partnership with the Department of City Planning and Fehr & Peers, has developed the City of Los Angeles Vehicle Miles Traveled (VMT) Calculator to estimate project-specific daily household VMT per capita and daily work VMT per employee for land use development projects. This application, the VMT Calculator, has been provided to You, the User, to assess vehicle miles traveled (VMT) outcomes of land use projects within the City of Los Angeles. The term “City” as used below shall refer to the City of Los Angeles. The terms “City” and “Fehr & Peers” as used below shall include their respective affiliates, subconsultants, employees, and representatives.

The City is pleased to be able to provide this information to the public. The City believes that the public is most effectively served when they are provided access to the technical tools that inform the public review process of private and public land use investments. However, in using the VMT Calculator, You agree to be bound by this VMT Calculator User Agreement (this Agreement).

VMT Calculator Application for the City of Los Angeles. The City’s consultant calibrated the VMT Calculator’s parameters in 2018 to estimate travel patterns of locations in the City, and validated those outcomes against empirical data. However, this calibration process is limited to locations within the City, and practitioners applying the VMT Calculator outside of the City boundaries should not apply these estimates without further calibration and validation of travel patterns to verify the VMT Calculator’s accuracy in estimating VMT in such other locations.

Limited License to Use. This Agreement gives You a limited, non-transferrable, non-assignable, and non-exclusive license to use and execute a copy of the VMT Calculator on a computer system owned, leased or otherwise controlled by You in Your own facilities, as set out below, provided You do not use the VMT Calculator in an unauthorized manner, and that You do not republish, copy, distribute, reverse-engineer, modify, decompile, disassemble, transfer, or sell any part of the VMT Calculator, and provided that You know and follow the terms of this Agreement. Your failure to follow the terms of this Agreement shall automatically terminate this license and Your right to use the VMT Calculator.

Ownership. You understand and acknowledge that the City owns the VMT Calculator, and shall continue to own it through Your use of it, and that no transfer of ownership of any kind is intended in allowing You to use the VMT Calculator.

Warranty Disclaimer. In spite of the efforts of the City and Fehr & Peers, some information on the VMT Calculator may not be accurate. The VMT Calculator, OUTPUTS AND ASSOCIATED DATA ARE PROVIDED “as is” WITHOUT WARRANTY OF ANY KIND, whether expressed, implied, statutory, or otherwise including but not limited to, the implied warranties of merchantability and fitness for a particular purpose.

Limitation of Liability. It is understood that the VMT Calculator is provided without charge. Neither the City nor Fehr & Peers can be responsible or liable for any information derived from its use, or for any delays, inaccuracies, incompleteness, errors or omissions arising out of your use of the VMT Calculator or with respect to the material contained in the VMT Calculator. You understand and agree that Your sole remedy against the City or Fehr & Peers for loss or damage caused by any defect or failure of the

VMT Calculator, regardless of the form of action, whether in contract, tort, including negligence, strict liability or otherwise, shall be the repair or replacement of the VMT Calculator to the extent feasible as determined solely by the City. In no event shall the City or Fehr & Peers be responsible to You or anyone else for, or have liability for any special, indirect, incidental or consequential damages (including, without limitation, damages for loss of business profits or changes to businesses costs) or lost data or downtime, however caused, and on any theory of liability from the use of, or the inability to use, the VMT Calculator, whether the data, and/or formulas contained in the VMT Calculator are provided by the City or Fehr & Peers, or another third party, even if the City or Fehr & Peers have been advised of the possibility of such damages.

This Agreement and License shall be governed by the laws of the State of California without regard to their conflicts of law provisions, and shall be effective as of the date set forth below and, unless terminated in accordance with the above or extended by written amendment to this Agreement, shall terminate on the earlier of the date that You are not making use of the VMT Calculator or one year after the beginning of Your use of the VMT Calculator.

By using the VMT Calculator, You hereby waive and release all claims, responsibilities, liabilities, actions, damages, costs, and losses, known and unknown, against the City and Fehr & Peers for Your use of the VMT Calculator.

Before making decisions using the information provided in this application, contact City LADOT staff to confirm the validity of the data provided.

Print and sign below, and submit to LADOT along with the transportation assessment Memorandum of Understanding (MOU).

You, the User	
By:	
Print Name:	Amrita Shankar
Title:	Transportation Engineer I
Company:	Linscott, Law, & Greenspan, Engineers
Address:	20931 Burbank Boulevard, Suite C Woodland Hills, CA 91367
Phone:	818.835.8648
Email Address:	shankar@llgengineers.com
Date:	06/03/2020

APPENDIX D

HCM AND LEVELS OF SERVICE EXPLANATION HCM DATA WORKSHEETS – WEEKDAY AM AND PM PEAK HOURS

LEVEL OF SERVICE FOR SIGNALIZED INTERSECTIONS

In the *Highway Capacity Manual (HCM)*, published by the Transportation Research Board, 2000, level of service for signalized intersections is defined in terms of delay, which is a measure of driver discomfort, frustration, fuel consumption, and increased 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 base conditions: in the absence of traffic control, in the absence of geometric delay, in the absence of 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.

Level of Service criteria for traffic signals are stated in terms of the average control delay per vehicle. Delay is a complex measure and is dependent on a number of variables, including the quality of progression, the cycle length, the green ratio, and the v/c ratio for the lane group in question.

Level of Service Criteria for Signalized Intersections	
Level of Service	Control Delay (Sec/Veh)
A	≤ 10
B	> 10 and ≤ 20
C	> 20 and ≤ 35
D	> 35 and ≤ 55
E	> 55 and ≤ 80
F	> 80

Level of Service (LOS) values are used to describe intersection operations with service levels varying from LOS A (free flow) to LOS F (jammed condition). The following descriptions summarize *HCM* criteria for each level of service:

LOS A describes operations with very low control delay, up to 10 seconds per vehicle. This level of service occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay values.

LOS B describes operations with control delay greater than 10 and up to 20 seconds per vehicle. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of delay.

LOS C describes operations with control delay greater than 20 and up to 35 seconds per vehicle. These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.

LOS D describes operations with control delay greater than 35 and up to 55 seconds per vehicle. At LOS D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.

LOS E describes operations with control delay greater than 55 and up to 80 seconds per vehicle. This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent occurrences.

LOS F describes operations with control delay in excess of 80 seconds per vehicle. This level, considered to be unacceptable to most drivers, often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the lane groups. It may also occur at high v/c ratios with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors to such delay levels.

LEVEL OF SERVICE FOR UNSIGNALIZED INTERSECTIONS

In the *Highway Capacity Manual (HCM)*, published by the Transportation Research Board, 2000, level of service for unsignalized 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 base conditions, in the absence of incidents, control, traffic, or geometric delay. Only the portion of total delay attributed to the traffic control measures, either traffic signals or stop signs, is quantified. This delay is called *control delay*. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

Level of Service criteria for unsignalized intersections are stated in terms of the average control delay per vehicle. The level of service is determined by the computed or measured control delay and is defined for each minor movement. Average control delay for any particular minor movement is a function of the service time for the approach and the degree of utilization. (Level of service is not defined for the intersection as a whole for two-way stop controlled intersections.)

Level of Service Criteria for TWSC/AWSC Intersections	
Level of Service	Average Control Delay (Sec/Veh)
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

Level of Service (LOS) values are used to describe intersection operations with service levels varying from LOS A (free flow) to LOS F (jammed condition). The following descriptions summarize *HCM* criteria for each level of service:

LOS A describes operations with very low control delay, up to 10 seconds per vehicle.

LOS B describes operations with control delay greater than 10 and up to 15 seconds per vehicle.

LOS C describes operations with control delay greater than 15 and up to 25 seconds per vehicle.

LOS D describes operations with control delay greater than 25 and up to 35 seconds per vehicle.

LOS E describes operations with control delay greater than 35 and up to 50 seconds per vehicle.

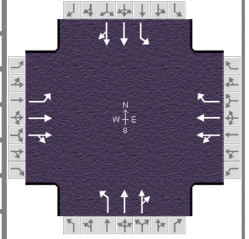
LOS F describes operations with control delay in excess of 50 seconds per vehicle. For two-way stop controlled intersections, LOS F exists when there are insufficient gaps of suitable size to allow side-street demand to safely cross through a major-street traffic stream. This level of service is generally evident from extremely long control delays experienced by side-street traffic and by queuing on the minor-street approaches.

HCS7 Signalized Intersection Results Summary

General Information

Agency	LLG Engineers				Duration, h	0.250
Analyst	AS	Analysis Date	Jun 9, 2020	Area Type	Other	
Jurisdiction	City of Los Angeles	Time Period	Existing - AM	PHF	0.94	
Urban Street	Vermont / Pico	Analysis Year	2020	Analysis Period	1> 7:15	
Intersection	Intersection #1	File Name	01AM - Existing.xus			
Project Description	1224 Menlo Avenue Residential					

Intersection Information



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	59	775	109	39	750	66	84	1255	73	67	1102	80

Signal Information

Cycle, s	90.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	49.9	29.9	0.0	0.0	0.0	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.1	4.1	0.0	0.0	0.0	0.0	
				Red	1.0	1.0	0.0	0.0	0.0	0.0	

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8		4		6		2
Case Number		6.0		7.0		6.0		6.0
Phase Duration, s		35.0		35.0		55.0		55.0
Change Period, (Y+R _c), s		5.1		5.1		5.1		5.1
Max Allow Headway (MAH), s		4.2		4.2		0.0		0.0
Queue Clearance Time (g _s), s		31.9		28.9				
Green Extension Time (g _e), s		0.0		0.8		0.0		0.0
Phase Call Probability		1.00		1.00				
Max Out Probability		1.00		1.00				

Movement Group Results

Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	1	6	16	5	2	12
Adjusted Flow Rate (v), veh/h	63	481	460	333	506	70	89	712	701	71	636	622
Adjusted Saturation Flow Rate (s), veh/h/ln	692	1900	1817	1120	1729	1610	448	1900	1863	387	1900	1854
Queue Service Time (g_s), s	5.0	20.4	20.4	6.5	24.9	2.7	15.0	24.0	24.2	14.5	20.2	20.2
Cycle Queue Clearance Time (g_c), s	29.9	20.4	20.4	26.9	24.9	2.7	35.2	24.0	24.2	38.7	20.2	20.2
Green Ratio (g/C)	0.33	0.33	0.33	0.33	0.33	0.33	0.55	0.55	0.55	0.55	0.55	0.55
Capacity (c), veh/h	119	631	604	417	574	535	228	1053	1033	190	1053	1028
Volume-to-Capacity Ratio (X)	0.529	0.761	0.761	0.798	0.881	0.131	0.392	0.676	0.679	0.374	0.603	0.605
Back of Queue (Q), ft/ln (95 th percentile)	85.3	386.7	374.6	329.8	458.3	48.3	82.8	385.1	381.6	71.2	329.9	325.1
Back of Queue (Q), veh/ln (95 th percentile)	3.4	15.5	15.0	13.2	18.3	1.9	3.3	15.4	15.3	2.8	13.2	13.0
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	43.5	26.9	26.9	27.0	28.4	21.0	25.3	14.3	14.3	28.1	13.4	13.4
Incremental Delay (d_2), s/veh	15.9	8.4	8.8	14.7	17.5	0.5	5.0	3.5	3.6	5.5	2.6	2.6
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	59.3	35.3	35.7	41.7	45.9	21.5	30.3	17.8	17.9	33.7	16.0	16.1
Level of Service (LOS)	E	D	D	D	D	C	C	B	B	C	B	B
Approach Delay, s/veh / LOS	37.0	D		42.5		D	18.6	B		17.0	B	
Intersection Delay, s/veh / LOS	26.6						C					

Multimodal Results

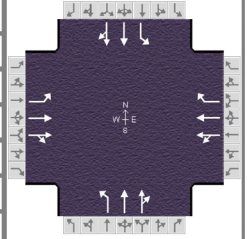
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.30	B		2.30	B		2.30	B		2.30	B	
Bicycle LOS Score / LOS	1.32	A		1.24	A		1.73	B		1.58	B	

HCS7 Signalized Intersection Results Summary

General Information

Agency	LLG Engineers				Duration, h	0.250	
Analyst	AS	Analysis Date	Jun 9, 2020	Area Type	Other	PHF	0.97
Jurisdiction	City of Los Angeles	Time Period	Existing - PM	PHF	0.97	Analysis Period	1> 17:00
Urban Street	Vermont / Pico	Analysis Year	2020	Analysis Period	1> 17:00	PHF	0.97
Intersection	Intersection #1	File Name	01PM - Existing.xus				
Project Description	1224 Menlo Avenue Residential						

Intersection Information



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	78	850	118	64	681	101	65	1223	75	71	1050	77

Signal Information

Cycle, s	90.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	49.9	29.9	0.0	0.0	0.0	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.1	4.1	0.0	0.0	0.0	0.0	
				Red	1.0	1.0	0.0	0.0	0.0	0.0	

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8		4		6		2
Case Number		6.0		7.0		6.0		6.0
Phase Duration, s		35.0		35.0		55.0		55.0
Change Period, (Y+R _c), s		5.1		5.1		5.1		5.1
Max Allow Headway (MAH), s		4.3		4.3		0.0		0.0
Queue Clearance Time (g _s), s		31.9		31.9				
Green Extension Time (g _e), s		0.0		0.0		0.0		0.0
Phase Call Probability		1.00		1.00				
Max Out Probability		1.00		1.00				

Movement Group Results

Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	1	6	16	5	2	12
Adjusted Flow Rate (v), veh/h	80	510	488	193	576	104	67	675	663	73	588	574
Adjusted Saturation Flow Rate (s), veh/h/ln	757	1900	1818	522	1729	1610	491	1900	1861	415	1900	1854
Queue Service Time (g_s), s	0.0	22.0	22.0	7.9	29.9	4.2	9.2	22.1	22.2	13.3	18.0	18.0
Cycle Queue Clearance Time (g_c), s	29.9	22.0	22.0	29.9	29.9	4.2	27.2	22.1	22.2	35.5	18.0	18.0
Green Ratio (g/C)	0.33	0.33	0.33	0.33	0.33	0.33	0.55	0.55	0.55	0.55	0.55	0.55
Capacity (c), veh/h	80	631	604	227	574	535	254	1053	1032	208	1053	1028
Volume-to-Capacity Ratio (X)	1.005	0.808	0.808	0.848	1.002	0.195	0.264	0.641	0.643	0.352	0.558	0.558
Back of Queue (Q), ft/ln (95 th percentile)	180.7	421.8	408.9	254.5	617.7	73.5	53.5	357.4	353.4	68.8	298.7	294
Back of Queue (Q), veh/ln (95 th percentile)	7.2	16.9	16.4	10.2	24.7	2.9	2.1	14.3	14.1	2.8	11.9	11.8
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	45.0	27.4	27.4	31.4	30.1	21.5	21.7	13.9	13.9	26.2	12.9	12.9
Incremental Delay (d_2), s/veh	102.0	10.7	11.1	30.6	38.0	0.8	2.5	3.0	3.1	4.6	2.1	2.2
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	147.0	38.1	38.5	61.9	68.1	22.3	24.2	16.8	17.0	30.8	15.1	15.1
Level of Service (LOS)	F	D	D	E	F	C	C	B	B	C	B	B
Approach Delay, s/veh / LOS	46.4	D		61.3	E		17.3	B		16.0	B	
Intersection Delay, s/veh / LOS	32.1						C					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.30	B		2.30	B		2.30	B		2.30	B	
Bicycle LOS Score / LOS	1.38	A		1.21	A		1.65	B		1.51	B	

HCS7 All-Way Stop Control Report

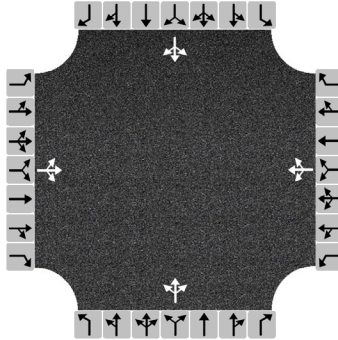
General Information

Analyst	AS
Agency/Co.	Linscott, Law & Greenspan
Date Performed	6/9/2020
Analysis Year	2020
Analysis Time Period (hrs)	0.25
Time Analyzed	Existing - AM
Project Description	1224 Menlo Avenue Residential

Site Information

Intersection	Intersection #2
Jurisdiction	City of Los Angeles
East/West Street	11th Street
North/South Street	Menlo Avenue
Peak Hour Factor	0.92

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	10	203	20	25	228	15	12	20	10	10	25	20
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	253			291			46			60		
Percent Heavy Vehicles	2			2			2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.225			0.259			0.041			0.053		
Final Departure Headway, hd (s)	4.50			4.48			5.18			5.06		
Final Degree of Utilization, x	0.316			0.363			0.066			0.084		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	2.50			2.48			3.18			3.06		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	253			291			46			60		
Capacity	800			803			695			711		
95% Queue Length, Q ₉₅ (veh)	1.4			1.7			0.2			0.3		
Control Delay (s/veh)	9.6			10.0			8.5			8.5		
Level of Service, LOS	A			B			A			A		
Approach Delay (s/veh)	9.6			10.0			8.5			8.5		
Approach LOS	A			B			A			A		
Intersection Delay, s/veh LOS	9.6						A					

HCS7 All-Way Stop Control Report

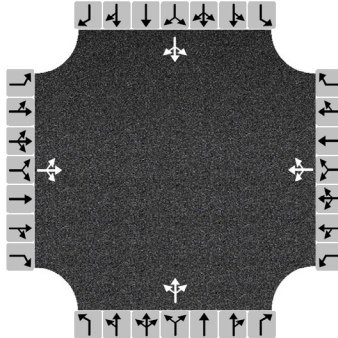
General Information

Analyst	AS
Agency/Co.	Linscott, Law & Greenspan
Date Performed	6/9/2020
Analysis Year	2020
Analysis Time Period (hrs)	0.25
Time Analyzed	Existing - PM
Project Description	1224 Menlo Avenue Residential

Site Information

Intersection	Intersection #2
Jurisdiction	City of Los Angeles
East/West Street	11th Street
North/South Street	Menlo Avenue
Peak Hour Factor	0.92

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	12	237	10	15	250	10	15	25	13	12	20	15
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	282			299			58			51		
Percent Heavy Vehicles	2			2			2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.250			0.266			0.051			0.045		
Final Departure Headway, hd (s)	4.56			4.54			5.26			5.22		
Final Degree of Utilization, x	0.356			0.377			0.084			0.074		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	2.56			2.54			3.26			3.22		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	282			299			58			51		
Capacity	790			793			684			689		
95% Queue Length, Q ₉₅ (veh)	1.6			1.8			0.3			0.2		
Control Delay (s/veh)	10.1			10.3			8.7			8.6		
Level of Service, LOS	B			B			A			A		
Approach Delay (s/veh)	10.1			10.3			8.7			8.6		
Approach LOS	B			B			A			A		
Intersection Delay, s/veh LOS	9.9						A					

HCS7 Two-Way Stop-Control Report

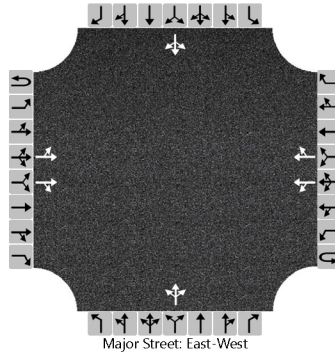
General Information

Analyst	AS
Agency/Co.	Linscott, Law & Greenspan
Date Performed	6/9/2020
Analysis Year	2020
Time Analyzed	Existing - AM
Intersection Orientation	East-West
Project Description	1224 Menlo Avenue Residential

Site Information

Intersection	Intersection #3
Jurisdiction	City of Los Angeles
East/West Street	Pico Boulevard
North/South Street	Menlo Avenue
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	1	0		0	1	0
Configuration		LT		TR		LT		TR			LTR				LTR	
Volume (veh/h)		7	893	15		10	810	35		20	0	61		45	0	25
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.14				4.14				7.54	6.54	6.94		7.54	6.54	6.94
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		8				11					88				76	
Capacity, c (veh/h)		739				696					226				116	
v/c Ratio		0.01				0.02					0.39				0.66	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					1.7				3.4	
Control Delay (s/veh)		9.9				10.3					30.8				81.8	
Level of Service (LOS)		A				B					D				F	
Approach Delay (s/veh)	0.2				0.3				30.8				81.8			
Approach LOS									D				F			

HCS7 Two-Way Stop-Control Report

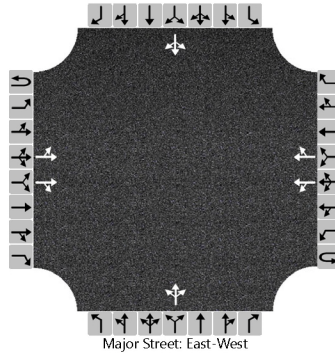
General Information

Analyst	AS
Agency/Co.	Linscott, Law & Greenspan
Date Performed	6/9/2020
Analysis Year	2020
Time Analyzed	Existing - PM
Intersection Orientation	East-West
Project Description	1224 Menlo Avenue Residential

Site Information

Intersection	Intersection #3
Jurisdiction	City of Los Angeles
East/West Street	Pico Boulevard
North/South Street	Menlo Avenue
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	1	0		0	1	0
Configuration		LT		TR		LT		TR			LTR				LTR	
Volume (veh/h)		20	831	145		12	801	33		10	0	55		10	0	35
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.14				4.14				7.54	6.54	6.94		7.54	6.54	6.94
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

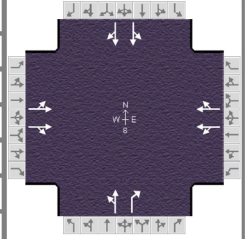
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		22				13					71				49	
Capacity, c (veh/h)		746				652					262				237	
v/c Ratio		0.03				0.02					0.27				0.21	
95% Queue Length, Q ₉₅ (veh)		0.1				0.1					1.1				0.8	
Control Delay (s/veh)		10.0				10.6					23.7				24.1	
Level of Service (LOS)		A				B					C				C	
Approach Delay (s/veh)	0.5				0.3				23.7				24.1			
Approach LOS									C				C			

HCS7 Signalized Intersection Results Summary

General Information

Agency	LLG Engineers			
Analyst	AS	Analysis Date	6/9/2020	
Jurisdiction	City of Los Angeles	Time Period	Existing - AM	
Urban Street	Westmoreland / Pico	Analysis Year	2020	
Intersection	Intersection #4	File Name	04AM - Existing.xus	
Project Description	1224 Menlo Avenue Residential			



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	54	892	53	26	768	99	45	207	34	78	189	42

Signal Information

Cycle, s	90.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	55.1	25.2	0.0	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.9	3.2	0.0	0.0	0.0	0.0		
				Red	1.0	1.6	0.0	0.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		6		2		8		4
Case Number		8.0		8.0		7.0		8.0
Phase Duration, s		60.0		60.0		30.0		30.0
Change Period, (Y+R _c), s		4.9		4.9		4.8		4.8
Max Allow Headway (MAH), s		0.0		0.0		4.3		4.3
Queue Clearance Time (g _s), s						14.7		12.4
Green Extension Time (g _e), s		0.0		0.0		2.1		2.3
Phase Call Probability						1.00		1.00
Max Out Probability						0.17		0.09

Movement Group Results

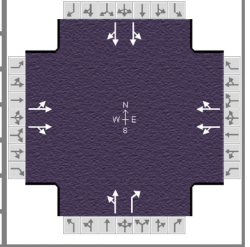
	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	546		564	513		479		280	38	167		176
Adjusted Saturation Flow Rate (s), veh/h/ln	1630		1697	1775		1660		1702	1610	1308		1650
Queue Service Time (g _s), s	0.0		17.4	0.0		14.2		5.0	1.6	0.0		7.7
Cycle Queue Clearance Time (g _c), s	14.1		17.4	12.9		14.2		12.7	1.6	10.4		7.7
Green Ratio (g/C)	0.61		0.61	0.61		0.61		0.28	0.28	0.28		0.28
Capacity (c), veh/h	1042		1039	1129		1017		524	451	428		462
Volume-to-Capacity Ratio (X)	0.524		0.543	0.455		0.471		0.535	0.084	0.391		0.381
Back of Queue (Q), ft/ln (95 th percentile)	236.3		255.5	217.8		212.4		226.5	27.1	136.4		138.6
Back of Queue (Q), veh/ln (95 th percentile)	9.5		10.2	8.7		8.5		9.1	1.1	5.5		5.5
Queue Storage Ratio (RQ) (95 th percentile)	0.00		0.00	0.00		0.00		0.00	0.00	0.00		0.00
Uniform Delay (d ₁), s/veh	9.5		10.1	9.3		9.5		27.7	23.9	26.7		26.1
Incremental Delay (d ₂), s/veh	1.9		2.0	1.3		1.6		1.1	0.1	0.6		0.5
Initial Queue Delay (d ₃), s/veh	0.0		0.0	0.0		0.0		0.0	0.0	0.0		0.0
Control Delay (d), s/veh	11.4		12.2	10.6		11.1		28.8	24.0	27.3		26.6
Level of Service (LOS)	B		B	B		B		C	C	C		C
Approach Delay, s/veh / LOS	11.8		B	10.8		B		28.2	C	26.9		C
Intersection Delay, s/veh / LOS	15.2						B					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.13		B	1.94		B	2.13		B	2.13		B
Bicycle LOS Score / LOS	1.40		A	1.31		A	1.01		A	0.77		A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	LLG Engineers			Duration, h	0.250
Analyst	AS	Analysis Date	6/9/2020	Area Type	Other
Jurisdiction	City of Los Angeles	Time Period	Existing - PM	PHF	0.96
Urban Street	Westmoreland / Pico	Analysis Year	2020	Analysis Period	1> 17:00
Intersection	Intersection #4	File Name	04PM - Existing.xus		
Project Description	1224 Menlo Avenue Residential				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	49	774	73	53	992	130	43	251	33	81	276	56

Signal Information																			
Cycle, s	90.0	Reference Phase	2																
Offset, s	0	Reference Point	End																
Uncoordinated	No	Simult. Gap E/W	On																
Force Mode	Fixed	Simult. Gap N/S	On	Green	55.1	25.2	0.0	0.0	0.0	0.0	1		2		3		4		
				Yellow	3.9	3.2	0.0	0.0	0.0	0.0			5		6		7		8
				Red	1.0	1.6	0.0	0.0	0.0	0.0									

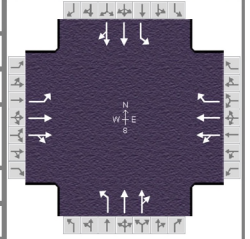
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		6		2		8		4
Case Number		8.0		8.0		7.0		8.0
Phase Duration, s		60.0		60.0		30.0		30.0
Change Period, (Y+R _c), s		4.9		4.9		4.8		4.8
Max Allow Headway (MAH), s		0.0		0.0		4.3		4.3
Queue Clearance Time (g _s), s						18.4		15.0
Green Extension Time (g _e), s		0.0		0.0		1.9		2.4
Phase Call Probability						1.00		1.00
Max Out Probability						0.55		0.24

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	450		483	621		603		306	34	202		228
Adjusted Saturation Flow Rate (s), veh/h/ln	1435		1681	1700		1662		1580	1610	1280		1653
Queue Service Time (g _s), s	2.2		14.1	1.1		19.9		6.0	1.4	0.0		10.4
Cycle Queue Clearance Time (g _c), s	22.1		14.1	17.2		19.9		16.4	1.4	13.0		10.4
Green Ratio (g/C)	0.61		0.61	0.61		0.61		0.28	0.28	0.28		0.28
Capacity (c), veh/h	923		1029	1084		1017		488	451	416		463
Volume-to-Capacity Ratio (X)	0.488		0.469	0.573		0.592		0.627	0.076	0.485		0.493
Back of Queue (Q), ft/ln (95 th percentile)	194.3		213	274.9		281.1		259	24.6	170.6		187.4
Back of Queue (Q), veh/ln (95 th percentile)	7.8		8.5	11.0		11.2		10.4	1.0	6.8		7.5
Queue Storage Ratio (RQ) (95 th percentile)	0.00		0.00	0.00		0.00		0.00	0.00	0.00		0.00
Uniform Delay (d ₁), s/veh	9.1		9.5	10.1		10.6		28.9	23.8	27.4		27.1
Incremental Delay (d ₂), s/veh	1.8		1.5	2.2		2.5		2.5	0.1	0.9		0.8
Initial Queue Delay (d ₃), s/veh	0.0		0.0	0.0		0.0		0.0	0.0	0.0		0.0
Control Delay (d), s/veh	10.9		11.0	12.3		13.2		31.4	23.9	28.3		27.9
Level of Service (LOS)	B		B	B		B		C	C	C		C
Approach Delay, s/veh / LOS	11.0		B	12.7		B		30.6	C	28.1		C
Intersection Delay, s/veh / LOS	16.5						B					

Multimodal Results	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.13		B	1.94		B	2.13		B	2.13		B
Bicycle LOS Score / LOS	1.26		A	1.50		A	1.05		A	0.84		A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	LLG Engineers			Duration, h	0.250
Analyst	AS	Analysis Date	Jun 9, 2020	Area Type	Other
Jurisdiction	City of Los Angeles	Time Period	Existing + Project - AM	PHF	0.94
Urban Street	Vermont / Pico	Analysis Year	2020	Analysis Period	1> 7:15
Intersection	Intersection #1	File Name	01AM - Existing + Project.xus		
Project Description	1224 Menlo Avenue Residential				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	59	779	109	47	758	66	84	1255	77	67	1102	80

Signal Information											
Cycle, s	90.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	49.9	29.9	0.0	0.0	0.0	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.1	4.1	0.0	0.0	0.0	0.0	
				Red	1.0	1.0	0.0	0.0	0.0	0.0	

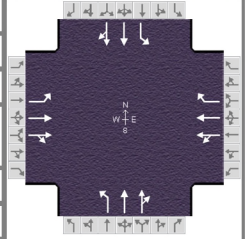
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8		4		6		2
Case Number		6.0		7.0		6.0		6.0
Phase Duration, s		35.0		35.0		55.0		55.0
Change Period, ($Y+R_c$), s		5.1		5.1		5.1		5.1
Max Allow Headway (MAH), s		4.2		4.2		0.0		0.0
Queue Clearance Time (g_s), s		31.9		30.8				
Green Extension Time (g_e), s		0.0		0.0		0.0		0.0
Phase Call Probability		1.00		1.00				
Max Out Probability		1.00		1.00				

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	1	6	16	5	2	12
Adjusted Flow Rate (v), veh/h	63	483	462	317	539	70	89	714	703	71	636	622
Adjusted Saturation Flow Rate (s), veh/h/ln	686	1900	1818	995	1729	1610	448	1900	1861	385	1900	1854
Queue Service Time (g_s), s	2.7	20.5	20.5	8.3	27.2	2.7	15.0	24.2	24.3	14.6	20.2	20.2
Cycle Queue Clearance Time (g_c), s	29.9	20.5	20.5	28.8	27.2	2.7	35.2	24.2	24.3	39.0	20.2	20.2
Green Ratio (g/C)	0.33	0.33	0.33	0.33	0.33	0.33	0.55	0.55	0.55	0.55	0.55	0.55
Capacity (c), veh/h	100	631	604	377	574	535	228	1053	1032	189	1053	1028
Volume-to-Capacity Ratio (X)	0.625	0.765	0.765	0.842	0.939	0.131	0.392	0.678	0.681	0.376	0.603	0.605
Back of Queue (Q), ft/ln (95 th percentile)	94.3	389.1	377	336.6	523.7	48.3	82.8	387.1	383.3	71.6	329.9	325.1
Back of Queue (Q), veh/ln (95 th percentile)	3.8	15.6	15.1	13.5	20.9	1.9	3.3	15.5	15.3	2.9	13.2	13.0
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	44.6	26.9	26.9	28.1	29.2	21.0	25.3	14.3	14.4	28.3	13.4	13.4
Incremental Delay (d_2), s/veh	26.0	8.6	8.9	19.9	25.1	0.5	5.0	3.5	3.6	5.6	2.6	2.6
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	70.5	35.5	35.8	48.0	54.3	21.5	30.3	17.8	18.0	33.9	16.0	16.1
Level of Service (LOS)	E	D	D	D	D	C	C	B	B	C	B	B
Approach Delay, s/veh / LOS	37.8	D		49.6	D		18.6	B		17.0	B	
Intersection Delay, s/veh / LOS	28.3						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.30	B	2.30	B	2.30	B	2.30	B
Bicycle LOS Score / LOS	1.32	A	1.25	A	1.73	B	1.58	B

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	LLG Engineers			Duration, h	0.250
Analyst	AS	Analysis Date	Jun 9, 2020	Area Type	Other
Jurisdiction	City of Los Angeles	Time Period	Existing + Project - PM	PHF	0.97
Urban Street	Vermont / Pico	Analysis Year	2020	Analysis Period	1> 17:00
Intersection	Intersection #1	File Name	01PM - Existing + Project.xus		
Project Description	1224 Menlo Avenue Residential				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	78	855	118	67	684	101	65	1223	80	71	1050	77

Signal Information											
Cycle, s	90.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	49.9	29.9	0.0	0.0	0.0	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.1	4.1	0.0	0.0	0.0	0.0	
				Red	1.0	1.0	0.0	0.0	0.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8		4		6		2
Case Number		6.0		7.0		6.0		6.0
Phase Duration, s		35.0		35.0		55.0		55.0
Change Period, (Y+R _c), s		5.1		5.1		5.1		5.1
Max Allow Headway (MAH), s		4.3		4.3		0.0		0.0
Queue Clearance Time (g _s), s		31.9		31.9				
Green Extension Time (g _e), s		0.0		0.0		0.0		0.0
Phase Call Probability		1.00		1.00				
Max Out Probability		1.00		1.00				

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	1	6	16	5	2	12
Adjusted Flow Rate (v), veh/h	80	512	491	182	592	104	67	678	665	73	588	574
Adjusted Saturation Flow Rate (s), veh/h/ln	754	1900	1819	468	1729	1610	491	1900	1859	413	1900	1854
Queue Service Time (g_s), s	0.0	22.2	22.2	7.7	29.9	4.2	9.2	22.2	22.4	13.4	18.0	18.0
Cycle Queue Clearance Time (g_c), s	29.9	22.2	22.2	29.9	29.9	4.2	27.2	22.2	22.4	35.8	18.0	18.0
Green Ratio (g/C)	0.33	0.33	0.33	0.33	0.33	0.33	0.55	0.55	0.55	0.55	0.55	0.55
Capacity (c), veh/h	80	631	604	211	574	535	254	1053	1030	206	1053	1028
Volume-to-Capacity Ratio (X)	1.005	0.812	0.812	0.865	1.031	0.195	0.264	0.644	0.646	0.355	0.558	0.558
Back of Queue (Q), ft/ln (95 th percentile)	180.7	425	412	251	666.6	73.5	53.5	359.5	355.3	69.2	298.7	294
Back of Queue (Q), veh/ln (95 th percentile)	7.2	17.0	16.5	10.0	26.7	2.9	2.1	14.4	14.2	2.8	11.9	11.8
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	45.0	27.5	27.5	32.5	30.1	21.5	21.7	13.9	13.9	26.3	12.9	12.9
Incremental Delay (d_2), s/veh	102.0	10.9	11.3	34.8	45.7	0.8	2.5	3.0	3.1	4.7	2.1	2.2
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	147.0	38.4	38.8	67.3	75.7	22.3	24.2	16.9	17.0	31.1	15.1	15.1
Level of Service (LOS)	F	D	D	E	F	C	C	B	B	C	B	B
Approach Delay, s/veh / LOS	46.6	D		67.6	E		17.3	B		16.0	B	
Intersection Delay, s/veh / LOS	33.5						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.30	B	2.30	B	2.30	B	2.30	B
Bicycle LOS Score / LOS	1.38	A	1.21	A	1.65	B	1.51	B

HCS7 All-Way Stop Control Report

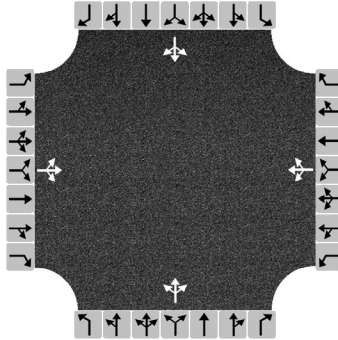
General Information

Analyst	AS
Agency/Co.	Linscott, Law & Greenspan
Date Performed	6/9/2020
Analysis Year	2020
Analysis Time Period (hrs)	0.25
Time Analyzed	Existing + Project - AM
Project Description	1224 Menlo Avenue Residential

Site Information

Intersection	Intersection #2
Jurisdiction	City of Los Angeles
East/West Street	11th Street
North/South Street	Menlo Avenue
Peak Hour Factor	0.92

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	10	203	24	27	228	15	21	23	19	10	27	20
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	258			293			68			62		
Percent Heavy Vehicles	2			2			2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.229			0.261			0.061			0.055		
Final Departure Headway, hd (s)	4.57			4.57			5.19			5.14		
Final Degree of Utilization, x	0.327			0.373			0.099			0.089		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	2.57			2.57			3.19			3.14		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	258			293			68			62		
Capacity	787			788			693			700		
95% Queue Length, Q ₉₅ (veh)	1.4			1.7			0.3			0.3		
Control Delay (s/veh)	9.8			10.3			8.8			8.6		
Level of Service, LOS	A			B			A			A		
Approach Delay (s/veh)	9.8			10.3			8.8			8.6		
Approach LOS	A			B			A			A		
Intersection Delay, s/veh LOS	9.8						A					

HCS7 All-Way Stop Control Report

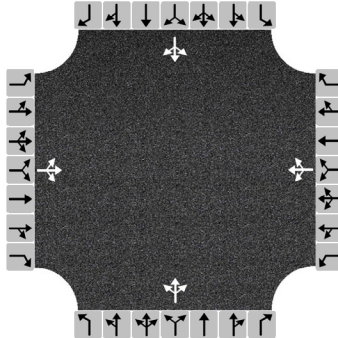
General Information

Analyst	AS
Agency/Co.	Linscott, Law & Greenspan
Date Performed	6/9/2020
Analysis Year	2020
Analysis Time Period (hrs)	0.25
Time Analyzed	Existing + Project - PM
Project Description	1224 Menlo Avenue Residential

Site Information

Intersection	Intersection #2
Jurisdiction	City of Los Angeles
East/West Street	11th Street
North/South Street	Menlo Avenue
Peak Hour Factor	0.92

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	12	237	16	17	250	10	18	26	16	12	22	15
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	288			301			65			53		
Percent Heavy Vehicles	2			2			2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.256			0.268			0.058			0.047		
Final Departure Headway, hd (s)	4.58			4.58			5.28			5.27		
Final Degree of Utilization, x	0.366			0.383			0.096			0.078		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	2.58			2.58			3.28			3.27		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	288			301			65			53		
Capacity	786			786			682			683		
95% Queue Length, Q ₉₅ (veh)	1.7			1.8			0.3			0.3		
Control Delay (s/veh)	10.2			10.4			8.8			8.7		
Level of Service, LOS	B			B			A			A		
Approach Delay (s/veh)	10.2			10.4			8.8			8.7		
Approach LOS	B			B			A			A		
Intersection Delay, s/veh LOS	10.1						B					

HCS7 Two-Way Stop-Control Report

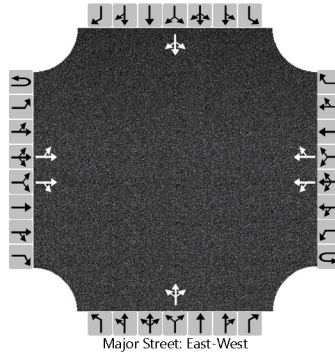
General Information

Analyst	AS
Agency/Co.	Linscott, Law & Greenspan
Date Performed	6/9/2020
Analysis Year	2020
Time Analyzed	Existing + Project - AM
Intersection Orientation	East-West
Project Description	1224 Menlo Avenue Residential

Site Information

Intersection	Intersection #3
Jurisdiction	City of Los Angeles
East/West Street	Pico Boulevard
North/South Street	Menlo Avenue
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	1	0		0	1	0
Configuration		LT		TR		LT		TR			LTR				LTR	
Volume (veh/h)		14	893	15		10	810	38		20	0	61		47	0	40
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.14				4.14				7.54	6.54	6.94		7.54	6.54	6.94
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		15				11					88				95	
Capacity, c (veh/h)		737				696					214				127	
v/c Ratio		0.02				0.02					0.41				0.74	
95% Queue Length, Q ₉₅ (veh)		0.1				0.0					1.9				4.3	
Control Delay (s/veh)		10.0				10.3					33.0				88.7	
Level of Service (LOS)		A				B					D				F	
Approach Delay (s/veh)	0.4				0.3				33.0				88.7			
Approach LOS									D				F			

HCS7 Two-Way Stop-Control Report

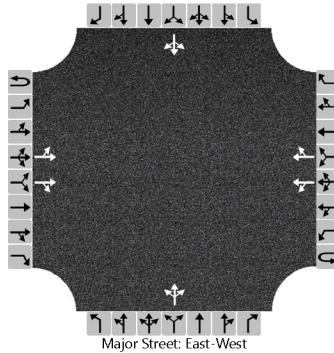
General Information

Analyst	AS
Agency/Co.	Linscott, Law & Greenspan
Date Performed	6/9/2020
Analysis Year	2020
Time Analyzed	Existing + Project - PM
Intersection Orientation	East-West
Project Description	1224 Menlo Avenue Residential

Site Information

Intersection	Intersection #3
Jurisdiction	City of Los Angeles
East/West Street	Pico Boulevard
North/South Street	Menlo Avenue
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	1	0		0	1	0
Configuration		LT		TR		LT		TR			LTR				LTR	
Volume (veh/h)		30	831	145		12	801	37		10	0	55		11	0	40
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

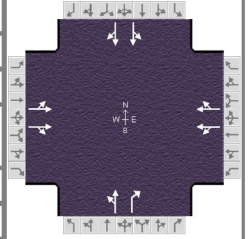
Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.14				4.14				7.54	6.54	6.94		7.54	6.54	6.94
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		33				13					71				55	
Capacity, c (veh/h)		744				652					251				230	
v/c Ratio		0.04				0.02					0.28				0.24	
95% Queue Length, Q ₉₅ (veh)		0.1				0.1					1.1				0.9	
Control Delay (s/veh)		10.1				10.6					24.9				25.6	
Level of Service (LOS)		B				B					C				D	
Approach Delay (s/veh)	0.7				0.3				24.9				25.6			
Approach LOS									C				D			

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	LLG Engineers			Duration, h	0.250
Analyst	AS	Analysis Date	6/9/2020	Area Type	Other
Jurisdiction	City of Los Angeles	Time Period	Existing + Project - AM	PHF	0.90
Urban Street	Westmoreland / Pico	Analysis Year	2020	Analysis Period	1> 7:30
Intersection	Intersection #4	File Name	04AM - Existing + Project.xus		
Project Description	1224 Menlo Avenue Residential				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	54	894	53	26	771	99	45	207	34	83	189	42

Signal Information											
Cycle, s	90.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	55.1	25.2	0.0	0.0	0.0	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.9	3.2	0.0	0.0	0.0	0.0	
				Red	1.0	1.6	0.0	0.0	0.0	0.0	

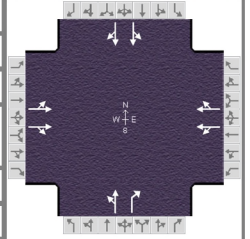
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		6		2		8		4
Case Number		8.0		8.0		7.0		8.0
Phase Duration, s		60.0		60.0		30.0		30.0
Change Period, (Y+R _c), s		4.9		4.9		4.8		4.8
Max Allow Headway (MAH), s		0.0		0.0		4.3		4.3
Queue Clearance Time (g _s), s						15.0		13.2
Green Extension Time (g _e), s		0.0		0.0		2.1		2.2
Phase Call Probability						1.00		1.00
Max Out Probability						0.19		0.12

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	547		566	515		481		280	38	168		180
Adjusted Saturation Flow Rate (s), veh/h/ln	1629		1697	1775		1661		1688	1610	1267		1652
Queue Service Time (g _s), s	0.0		17.4	0.0		14.2		5.0	1.6	0.0		7.9
Cycle Queue Clearance Time (g _c), s	14.1		17.4	13.0		14.2		13.0	1.6	11.2		7.9
Green Ratio (g/C)	0.61		0.61	0.61		0.61		0.28	0.28	0.28		0.28
Capacity (c), veh/h	1042		1039	1129		1017		520	451	418		463
Volume-to-Capacity Ratio (X)	0.525		0.544	0.456		0.473		0.539	0.084	0.403		0.390
Back of Queue (Q), ft/ln (95 th percentile)	236.7		256	218.9		213		227.5	27.1	139.1		142.7
Back of Queue (Q), veh/ln (95 th percentile)	9.5		10.2	8.8		8.5		9.1	1.1	5.6		5.7
Queue Storage Ratio (RQ) (95 th percentile)	0.00		0.00	0.00		0.00		0.00	0.00	0.00		0.00
Uniform Delay (d ₁), s/veh	9.5		10.1	9.3		9.5		27.8	23.9	26.9		26.2
Incremental Delay (d ₂), s/veh	1.9		2.0	1.3		1.6		1.1	0.1	0.6		0.5
Initial Queue Delay (d ₃), s/veh	0.0		0.0	0.0		0.0		0.0	0.0	0.0		0.0
Control Delay (d), s/veh	11.4		12.2	10.6		11.1		28.9	24.0	27.6		26.7
Level of Service (LOS)	B		B	B		B		C	C	C		C
Approach Delay, s/veh / LOS	11.8		B	10.8		B		28.3	C	27.1		C
Intersection Delay, s/veh / LOS	15.3						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.13	B	1.94	B	2.13	B	2.13	B
Bicycle LOS Score / LOS	1.41	A	1.31	A	1.01	A	0.78	A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	LLG Engineers			Duration, h	0.250
Analyst	AS	Analysis Date	6/9/2020	Area Type	Other
Jurisdiction	City of Los Angeles	Time Period	Existing + Project - PM	PHF	0.96
Urban Street	Westmoreland / Pico	Analysis Year	2020	Analysis Period	1> 17:00
Intersection	Intersection #4	File Name	04PM - Existing + Project.xus		
Project Description	1224 Menlo Avenue Residential				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	49	775	73	53	996	130	43	251	33	83	276	56

Signal Information											
Cycle, s	90.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	55.1	25.2	0.0	0.0	0.0	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.9	3.2	0.0	0.0	0.0	0.0	
				Red	1.0	1.6	0.0	0.0	0.0	0.0	

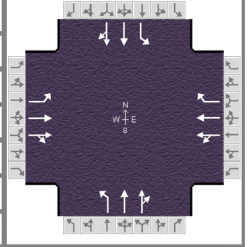
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		6		2		8		4
Case Number		8.0		8.0		7.0		8.0
Phase Duration, s		60.0		60.0		30.0		30.0
Change Period, ($Y+R_c$), s		4.9		4.9		4.8		4.8
Max Allow Headway (MAH), s		0.0		0.0		4.3		4.3
Queue Clearance Time (g_s), s						18.5		15.4
Green Extension Time (g_e), s		0.0		0.0		1.9		2.4
Phase Call Probability						1.00		1.00
Max Out Probability						0.57		0.27

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	451		484	623		605		306	34	201		231
Adjusted Saturation Flow Rate (s), veh/h/ln	1432		1681	1700		1662		1572	1610	1259		1654
Queue Service Time (g_s), s	2.2		14.1	1.2		20.0		6.1	1.4	0.0		10.5
Cycle Queue Clearance Time (g_c), s	22.2		14.1	17.3		20.0		16.5	1.4	13.4		10.5
Green Ratio (g/C)	0.61		0.61	0.61		0.61		0.28	0.28	0.28		0.28
Capacity (c), veh/h	921		1029	1084		1018		486	451	411		463
Volume-to-Capacity Ratio (X)	0.489		0.470	0.575		0.594		0.630	0.076	0.490		0.499
Back of Queue (Q), ft/ln (95 th percentile)	194.5		213.3	275.7		282.5		259.5	24.6	171.3		189.7
Back of Queue (Q), veh/ln (95 th percentile)	7.8		8.5	11.0		11.3		10.4	1.0	6.9		7.6
Queue Storage Ratio (RQ) (95 th percentile)	0.00		0.00	0.00		0.00		0.00	0.00	0.00		0.00
Uniform Delay (d_1), s/veh	9.1		9.5	10.1		10.6		28.9	23.8	27.5		27.1
Incremental Delay (d_2), s/veh	1.9		1.5	2.2		2.6		2.6	0.1	0.9		0.8
Initial Queue Delay (d_3), s/veh	0.0		0.0	0.0		0.0		0.0	0.0	0.0		0.0
Control Delay (d), s/veh	10.9		11.0	12.3		13.2		31.5	23.9	28.4		27.9
Level of Service (LOS)	B		B	B		B		C	C	C		C
Approach Delay, s/veh / LOS	11.0		B	12.7		B		30.7	C	28.2		C
Intersection Delay, s/veh / LOS	16.5						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.13	B	1.94	B	2.13	B	2.13	B
Bicycle LOS Score / LOS	1.26	A	1.50	B	1.05	A	0.84	A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	LLG Engineers			Duration, h	0.250
Analyst	AS	Analysis Date	Jun 9, 2020	Area Type	Other
Jurisdiction	City of Los Angeles	Time Period	Future - AM	PHF	0.94
Urban Street	Vermont / Pico	Analysis Year	2022	Analysis Period	1> 7:15
Intersection	Intersection #1	File Name	01AM - Future.xus		
Project Description	1224 Menlo Avenue Residential				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	64	795	111	44	771	76	86	1294	75	84	1152	94

Signal Information											
Cycle, s	90.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	49.9	29.9	0.0	0.0	0.0	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.1	4.1	0.0	0.0	0.0	0.0	
				Red	1.0	1.0	0.0	0.0	0.0	0.0	

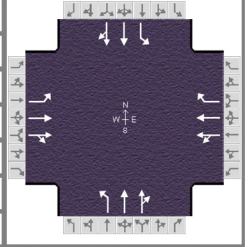
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8		4		6		2
Case Number		6.0		7.0		6.0		6.0
Phase Duration, s		35.0		35.0		55.0		55.0
Change Period, ($Y+R_c$), s		5.1		5.1		5.1		5.1
Max Allow Headway (MAH), s		4.2		4.2		0.0		0.0
Queue Clearance Time (g_s), s		31.9		31.0				
Green Extension Time (g_e), s		0.0		0.0		0.0		0.0
Phase Call Probability		1.00		1.00				
Max Out Probability		1.00		1.00				

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	1	6	16	5	2	12
Adjusted Flow Rate (v), veh/h	68	493	471	323	544	81	91	734	723	89	671	655
Adjusted Saturation Flow Rate (s), veh/h/ln	678	1900	1818	1008	1729	1610	420	1900	1863	371	1900	1849
Queue Service Time (g_s), s	2.3	21.0	21.0	7.9	27.6	3.2	17.3	25.2	25.4	20.8	21.9	22.0
Cycle Queue Clearance Time (g_c), s	29.9	21.0	21.0	29.0	27.6	3.2	39.3	25.2	25.4	46.2	21.9	22.0
Green Ratio (g/C)	0.33	0.33	0.33	0.33	0.33	0.33	0.55	0.55	0.55	0.55	0.55	0.55
Capacity (c), veh/h	98	631	604	381	574	535	210	1053	1033	181	1053	1025
Volume-to-Capacity Ratio (X)	0.698	0.780	0.780	0.849	0.947	0.151	0.435	0.696	0.700	0.494	0.637	0.639
Back of Queue (Q), ft/ln (95 th percentile)	108.6	400.6	388.2	343.9	534	56	91.2	402.7	399.4	101.1	354.5	349.2
Back of Queue (Q), veh/ln (95 th percentile)	4.3	16.0	15.5	13.8	21.4	2.2	3.6	16.1	16.0	4.0	14.2	14.0
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	44.7	27.1	27.1	27.9	29.3	21.1	27.4	14.6	14.6	31.4	13.8	13.8
Incremental Delay (d_2), s/veh	34.1	9.3	9.6	20.5	26.5	0.6	6.4	3.8	3.9	9.3	2.9	3.0
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	78.8	36.3	36.7	48.4	55.7	21.7	33.8	18.4	18.5	40.8	16.7	16.9
Level of Service (LOS)	E	D	D	D	E	C	C	B	B	D	B	B
Approach Delay, s/veh / LOS	39.3	D		50.3	D		19.4	B		18.3	B	
Intersection Delay, s/veh / LOS	29.2						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.30	B	2.30	B	2.30	B	2.30	B
Bicycle LOS Score / LOS	1.34	A	1.27	A	1.76	B	1.65	B

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	LLG Engineers			Duration, h	0.250
Analyst	AS	Analysis Date	Jun 9, 2020	Area Type	Other
Jurisdiction	City of Los Angeles	Time Period	Future - PM	PHF	0.97
Urban Street	Vermont / Pico	Analysis Year	2022	Analysis Period	1> 17:00
Intersection	Intersection #1	File Name	01PM - Future.xus		
Project Description	1224 Menlo Avenue Residential				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	97	872	120	66	697	124	66	1287	81	87	1100	90

Signal Information											
Cycle, s	90.0	Reference Phase	2	Green49.9 Yellow4.1 Red1.0	49.9	29.9	0.0	0.0	0.0	0.0	1 2 3 4
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On								
Force Mode	Fixed	Simult. Gap N/S	On								
											5 6 7 8

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8		4		6		2
Case Number		6.0		7.0		6.0		6.0
Phase Duration, s		35.0		35.0		55.0		55.0
Change Period, (Y+R _c), s		5.1		5.1		5.1		5.1
Max Allow Headway (MAH), s		4.3		4.3		0.0		0.0
Queue Clearance Time (g _s), s		31.9		31.9				
Green Extension Time (g _e), s		0.0		0.0		0.0		0.0
Phase Call Probability		1.00		1.00				
Max Out Probability		1.00		1.00				

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	1	6	16	5	2	12
Adjusted Flow Rate (v), veh/h	100	522	500	178	609	128	68	711	699	90	621	606
Adjusted Saturation Flow Rate (s), veh/h/ln	745	1900	1819	440	1729	1610	462	1900	1860	387	1900	1849
Queue Service Time (g_s), s	0.0	22.8	22.8	7.1	29.9	5.2	10.3	24.0	24.2	19.4	19.5	19.5
Cycle Queue Clearance Time (g_c), s	29.9	22.8	22.8	29.9	29.9	5.2	29.8	24.0	24.2	43.5	19.5	19.5
Green Ratio (g/C)	0.33	0.33	0.33	0.33	0.33	0.33	0.55	0.55	0.55	0.55	0.55	0.55
Capacity (c), veh/h	80	631	604	202	574	535	236	1053	1031	191	1053	1025
Volume-to-Capacity Ratio (X)	1.250	0.828	0.828	0.881	1.060	0.239	0.289	0.675	0.678	0.470	0.590	0.591
Back of Queue (Q), ft/ln (95 th percentile)	260.7	438.3	425	251.8	722.1	92.1	57.3	384.7	380.9	96.7	320.1	314.8
Back of Queue (Q), veh/ln (95 th percentile)	10.4	17.5	17.0	10.1	28.9	3.7	2.3	15.4	15.2	3.9	12.8	12.6
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	45.0	27.7	27.7	32.6	30.1	21.8	23.2	14.3	14.3	29.8	13.3	13.3
Incremental Delay (d_2), s/veh	182.0	11.9	12.3	38.5	54.5	1.1	3.1	3.5	3.6	8.1	2.4	2.5
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	227.0	39.6	40.0	71.1	84.6	22.9	26.2	17.7	17.9	37.9	15.7	15.8
Level of Service (LOS)	F	D	D	E	F	C	C	B	B	D	B	B
Approach Delay, s/veh / LOS	56.5	E		73.3		E	18.2	B		17.3	B	
Intersection Delay, s/veh / LOS	37.3						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.30	B	2.30	B	2.30	B	2.30	B
Bicycle LOS Score / LOS	1.41	A	1.24	A	1.71	B	1.57	B

HCS7 All-Way Stop Control Report

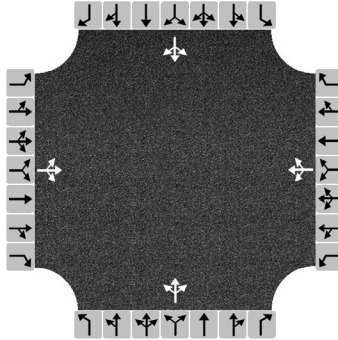
General Information

Analyst	AS
Agency/Co.	Linscott, Law & Greenspan
Date Performed	6/9/2020
Analysis Year	2022
Analysis Time Period (hrs)	0.25
Time Analyzed	Future - AM
Project Description	1224 Menlo Avenue Residential

Site Information

Intersection	Intersection #2
Jurisdiction	City of Los Angeles
East/West Street	11th Street
North/South Street	Menlo Avenue
Peak Hour Factor	0.92

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	10	207	20	26	244	15	12	20	10	10	26	20
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	258			310			46			61		
Percent Heavy Vehicles	2			2			2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.229			0.275			0.041			0.054		
Final Departure Headway, hd (s)	4.53			4.50			5.24			5.12		
Final Degree of Utilization, x	0.324			0.387			0.066			0.087		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	2.53			2.50			3.24			3.12		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	258			310			46			61		
Capacity	795			800			687			703		
95% Queue Length, Q ₉₅ (veh)	1.4			1.8			0.2			0.3		
Control Delay (s/veh)	9.7			10.3			8.6			8.6		
Level of Service, LOS	A			B			A			A		
Approach Delay (s/veh)	9.7			10.3			8.6			8.6		
Approach LOS	A			B			A			A		
Intersection Delay, s/veh LOS	9.8						A					

HCS7 All-Way Stop Control Report

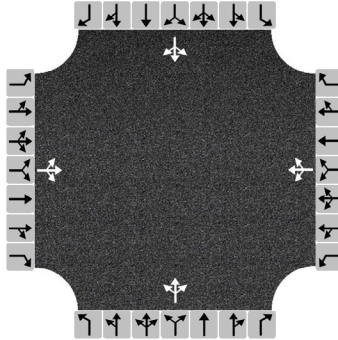
General Information

Analyst	AS
Agency/Co.	Linscott, Law & Greenspan
Date Performed	6/9/2020
Analysis Year	2022
Analysis Time Period (hrs)	0.25
Time Analyzed	Future - PM
Project Description	1224 Menlo Avenue Residential

Site Information

Intersection	Intersection #2
Jurisdiction	City of Los Angeles
East/West Street	11th Street
North/South Street	Menlo Avenue
Peak Hour Factor	0.92

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	12	251	10	15	258	10	15	26	13	12	20	15
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	297			308			59			51		
Percent Heavy Vehicles	2			2			2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.264			0.273			0.052			0.045		
Final Departure Headway, hd (s)	4.58			4.57			5.32			5.28		
Final Degree of Utilization, x	0.377			0.390			0.087			0.075		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	2.58			2.57			3.32			3.28		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	297			308			59			51		
Capacity	787			788			677			681		
95% Queue Length, Q ₉₅ (veh)	1.8			1.9			0.3			0.2		
Control Delay (s/veh)	10.3			10.5			8.8			8.7		
Level of Service, LOS	B			B			A			A		
Approach Delay (s/veh)	10.3			10.5			8.8			8.7		
Approach LOS	B			B			A			A		
Intersection Delay, s/veh LOS	10.1						B					

HCS7 Two-Way Stop-Control Report

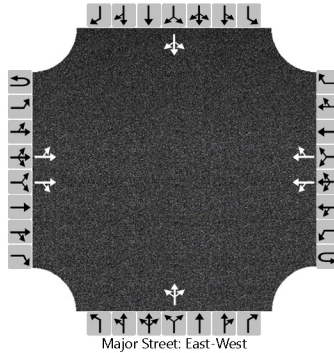
General Information

Analyst	AS
Agency/Co.	Linscott, Law & Greenspan
Date Performed	6/9/2020
Analysis Year	2022
Time Analyzed	Future - AM
Intersection Orientation	East-West
Project Description	1224 Menlo Avenue Residential

Site Information

Intersection	Intersection #3
Jurisdiction	City of Los Angeles
East/West Street	Pico Boulevard
North/South Street	Menlo Avenue
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	1	0		0	1	0
Configuration		LT		TR		LT		TR			LTR				LTR	
Volume (veh/h)		7	932	15		10	845	36		20	0	62		46	0	26
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.14				4.14				7.54	6.54	6.94		7.54	6.54	6.94
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		8				11					89				78	
Capacity, c (veh/h)		714				671					208				105	
v/c Ratio		0.01				0.02					0.43				0.75	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					2.0				4.0	
Control Delay (s/veh)		10.1				10.5					34.6				104.3	
Level of Service (LOS)		B				B					D				F	
Approach Delay (s/veh)	0.2				0.3				34.6				104.3			
Approach LOS									D				F			

HCS7 Two-Way Stop-Control Report

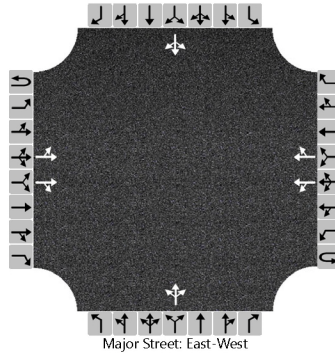
General Information

Analyst	AS
Agency/Co.	Linscott, Law & Greenspan
Date Performed	6/9/2020
Analysis Year	2022
Time Analyzed	Future - PM
Intersection Orientation	East-West
Project Description	1224 Menlo Avenue Residential

Site Information

Intersection	Intersection #3
Jurisdiction	City of Los Angeles
East/West Street	Pico Boulevard
North/South Street	Menlo Avenue
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	1	0		0	1	0
Configuration		LT		TR		LT		TR			LTR				LTR	
Volume (veh/h)		20	871	148		12	842	34		10	0	56		10	0	36
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.14				4.14				7.54	6.54	6.94		7.54	6.54	6.94
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

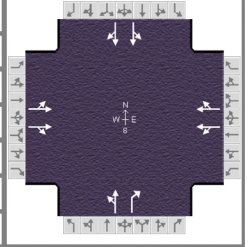
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		22				13					72				50	
Capacity, c (veh/h)		717				626					242				217	
v/c Ratio		0.03				0.02					0.30				0.23	
95% Queue Length, Q ₉₅ (veh)		0.1				0.1					1.2				0.9	
Control Delay (s/veh)		10.2				10.9					26.0				26.4	
Level of Service (LOS)		B				B					D				D	
Approach Delay (s/veh)	0.5				0.4				26.0				26.4			
Approach LOS									D				D			

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	LLG Engineers			Duration, h	0.250
Analyst	AS	Analysis Date	6/9/2020	Area Type	Other
Jurisdiction	City of Los Angeles	Time Period	Future - AM	PHF	0.90
Urban Street	Westmoreland / Pico	Analysis Year	2022	Analysis Period	1> 7:30
Intersection	Intersection #4	File Name	04AM - Future.xus		
Project Description	1224 Menlo Avenue Residential				





Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	55	931	54	27	796	101	46	211	35	86	193	49

Signal Information																			
Cycle, s	90.0	Reference Phase	2																
Offset, s	0	Reference Point	End																
Uncoordinated	No	Simult. Gap E/W	On																
Force Mode	Fixed	Simult. Gap N/S	On	Green	55.1	25.2	0.0	0.0	0.0	0.0	1		2		3		4		
				Yellow	3.9	3.2	0.0	0.0	0.0	0.0			5		6		7		8
				Red	1.0	1.6	0.0	0.0	0.0	0.0									

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		6		2		8		4
Case Number		8.0		8.0		7.0		8.0
Phase Duration, s		60.0		60.0		30.0		30.0
Change Period, ($Y+R_c$), s		4.9		4.9		4.8		4.8
Max Allow Headway (MAH), s		0.0		0.0		4.3		4.3
Queue Clearance Time (g_s), s						16.2		14.3
Green Extension Time (g_e), s		0.0		0.0		2.0		2.2
Phase Call Probability						1.00		1.00
Max Out Probability						0.28		0.17

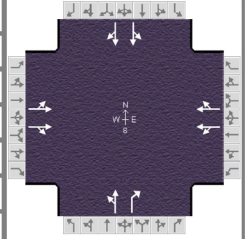
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	567		588	529		497		286	39	173		192
Adjusted Saturation Flow Rate (s), veh/h/ln	1616		1698	1765		1662		1634	1610	1217		1645
Queue Service Time (g_s), s	0.4		18.5	0.0		14.9		5.7	1.6	0.0		8.5
Cycle Queue Clearance Time (g_c), s	15.3		18.5	13.5		14.9		14.2	1.6	12.3		8.5
Green Ratio (g/C)	0.61		0.61	0.61		0.61		0.28	0.28	0.28		0.28
Capacity (c), veh/h	1034		1039	1123		1017		505	451	404		461
Volume-to-Capacity Ratio (X)	0.549		0.566	0.472		0.489		0.566	0.086	0.428		0.416
Back of Queue (Q), ft/ln (95 th percentile)	247.5		269.1	225.8		221.6		235.4	27.9	144.7		152.9
Back of Queue (Q), veh/ln (95 th percentile)	9.9		10.8	9.0		8.9		9.4	1.1	5.8		6.1
Queue Storage Ratio (RQ) (95 th percentile)	0.00		0.00	0.00		0.00		0.00	0.00	0.00		0.00
Uniform Delay (d_1), s/veh	9.6		10.4	9.4		9.7		28.2	23.9	27.3		26.4
Incremental Delay (d_2), s/veh	2.1		2.2	1.4		1.7		1.5	0.1	0.7		0.6
Initial Queue Delay (d_3), s/veh	0.0		0.0	0.0		0.0		0.0	0.0	0.0		0.0
Control Delay (d), s/veh	11.7		12.6	10.8		11.3		29.7	24.0	28.0		27.0
Level of Service (LOS)	B		B	B		B		C	C	C		C
Approach Delay, s/veh / LOS	12.2		B	11.1		B		29.0	C	27.5		C
Intersection Delay, s/veh / LOS	15.6						B					

Multimodal Results	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.13		B	1.94		B	2.13		B	2.13		B
Bicycle LOS Score / LOS	1.44		A	1.33		A	1.02		A	0.79		A

HCS7 Signalized Intersection Results Summary

General Information

Agency	LLG Engineers		
Analyst	AS	Analysis Date	6/9/2020
Jurisdiction	City of Los Angeles	Time Period	Future - PM
Urban Street	Westmoreland / Pico	Analysis Year	2022
Intersection	Intersection #4	File Name	04PM - Future.xus
Project Description	1224 Menlo Avenue Residential		



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	56	807	74	54	1035	138	44	256	34	85	282	59

Signal Information

Cycle, s	90.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	55.1	25.2	0.0	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.9	3.2	0.0	0.0	0.0	0.0		
				Red	1.0	1.6	0.0	0.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		6		2		8		4
Case Number		8.0		8.0		7.0		8.0
Phase Duration, s		60.0		60.0		30.0		30.0
Change Period, (Y+R _c), s		4.9		4.9		4.8		4.8
Max Allow Headway (MAH), s		0.0		0.0		4.3		4.3
Queue Clearance Time (g _s), s						19.9		16.2
Green Extension Time (g _e), s		0.0		0.0		1.7		2.3
Phase Call Probability						1.00		1.00
Max Out Probability						0.79		0.34

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	461		515	649		630		313	35	202		242
Adjusted Saturation Flow Rate (s), veh/h/ln	1301		1684	1694		1661		1519	1610	1200		1653
Queue Service Time (g _s), s	4.0		15.4	2.9		21.3		6.8	1.5	0.0		11.1
Cycle Queue Clearance Time (g _c), s	25.3		15.4	18.8		21.3		17.9	1.5	14.2		11.1
Green Ratio (g/C)	0.61		0.61	0.61		0.61		0.28	0.28	0.28		0.28
Capacity (c), veh/h	842		1031	1080		1017		471	451	395		463
Volume-to-Capacity Ratio (X)	0.547		0.500	0.600		0.619		0.663	0.079	0.511		0.523
Back of Queue (Q), ft/ln (95 th percentile)	202.6		229.5	290.3		298.6		270.4	25.4	173.9		198.8
Back of Queue (Q), veh/ln (95 th percentile)	8.1		9.2	11.6		11.9		10.8	1.0	7.0		8.0
Queue Storage Ratio (RQ) (95 th percentile)	0.00		0.00	0.00		0.00		0.00	0.00	0.00		0.00
Uniform Delay (d ₁), s/veh	9.4		9.8	10.3		10.9		29.4	23.9	27.8		27.3
Incremental Delay (d ₂), s/veh	2.6		1.7	2.5		2.8		3.5	0.1	1.1		1.1
Initial Queue Delay (d ₃), s/veh	0.0		0.0	0.0		0.0		0.0	0.0	0.0		0.0
Control Delay (d), s/veh	12.0		11.5	12.8		13.7		32.9	23.9	28.9		28.4
Level of Service (LOS)	B		B	B		B		C	C	C		C
Approach Delay, s/veh / LOS	11.7		B	13.2		B		32.0	C	28.6		C
Intersection Delay, s/veh / LOS	17.1						B					

Multimodal Results

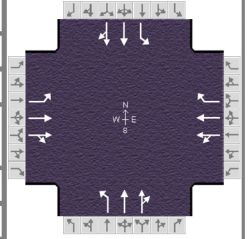
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.13		B	1.94		B	2.13		B	2.13		B
Bicycle LOS Score / LOS	1.29		A	1.54		B	1.06		A	0.85		A

HCS7 Signalized Intersection Results Summary

General Information

Agency	LLG Engineers		
Analyst	AS	Analysis Date	Jun 9, 2020
Jurisdiction	City of Los Angeles	Time Period	Future + Project - AM
Urban Street	Vermont / Pico	Analysis Year	2022
Intersection	Intersection #1	File Name	01AM - Future + F
Project Description	1224 Menlo Avenue Residential		

Intersection Information



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	64	799	111	52	779	76	86	1294	79	84	1152	94

Signal Information

Cycle, s	90.0	Reference Phase	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
----------	------	-----------------	---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8		4		6		2
Case Number		6.0		7.0		6.0		6.0
Phase Duration, s		35.0		35.0		55.0		55.0
Change Period, ($Y+R_c$), s		5.1		5.1		5.1		5.1
Max Allow Headway (MAH), s		4.2		4.2		0.0		0.0
Queue Clearance Time (g_s), s		31.9		31.9				
Green Extension Time (g_e), s		0.0		0.0		0.0		0.0
Phase Call Probability		1.00		1.00				
Max Out Probability		1.00		1.00				

Movement Group Results

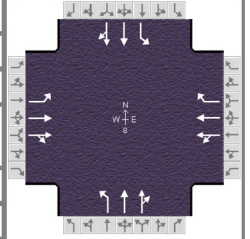
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R	
Assigned Movement	3	8	18	7	4	14	1	6	16	5	2	12	
Adjusted Flow Rate (v), veh/h	68	495	473	307	577	81	91	736	725	89	671	655	
Adjusted Saturation Flow Rate (s), veh/h/ln	672	1900	1818	894	1729	1610	420	1900	1861	369	1900	1849	
Queue Service Time (g_s), s	0.0	21.2	21.2	8.7	29.9	3.2	17.3	25.4	25.6	21.0	21.9	22.0	
Cycle Queue Clearance Time (g_c), s	29.9	21.2	21.2	29.9	29.9	3.2	39.3	25.4	25.6	46.5	21.9	22.0	
Green Ratio (g/C)	0.33	0.33	0.33	0.33	0.33	0.33	0.55	0.55	0.55	0.55	0.55	0.55	
Capacity (c), veh/h	80	631	604	344	574	535	210	1053	1032	180	1053	1025	
Volume-to-Capacity Ratio (X)	0.851	0.784	0.784	0.892	1.005	0.151	0.435	0.699	0.702	0.497	0.637	0.639	
Back of Queue (Q), ft/ln (95 th percentile)	132.2	403.1	390.7	352.6	622	56	91.2	404.7	401.2	101.7	354.5	349.2	
Back of Queue (Q), veh/ln (95 th percentile)	5.3	16.1	15.6	14.1	24.9	2.2	3.6	16.2	16.0	4.1	14.2	14.0	
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	45.0	27.1	27.1	29.1	30.1	21.1	27.4	14.6	14.6	31.6	13.8	13.8	
Incremental Delay (d_2), s/veh	65.2	9.4	9.8	27.5	38.7	0.6	6.4	3.9	4.0	9.5	2.9	3.0	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/veh	110.2	36.5	36.9	56.7	68.7	21.7	33.8	18.4	18.6	41.1	16.7	16.9	
Level of Service (LOS)	F	D	D	E	F	C	C	B	B	D	B	B	
Approach Delay, s/veh / LOS	41.6	D		61.0		E		19.4	B		18.3	B	
Intersection Delay, s/veh / LOS	31.8						C						

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.30	B		2.30	B		2.30	B		2.30	B	
Bicycle LOS Score / LOS	1.34	A		1.28	A		1.77	B		1.65	B	

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	LLG Engineers			Duration, h	0.250
Analyst	AS	Analysis Date	Jun 9, 2020	Area Type	Other
Jurisdiction	City of Los Angeles	Time Period	Future + Project - PM	PHF	0.97
Urban Street	Vermont / Pico	Analysis Year	2022	Analysis Period	1> 17:00
Intersection	Intersection #1	File Name	01PM - Future + Project.xus		
Project Description	1224 Menlo Avenue Residential				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	97	877	120	69	700	124	66	1287	86	87	1100	90

Signal Information											
Cycle, s	90.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	49.9	29.9	0.0	0.0	0.0	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.1	4.1	0.0	0.0	0.0	0.0	
				Red	1.0	1.0	0.0	0.0	0.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8		4		6		2
Case Number		6.0		7.0		6.0		6.0
Phase Duration, s		35.0		35.0		55.0		55.0
Change Period, ($Y+R_c$), s		5.1		5.1		5.1		5.1
Max Allow Headway (MAH), s		4.3		4.3		0.0		0.0
Queue Clearance Time (g_s), s		31.9		31.9				
Green Extension Time (g_e), s		0.0		0.0		0.0		0.0
Phase Call Probability		1.00		1.00				
Max Out Probability		1.00		1.00				

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	1	6	16	5	2	12
Adjusted Flow Rate (v), veh/h	100	525	503	168	625	128	68	714	701	90	621	606
Adjusted Saturation Flow Rate (s), veh/h/ln	743	1900	1819	391	1729	1610	462	1900	1858	386	1900	1849
Queue Service Time (g_s), s	0.0	22.9	23.0	6.9	29.9	5.2	10.3	24.1	24.3	19.5	19.5	19.5
Cycle Queue Clearance Time (g_c), s	29.9	22.9	23.0	29.9	29.9	5.2	29.8	24.1	24.3	43.9	19.5	19.5
Green Ratio (g/C)	0.33	0.33	0.33	0.33	0.33	0.33	0.55	0.55	0.55	0.55	0.55	0.55
Capacity (c), veh/h	80	631	604	187	574	535	236	1053	1030	190	1053	1025
Volume-to-Capacity Ratio (X)	1.250	0.832	0.832	0.898	1.088	0.239	0.289	0.678	0.681	0.473	0.590	0.591
Back of Queue (Q), ft/ln (95 th percentile)	260.7	442.1	428.9	247.9	779.8	92.1	57.3	386.9	382.8	97.3	320.1	314.8
Back of Queue (Q), veh/ln (95 th percentile)	10.4	17.7	17.2	9.9	31.2	3.7	2.3	15.5	15.3	3.9	12.8	12.6
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	45.0	27.7	27.7	33.7	30.1	21.8	23.2	14.3	14.4	30.0	13.3	13.3
Incremental Delay (d_2), s/veh	182.0	12.1	12.6	43.5	63.7	1.1	3.1	3.5	3.6	8.2	2.4	2.5
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	227.0	39.9	40.4	77.2	93.8	22.9	26.2	17.8	18.0	38.3	15.7	15.8
Level of Service (LOS)	F	D	D	E	F	C	C	B	B	D	B	B
Approach Delay, s/veh / LOS	56.7	E		80.9	F		18.3	B		17.3	B	
Intersection Delay, s/veh / LOS	38.8						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.30	B	2.30	B	2.30	B	2.30	B
Bicycle LOS Score / LOS	1.42	A	1.25	A	1.71	B	1.57	B

HCS7 All-Way Stop Control Report

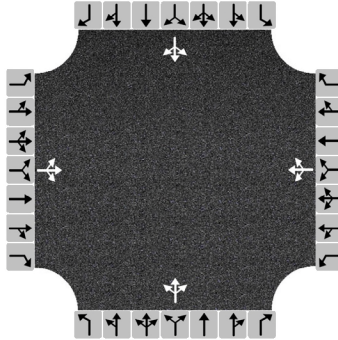
General Information

Analyst	AS
Agency/Co.	Linscott, Law & Greenspan
Date Performed	6/9/2020
Analysis Year	2022
Analysis Time Period (hrs)	0.25
Time Analyzed	Future + Project - AM
Project Description	1224 Menlo Avenue Residential

Site Information

Intersection	Intersection #2
Jurisdiction	City of Los Angeles
East/West Street	11th Street
North/South Street	Menlo Avenue
Peak Hour Factor	0.92

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	10	207	24	28	244	15	21	23	19	10	28	20
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	262			312			68			63		
Percent Heavy Vehicles	2			2			2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.233			0.277			0.061			0.056		
Final Departure Headway, hd (s)	4.60			4.59			5.25			5.21		
Final Degree of Utilization, x	0.335			0.397			0.100			0.091		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	2.60			2.59			3.25			3.21		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	262			312			68			63		
Capacity	782			785			685			691		
95% Queue Length, Q ₉₅ (veh)	1.5			1.9			0.3			0.3		
Control Delay (s/veh)	9.9			10.6			8.8			8.7		
Level of Service, LOS	A			B			A			A		
Approach Delay (s/veh)	9.9			10.6			8.8			8.7		
Approach LOS	A			B			A			A		
Intersection Delay, s/veh LOS	10.0						A					

HCS7 All-Way Stop Control Report

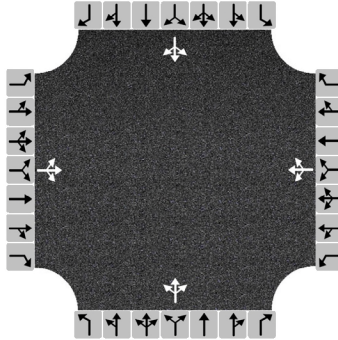
General Information

Analyst	AS
Agency/Co.	Linscott, Law & Greenspan
Date Performed	6/9/2020
Analysis Year	2022
Analysis Time Period (hrs)	0.25
Time Analyzed	Future + Project - PM
Project Description	1224 Menlo Avenue Residential

Site Information

Intersection	Intersection #2
Jurisdiction	City of Los Angeles
East/West Street	11th Street
North/South Street	Menlo Avenue
Peak Hour Factor	0.92

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	12	251	16	17	258	10	18	27	16	12	22	15
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	303			310			66			53		
Percent Heavy Vehicles	2			2			2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.270			0.275			0.059			0.047		
Final Departure Headway, hd (s)	4.60			4.61			5.34			5.33		
Final Degree of Utilization, x	0.388			0.397			0.098			0.079		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	2.60			2.61			3.34			3.33		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	303			310			66			53		
Capacity	783			781			674			675		
95% Queue Length, Q ₉₅ (veh)	1.8			1.9			0.3			0.3		
Control Delay (s/veh)	10.5			10.6			8.9			8.8		
Level of Service, LOS	B			B			A			A		
Approach Delay (s/veh)	10.5			10.6			8.9			8.8		
Approach LOS	B			B			A			A		
Intersection Delay, s/veh LOS	10.3						B					

HCS7 Two-Way Stop-Control Report

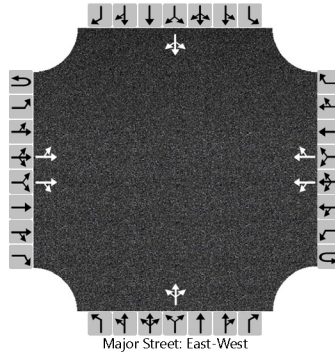
General Information

Analyst	AS
Agency/Co.	Linscott, Law & Greenspan
Date Performed	6/9/2020
Analysis Year	2022
Time Analyzed	Future + Project - AM
Intersection Orientation	East-West
Project Description	1224 Menlo Avenue Residential

Site Information

Intersection	Intersection #3
Jurisdiction	City of Los Angeles
East/West Street	Pico Boulevard
North/South Street	Menlo Avenue
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	1	0		0	1	0
Configuration		LT		TR		LT		TR			LTR				LTR	
Volume (veh/h)		14	932	15		10	845	39		20	0	62		48	0	41
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.14				4.14				7.54	6.54	6.94		7.54	6.54	6.94
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		15				11					89				97	
Capacity, c (veh/h)		712				671					197				114	
v/c Ratio		0.02				0.02					0.45				0.85	
95% Queue Length, Q ₉₅ (veh)		0.1				0.0					2.1				5.0	
Control Delay (s/veh)		10.2				10.5					37.5				116.4	
Level of Service (LOS)		B				B					E				F	
Approach Delay (s/veh)	0.4				0.3				37.5				116.4			
Approach LOS									E				F			

HCS7 Two-Way Stop-Control Report

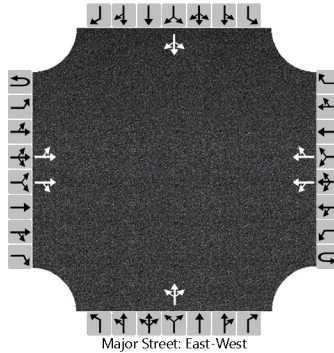
General Information

Analyst	AS
Agency/Co.	Linscott, Law & Greenspan
Date Performed	6/9/2020
Analysis Year	2022
Time Analyzed	Future + Project - PM
Intersection Orientation	East-West
Project Description	1224 Menlo Avenue Residential

Site Information

Intersection	Intersection #3
Jurisdiction	City of Los Angeles
East/West Street	Pico Boulevard
North/South Street	Menlo Avenue
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	1	0		0	1	0
Configuration		LT		TR		LT		TR			LTR				LTR	
Volume (veh/h)		30	871	148		12	842	38		10	0	56		11	0	41
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

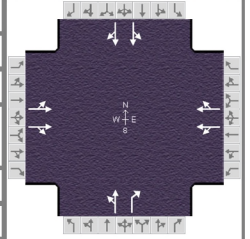
Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.14				4.14				7.54	6.54	6.94		7.54	6.54	6.94
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		33				13					72				57	
Capacity, c (veh/h)		715				626					230				209	
v/c Ratio		0.05				0.02					0.31				0.27	
95% Queue Length, Q ₉₅ (veh)		0.1				0.1					1.3				1.1	
Control Delay (s/veh)		10.3				10.9					27.5				28.4	
Level of Service (LOS)		B				B					D				D	
Approach Delay (s/veh)	0.8				0.4				27.5				28.4			
Approach LOS									D				D			

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	LLG Engineers			Duration, h	0.250
Analyst	AS	Analysis Date	6/9/2020	Area Type	Other
Jurisdiction	City of Los Angeles	Time Period	Future + Project - AM	PHF	0.90
Urban Street	Westmoreland / Pico	Analysis Year	2022	Analysis Period	1> 7:30
Intersection	Intersection #4	File Name	04AM - Future + Project.xus		
Project Description	1224 Menlo Avenue Residential				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	55	933	54	27	799	101	46	211	35	91	193	49

Signal Information											
Cycle, s	90.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	55.1	25.2	0.0	0.0	0.0	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.9	3.2	0.0	0.0	0.0	0.0	
				Red	1.0	1.6	0.0	0.0	0.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		6		2		8		4
Case Number		8.0		8.0		7.0		8.0
Phase Duration, s		60.0		60.0		30.0		30.0
Change Period, ($Y+R_c$), s		4.9		4.9		4.8		4.8
Max Allow Headway (MAH), s		0.0		0.0		4.3		4.3
Queue Clearance Time (g_s), s						16.5		15.1
Green Extension Time (g_e), s		0.0		0.0		2.0		2.2
Phase Call Probability						1.00		1.00
Max Out Probability						0.31		0.21

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	568		590	531		499		286	39	173		197
Adjusted Saturation Flow Rate (s), veh/h/ln	1613		1698	1765		1662		1618	1610	1177		1647
Queue Service Time (g_s), s	0.5		18.6	0.0		15.0		5.7	1.6	0.0		8.8
Cycle Queue Clearance Time (g_c), s	15.4		18.6	13.5		15.0		14.5	1.6	13.1		8.8
Green Ratio (g/C)	0.61		0.61	0.61		0.61		0.28	0.28	0.28		0.28
Capacity (c), veh/h	1032		1039	1123		1017		500	451	394		461
Volume-to-Capacity Ratio (X)	0.551		0.567	0.473		0.490		0.571	0.086	0.440		0.426
Back of Queue (Q), ft/ln (95 th percentile)	248.4		270.1	226.4		222.2		236.3	27.9	147.1		157.4
Back of Queue (Q), veh/ln (95 th percentile)	9.9		10.8	9.1		8.9		9.5	1.1	5.9		6.3
Queue Storage Ratio (RQ) (95 th percentile)	0.00		0.00	0.00		0.00		0.00	0.00	0.00		0.00
Uniform Delay (d_1), s/veh	9.7		10.4	9.4		9.7		28.3	23.9	27.6		26.5
Incremental Delay (d_2), s/veh	2.1		2.2	1.4		1.7		1.6	0.1	0.8		0.6
Initial Queue Delay (d_3), s/veh	0.0		0.0	0.0		0.0		0.0	0.0	0.0		0.0
Control Delay (d), s/veh	11.8		12.6	10.8		11.4		29.8	24.0	28.4		27.1
Level of Service (LOS)	B		B	B		B		C	C	C		C
Approach Delay, s/veh / LOS	12.2		B	11.1		B		29.1	C	27.7		C
Intersection Delay, s/veh / LOS	15.7						B					

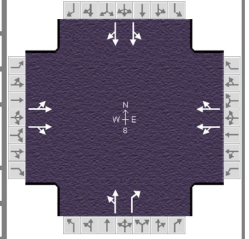
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.13	B	1.94	B	2.13	B	2.13	B
Bicycle LOS Score / LOS	1.44	A	1.34	A	1.02	A	0.79	A

HCS7 Signalized Intersection Results Summary

General Information

Agency	LLG Engineers		
Analyst	AS	Analysis Date	6/9/2020
Jurisdiction	City of Los Angeles	Time Period	Future + Project - PM
Urban Street	Westmoreland / Pico	Analysis Year	2022
Intersection	Intersection #4	File Name	04PM - Future + F
Project Description	1224 Menlo Avenue Residential		

Intersection Information



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	56	808	74	54	1039	138	44	256	34	87	282	59

Signal Information

Cycle, s	90.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	55.1	25.2	0.0	0.0	0.0	0.0	0.0
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.9	3.2	0.0	0.0	0.0	0.0	0.0
				Red	1.0	1.6	0.0	0.0	0.0	0.0	0.0

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		6		2		8		4
Case Number		8.0		8.0		7.0		8.0
Phase Duration, s		60.0		60.0		30.0		30.0
Change Period, (Y+R _c), s		4.9		4.9		4.8		4.8
Max Allow Headway (MAH), s		0.0		0.0		4.3		4.3
Queue Clearance Time (g _s), s						20.0		16.6
Green Extension Time (g _e), s		0.0		0.0		1.6		2.3
Phase Call Probability						1.00		1.00
Max Out Probability						0.82		0.37

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	461		516	651		632		313	35	201		245
Adjusted Saturation Flow Rate (s), veh/h/ln	1298		1684	1694		1661		1509	1610	1179		1654
Queue Service Time (g _s), s	4.1		15.4	3.0		21.4		6.8	1.5	0.0		11.2
Cycle Queue Clearance Time (g _c), s	25.5		15.4	18.9		21.4		18.0	1.5	14.6		11.2
Green Ratio (g/C)	0.61		0.61	0.61		0.61		0.28	0.28	0.28		0.28
Capacity (c), veh/h	840		1031	1081		1017		468	451	389		463
Volume-to-Capacity Ratio (X)	0.549		0.501	0.602		0.621		0.667	0.079	0.516		0.529
Back of Queue (Q), ft/ln (95 th percentile)	202.8		229.8	291.8		300		271.4	25.4	174.4		201.1
Back of Queue (Q), veh/ln (95 th percentile)	8.1		9.2	11.7		12.0		10.9	1.0	7.0		8.0
Queue Storage Ratio (RQ) (95 th percentile)	0.00		0.00	0.00		0.00		0.00	0.00	0.00		0.00
Uniform Delay (d ₁), s/veh	9.5		9.8	10.3		10.9		29.5	23.9	27.9		27.4
Incremental Delay (d ₂), s/veh	2.6		1.7	2.5		2.9		3.6	0.1	1.2		1.1
Initial Queue Delay (d ₃), s/veh	0.0		0.0	0.0		0.0		0.0	0.0	0.0		0.0
Control Delay (d), s/veh	12.0		11.5	12.8		13.8		33.1	23.9	29.1		28.5
Level of Service (LOS)	B		B	B		B		C	C	C		C
Approach Delay, s/veh / LOS	11.8		B	13.3		B		32.1	C	28.8		C
Intersection Delay, s/veh / LOS	17.2						B					

Multimodal Results

	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.13	B	1.94	B	2.13	B	2.13	B
Bicycle LOS Score / LOS	1.29	A	1.55	B	1.06	A	0.86	A