### TRANSPORTATION ASSESSMENT FOR THE 1050 LA CIENEGA PROJECT

LOS ANGELES, CALIFORNIA

PREPARED FOR

**JUNE 2022** 

**1050 LA CIENEGA, LLC** 

PREPARED BY



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June 2022

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## Chapter 1 Introduction

This study presents the transportation assessment for the proposed 1050 La Cienega development (Project) located at 1050 La Cienega Boulevard (Project Site) in the *Wilshire Community Plan* (Los Angeles Department of City Planning [LADCP], Revised September 2016) area of the City of Los Angeles, California (City). The methodology and base assumptions used in the analysis were established in consultation with the Los Angeles Department of Transportation (LADOT).

#### **PROJECT DESCRIPTION**

The Project proposes a mixed-use development consisting of 290 apartment units, including 29 affordable units, and 7,500 square feet (sf) of commercial uses. The Project Site is currently vacant.

The Project would include a total of 426 vehicle parking spaces, as permissible by the Los Angeles Municipal Code (LAMC), within the one subterranean and three above ground levels. The Project would also provide a total of 184 bicycle parking spaces, including 164 long-term spaces and 20 short-term spaces. Vehicular access would be provided via one-way ingress at the southern driveway and one-way egress at the northern driveway. Bicycle and pedestrian access to the Project Site would be provided separately from the vehicular driveways via commercial and residential entrances along La Cienega Boulevard. The Project proposes all passenger and commercial loading on-site within the loading area on the ground level. The conceptual Project Site plan is shown in Figure 1.

#### **PROJECT LOCATION**

The Project Site is located in City Council District 5 and is comprised of 11 parcels in the Los Angeles County Assessor's records (Assessor Parcel Numbers 5087-001-023, -024, 040, -041, and -042). As illustrated in Figure 2, the Project Site is generally bounded by an automobile repair facility to the north, residential uses to the east, commercial uses to the south, and La Cienega Boulevard to the west. La Cienega Boulevard provides primary local and regional access to the Project Site. The Project Site is located approximately 1.40 miles north of the Santa Monica Freeway (I-10), which provides regional transportation between Santa Monica (approximately 8.00 miles west) and the East Los Angeles Interchange (approximately 11.00 miles east). The most direct route to I-10 from the Project Site is via La Cienega Boulevard.

The Project Site is located approximately 130 feet north of Los Angeles County Metropolitan Transportation Authority (Metro) bus stops at the intersection of La Cienega Boulevard & Whitworth Drive, approximately 250 feet south of Metro bus stops at the intersection of La Cienega Boulevard & Olympic Boulevard, and approximately 0.25 miles north of Metro and Santa Monica Big Blue Bus stops at the intersection of La Cienega Boulevard & Pico Boulevard at the intersection of La Cienega Boulevard & Pico Boulevard is identified as a Major Transit Stop, which is defined in *Transit Oriented Communities Affordable Housing Incentive Program Guidelines (TOC Guidelines)* (LADCP, Revised February 26, 2018) (TOC Guidelines) as a rail station, an intersection of two or more bus regular bus lines with service intervals of 15 minutes or less during the morning and afternoon commuter peak periods. Further, the Project Site is located within 0.50 miles of the future Metro Purple Line (D Line) Extension Wilshire/La Cienega Station, which is scheduled to open in Year 2024.

#### STUDY SCOPE

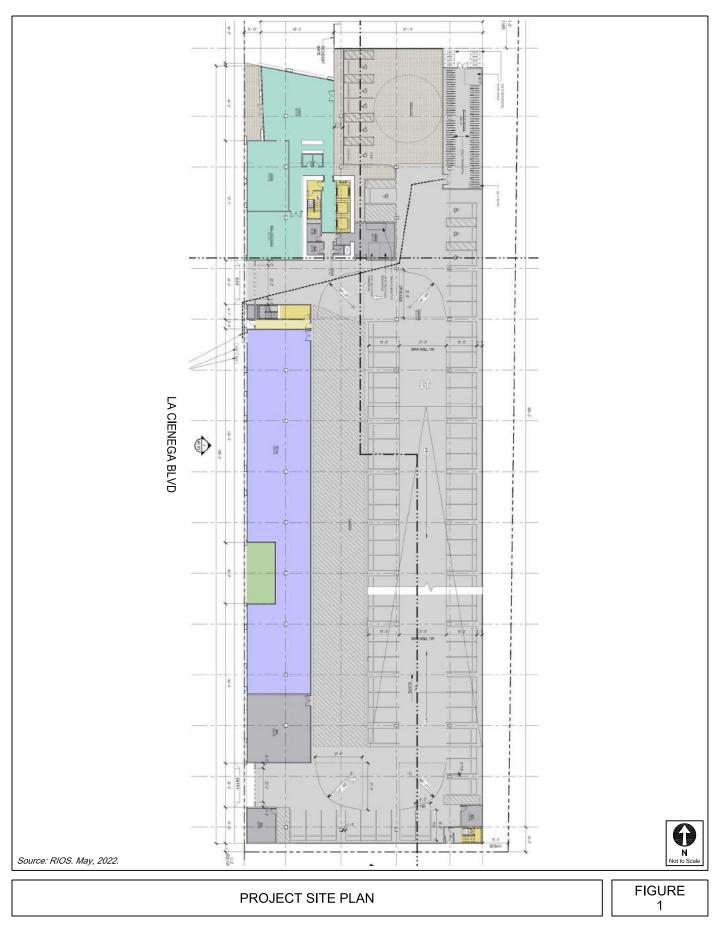
The scope of analysis for this study was developed in consultation with LADOT and is consistent with *Transportation Assessment Guidelines* (LADOT, July 2020, Revised August 2021) (TAG) and in compliance with the California Environmental Quality Act (CEQA) Guidelines (California Code of Regulations, Title 14, Section 15000 and following).

The base assumptions and technical methodologies (i.e., vehicle miles traveled [VMT], trip generation, study locations, analysis methodology, etc.) were identified and agreed to in a Transportation Assessment Memorandum of Understanding (MOU), which was reviewed and approved by LADOT on March 16, 2022. A copy of the signed MOU is provided in Appendix A.

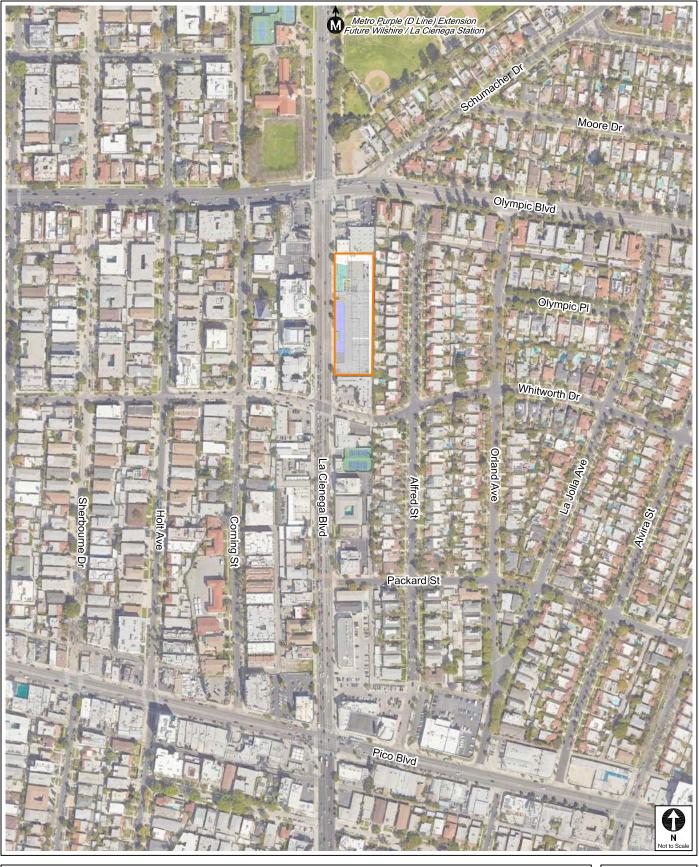
#### **ORGANIZATION OF REPORT**

This report is divided into six chapters, including this introduction. Chapter 2 describes the Project Context including the study area and existing and future cumulative transportation conditions. Chapter 3 presents the Project Traffic including the Project trip generation, trip distribution, and trip assignment. Chapter 4 details the CEQA Analysis of Transportation Impacts including TAG Thresholds T-1 through T-3 and the LADOT Freeway Safety Analysis. Chapter 5 discusses the Non-CEQA Transportation Analyses including the pedestrian, bicycle, and transit assessments, Project access, safety, and circulation assessments, residential street cut-through analysis, construction impact analysis, and parking analysis. Chapter 6 summarizes the analyses and study conclusions. The appendices contain supporting documentation, including the MOU that outlines the study scope and assumptions, and additional details supporting the technical analyses.









PROJECT SITE LOCATION

## Chapter 2 Project Context

A comprehensive data collection effort was undertaken to develop a detailed description of existing and future conditions in the Project Study Area. The Existing Conditions analysis includes an assessment of the existing freeway and street systems, an analysis of traffic volumes and current operating conditions, and an assessment of the existing public transit service, as well as pedestrian and bicycle circulation, at the time the MOU was approved in Year 2022. An inventory of lane configurations, signal phasing, parking restrictions, etc., for the analyzed intersections was also collected, along with peak period traffic counts.

In addition, this Chapter contains a discussion of the future conditions detailing the assumptions used to develop the Future without Project Conditions in Year 2026, which correspond to anticipated occupancy of the Project.

#### **STUDY AREA**

The Study Area includes three signalized intersections along La Cienega Boulevard, as shown in Figure 3. The intersections were selected in consultation with LADOT based on the following factors identified in the TAG:

- 1. Primary Project driveway(s)
- Intersections at either end of the block on which the Project is located or up to 600 feet from the primary Project driveway(s)
- 3. Unsignalized intersections that are adjacent to the Project site or that are expected to be integral to the Project's site access and circulation plan
- 4. Signalized intersections in proximity to the Project site where 100 or more net new Project trips would be added

Three signalized study intersections, listed in Table 1, were identified for detailed analyses. The existing lane configurations at the analyzed intersections are provided in Figure 4.

### **EXISTING TRANSPORTATION CONDITIONS**

#### Existing Street System

The existing street system in the Study Area consists of a regional roadway system including freeways, arterials, collectors, and local streets that provide regional, sub-regional, or local access and circulation within the Study Area. These transportation facilities generally provide two to six travel lanes and usually allow parking on either side of the street. Typically, the speed limits range between 25 and 35 miles per hour (mph) on the streets and between 55 and 65 mph on freeways.

Street classifications are designated in *Mobility Plan 2035, An Element of the General Plan* (LADCP, September 2016) (Mobility Plan) and incorporated in *Wilshire Community Plan.* The Mobility Plan defines specific street standards to provide an enhanced balance between traffic flow and other important street functions including transit routes and stops, pedestrian environments, bicycle routes, building design and site access, etc. Per the Mobility Plan, street classifications are defined as follows:

- <u>Freeways</u> are high-volume, high-speed roadways with limited access provided by interchanges that carry regional traffic through and do not provide local access to adjacent land uses.
- <u>Arterial Streets</u> are major streets that serve through traffic, as well as provide access to major commercial activity centers. Arterials are divided into two categories:
  - <u>Boulevards</u> represent the widest Arterial Streets that typically provide regional access to major destinations and include two categories:
    - <u>Boulevard I</u> provides up to four travel lanes in each direction with a target operating speed of 40 mph, and generally includes a right-of-way (ROW) width of 136 feet and pavement width of 100 feet.
    - <u>Boulevard II</u> provides up to three travel lanes in each direction with a target operating speed of 35 mph, and generally includes a ROW width of 110 feet, and pavement widths of 80 feet.

- <u>Avenues</u> are typically narrow arterials that pass through both residential and commercial areas and include three categories:
  - <u>Avenue I</u> provides up to two travel lanes in each direction with a target operating speed of 35 mph, with a ROW width of 100 feet and pavement width of 70 feet.
  - <u>Avenue II</u> provides up to two travel lanes in each direction with a target operating speed of 30 mph, with a ROW width of 86 feet and pavement width of 56 feet.
  - <u>Avenue III</u> provides up to two travel lanes in each direction with a target operating speed of 25 mph, with a ROW width of 72 feet and pavement width of 46 feet.
- <u>Collector Streets</u> are generally located in residential neighborhoods and provide access to and from Arterial Streets for local traffic and are not intended for cut-through traffic. They provide one travel lane in each direction with operating speed of 25 mph, with a ROW width generally at 66 feet and pavement width of 40 feet.
- <u>Local Streets</u> are intended to accommodate lower volumes of vehicle traffic and provide parking on both sides of the street. They provide one travel lane in each direction with a target operating speed of 15 to 20 mph. Pavement widths may vary between 30-36 feet within a ROW width of 50-60 feet. Local Streets include two categories:
  - <u>Continuous</u> Local Streets connect to other streets at both ends
  - <u>Non-continuous</u> Local Streets lead to a dead-end

Primary regional access to the Project Site is provided by I-10 within the Study Area. The arterial providing access to the Project Site is La Cienega Boulevard. The following is a brief description of the roadways in the Study Area, including their classifications under the Mobility Plan:

#### <u>Freeways</u>

 <u>I-10</u> – I-10 is a freeway that generally runs in the east-west direction and is located approximately 1.40 miles south of the Project Site. Within the Study Area, I-10 provides five travel lanes in each direction. Access to and from I-10 is available via interchanges on La Cienega Boulevard.

#### <u>Roadways</u>

- <u>Olympic Boulevard</u> Olympic Boulevard is a designated Boulevard II and generally travels in the east-west direction within the Study Area. It is located north of the Project Site and provides six travel lanes, three lanes in each direction, with left-turn lanes at major intersections and a two-way left-turn median. Unmetered parking is generally available within the curb lane on both sides of the street with peak hour restrictions within the Study Area. Travel lanes are typically 10 to 11 feet wide, and the approximate paved width of Olympic Boulevard is 70 to 75 feet within the Study Area.
- <u>La Cienega Boulevard</u> La Cienega Boulevard is a designated Avenue I and generally travels in the north-south direction within the Study Area. It is located along the western boundary of the Project Site and provides six travel lanes, three lanes in each direction, with left-turn lanes at major intersections and a two-way left-turn median. One-hour and two-hour unmetered parking is generally available within the curb lane on both sides of the street with peak hour restrictions within the Study Area. Travel lanes are typically 10 to 11 feet wide, and the approximate paved width of La Cienega Boulevard is 70 feet within the Study Area.
- <u>Pico Boulevard</u> Pico Boulevard is a designated Avenue I and generally travels in the east-west direction within the Study Area. It is located south of the Project Site and provides four travel lanes, two lanes in each direction, with left-turn lanes at major intersections and a two-way left-turn median. One-hour metered parking is generally available on both sides of the street within the Study Area. Travel lanes are typically 11 to 12 feet wide, and the approximate paved width of Pico Boulevard is 70 feet within the Study Area.
- <u>Whitworth Drive</u> Whitworth Drive is a designated Collector west of La Cienega Boulevard and a Local Street east of La Cienega Boulevard. Whitworth Drive generally travels in the east-west direction and is located south of the Project Site. It provides two travel lanes, one lane in each direction. One-hour and unrestricted unmetered parking is generally available on both sides of the street between within the Study Area. Travel lanes are typically 10 feet wide, and the approximate paved width of Whitworth Drive is 36 feet within the Study Area.

The existing mobility facilities at each of the analyzed study intersections are detailed in Figure 5 and the Mobility Plan street designations within the Study Area are shown in Figure 6.

#### **Existing Pedestrian Facilities**

The walkability of existing facilities is based on the availability of pedestrian routes necessary to accomplish daily tasks without the use of an automobile. These attributes are quantified by WalkScore.com and assigned a score out of 100 points. With the various commercial businesses

and cultural facilities adjacent to residential neighborhoods, the walkability of the area is approximately 82 points<sup>1</sup>.

Sidewalks provide pedestrian connections on both sides of La Cienega Boulevard along the Project frontage. The three study intersections provide signalized pedestrian crossings near the Project Site with marked crosswalks, including continental striping along the west leg of La Cienega Boulevard & Olympic Boulevard, all four legs of La Cienega Boulevard & Whitworth Drive, and all four legs of La Cienega Boulevard & Pico Boulevard, as well as pedestrian phasing and Americans with Disabilities Act (ADA) accessible curb ramps. The pedestrian facilities provided at the study intersections are further detailed in Figure 5.

Pedestrian destinations within 0.25 miles of the Project Site, including various commercial uses located along La Cienega Boulevard, Olympic Boulevard, and Pico Boulevard, are illustrated in Figure 6.

#### **Existing Bicycle System**

Based on 2010 Bicycle Plan, A Component of the City of Los Angeles Transportation Element (LADCP, adopted March 1, 2011) (2010 Bicycle Plan), the existing bicycle system consists of a limited network of bicycle lanes (Class II) and bicycle routes (Class III). Class II bicycle lanes are a component of street design with dedicated striping, separating vehicular traffic from bicycle traffic. Class III bicycle routes and bicycle-friendly streets are those where motorists and cyclists share the roadway and there is no separated striping for bicycle travel. Bicycle routes and bicycle-friendly streets are preferably placed on Collector and lower volume Arterial Streets. Bicycle routes with shared lane markings, or "sharrows", remind bicyclists to ride farther from parked cars to prevent collisions, increase awareness of motorists that bicycles may be in the travel lane, and shows bicyclists the correct direction of travel.

The components of the 2010 Bicycle Plan have been incorporated into the bicycle network of the Mobility Plan. The Mobility Plan consists of a Bicycle Enhanced Network (Low-Stress Network)

<sup>&</sup>lt;sup>1</sup> Walk Score (www.walkscore.com) rates the Project Site with a score of 82 of 100 possible points (scores accessed on April 18, 2022 for 1050 La Cienega Boulevard). Walk Score calculates the walkability of specific addresses by considering the ease of living in the neighborhood with a reduced reliance on automobile travel.

(BEN) and a Bicycle Lane Network (BLN). The BEN is a subset of and supplement to the 2010 Bicycle Plan and is comprised of a network of streets that prioritize bicyclists and provide bicycle paths (Class I) and protected bicycle lanes (Class IV). Class IV protected bicycle lanes including cycle tracks, bicycle traffic signals, and demarcated areas to facilitate turns at intersections and along neighborhood streets, provide further protection from other travel lanes. Class IV networks often provide mini-roundabouts, cross-street stop signs, crossing islands at major intersection crossings, improved street lighting, bicycle boxes, and bicycle-only left-turn pockets. Once implemented, these facilities would offer a safer environment for both cyclists and motorists. The BLN consists of Class II bicycle lanes with striped separation from motorized vehicle traffic and Class III bicycle lanes (sharrows).

No existing bicycle infrastructure is provided within the Study Area.

#### Existing Transit System

As described above, the Project Site is located approximately 130 feet north of Metro bus stops at the intersection of La Cienega Boulevard & Whitworth Drive, approximately 250 feet south of Metro bus stops at the intersection of La Cienega Boulevard & Olympic Boulevard, and approximately 0.25 miles north of Metro and Santa Monica Big Blue Bus stops at the intersection of La Cienega Boulevard & Pico Boulevard. The Project Site is also located within 0.50 miles of the future Metro Purple Line (D Line) Extension Wilshire/La Cienega Station. Figure 7 illustrates the existing transit service and transit stops within the Study Area.

Table 2 summarizes the transit lines operating in the Study Area for each of the service providers in the region, the type of service (peak vs. off-peak, express vs. local), and the frequency of service, as described above. The average frequency of transit service during the peak hour was derived from the number of peak-period stops made at the stop nearest the Project Site. Tables 3A and 3B summarize the total residual capacity of the Metro and Santa Monica Big Blue Bus lines during the morning and afternoon peak hours based on the frequency of service of each line and the maximum seated and standing capacity of each bus. As shown, the transit lines within 0.25 miles walking distance of the Project Site currently have available capacity for 1,241 additional riders during the morning peak hour and 1,166 additional riders during the afternoon

peak hour. The transit lines with bus stops or stations located more than 0.25 miles from the Project Site were not included in this analysis.

#### Vision Zero

As described in *Vision Zero: Eliminating Traffic Deaths in Los Angeles by 2025* (City of Los Angeles, August 2015), Vision Zero is a traffic safety policy that promotes strategies to eliminate transportation-related collisions that result in severe injury or death. Vision Zero has identified the High Injury Network (HIN), a network of streets included based on collision data from the last five years, where strategic investments will have the biggest impact in reducing death and severe injury. Within the Study Area, La Cienega Boulevard, south of Whitworth Drive, and Pico Boulevard are identified in the HIN.

#### **Existing Traffic Volumes**

Traffic count data collection is generally conducted during times with typical travel demand patterns (i.e., when local schools are in session, businesses in full operation, weeks without holidays, etc.) However, due to the ongoing Safer at Home / Safer LA: Emergency Orders<sup>2</sup> in response to the COVID-19 pandemic, typical traffic patterns are disrupted and LADOT directed transportation assessments to utilize traffic count data collected prior to March 1, 2020. However, given the uncertainty of the termination of the Safer-At-Home order, LADOT is allowing the use of traffic count data collected after March 1, 2020 with application of an adjustment factor based on a review of historical traffic count data to reflect typical traffic conditions prior to COVID-19.

Existing weekday morning (7:00 AM to 10:00 AM) and afternoon (3:00 PM to 6:00 PM) peak hour traffic count data was collected in March 2022 at the three study intersections. Available historical peak hour traffic count data for Intersection #1, La Cienega Boulevard & Olympic Boulevard, from Year 2017 and Intersection #3, La Cienega Boulevard & Pico Boulevard, from Year 2018 were used to develop the adjustment factor to apply to Year 2022 traffic counts to reflect typical traffic

<sup>&</sup>lt;sup>2</sup> The standing public health orders issued by the City and/or County of Los Angeles beginning March 2020 and remining in effect until further notice.

patterns prior to COVID-19. Based on a comparison of the Year 2017 and 2018 traffic counts, the Year 2022 counts were increased by 7% in the morning peak hour and 14% in the afternoon peak hour to represent typical Existing Conditions in Year 2022.

The existing peak hour traffic volumes, representing Existing Conditions in Year 2022, are illustrated in Figure 8. The traffic count details are provided in Appendix B.

### FUTURE CUMULATIVE TRANSPORTATION CONDITIONS

The forecast of Future without Project Conditions was prepared in accordance with procedures outlined in the TAG. Specifically, two requirements are provided for developing the cumulative traffic volume forecast:

"The Transportation Assessment must estimate ambient traffic conditions for the study horizon year selected during the scoping phase and recorded in the executed MOU. The study must clearly identify the horizon year and annual ambient growth rate used for the study. The horizon year should align with the development project's expected completion year. For development projects constructed in phases over several years, the Transportation Assessment should analyze intermediary milestones before the buildout and completion of the project. The annual ambient growth rate shall be determined by LADOT staff during the scoping process and can be based on an adopted TSP, the most recent SCAG regional transportation model, the citywide transportation model, or other empirical information approved by LADOT.

"The Transportation Assessment must consider related projects. For related development projects, this should include the associated trip generation for known development projects within one-half mile (2,640 foot) radius of the project site and one-quarter mile (1,320 foot) radius of the farthest outlying study intersections. Consultation with the Department of City Planning and LADOT may be required to compile the related projects list. The City's ZIMAS database can be used to assist in identifying development projects that have submitted applications to the City of Los Angeles. Project access and circulation constraints would be determined by adding project-generated trips to future base traffic volumes including ambient growth and related projects and conducting the operational analysis."

The ambient growth factor discussed below likely includes some traffic increases resulting from the Related Projects. Therefore, through some inherent double-counting of vehicles, the traffic analysis provides a highly conservative estimate of Future without Project traffic volumes. The Future without Project traffic volumes, therefore, include ambient growth, which reflects increases in traffic due to regional growth and development outside the Study Area, as well as traffic generated by ongoing or entitled projects near or within the Study Area.

#### **Ambient Traffic Growth**

Existing traffic is expected to increase as a result of regional growth and development outside the Study Area. Based on discussions with LADOT during the MOU process, an ambient growth factor of 1% per year compounded annually was applied to be conservative by increasing the existing traffic volumes to reflect the effects of the regional growth and development by Year 2026. The total adjustment applied over the four-year period between Year 2022 and the anticipated buildout year of the Project was 4.06%. This growth factor accounts for increases in traffic due to potential projects plus projects not yet proposed and projects located outside the Study Area.

#### **Related Projects**

In accordance with the TAG, this study also considered the effects of the Project in relation to other developments either proposed, approved, or under construction (collectively, the Related Projects). Including this analysis step, the potential impact of the Project was evaluated within the context of past, present, and probable future developments capable of producing cumulative impacts. In accordance with the procedures outlined in the TAG, Related Projects within 0.50 miles of the Project Site were considered for analysis.

The list of Related Projects is based on information provided by LADCP and LADOT in January 2022, as well as recent studies of development projects in the area. Based on a review of available information in April 2022, no Related Projects in the City of Beverly Hills were identified within 0.50 miles of the Project Site. The Related Projects are detailed in Table 4 and their approximate locations are shown in Figure 9. Though the buildout years of many of these Related Projects are uncertain and may be well beyond the buildout year of the Project, and notwithstanding that some may never be approved or developed, they were all considered as part of this Study and conservatively assumed to be completed by the Project buildout Year 2026. Therefore, the traffic growth due to the development of Related Projects considered in this analysis is highly conservative.

and, by itself, substantially overestimates the actual traffic volume growth in the West Los Angeles area that would likely occur in the next four years prior to Project buildout. With the addition of the 1% per year ambient growth factor previously discussed, the Future without Project Condition is even more conservative. Using these assumptions, the potential traffic impacts of the Project were evaluated. The development of estimated traffic volumes added to the study intersections as a result of Related Projects involves the use of a three-step process: trip generation, trip distribution, and trip assignment.

**Trip Generation**. Trip generation estimates for the Related Projects were provided by LADOT or were calculated using a combination of previous study findings and the trip generation rates contained in *Trip Generation Manual, 11<sup>th</sup> Edition* (Institute of Transportation Engineers [ITE], 2021). The Related Projects trip generation estimates summarized in Table 4 are conservative in that they do not in every case account for either the trips generated by the existing uses to be removed or the likely use of other travel modes (e.g., transit, bus, bicycling, walking, carpool, etc.) Further, in many cases, they do not account for the internal capture trips within a multi-use development or for the interaction of trips between multiple Related Projects, in which one Related Project serves as the origin for a trip destined for another Related Project.

**Trip Distribution**. The geographic distribution of the traffic generated by the Related Projects is dependent on several factors. These include the type and density of the proposed land uses, the geographic distribution of the population from which the residents and potential patrons of the proposed developments are drawn, and the location of these projects in relation to the surrounding street system. These factors are considered along with logical travel routes through the street system to develop a reasonable pattern of trip distribution.

<u>**Traffic Assignment</u>**. The trip generation estimates for the Related Projects were assigned to the local street system using the trip distribution pattern described above. Figure 10 shows the peak hour traffic volumes associated with these Related Projects at the study intersections.</u>

#### Future without Project Traffic Volumes

The Future without Project Conditions peak hour traffic volumes represent the combination of Existing Conditions traffic volumes, ambient growth, and Related Project traffic. These volumes at the three study intersections are shown in Figure 11.

#### Future Roadway Improvements

The analysis of Future Conditions considered roadway improvements that were funded and reasonably expected to be implemented prior to the buildout of the proposed Project. Any roadway improvement that would result in changes to the physical configuration at the study intersections would be incorporated into the analysis. Other proposed traffic / trip reduction strategies such as transportation demand management (TDM) programs for individual buildings and developments were omitted from the Future Conditions analyses. The following plans were evaluated for their potential effects on the future roadway configurations.

**Mobility Plan.** In the Mobility Plan, the City identifies key corridors as components of various "mobility-enhanced networks." Each network is intended to focus on improving a particular aspect of urban mobility, including transit, neighborhood connectivity, bicycles, pedestrians, and vehicles. The specific improvements that may be implemented in those networks have not yet been identified and there is no schedule for implementation; therefore, no changes to intersection lane configurations were made because of the Mobility Plan. However, the following mobility-enhanced networks include corridors within the Study Area, as well as others within 0.25 miles of the Project Site, and are depicted in Figure 12:

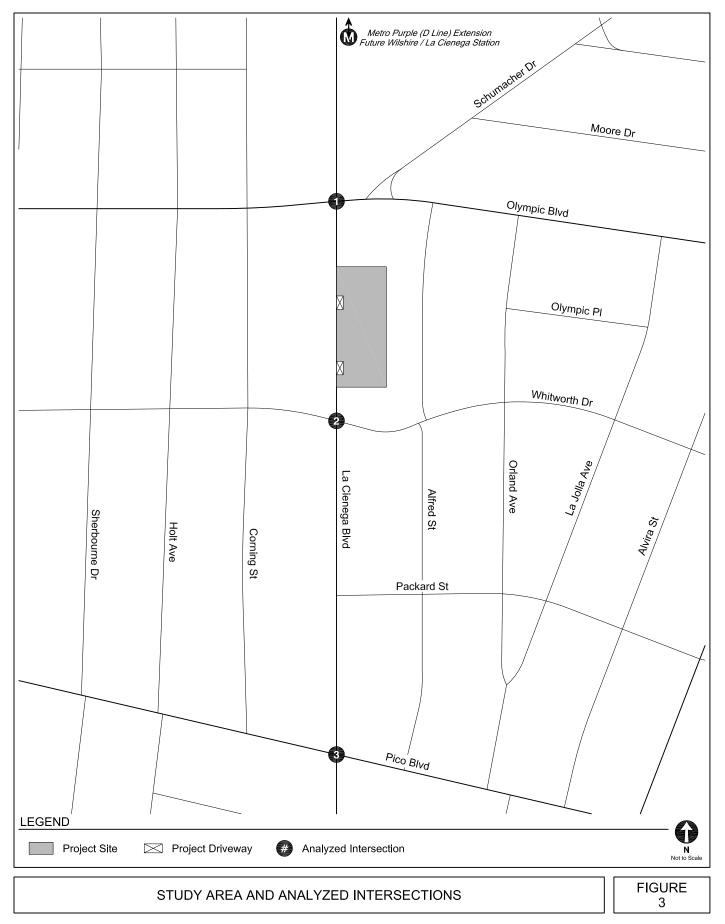
- <u>Transit Enhanced Network (TEN)</u>: The TEN aims to improve existing and future bus services through reliable and frequent transit service in order to increase transit ridership, reduce single-occupancy vehicle trips, and integrate transit infrastructure investments within the surrounding street system. La Cienega Boulevard south of Olympic Boulevard and Pico Boulevard are designated as part of the TEN.
- <u>Neighborhood Enhanced Network (NEN)</u>: The NEN reflects the synthesis of the bicycle and pedestrian networks and serves as a system of Local Streets that are slow moving

and safe enough to connect neighborhoods through active transportation. Whitworth Drive and Schumacher Drive north of the Project Site are designated as part of the NEN.

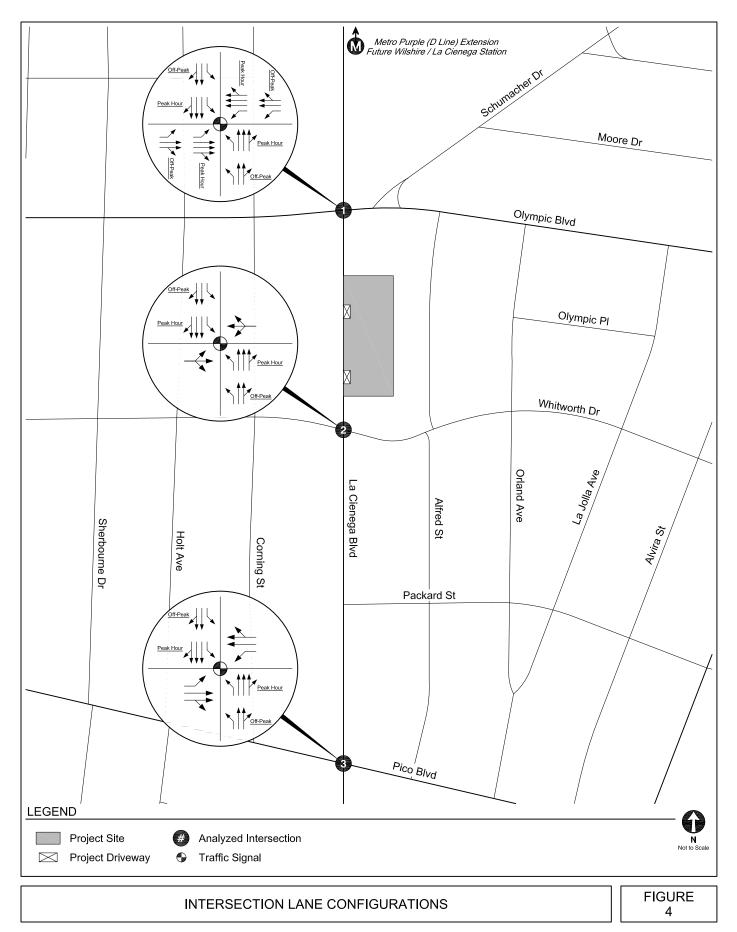
- <u>BEN / BLN</u>: Within the Study Area, Pico Boulevard has been designated as part of the BLN. There are no streets designated as part of the BEN.
- <u>Pedestrian Enhanced District (PED)</u>: The Mobility Plan aims to promote walking to reduce the reliance on automobile travel by providing more attractive and pedestrian-friendly sidewalks, as well as adding pedestrian signalizations, street trees, and pedestrianoriented design features. Several streets within the Study Area are designated PEDs where pedestrian improvements could be prioritized to provide better connectivity to and from major destinations within communities, including La Cienega Boulevard south of Olympic Boulevard, Olympic Boulevard, and Pico Boulevard.

Metro Purple Line (D Line) Extension. The Metro Purple Line (D Line) Extension would expand service from its current terminus at the existing Wilshire/Western Station to the proposed Westwood/Veterans Administration Hospital Station. The line will operate underground, with the majority of the alignment along Wilshire Boulevard. The project is being constructed in three phases. The first phase, currently being constructed, would extend the line to the Wilshire/La Cienega Station and is anticipated to be completed and in operation by Year 2024. The Project Site is located within 0.50 miles of the future Wilshire/La Cienega Station. The second phase, which would extend service to the Century City/Constellation Station, is under construction and is anticipated to be completed by Year 2025. The final phase, which would complete extension to the Westwood/Veterans Administration Hospital Station, is also under construction and is anticipated to be completed by Year 2027. The Metro Purple Line (D Line) Extension will be underground and will not affect at-grade configurations of the corridors in the Study Area, Therefore, no modifications to the street network were made as a result of this project.

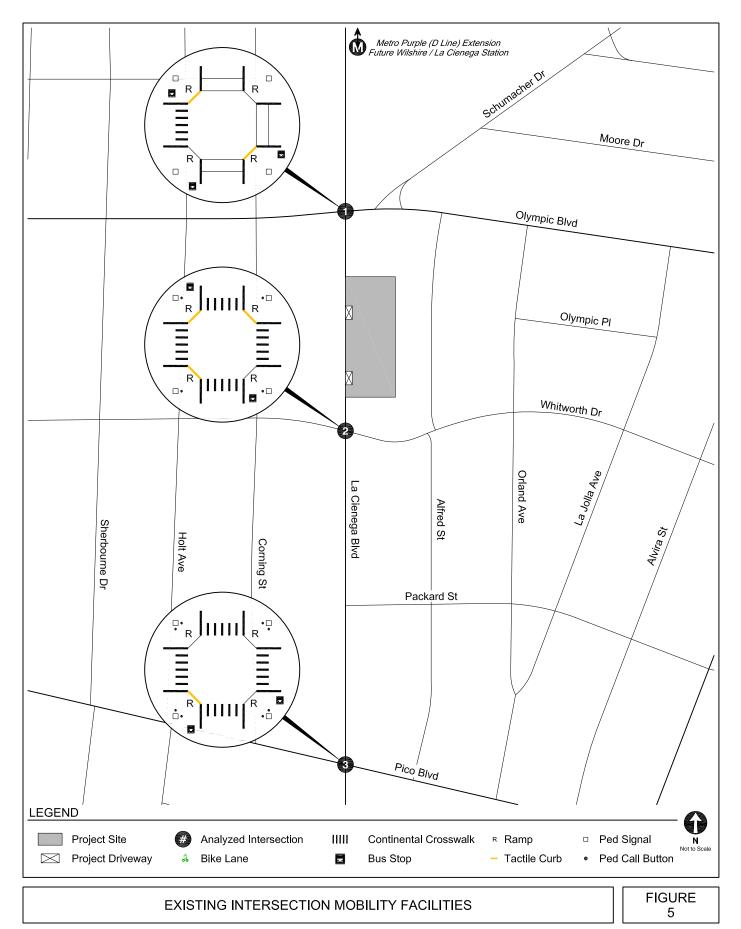




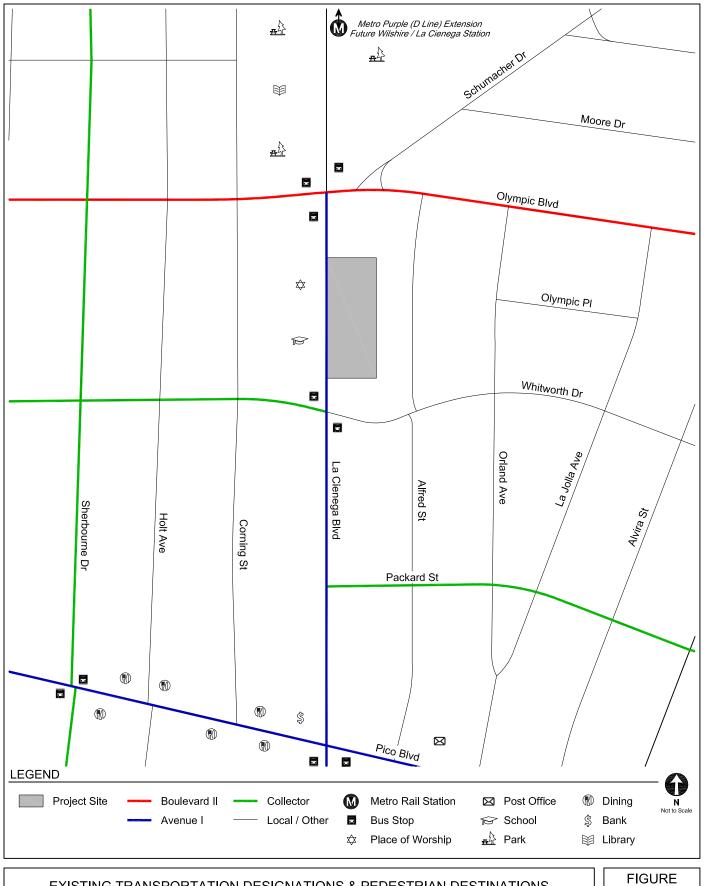






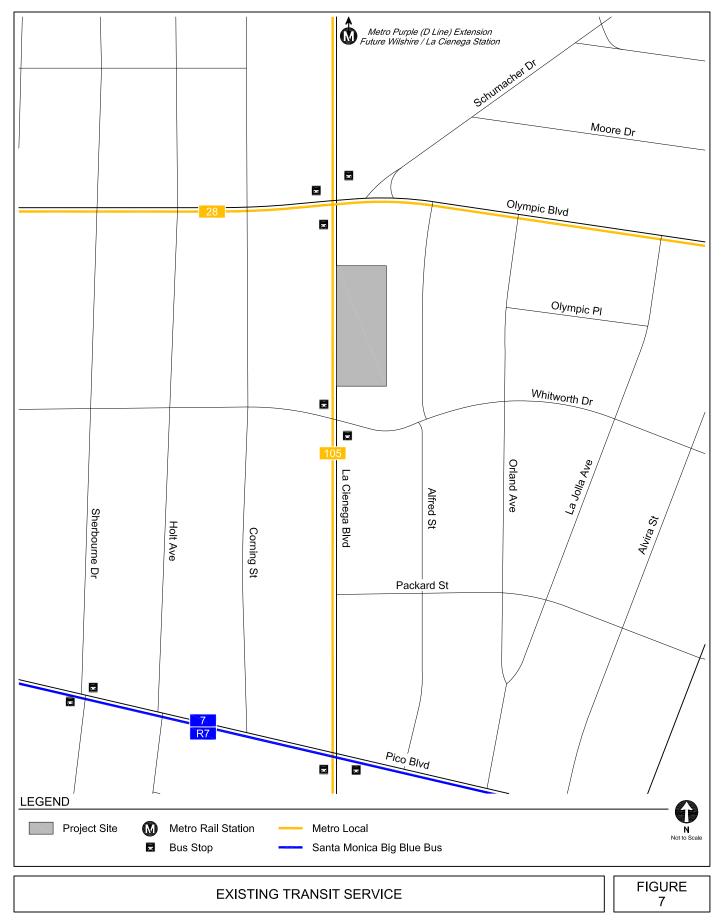




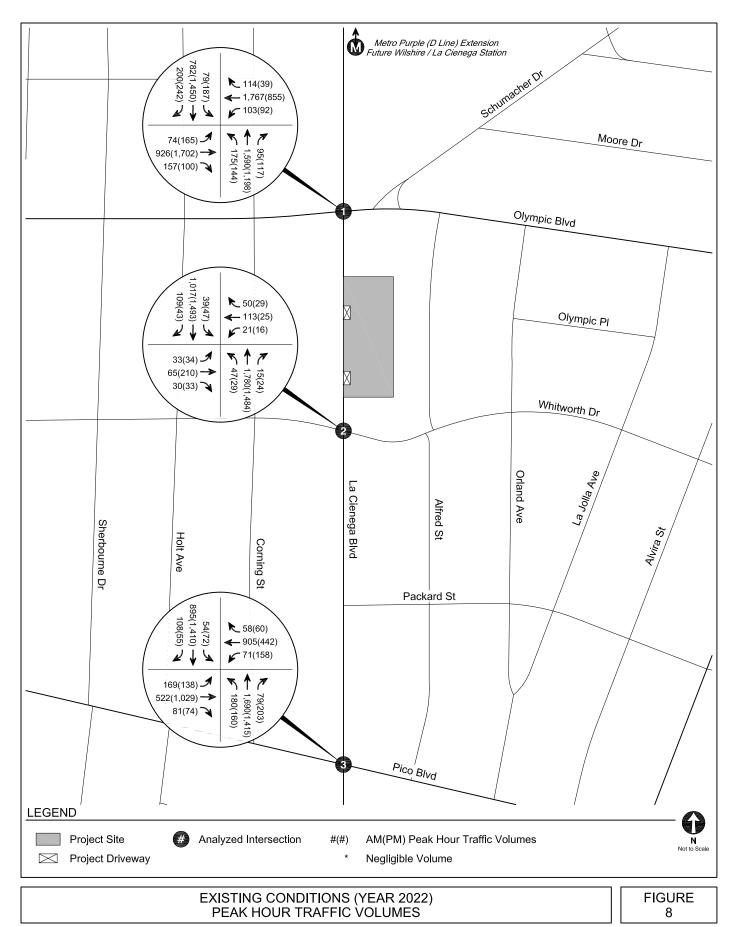


EXISTING TRANSPORTATION DESIGNATIONS & PEDESTRIAN DESTINATIONS





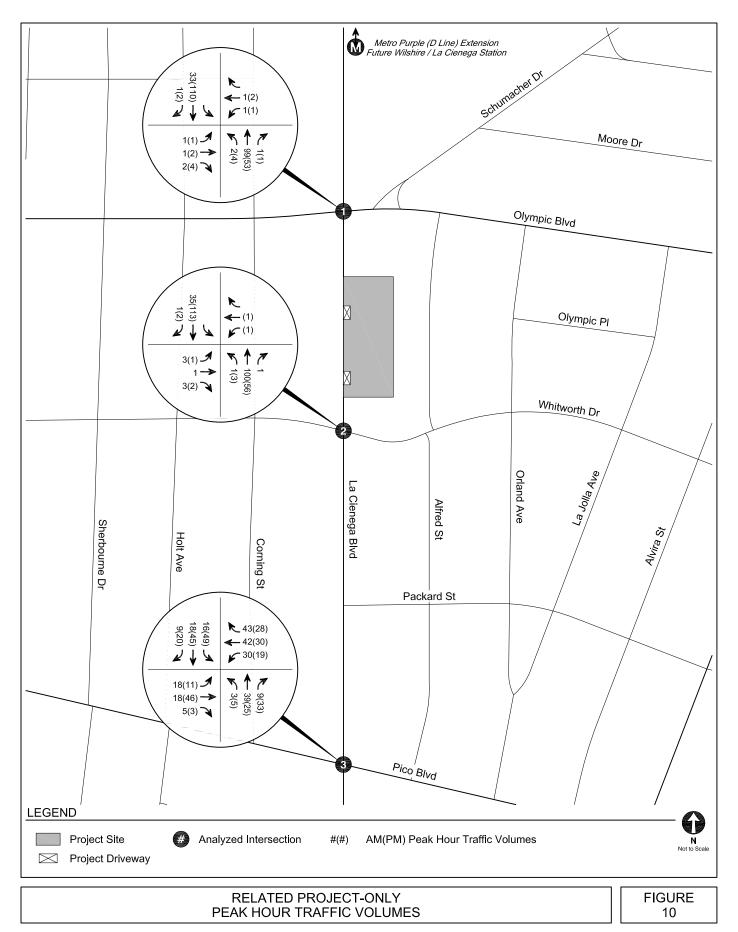




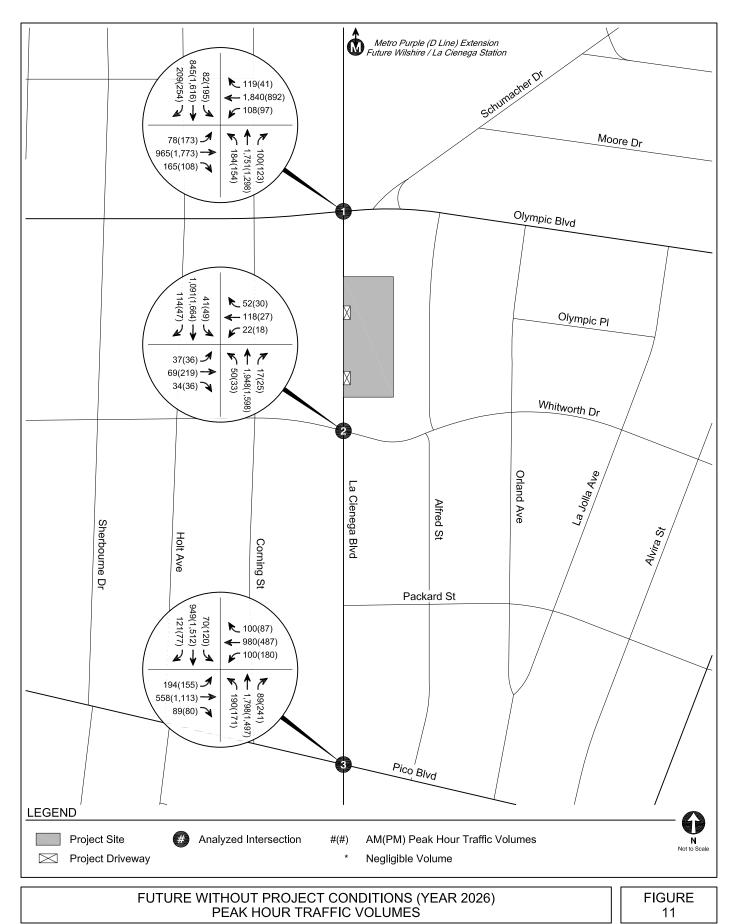
















#### TABLE 1 STUDY INTERSECTIONS

No.	North/South Street	East/West Street
1.	La Cienega Boulevard	Olympic Boulevard
2.	La Cienega Boulevard	Whitworth Drive
3.	La Cienega Boulevard	Pico Boulevard

# TABLE 2EXISTING TRANSIT SERVICE IN STUDY AREA

Provider, Route, and Service Area		Someioo Turoo	Hours of Operation	Δ	verage Headway (minutes)			
		Service Type	vice Type Hours of Operation		Peak Hour	Afternoon Peak Hour		
Metro Bus Service [a]				NB/EB	SB/WB	NB/EB	SB/WB	
28	Century City to Downtown LA via Olympic Boulevard	Local	4:30 A.M 2:00 A.M.	13	12	14	16	
105	West Hollywood - Vernon via La Cienega Boulevard/Vernon Avenue	Local	4:00 A.M 11:00 P.M.	11	11	11	9	
Santa Monica Big Blue Bus Service				NB/EB	SB/WB	NB/EB	SB/WB	
7	Eastbound to Wilshire/Western Station, Westbound to Downtown Santa Monica	Local	5:00 A.M 11:30 P.M.	14	11	13	15	
R7	Eastbound to Wilshire/Western Station, Westbound to Downtown Santa Monica	Rapid	6:30 A.M - 8:00 P.M.	18	16	13	15	

Notes:

Metro - Los Angeles County Metropolitan Transportation Authority.

NB - Northbound. EB - Eastbound. SB - Southbound. WB - Westbound.

[a] Transit routes and frequencies are current as of the time of publishing this analysis, including recent changes based on the Metro Next Generation Bus Study.

 TABLE 3A

 TRANSIT SYSTEM CAPACITY IN STUDY AREA - MORNING PEAK HOUR

Provider, Route, and Service Area		Capacity	Peak Hour Ridership [b]				Average Remaining		Average Remaining	
		per Trip	Peak Load		Average Load		Capacity per Trip		Peak Hour Capacity	
		[a]	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Metro Bus	Service									
28	Century City to Downtown LA via Olympic Boulevard	50	8	22	4	18	46	32	218	161
105	West Hollywood - Vernon via La Cienega Boulevard/Vernon Avenue	50	25	10	16	7	34	44	188	239
Santa Mon	ica Big Blue Bus Service									
7	Eastbound to Wilshire/Western Station, Westbound to Downtown Santa Monica	50	23	37	14	27	36	23	153	121
R7	Eastbound to Wilshire/Western Station, Westbound to Downtown Santa Monica	50	17	56	13	39	37	11	120	41
Total Remaining Peak Hour Transit System Capacity							1,2	241		

Notes:

Metro - Los Angeles County Metropolitan Transportation Authority.

NB - Northbound. EB - Eastbound. SB - Southbound. WB - Westbound.

[a] Capacity assumptions:

Metro and Santa Monica Big Blue Bus - 40 seated / 50 standing.

[b] Based on ridership data provided by Metro and Santa Monica Big Blue Bus in 2019.

 TABLE 3B

 TRANSIT SYSTEM CAPACITY IN STUDY AREA - AFTERNOON PEAK HOUR

Provider, Route, and Service Area		Capacity	Peak Hour Ridership [b]				Average Remaining		Average Remaining	
		per Trip	Peak Load		Average Load		Capacity per Trip		Peak Hour Capacity	
		[a]	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Metro Bus	Service									
28	Century City to Downtown LA via Olympic Boulevard	50	29	8	21	5	29	45	137	224
105	West Hollywood - Vernon via La Cienega Boulevard/Vernon Avenue	50	14	27	11	20	39	31	216	168
Santa Mon	ica Big Blue Bus Service									
7	Eastbound to Wilshire/Western Station, Westbound to Downtown Santa Monica	50	38	21	32	18	18	32	77	128
R7	Eastbound to Wilshire/Western Station, Westbound to Downtown Santa Monica	50	41	23	32	17	18	33	86	132
Total Remaining Peak Hour Transit System Capacity							1,1	166		

Notes:

Metro - Los Angeles County Metropolitan Transportation Authority.

NB - Northbound. EB - Eastbound. SB - Southbound. WB - Westbound.

[a] Capacity assumptions:

Metro and Santa Monica Big Blue Bus - 40 seated / 50 standing.

[b] Based on ridership data provided by Metro and Santa Monica Big Blue Bus in 2019.

#### TABLE 4 RELATED PROJECTS LIST

				Trip Generation [a]						
No.	Project Address Use		Use	Daily	Morning Book Hour			Afternoon Peak Hour		
				Daily	In	Out	Total	In	Out	Total
1.	Mixed-Use	5935 W Pico Boulevard	124 residential units, 3,100 sf retail, and 2,000 sf restaurant	687	17	47	64	43	20	63
2.	Mixed-Use	6132 W Pico Boulevard	100 residential units and 14,000 sf retail	807	5	34	39	47	30	77
3.	Residential	6055 W Pico Boulevard	125 residential units and 4,140 sf retail	313	(2)	24	22	16	4	20
4.	Medical Office Building	656 S San Vicente Boulevard	140,305 sf medical office and 5,000 sf retail	3,552	234	70	304	113	269	382
5.	6075-6099 Pico Blvd Mixed-Use Project	6075 W Pico Boulevard	110 hotel rooms, 45 residential units, 3,800 sf restaurant, and 2,500 sf retail	1,367	15	27	42	43	27	70
6. [b]	843 S Sherbourne Drive	843 S Sherbourne Drive	56 eldercare units	124	2	2	4	5	5	10
7. [b]	1233 S Bedford Street	1233 S Bedford Street	9 condominium units	41	1	2	3	2	2	4
8. [b]	825 S Holt Avenue	825 S Holt Avenue	80 eldercare units	177	3	3	6	7	7	14
9. [b]	1415 1/2 S Robertson Boulevard	1415 1/2 S Robertson Boulevard	65 residential units and 3,000 sf commercial	617	22	31	53	31	21	52
10. [b]	1049 S Holt Avenue	1049 S Holt Avenue	15 residential units (2 affordable units)	67	1	5	6	4	2	6
11. [b]	1047 S Corning Street	1047 S Corning Street	12 residential units (2 affordable units)	53	1	4	5	3	2	5
12. [b]	1255 S La Cienega Boulevard	1255 S La Cienega Boulevard	30 residential units (3 affordable units) and 1,098 sf commercial	253	9	14	23	14	8	22
13. [b]	911-913 S Shenandoah Street	911-913 S Shenandoah Street	14 residential units (2 affordable)	62	1	4	5	4	2	6
14. [b]	6001 W Pico Boulevard	6001 W Pico Boulevard	48 residential units (5 affordable) and 1,000 sf commercial	323	11	18	29	16	12	28

Notes:

sf: square feet

[a] Related project information provided by the Los Angeles Department of Transportation in January 2022, Department of City Planning, and recent traffic studies prepared in the area. This list includes known development projects within one-half mile (2,460 foot) radius of the Project Site.

[b] Trip Generation estimates developed using Trip Generation Manual, 11th Edition, Institute of Transportation Engineers, 2021 and LADOT's Transportation Assessment Guidelines.

# Chapter 3 Project Traffic

Trip generation estimates, trip distribution patterns and trip assignments were prepared for the Project. These components form the basis of the Project's traffic analysis.

#### **PROJECT TRIP GENERATION**

The number of peak hour trips expected to be generated by the Project was estimated using morning and afternoon peak hour rates for high-rise multifamily housing and affordable housing units based on empirical data collected in the City and published in the TAG, as well as high-turnover (sit-down) restaurant uses published in *Trip Generation Manual, 11<sup>th</sup> Edition*. To provide a conservative analysis, the commercial uses were evaluated using trip rates for high-turnover (sit-down) restaurant uses. The ITE rates for high-turnover (sit-down) restaurant were determined by surveys of similar land uses at sites around the country and are used to calculate the number of vehicle trips traveling to and from the Project Site during the morning and afternoon peak hour relative to the size of development of the specific land use. In consultation with LADOT during the MOU process, allowable trip generation reductions were applied to the commercial trip generation estimates to account for internal capture, public transit usage/walking arrivals, and pass-by trips:

- <u>Internal Capture</u>: A 10% internal capture reduction was applied to account for person trips made between the different uses of the Project without requiring an additional vehicle trip.
- <u>Transit Usage</u>: A 10% transit usage reduction was applied in accordance with the TAG for a development within 0.25 miles of local bus stops. To provide a conservative analysis, no additional transit trip credits were applied to account for the Project's proximity to the future Metro Purple Line (D Line) Extension's Wilshire/La Cienega Station.
- <u>Pass-By</u>: Consistent with Attachment H of the TAG, a 20% pass-by reduction was applied to account for Project trips made as an intermediate stop on the way from an origin to a primary trip destination without route diversion.

After accounting for the reduction described above, the Project is estimated to generate 130 morning peak hour trips (55 inbound, 75 outbound) and 138 afternoon peak hour trips (79 inbound, 59 outbound), as summarized in Table 5.

#### **PROJECT TRIP DISTRIBUTION**

The geographic distribution of trips generated by the Project is primarily dependent on the location of residential and commercial uses from which tenants of the Project would be drawn, characteristics of the street system serving the Project Site, existing intersection traffic volumes, the location of the proposed driveways, as well as input from LADOT staff.

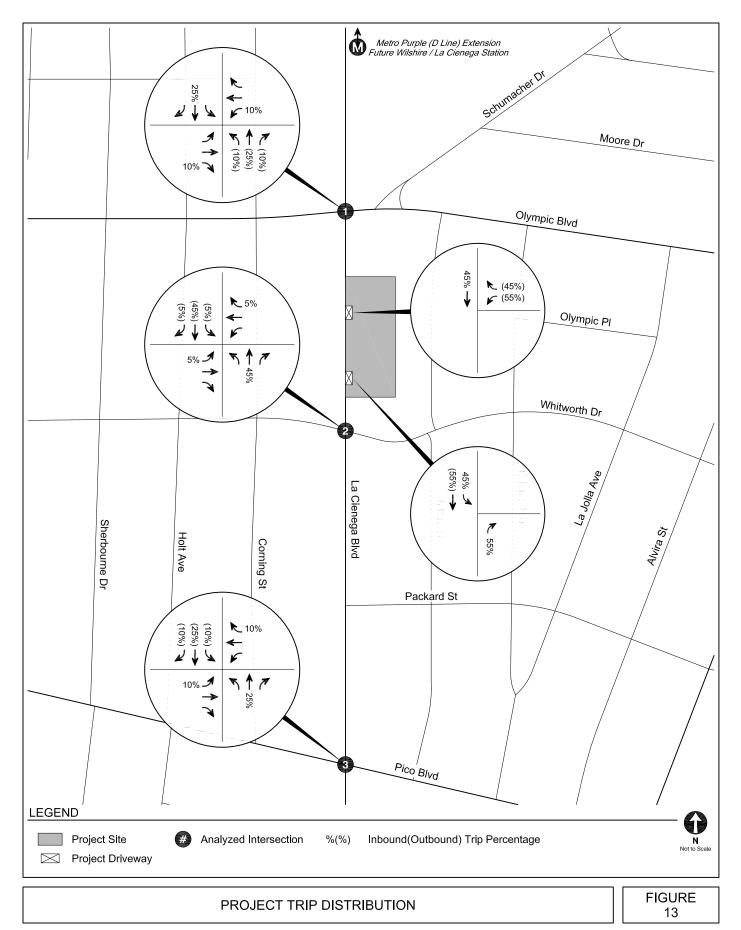
The intersection-level trip distribution for the Project is shown in Figure 13. Generally, the regional pattern is as follows:

- 25% northbound
- 25% eastbound
- 25% southbound
- 25% westbound

#### **PROJECT TRIP ASSIGNMENT**

The Project trip generation estimates summarized in Table 5 and the trip distribution pattern shown in Figure 13, were used to assign the Project-generated traffic through the study intersections. Figure 14 illustrates the Project-only traffic volumes at the study intersections during typical weekday morning and afternoon peak hours.







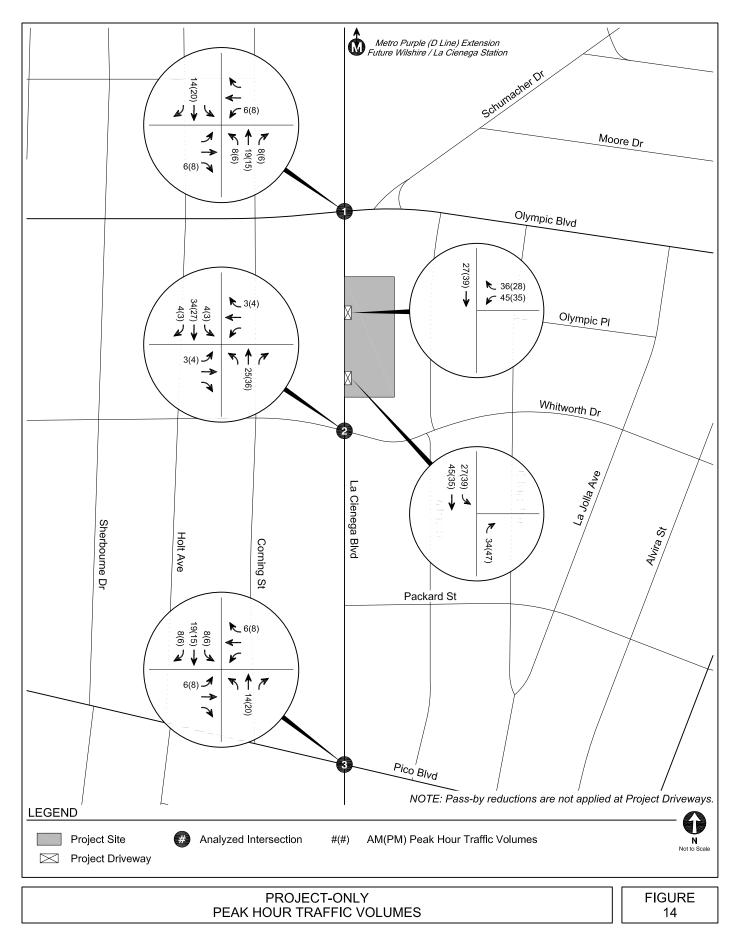


 TABLE 5

 PROJECT VEHICLE TRIP GENERATION ESTIMATES

Land Use	Land	Rate	Morning Peak Hour			Afternoon Peak Hour		
	Use	In	Out	Total	In	Out	Total	
Trip Generation Rates [a]								
Multifamily Housing (High-Rise)	222	per du	34%	66%	0.27	56%	44%	0.32
Affordable Family (Within TPA)	[b]	per du	37%	63%	0.49	56%	44%	0.35
High-Turnover (Sit-Down) Restaurant	932	per ksf	55%	45%	9.57	61%	39%	9.05
Proposed Project								
Multifamily Housing (High-Rise)	222	261 du	24	46	70	47	37	84
Affordable Family (Within TPA)	[b]	29 du	5	9	14	6	4	10
High-Turnover (Sit-Down) Restaurant Internal Capture Reduction - 10% [c] Transit/Walk Reduction - 10% [d] Pass-By Reduction - 20% [e]	932	7.500 ksf	40 (4) (4) (6)	32 (3) (3) (6)	72 (7) (7) (12)	41 (4) (4) (7)	27 (3) (2) (4)	68 (7) (6) (11)
TOTAL NEW PROJECT TRIPS		55	75	130	79	59	138	

Notes:

du: dwelling unit ksf: 1,000 square feet

- [a] Source: Transportation Assessment Guidelines (TAG), Los Angeles Department of Transportation (LADOT), July 2020 and Trip Generation Manual, 11th Edition, Institute of Transportation Engineers (ITE), 2021.
- [b] Per LADOT's Transportation Assessment Guidelines, residential or mixed-use developments inside a Transit Priority Area (TPA) which include Affordable Housing units are eligible to use a City-specific trip generation rate based on vehicle trip count data collected at affordable housing sites in the City of Los Angeles in 2016.
- [c] Internal capture reductions account for person trips made between distinct land uses within a mixed-use development (i.e., between residential and restaurant).
- [d] The Project Site is located within 0.25 miles of Metro Local bus stops serving Line 28 and Line 105; therefore, a 10% transit reduction was applied to account for transit usage and walking visitor arrivals.
- [e] Pass-by reductions account for Project trips made by drivers already passing by on La Cienega Boulevard for a different primary trip purpose.

# Chapter 4 CEQA Analysis of Transportation Impacts

This chapter presents the results of an analysis of CEQA-related transportation impacts. The analysis identifies any potential conflicts the Project may have with adopted City plans and policies, the improvements associated with the potential conflicts, the results of a Project VMT analysis that satisfies State requirements under *State of California Senate Bill* 743 (Steinberg, 2013) (SB 743), and an identification of any hazards created due to geometric design features.

#### METHODOLOGY

SB 743, made effective in January 2014, required the Governor's Office of Planning and Research (OPR) to change the CEQA guidelines regarding the analysis of transportation impacts. Under SB 743, the focus of transportation analysis shifted from vehicular delay (level of service [LOS]) to VMT, in order to reduce greenhouse gas emissions (GHG), create multimodal networks, and promote mixed-use developments.

The TAG defines the methodology of analyzing a project's transportation impacts in accordance with SB 743. Per the TAG, the CEQA transportation analysis contains the following thresholds for identifying significant impacts:

- Threshold T-1: Conflicting with Plans, Programs, Ordinances, or Policies
- Threshold T-2.1: Causing Substantial VMT
- Threshold T-2.2: Substantially Inducing Additional Automobile Travel
- Threshold T-3: Substantially Increasing Hazards Due to a Geometric Design Feature or Incompatible Use

The thresholds were reviewed and analyzed, as detailed in the following Sections 4A through 4D. In addition, a CEQA safety analysis of California Department of Transportation (Caltrans) freeway facilities for the Project is provided in Section 4E.

#### Section 4A: Threshold T-1

#### Conflicting with Plans, Programs, Ordinances, or Policies Analysis

Threshold T-1 assesses whether a project would conflict with an adopted program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities.

#### PLANS, PROGRAMS, ORDINANCES, AND POLICIES

Table 2.1-1 of the TAG identifies the City plans, policies, programs, ordinances, and standards relevant in determining project consistency. Attachment D of the TAG, *Plans, Policies, and Programs Consistency Worksheet*, provides a structured approach to evaluate whether a project conflicts with the City's plans, programs, ordinances, or policies and to streamline the review by highlighting the most relevant plans, policies, and programs when assessing potential impacts to the City's transportation system. The *Plans, Policies, and Programs Consistency Worksheet* for the Project is provided in Appendix C.

As stated in Section 2.1.4 of the TAG, a project that generally conforms with and does not obstruct the City's development policies and standards will generally be considered to be consistent. As detailed in Appendix C, the Project is generally consistent with the City documents listed in Table 2.1-1 of the TAG; therefore, the Project would not result in a significant impact under Threshold T-1. A detailed discussion of the plans, programs, ordinances, or policies related to the Project is provided below.

#### Mobility Plan

The Mobility Plan combines "complete street" principles with the following five goals that define the City's mobility priorities:

- <u>Safety First</u>: Design and operate streets in a way that enables safe access for all users, regardless of age, ability, or transportation mode of choice.
- <u>World Class Infrastructure</u>: A well-maintained and connected network of streets, paths, bikeways, trails, and more provides Angelenos with the optimum variety of mode choices.
- <u>Access for All Angelenos</u>: A fair and equitable system must be accessible to all and must pay particularly close attention to the most vulnerable users.
- <u>Collaboration, Communication, and Informed Choices</u>: The impact of new technologies on our day-to-day mobility demands will continue to become increasingly important to the future. The amount of information made available by new technologies must be managed responsibly in the future.
- <u>Clean Environments and Healthy Communities</u>: Active transportation modes such as bicycling and walking can significantly improve personal fitness and create new opportunities for social interaction, while lessening impacts on the environment.

A detailed analysis of the Project's consistency with the specific policies of the Mobility Plan is provided in Table 6 and Appendix C. As detailed in Chapter 2, the Mobility Plan identifies key corridors within the Project area as components of various "mobility-enhanced networks." Though no specific improvements have been identified and there is no schedule for implementation, the mobility-enhanced networks represent a focus on improving a particular aspect of urban mobility, including transit, neighborhood connectivity, bicycles, pedestrians, and vehicles. The Project would be designed with the mobility-enhanced networks as a top priority.

Two vehicular driveways would be provided along La Cienega Boulevard, with one-way ingress at the southern driveway and one-way egress at the northern driveway. La Cienega Boulevard currently meets Mobility Plan roadway and ROW standards, and no dedications or widenings would be required. Bicycle and pedestrian access to the Project Site would be provided separately from the vehicular driveways via commercial and residential entrances along the Project's La Cienega Boulevard frontage. All driveways and access points would be designed consistent with LADOT standards and all ADA requirements. The Project would conform to all design element requirements along the Project frontages to encourage walking and enhance the pedestrian environment.

The Project is located within a transit priority area (TPA) and a High-Quality Transit Area (HQTA) and would provide bicycle parking for residents and visitors, thereby promoting public and active transportation modes and reducing the Project VMT per capita for residents compared to the average for the area, as demonstrated in Section 4B. Further, the Project does not propose modifying, removing, or otherwise negatively affect existing bicycle infrastructure.

Thus, the Project would be consistent with the goals of the Mobility Plan.

#### Plan for a Healthy Los Angeles

*Plan for a Healthy Los Angeles: A Health and Wellness Element of the General Plan* (LADCP, March 2015) introduces guidelines for the City to follow to enhance the City's position as a regional leader in health and equity, encourage healthy design and equitable access, and increase awareness of equity and environmental issues.

A detailed analysis of the Project's consistency with Plan for a Healthy Los Angeles is provided in Table 7. The Project prioritizes safety and access for all individuals utilizing the site by complying with all ADA requirements and providing direct connections to pedestrian amenities along the Project frontage. Further, the Project supports healthy lifestyles by locating housing and jobs within a TPA and HQTA, providing bicycle parking, and designing a more comfortable environment for pedestrians.

Thus, the Project would be consistent with the goals of Plan for a Healthy Los Angeles.

#### Land Use Element of the General Plan

The City General Plan's Land Use Element contains 35 Community Plans that establish specific goals and strategies for the various neighborhoods across Los Angeles. The Project is located within the *Wilshire Community Plan* area.

A detailed analysis of the Project's consistency with *Wilshire Community Plan* is addressed in Table 8. The Project converts vacant space into residential and commercial uses within a TPA and HQTA, in proximity to nearby mixed-use commercial corridors, several local bus lines, and the planned Metro Purple Line (D Line) Extension, and without displacing any existing uses. Thus, the Project would be consistent with the objective to reduce vehicular trips and develop housing in proximity to transportation facilities of *Wilshire Community Plan*.

#### LAMC Section 12.21.A.16 (Bicycle Parking)

LAMC Section 12.21.A.16 details the bicycle parking requirements for new developments. As further detailed in Section 5E, the proposed bicycle parking short-term and long-term supply for the Project would satisfy LAMC requirements.

#### LAMC Section 12.26J (TDM Ordinance)

LAMC Section 12.26J, the TDM Ordinance (1993), establishes trip reduction requirements for non-residential projects in excess of 25,000 sf. The Project does not propose non-residential uses in excess of 25,000 sf. Therefore, LAMC Section 12.26J is not applicable to the Project.

#### Vision Zero Action Plan / Vision Zero Corridor Plans

Vision Zero implements projects that are designed to increase safety on the most vulnerable City streets. As discussed in Chapter 2, La Cienega Boulevard, south of Whitworth Drive, and Pico Boulevard are identified as part of the HIN. Thus, the Project Site is not located adjacent to any corridor identified as part of the HIN. Thus, the Project would not interfere with existing Vision Zero improvement projects, nor would the Project preclude future Vision Zero safety improvements by the City. Thus, the Project does not conflict with Vision Zero.

#### Streetscape Plans

The Project is not located within the boundaries of any streetscape plan and, therefore, streetscape plans do not apply to this Project.

#### **Citywide Design Guidelines**

The Pedestrian-First Design approach of the *Citywide Design Guidelines* (Los Angeles City Planning Urban Design Studio, October 2019) identifies design strategies that "create human scale spaces in response to how people actually engage with their surroundings, by prioritizing active street frontages, clear paths of travel, legible wayfinding, and enhanced connectivity. Pedestrian-First Design promotes healthy living, increases economic activity at the street level, enables social interaction, creates equitable and accessible public spaces, and improves public safety."

The Pedestrian-First Design guidelines are as follows:

- <u>Guideline 1</u>: Promote a safe, comfortable, and accessible pedestrian experience for all.
- <u>Guideline 2</u>: Carefully incorporate vehicular access such that it does not degrade the pedestrian experience.
- <u>Guideline 3</u>: Design projects to actively engage with streets and public space and maintain human scale.

A detailed analysis of the Project's consistency with the guidelines of the Pedestrian-First Design approach is provided in Table 9.

The Project design includes separate bicycle, pedestrian, and vehicular access points and street trees to provide adequate shade and enhance the pedestrian environment in accordance with the City's design considerations. Additionally, the Project will be oriented toward La Cienega Boulevard and the active ground floor facilities will ensure the Project engages with the street and its surrounding uses. Thus, the Project design provides for the safety, comfort, and accessibility of pedestrians, aligning with the Pedestrian-First Design approach.

#### **CUMULATIVE ANALYSIS**

In addition to potential Project-specific impacts, the TAG requires that the Project be reviewed in combination with nearby Related Projects to determine if there may be a cumulatively significant impact resulting from inconsistency with a particular program, plan, policy, or ordinance. In accordance with the TAG, the cumulative analysis must include consideration of any Related Projects within 0.50 miles of the Project Site and any transportation system improvements in the vicinity. Related Projects located within 0.50 miles of the Project site are identified in Table 4.

Similar to the Project, the Related Projects would be individually responsible for complying with relevant plans, programs, ordinances, or policies addressing the circulation system. Thus, the Project, together with the Related Projects, would not result in cumulative impacts with respect to consistency with each of the plans, ordinances, or policies reviewed. The Project and the Related Projects would not interfere with any of the general policy recommendations and/or pilot proposals and, therefore, there would be no significant Project impact or cumulative impact.

### TABLE 6 PROJECT CONSISTENCY WITH MOBILITY PLAN 2035

Objective, Policy, Program, or Plan [a]	Analysis of Project Consistency				
Chapter 1 - Safety First					
Policy 1.1 Roadway User Vulnerability Design, plan, and operate streets to prioritize the safety of the most vulnerable roadway user.	<b>Consistent.</b> Vehicular access would be provided via one-way ingress at the southern driveway and one-way egress at the northern driveway along La Cienega Boulevard. La Cienega Boulevard provides a two-way left-turn median adjacent to the Project Site. Bicycle and pedestrian access to the Project Site would be provided separately from the vehicular driveways via commercial and residential entrances along the Project frontage.				
Policy 1.2 Complete Streets Implement a balanced transportation system on all streets, tunnels, and bridges using complete streets principles to ensure the safety and mobility of all users.	<b>Consistent.</b> The Project would conform to all design element requirements which may affect public rights-of-way, including proper driveway alignment, sidewalk widths, and design that would not hinder sight distance, mobility, or accessibility. The Project would support the mobility goals of the City and help facilitate pedestrian and bicycle accessibility by improving the safety and mobility of all users.				
Policy 1.6, Multi-Modal Detour Facilities Design detour facilities to provide safe passage for all modes of travel.	<b>Consistent.</b> The construction management plan that would be prepared to address non-CEQA impacts would include detour routes for all applicable travel modes, including pedestrian, bicycle, and transit users.				
Chapter 2 - World Class Infrastructure					
Policy 2.2 Complete Streets Design Guide Establish the Complete Streets Design Guide as the City's document to guide the operations and design of streets and other public rights-of- way.	<b>Consistent.</b> The Project would conform to all design element requirements which may affect public rights-of-way, including proper driveway alignment, adequate sidewalk widths, improved lighting elements, and landscaping design which does not hinder sight distance, mobility, or accessibility.				
Policy 2.3 Pedestrian Infrastructure Recognize walking as a component of every trip, and ensure high-quality pedestrian access in all site planning and public right-of-way modifications to provide a safe and comfortable walking environment.	<b>Consistent.</b> Adjacent to the Project Site, La Cienega Boulevard south of Olympic Boulevard is identified as part of the Mobility Plan's Pedestrian Enhanced Network. The Project does not propose repurposing existing curb space and does not propose narrowing or shifting existing sidewalk placement or paving, narrowing, shifting, or removing an existing parkway. The Project's design would include street trees along the Project frontage to provide adequate shade and enhance the pedestrian environment. Additionally, the Project would provide bicycle and pedestrian access separate from the vehicular driveways via commercial and residential amenity entrances along La Cienega Boulevard, and all vehicular access points would be designed to provide an adequate pedestrian refuge area between the driveways where necessary.				
Policy 2.4 Neighborhood Enhanced Network Provide a slow speed network of locally serving streets.	<b>Consistent.</b> No streets adjacent to the Project Site are designated as parts of the Mobility Plan's Neighborhood Enhanced Network. The Project would not affect travel speed or safety, impede the development of any future improvements, or interfere with the neighborhood character of any of these streets.				
Policy 2.5 Transit Network Improve the performance and reliability of existing and future bus service.	<b>Consistent.</b> Adjacent to the Project Site, La Cienega Boulevard south of Olympic Boulevard is designated as part of the Mobility Plan's Transit Enhanced Network. The Project would develop transit-accessible residential and commercial space within an identified Transit Priority Area and High-Quality Transit Area. As discussed in Chapter 2, there is sufficient capacity within the existing and future transit system to accommodate the additional ridership generated by the Project.				
Policy 2.6 Bicycle Networks Provide safe, convenient, and comfortable local and regional bicycling facilities for people of all types and abilities. (includes scooters, skateboards, rollerblades, etc.)	<b>Consistent.</b> No street adjacent to the Project Site have been identified as part of the Bicycle Lane Network or Bicycle Enhanced Network. The Project does not propose modifying, removing, or otherwise affecting existing bicycle infrastructure, and the Project driveways are not proposed along a street with a bicycle facility. Bicycle parking would also be provided on-site in accordance with LAMC requirements.				

Notes:
[a] Objectives, Policies, Programs, or Plans based on information provided in Mobility Plan 2035: An Element of the General Plan (Los Angeles Department of City Planning, January 2016).

# TABLE 6 (CONT.) PROJECT CONSISTENCY WITH MOBILITY PLAN 2035

Objective, Policy, Program, or Plan [a]	Analysis of Project Consistency
Policy 2.9 Multiple Networks Consider the role of each mode enhanced network when designing a street that included multiple modes.	<b>Consistent.</b> La Cienega Boulevard adjacent to the Project Site is identified as part of the Mobility Plan's Transit Enhanced Network and Pedestrian Enhanced Network. The Project would provide ground floor commercial space accessible via La Cienega Boulevard that would serve the adjacent neighborhood. The Project would also improve the adjacent pedestrian facilities to enhance the pedestrian experience as well as to provide safe access to the nearby transit stops.
Policy 2.10 Loading Areas Facilitate the provision of adequate on and off- street loading areas.	Consistent. All commercial loading activities would occur on-site as to not disrupt the operations within the public right-of-way.
Policy 2.17 Street Widenings Carefully consider the overall implications (costs, character, safety, travel, infrastructure, environment) of widening a street before requiring the widening, even when the existing right of way does not include a curb and gutter or the resulting roadway would be less than the standard dimension.	<b>Consistent.</b> The Project does not propose modifications to widen streets beyond their required Mobility Plan classifications, nor does the Project require any dedications of right-of-way.
Chapter 3 - Access for All Angelenos	L
Policy 3.1 Access for All Recognize all modes of travel, including pedestrian, bicycle, transit, and vehicular modes – including goods movement – as integral components of the City's transportation system.	<b>Consistent.</b> The Project encourages multi-modal transportation alternatives and access for all travel modes to and from the Project Site. The Project provides separate bicycle and pedestrian entrances and bicycle parking to encourage walking and bicycling. The Project encourages transit usage by developing a mixed-use project, including 29 affordable housing units, located in proximity to transit. The Project would support those residents, employees, and visitors who choose to travel by automobile through the provision of access points along La Cienega Boulevard and an adequate parking supply as allowed for projects within a Transit Oriented Communities Tier 3 area.
Policy 3.2 People with Disabilities Accommodate the needs of people with disabilities when modifying or installing infrastructure in the public right-of-way.	<b>Consistent.</b> The Project's vehicular, bicycle, and pedestrian entrances would be designed in accordance with LADOT standards and would comply with Americans with Disabilities Act (ADA) requirements. The Project design would also be in compliance with all ADA requirements and would provide direct connections to pedestrian amenities along the Project frontage.
Policy 3.3 Land Use Access and Mix Promote equitable land use decisions that result in fewer vehicle trips by providing greater proximity and access to jobs, destinations, and other neighborhood services.	<b>Consistent.</b> The Project's mix of residential, including 29 affordable housing units, and local- serving commercial uses located within proximity to transit helps to minimize vehicle trips and enhance proximity and convenience of residences to jobs and services.
Policy 3.4 Transit Services Provide all residents, workers, and visitors with affordable, efficient, convenient, and attractive transit services.	<b>Consistent.</b> The Project is located within one-quarter mile of several Metro local and Santa Monica Big Blue Bus lines, providing residents, employees, and patrons opportunities to travel to the Project Site via multiple public transit services. The Project is also located within one-half mile of the Metro Purple Line (D Line) Extension Wilshire/La Cienega Station.
Policy 3.5 Multi-Modal Features Support "first-mile, last-mile solutions" such as multi-modal transportation services, organizations, and activities in the areas around transit stations and major bus stops (transit stops) to maximize multi-modal connectivity and access for transit riders.	<b>Consistent.</b> The Project would support "first-mile, last-mile solutions" by developing a project located in an active residential and commercial area of the Wilshire community and within one- quarter mile of several local bus lines. Additionally, the Project includes several design features as TDM measures, such as a reduced parking supply, unbundled parking, and the provision of bicycle parking per the LAMC, that will encourage the use of transit and other alternative modes of transportation.
Policy 3.8 Bicycle Parking Provide bicyclists with convenient, secure, and well-maintained bicycle parking facilities.	<b>Consistent.</b> The Project provides infrastructure and services to encourage bicycling for residents, employees, and visitors to the Project Site.

Notes:
[a] Objectives, Policies, Programs, or Plans based on information provided in Mobility Plan 2035: An Element of the General Plan (Los Angeles Department of City Planning, January 2016).

# TABLE 6 (CONT.) PROJECT CONSISTENCY WITH MOBILITY PLAN 2035

Objective, Policy, Program, or Plan [a]	Analysis of Project Consistency				
Chapter 4 - Collaboration, Communication, & Informed Choices					
Policy 4.8 Transportation Demand Management Strategies Encourage greater utilization of Transportation Demand Management (TDM) strategies to reduce dependence on single-occupancy vehicles.	<b>Consistent.</b> The Project incorporates several design features, which include TDM measures to reduce the number of single occupancy vehicle trips to the Project Site, such as a reduced parking supply, unbundled parking, and the provision of bicycle parking per the LAMC.				
Policy 4.13 Parking and Land Use Management Balance on-street and off-street parking supply with other transportation and land use objectives.	<b>Consistent.</b> The Project would provide sufficient off-street parking as allowed for projects within a TOC Tier 3 area. The Project would also retain the existing on-street parking around Project frontage, to the extent feasible.				
Chapter 5 - Clean Environments & Healthy Com	nunities				
Policy 5.1 Sustainable Transportation Encourage the development of a sustainable transportation system that promotes environmental and public health.	<b>Consistent.</b> As part of the Project, bicycle parking facilities and improved pedestrian facilities would be provided. This would promote active transportation modes such as biking and walking. Additionally, the Project is located within one-quarter mile of several local bus lines, providing residents, employees, and visitors to the Project with public transportation alternatives.				
Policy 5.2 Vehicle Miles Traveled (VMT) Support ways to reduce vehicle miles traveled (VMT) per capita.	<b>Consistent.</b> The Project is estimated to generate lower VMT per capita for residents than the average for the area, as demonstrated in Section 4B. Additionally, the Project incorporates several TDM measures to reduce the number of single occupancy vehicle trips to the Project Site, including a reduced parking supply, unbundled parking, and the provision of bicycle parking per the LAMC.				

Notes: [a] Objectives, Policies, Programs, or Plans based on information provided in Mobility Plan 2035: An Element of the General Plan (Los Angeles Department of City Planning, January 2016).

# TABLE 7 PROJECT CONSISTENCY WITH PLAN FOR A HEALTHY LOS ANGELES

Objective, Policy, Program, or Plan [a]	Analysis of Project Consistency			
Chapter 1 - Los Angeles, a Leader in Health and Equity				
Policy 1.5 Plan for Health Improve Angelenos' health and well-being by incorporating a health perspective into land use, design, policy, and zoning decisions through existing tools, practices, and programs.	<b>Consistent.</b> The Project prioritizes safety and access for all individuals utilizing the site by complying with all ADA requirements and providing direct connections to pedestrian amenities along the Project frontage. The Project supports healthy lifestyles by locating housing and jobs near transit, providing bicycle parking, and designing a more comfortable environment for pedestrians.			
Policy 1.7 Displacement and Health Reduce the harmful health impacts of displacement on individuals, families and communities by pursuing strategies to create opportunities for existing residents to benefit from local revitalization efforts by: creating local employment and economic opportunities for low-income residents and local small businesses; expanding and preserving existing housing opportunities available to low-income residents; preserving cultural and social resources; and creating and implementing tools to evaluate and mitigate the potential displacement caused by large-scale investment and development.	<b>Consistent.</b> The Project provides residential, including 29 affordable housing units, and employment opportunities in close proximity to transit. The Project does not displace any existing housing; rather, it converts vacant space into an active and vibrant mixed-use community with improved mobility options.			
Chapter 2 - A City Built for Health				
Policy 2.1 Access to Goods and Services Enhance opportunities for improved health and well-being for all Angelenos by increasing the availability of and access to affordable goods and services that promote health and healthy environments, with a priority on low-income neighborhoods.	<b>Consistent.</b> The Project provides employment and entrepreneurial opportunities for both new residents and existing community members through the development of residential and commercial space.			
Chapter 5 - An Environment Where Life Thrives				
Policy 5.7 Land Use Planning for Public Health and GHG Emission Reduction Promote land use policies that reduce per capita greenhouse gas emissions, result in improved air quality and decreased air pollution, especially for children, seniors and others susceptible to respiratory diseases.	<b>Consistent.</b> The Project is estimated to generate lower VMT per capita for residents than the average for the area, as demonstrated in Section 4B. Additionally, the Project incorporates several TDM measures to reduce the number of single occupancy vehicle trips to the Project Site, including a reduced parking supply, unbundled parking, and the provision of bicycle parking per the LAMC, as Project design features. VMT directly contributes to GHG emissions, so a reduced VMT per capita also reduces GHG per capita.			

Notes:

[a] Objectives, Policies, Programs, or Plans based on information provided in *Plan for a Healthy Los Angeles: A Health and Wellness Element of the General Plan* (Los Angeles Department of City Planning, March 2015).

#### TABLE 8 PROJECT CONSISTENCY WITH WILSHIRE COMMUNITY PLAN

Objective, Policy, Program, or Plan [a]	Analysis of Project Consistency
Plan Objectives and Policies	
<b>Objective 1-1:</b> Provide for the preservation of existing quality housing, and for the development of new housing to meet the diverse economic and physical needs of the existing residents and expected new residents in the Wilshire Community Plan Area to the year 2010. Policy 1-1.3: Provide for adequate Multiple Family residential development.	<b>Consistent.</b> The Project converts vacant space into a mixed-use development, including multi-family housing with 29 affordable housing units.
<b>Objective 1-2:</b> Reduce vehicular trips and congestion by developing new housing in close proximity to regional and community commercial centers, subway stations, and existing bus route stops. Policy 1-2.1: Encourage higher density residential uses near major public transportation centers.	<b>Consistent.</b> The Project constructs higher density residential uses in close proximity to mixed-use commercial corridors, including Olympic Boulevard and Pico Boulevard, and several local bus lines. The Project is also located within one-half mile of the Metro Purple Line (D Line) Extension Wilshire/La Cienega Station.
<b><u>Objective 1-4:</u></b> Provide affordable housing and increased accessibility to more population segments, especially students, the handicapped, and senior citizens. Policy 1-4.1: Provide greater individual choice in type, quality, price, and location of housing.	<b>Consistent.</b> The Project would provide multi-family housing, including 29 affordable housing units. No existing residential units would be displaced by the Project.
Policy 1-4.2: Ensure that new housing opportunities minimize displacement of residents.	
<b>Objective 2-1:</b> Preserve and strengthen viable commercial development and provide additional opportunity for new commercial development and services within existing commercial areas. Policy 1-1.1: New commercial uses should be located in established commercial areas or shopping centers.	<b>Consistent.</b> The Project converts vacant space into a mixed-use development, including local-serving commercial uses, in close proximity to mixed-use commercial corridors, including Olympic Boulevard and Pico Boulevard, and several local bus lines.
Policy 1-1.3: Enhance the viability of existing neighborhood stores and businesses which support the needs of local residents and are compatible with the neighborhood.	
<b><u>Objective 2-2:</u></b> Promote distinctive commercial districts and pedestrian-oriented areas. Policy 2-2.1: Encourage pedestrian-oriented design in designated areas and in new development.	<b>Consistent.</b> Bicycle and pedestrian access to the Project Site would be provided separately from the vehicular driveways via commercial and residential entrances along the Project Frontage on La Cienega Boulevard. The Project encourages walking to and from the Project site by designing a more comfortable environment for pedestrians and providing direct connections to nearby pedestrian amenities.
Design Policies for Individual Projects	
<ul> <li><u>A-1 Site Planning:</u> Structures shall be oriented toward the main commercial street where a parcel is located and avoid pedestrian/vehicular conflicts by:</li> <li>b. Minimize the number of driveways/curb cuts which provide access from arterials.</li> <li>c. Maximize pedestrian oriented retail and commercial service uses along street grade level frontages along commercial boulevards.</li> </ul>	<b>Consistent.</b> Vehicular access would be provided via one-way ingress at the southern driveway and one-way egress at the northern driveway on La Cienega Boulevard. Bicycle and pedestrian access to the Project Site would be provided separately from the vehicular driveways via commercial and residential amenity entrances along the Project frontage. The Project would be oriented towards La Cienega Boulevard and designed to further activate the street level frontages and enhance the pedestrian environment.

Notes:

[a] Objectives, Policies, Programs, or Plans based on information provided in the Hollywood Community Plan, Los Angeles Department of City Planning, 1988.

# TABLE 9 PROJECT CONSISTENCY WITH CITYWIDE DESIGN GUIDELINES

Objective, Policy, Program, or Plan [a]	Analysis of Project Consistency
Pedestrian-First Design	·
Guideline 1: Promote a safe, comfortable, and accessible pedestrian experience for allDesign projects to be safe and accessible and contribute to a better public right-of-way for people of all ages, genders, and abilities, especially the most vulnerable - children, seniors, and people with disabilities.Guideline 2: Carefully incorporate vehicular access such that it does not degrade the pedestrian experienceDesign to avoid pedestrian and vehicular conflicts and to create an inviting and comfortable public realm reinforces walkability and improves the quality of life for users.Guideline 3: Design projects to actively engage with streets and public space and maintain human scaleNew projects should be designed to contribute to a vibrant and attractive public realm that promotes a sense of civic pride. Better connections within the built environment contribute to a livable and accessible city and a healthier public realm.	<b>Consistent.</b> The Project provides for the safety, comfort, and accessibility of pedestrians in a number of ways. First, the Project would separate bicycle and pedestrian access from vehicular access via commercial and residential amenity entrances along the Project frontage. Additionally, the Project's design would include street trees along the project frontage to provide adequate shade and enhance the pedestrian environment. Vehicular access would be provided via a circular driveway along La Cienega Boulevard with one-way ingress at the southern driveway and one-way egress at the northern driveway. La Cienega Boulevard provides a two-way left-turn median adjacent to the Project Site. As discussed above, bicycle and pedestrian access to the Project Site would be provided separately from the vehicular driveway. Therefore, it is not anticipated that the Project would result in conflict between pedestrians and vehicles. The Project design includes accessible sidewalks, pedestrian amenities, and vehicular driveways in accordance with the City's design considerations. Further, the orientation of the Project's design and active ground floor facilities ensures that the Project engages with the street and its surrounding uses.
360 Degree Design	<u> </u>
Guideline 6: Provide amenities that support community building and provide an inviting, comfortable user experience Design to create livable places and desirable environments where people want to spend time engaging in social, civic, and recreational activities. Projects that encourage connections with a variety of transit modes and enhance their immediate environment with amenities are highly encouraged.	<b>Consistent.</b> The Project design includes elements that reinforce orientation to the street, such as local-serving ground floor commercial space and the Project's connections to the off-site pedestrian facilities. The Project is also located in proximity to active commercial centers of the Wilshire Community and residential neighborhoods, as well as various transit opportunities.
Climate-Adapted Design	<u> </u>
Guideline 9: Configure the site layout, building massing and orientation to lower energy demand and increase the comfort and well-being of users Design projects to incorporate sustainable design and energy efficiency principles. Encouraging sustainability and innovation contributes to the well-being of current and future generations.	<b>Consistent</b> . The Project would provide street trees to provide adequate shade and a more comfortable environment for pedestrians.

Notes:

[a] Objectives, Policies, Programs, or Plans based on information provided in the Citywide Design Guidelines (Los Angeles Department of City Planning, 2019).

### Section 4B: Threshold T-2.1 Causing Substantial VMT Analysis

Threshold T-2.1 states that a residential project would result in a significant VMT impact if it cannot meet the household VMT per capita of 15% below the existing average household VMT per capita for the Area Planning Commission (APC) area in which a project is located. Similarly, a commercial project would result in a significant VMT impact if it cannot meet the work VMT per employee of 15% below the existing average work VMT per employee for the APC area in which the project is located.

The VMT analysis presented below was conducted in accordance with the TAG, which satisfies State requirements under SB 743.

#### VMT METHODOLOGY

The following describes the methodology by which vehicle trips and VMT are calculated in *City of Los Angeles VMT Calculator Version 1.3* (LADOT, July 2020 (VMT Calculator), as detailed in *City of Los Angeles VMT Calculator Documentation* (LADOT and LADCP, May 2020). LADOT developed the VMT Calculator to estimate project-specific daily household VMT per capita and daily work VMT per employee for developments within City limits, which are based on the following types of one-way trips:

- <u>Home-Based Work Production</u>: trips to a workplace destination originating from a residential use
- <u>Home-Based Other Production</u>: trips to a non-workplace destination (e.g., retail, restaurant, etc.) originating from a residential use
- <u>Home-Based Work Attraction</u>: trips to a workplace destination originating from a residential use

As detailed in *City of Los Angeles VMT Calculator Documentation*, the household VMT per capita threshold applies to Home-Based Work Production and Home-Based Other Production trips, and

the work VMT per employee threshold applies to Home-Based Work Attraction trips, as the location and characteristics of residences and workplaces are often the main drivers of VMT, as detailed in Appendix 1 of *Technical Advisory on Evaluating Transportation Impacts in CEQA* (OPR, December 2018).

Other types of trips generated in the VMT Calculator include Non-Home-Based Other Production (trips to a non-residential destination originating from a non-residential use), Home-Based Other Attraction (trips to a non-workplace destination originating from a residential use), and Non-Home-Based Other Attraction (trips to a non-residential destination originating from a non-residential use). These trip types are not factored into the VMT per capita and VMT per employee thresholds as those trips are typically localized and are assumed to have a negligible effect on the VMT impact assessment. However, those trips are factored into the calculation of total project VMT for screening purposes when determining if VMT analysis would be required.

Table 2.2-1 of the TAG details the following daily household VMT per capita and daily work VMT per employee impact criteria for the APC areas:

APC	Daily Household VMT per Capita	Daily Work VMT per Employee
Central	6.0	7.6
East LA	7.2	12.7
Harbor	9.2	12.3
North Valley	9.2	15.0
South LA	6.0	11.6
South Valley	9.4	11.6
West LA	7.4	11.1
Source: TAG	•	•

Source: TAG

The Project is located within the Central APC and, therefore, has a daily household VMT per capita impact threshold of 6.0 and a daily work VMT per employee impact threshold of 7.6.

#### Travel Behavior Zones (TBZ)

The City developed TBZ categories to determine the magnitude of VMT and vehicle trip reductions that could be achieved through TDM strategies. As detailed in *City of Los Angeles VMT Calculator Documentation*, the development of the TBZs considered the population density, land use density, intersection density, and proximity to transit of each Census tract in the City and are categorized as follows:

- 1. <u>Suburban (Zone 1)</u>: Very low-density primarily centered around single-family homes and minimally connected street network
- 2. <u>Suburban Center (Zone 2)</u>: Low-density developments with a mix of residential and commercial uses with larger blocks and lower intersection density
- 3. <u>Compact Infill (Zone 3)</u>: Higher density neighborhoods that include multi-story buildings and well-connected streets
- 4. <u>Urban (Zone 4)</u>: High-density neighborhoods characterized by multi-story buildings with a dense road network

The VMT Calculator determines a project's TBZ based on the latitude and longitude of a project address. The Project located within a Suburban Center (Zone 2) TBZ.

#### Mixed-Use Development Methodology

As detailed in *City of Los Angeles VMT Calculator Documentation*, the VMT Calculator accounts for the interaction of land uses within a mixed-use development and considers the following sociodemographic, land use, and built environment factors for a project area:

- The project's jobs/housing balance
- Land use density of the project
- Transportation network connectivity
- Availability of and proximity to transit
- Proximity to retail and other destinations
- Vehicle ownership rates
- Household size

#### Trip Lengths

The VMT Calculator determines a project's VMT based on trip length information from the City's Travel Demand Forecasting Model, which considers the traffic analysis zones within 0.125 miles of a project to determine the average trip length and trip type, which factor into the calculation of a project's VMT.

#### Population and Employment Assumptions

As previously stated, the VMT thresholds identified in the TAG are based on household VMT per capita and work VMT per employee. Thus, the VMT Calculator contains population assumptions developed based on Census data for the City and employment assumptions derived from multiple data sources, including *2012 Developer Fee Justification Study* (Los Angeles Unified School District, 2012), *Trip Generation Manual, 9<sup>th</sup> Edition* (ITE, 2012), the San Diego Association of Governments Activity Based Model, the United States Department of Energy, and other modeling resources. A summary of population and employment assumptions for various land uses is provided in Table 1 of City of Los Angeles VMT Calculator Documentation.

#### **TDM Measures**

Additionally, the VMT Calculator measures the reduction in VMT resulting from a project's incorporation of TDM strategies. The following seven categories of TDM strategies are included in the VMT Calculator:

- 1. Parking
- 2. Transit
- 3. Education and Encouragement
- 4. Commute Trip Reductions
- 5. Shared Mobility
- 6. Bicycle Infrastructure
- 7. Neighborhood Enhancement

TDM strategies within each of these categories have been empirically demonstrated to reduce trip-making or mode choice in such a way as to reduce VMT, as documented in *Quantifying Greenhouse Gas Mitigation Measures* (California Air Pollution Control Officers Association, 2010).

#### **PROJECT VMT ANALYSIS**

The VMT Calculator was used to evaluate Project VMT for comparison to the VMT impact criteria. Based on guidance from the City, the VMT Calculator was modeled for the Project's land uses and their respective sizes as the primary input.

As stated in the TAG and per *City of Los Angeles VMT Calculator User Guide* (LADOT and LADCP, May 2020), retail uses (including restaurant uses) totaling less than 50,000 sf would be considered local- serving and would have a negligible effect on regional VMT. Therefore, the VMT impact of the Project's commercial component would be considered less-than-significant. As such, the VMT analysis presented below evaluates the household VMT per capita generated by the residential uses of the Project.

#### Project VMT

The Project design incorporates TDM measures that would reduce the number of single occupancy vehicle trips to the Project Site, including a reduced parking supply compared to standard LAMC requirements, unbundled parking, and the provision of bicycle parking, as further detailed in Section 5E. Therefore, for the purposes of this analysis, these TDM strategies were considered as Project design features in the VMT Calculator.

The VMT analysis results based on the VMT Calculator are summarized in Table 10. The VMT Calculator estimates that the Project would generate a total daily VMT of 11,780 and a total homebased production VMT of 3,179. Thus, the Project would generate an average household VMT per capita of 4.7. The average household VMT per capita would not exceed the Central APC significant household VMT impact threshold of 6.0 and, therefore, the overall Project would not result in a significant VMT impact, and no mitigation measures would be required. The detailed output from the VMT Calculator is provided in Appendix D.

#### CUMULATIVE ANALYSIS

Cumulative effects of development projects are determined based on the consistency with the air quality and GHG reduction goals of *Connect SoCal – The 2020-2045 Regional Transportation Plan / Sustainable Communities Strategy of the Southern California Association of Governments* (Southern California Association of Governments [SCAG], Adopted September 2020) (RTP/SCS) in terms of development location, density, and intensity. The RTP/SCS presents a long-term vision for the region's transportation system through Year 2045 and balances the region's future mobility and housing needs with economic, environmental, and public health goals.

As detailed in the TAG, for projects that do not demonstrate a project impact by applying an efficiency-based impact threshold (i.e., household VMT per capita or work VMT per employee) in the project impact analysis, a less than significant impact conclusion is sufficient in demonstrating there is no cumulative VMT impact, as those projects are already shown to align with the long-term VMT and GHG goals of the RTP/SCS.

As described above, the Project would not result in a significant VMT impact. Further, the Project would be designed to further reduce single occupancy trips to the Project Site through various TDM strategies that would be incorporated as part of the Project design, including a reduced vehicular parking supply compared to standard LAMC requirements and the provision of LAMC-required bicycle parking. Therefore, the Project would result in a less-than-significant cumulative impact under Threshold T-2.1 and no further evaluation or mitigation measures would be required.

Furthermore, the Project Site is well-served by various local bus lines and would contribute to the productivity and use of the regional transportation system by providing housing near transit and encourage active transportation by providing new bicycle parking infrastructure and active street frontages, in line with RTP/SCS goals. Thus, the Project would encourage a variety of transportation options and would be consistent with the RTP/SCS goal of maximizing mobility and accessibility in the region.

#### TABLE 10 VMT ANALYSIS SUMMARY

Project Information				
Land Use	Size			
Multi-Family Housing	261 du			
Affordable Housing - Family	29 du			
High-Turnover Sit-Down Restaurant	7,500 sf			
Project Analysis [a]				
Resident Population	679			
Employee Population	30			
Project Area Planning Commission	Central			
Travel Behavior Zone (TBZ)	Suburban Center			
Maximum Allowable VMT Reduction [b]	20%			
VMT Analysis [c]				
Daily Vehicle Trips	1,852			
Total Daily VMT	11,780			
Total Home-Based Production VMT	3,179			
Household VMT per Capita [d]	4.7			
Impact Threshold	6.0			
Significant Impact	NO			
Total Work-Based Attraction VMT	214			
Work VMT per Employee [e]	N/A			
Impact Threshold	7.6			
Significant Impact	NO			

Notes:

du = dwelling units. sf = square feet.

[a] VMT results based on the City of Los Angeles VMT Calculator Version 1.3 (July 2020).

- [b] The maximum allowable VMT reduction is based on the Project's designated TBZ as determined in *Transportation Demand Management Strategies in LA VMT Calculator* (LADOT, November 2019) and *Quantifying Greenhouse Gas Mitigation Measures* (California Air Pollution Control Officers Association, 2010).
- [c] Project design features include reduced parking supply, unbundled parking, and the provision of bike parking per LAMC.
- [d] Based on home-based production trips only (see Appendix D, Report 4).
- [e] The Project provides less than 50,000 sf of commercial retail and restaurant space and is therefore presumed to have a less-than-significant impact according to the TAG.

### Section 4C: Threshold T-2.2 Substantially Inducing Additional Automobile Travel Analysis

The intent of Threshold T-2.2 is to assess whether a transportation project would induce substantial VMT by increasing vehicular capacity on the roadway network, such as the addition of through traffic lanes on existing or new highways, including general purpose lanes, high-occupancy vehicle lanes, peak period lanes, auxiliary lanes, and lanes through grade-separated interchanges.

The Project is not a transportation project that would induce automobile travel. Therefore, further evaluation is not required, and the Project would not result in a significant impact under Threshold T-2.2.

#### Section 4D: Threshold T-3

# Substantially Increasing Hazards Due to a Geometric Design Feature or Incompatible Use Analysis

Evaluation is required for projects that propose new access points or modifications along the public ROW (i.e., street dedications) under Threshold T-3. Project access plans were reviewed to determine if the Project would substantially increase hazards due to geometric design features, including safety, operational, or capacity impacts.

#### **ACCESS OVERVIEW**

As described in Chapter 1, vehicular access to the Project Site would be provided via one-way ingress at the southern driveway and one-way egress at the northern driveway. La Cienega Boulevard provides a two-way left-turn median adjacent to the Project Site that will facilitate left-turns into and out of the driveways. Bicycle and pedestrian access to the Project Site would be provided separately from the vehicular driveways via retail and residential entrances along La Cienega Boulevard. The Project would not modify roadway widths or otherwise affect the geometric design of roads surrounding the Project Site, nor would it implement any features that would obstruct sight distance or paths of vehicular, pedestrian, or bicycle travel.

#### **PROJECT HAZARDS ANALYSIS**

#### Potential Geometric Design Hazards

The Project would not increase the number of curb cuts along the Project's La Cienega Boulevard frontage. The vehicular driveways would provide adequate sight distance, as La Cienega Boulevard has no curvatures and is relatively level adjacent to the Project Site. The design does not locate impediments that would affect visibility of approaching vehicles, pedestrians, or

bicycles. Additionally, the vehicular driveways would intersect La Cienega Boulevard at right angles, to the extent possible, to maximize sight distance.

Based on the analysis in Chapter 3, the Project is estimated to generate fewer than 150 total trips (inbound and outbound) during any single peak hour, which equates to fewer than three vehicles per minute. Additionally, operations are restricted to inbound only at the southern driveway and outbound only traffic at the northern driveway, which reduces conflicts and activity compared to a full-access driveway. The driveways would have the capacity to accommodate the Project trips and, therefore, no queue spillover into the public ROW is anticipated.

#### **Consistency with Modal Priority Networks**

The segment of La Cienega Boulevard on which Project vehicular driveways are located is not designated as part of the BEN/BLN, HIN, or NEN. Along the Project frontage, La Cienega Boulevard is identified as part of the TEN and PED. Nevertheless, the designs do not result in any impediments to the visibility of approaching vehicles, pedestrians, or bicycles, and the Project vehicular driveways would intersect La Cienega Boulevard at right angles, to the extent possible, to maximize sight distance and be designed to City standards. Further, all vehicular access points would be designed to provide an adequate pedestrian refuge area between the driveways. The Project would not increase the number of curb cuts along the La Cienega Boulevard frontage and, thus, would limit potential interruptions to pedestrian, bicycle, and vehicle traffic flow. Thus, the Project vehicular driveways would present no substantial conflict with any of those modal priorities. Moreover, the Project would not preclude or interfere with the implementation of future roadway improvements benefiting transit, pedestrians, or bicycles.

#### Pedestrian and Bicycle Activity

As discussed above, bicycle and pedestrian access to the Project Site would be provided separately from the vehicular driveways via retail and residential amenity entrances along La Cienega Boulevard. The Project would result in a modest increase in both bicycle and pedestrian activity along La Cienega Boulevard; however, the access locations would be designed to accommodate adequate sidewalks and enhanced connectivity that meet the City's requirements

to further protect bicycle and pedestrian safety. The driveways would not cross any existing bicycle infrastructure and adequate sight distance exists for drivers entering and/or exiting driveways to see oncoming bicyclists and pedestrians. Therefore, the Project is not anticipated to result in significant vehicle-pedestrian or vehicle-bicycle conflicts.

#### Summary

Based on this review, the Project would not result in any hazards from the design or operation and would not result in a significant impact.

#### **CUMULATIVE ANALYSIS**

In addition to potential Project-specific impacts, the TAG requires that the Project be reviewed in combination with Related Projects with access points along the same block as the Project to determine if there may be a cumulatively significant impact. None of the Related Projects in Table 4 and Figure 9 are located along the same block as the Project. Therefore, the Project would not result in cumulative impacts that would substantially increase hazards due to geometric design features, including safety, operational, or capacity impacts.

### Section 4E Freeway Safety Analysis

LADOT issued *Interim Guidance for Freeway Safety Analysis* (May 1, 2020) (City Freeway Guidance) identifying City requirements for a CEQA safety analysis of Caltrans facilities as part of a transportation assessment.

#### **ANALYSIS METHODOLOGY**

The City Freeway Guidance relates to the identification of potential safety issues at freeway offramps as a result of increased traffic from development projects. It provides a methodology and significance criteria for assessing whether additional vehicle queueing at off-ramps could result in a safety issue due to speed differentials between the mainline freeway lanes and the queued vehicles at the off-ramp.

Based on the City Freeway Guidance, a transportation assessment for a development project must include analysis of any freeway off-ramp where the project adds 25 or more peak hour trips. A project would result in a significant contribution to such a ramp if each of the following three criteria were met:

- 1. Under a scenario analyzing future conditions upon project buildout, with project traffic included, the off-ramp queue would extend to the mainline freeway lanes<sup>3</sup>.
- 2. A project would contribute at least two vehicle lengths (50 feet, assuming 25 feet per vehicle) to the queue.
- 3. The average speed of mainline freeway traffic adjacent to the off-ramp during the analyzed peak hour(s) is greater than 30 mph.

Should a significant contribution be identified, corrective measures to be considered include TDM strategies to reduce a project's trip generation, investments in active transportation or transit

<sup>&</sup>lt;sup>3</sup> If an auxiliary lane is provided on the freeway, then half the length of the auxiliary lane is added to the ramp storage length.

system infrastructure to reduce a project's trip generation, changes to the traffic signal timing or lane assignments at the ramp intersection, or physical changes to the off-ramp. Any physical change to the ramp would have to improve safety, not induce greater VMT, and not result in secondary environmental impacts.

#### PROJECT SAFETY ANALYSIS

Based on the Project's trip generation estimates and trip assignments, which are detailed in Chapter 3, the Project would not add 25 or more peak hour trips to any freeway off-ramp locations. Therefore, no further freeway off-ramp queuing analysis is required. Furthermore, the Project would not adversely affect safety on freeway facilities and no corrective measures at any freeway off-ramps would be required.

# Chapter 5 Non-CEQA Transportation Analysis

This chapter summarizes the non-CEQA transportation analysis of the Project. It includes an evaluation of Project traffic, proposed access provisions, safety, and circulation operations of the Project, and pedestrian, bicycle, and transit facilities in the vicinity of the Project. This chapter also evaluates the Project's operational conditions, parking supply and requirements, and effects due to Project construction.

Per Section 3.1 of the TAG, any deficiencies identified based on the non-CEQA transportation analysis is "not intended to be interpreted as thresholds of significance, or significance criteria for purposes of CEQA review unless otherwise specifically identified in Section 2." Section 3 of the TAG identifies the following four non-CEQA transportation analyses for reviewing potential transportation deficiencies that may result from a development project:

- Pedestrian, Bicycle, and Transit Access Assessment
- Project Access, Safety, and Circulation Evaluation
- Residential Street Cut-Through Analysis
- Project Construction

The four non-CEQA transportation analyses are reviewed in detail in Sections 5A through 5D. In addition, a review of the proposed parking and the City's parking requirement for the Project is provided in Section 5E.

# Section 5A Pedestrian, Bicycle, and Transit Assessment

This section assesses the Project's potential effect on pedestrian, bicycle, and transit facilities in the vicinity of the Project Site. Factors to consider when assessing a project's potential effect on pedestrian, bicycle, and transit facilities, include the following:

- Would the project directly or indirectly result in a permanent removal or modification that would lead to the degradation of pedestrian, bicycle, or transit facilities?
- Would a project intensify use of existing pedestrian, bicycle, or transit facilities?

#### **EXISTING FACILITIES**

#### Pedestrians and Bicycles

Existing pedestrian facilities adjacent to the Project Site include sidewalks along both sides of La Cienega Boulevard. The Project would consolidate existing curb cuts and would not introduce any modifications or disruptions to bicycle facilities adjacent to the Project Site. As such, the Project would not directly or indirectly result in a permanent removal or modification that would lead to the degradation of pedestrian or bicycle facilities. Although the Project may intensify use of existing pedestrian and bicycle facilities, as well as vehicular traffic volumes using La Cienega Boulevard, it is not anticipated that the volumes of any of those travel modes would reach a level where any degradation, capacity constraint, or conflict would arise.

#### <u>Transit</u>

As detailed in Chapter 2 and illustrated in Figure 7, the Project Site is located within 0.25 miles of several transit stops providing service to lines operated by Metro and Santa Monica Big Blue Bus within the Study Area. Nearest to the Project Site, bus stops serving Metro Line 105 are located at Intersection #2, La Cienega Boulevard & Whitworth Drive, bus stops serving Metro Lines 28 and

105 are located at Intersection #1, La Cienega Boulevard & Olympic Boulevard, and bus stops serving Metro Line 105 and Santa Monica Big Blue Bus Routes 7 and Rapid 7 are located at Intersection #3, La Cienega Boulevard & Pico Boulevard. The Project Site is also located within 0.50 miles of the planned Metro Purple Line (D Line) Extension Wilshire/La Cienega Station.

Tables 3A and 3B summarize the total residual capacity of the Metro bus and Santa Monica Big Blue Bus lines within 0.25 miles of the Project Site during the morning and afternoon peak hours based on the frequency of service of each line and the maximum seated and standing capacity of each bus. As shown, the transit lines within 0.25 miles walking distance of the Project Site currently have additional capacity for 1,241 additional riders during the morning peak hour and 1,166 additional riders during the afternoon peak hour.

#### INTENSIFICATION OF USE

The Project would result in some intensification of pedestrian, bicycle, and transit activity in the vicinity of the Project Site. However, given the Project Site's location near local bus services and its proximity to active commercial centers, it is ideally located to encourage non-automobile trips to and from those destinations and reach additional public transit routes. The amount of additional pedestrian, bicycle, and transit activity generated by the Project would not strain the capacity of facilities and operations dedicated to those modes.

#### Transit Ridership

Although the Project will cumulatively add transit ridership, the Project Site and Study Area are served by a vast amount of transit service, as detailed in Table 2. As shown in Tables 3A and 3B, the total residual capacity of the bus lines within 0.25 miles walking distance of the Project Site during the morning and afternoon peak hours is approximately 1,241 and 1,166 riders, respectively. As shown in Table 5, the total Project trips during the morning and afternoon peak hours are projected at 130 and 138 vehicle trips, respectively. It should be noted that a percentage of vehicle-transit trips are inherent in the trip generation rates of the residential component, and a 10% transit usage reduction was applied to the commercial trip generation estimates. However, for the purposes of providing a more conservative analysis, all vehicle trips generated by the

Project were converted into person-transit trips to determine if the entirety of the Project could be accommodated within the reserve capacity of the transit system. Based on the average vehicle occupancy factor of 1.55 for all trip purposes in Los Angeles County as identified in *SCAG Regional Travel Demand Model and 2012 Model Validation* (SCAG, March 2016), the total Project vehicle-transit trips correspond to 202 and 214 person-transit trips in the morning and afternoon peak hours, respectively. This equates to 16% and 12% of the total residual capacity of the transit lines within the Study Area during the morning and afternoon peak hours, respectively. This result confirms that the adjacent transit capacity can easily accommodate the intensification of transit usage attributable to the Project without significantly absorbing excess capacity, even when all vehicle trips are converted to transit trips.

## Section 5B Project Access, Safety, and Circulation Assessment

This section summarizes access, safety, and circulation at and around the Project Site. It includes a quantitative evaluation of the Project's access and circulation operations, including the anticipated LOS at the study intersections and anticipated traffic queues.

#### **PROJECT ACCESS**

#### <u>Vehicles</u>

Vehicular access would be provided via one-way ingress at the southern driveway and one-way egress at the northern driveway. La Cienega Boulevard provides a two-way left-turn median adjacent to the Project Site that will facilitate left-turns into and out of the driveways.

#### Pedestrians and Bicycles

Bicycle and pedestrian access to the Project Site would be provided separately from the vehicular driveways via retail and residential entrances along La Cienega Boulevard. These facilities would provide adequate capacity and ensure safe movement for pedestrians and bicycles to, from, and around the Project Site.

#### **OPERATIONAL EVALUATION**

Intersection operation conditions were evaluated for typical weekday morning (7:00 AM to 10:00 AM) and afternoon (3:00 PM to 6:00 PM) peak periods. A total of three signalized study intersections were selected for detailed transportation analysis in consultation with LADOT.

The following traffic conditions were developed and analyzed as part of this study:

- <u>Existing with Project Conditions (Year 2022)</u> This analysis condition analyzes the
  potential intersection operating conditions that could be expected if the Project were built
  under existing conditions. In this analysis, the Project-generated traffic is added to the
  Existing Conditions.
- <u>Future with Project Conditions (Year 2026)</u> This analysis condition analyzes the potential intersection operating conditions that could be expected if the Project is fully occupied in the projected buildout year. In this analysis, the Project-generated traffic is added to Future without Project Conditions (Year 2026).

#### **Methodology**

In accordance with the TAG, the intersection delay and queue analyses for the operational evaluation were conducted using the *Highway Capacity Manual, 6<sup>th</sup> Edition* (Transportation Research Board, 2016) (HCM) methodology, which was implemented using Synchro software and signal timing worksheets from the City to analyze intersection operating conditions. The HCM signalized methodology calculates the average delay, in seconds, for each vehicle passing through the intersections. Table 11 presents a description of the LOS categories, which range from excellent, nearly free-flow traffic at LOS A, to stop-and-go conditions at LOS F, for signalized intersections.

The queue lengths were estimated using Synchro, which reports the 95<sup>th</sup> percentile queue length for signalized and unsignalized intersections in vehicles per lane, which can be converted into distance by multiplying the vehicle queue by 25 feet per vehicle. The reported queues are calculated using the HCM signalized intersection methodology.

LOS and queuing worksheets for each scenario are provided in Appendix E.

#### **Existing with Project Conditions**

<u>**Traffic Volumes.**</u> The Project-only morning and afternoon peak hour traffic volumes described in Chapter 3 and shown in Figure 14 were added to the existing morning and afternoon peak hour

traffic volumes shown in Figure 8. The resulting volumes are illustrated in Figure 15 and represent Existing with Project Conditions, assuming Project operation under Existing Conditions.

**Intersection LOS**. Table 12 summarizes the intersection LOS under Existing Conditions and Existing with Project Conditions during the weekday morning and afternoon peak hours for the study intersections. As shown, Intersection #2, La Cienega Boulevard & Whitworth Drive, would operate at LOS A during both the morning and afternoon peak hours under both Existing Conditions and Existing with Project Conditions. The remaining intersections would operate at LOS E or F during at least one of the analyzed peak hours under Existing Conditions and Existing with Project Conditions.

#### Future with Project Conditions

All future considerations, including cumulative traffic growth (i.e., ambient growth and Related Project traffic) and transportation infrastructure improvements described in Chapter 2 are incorporated into this analysis.

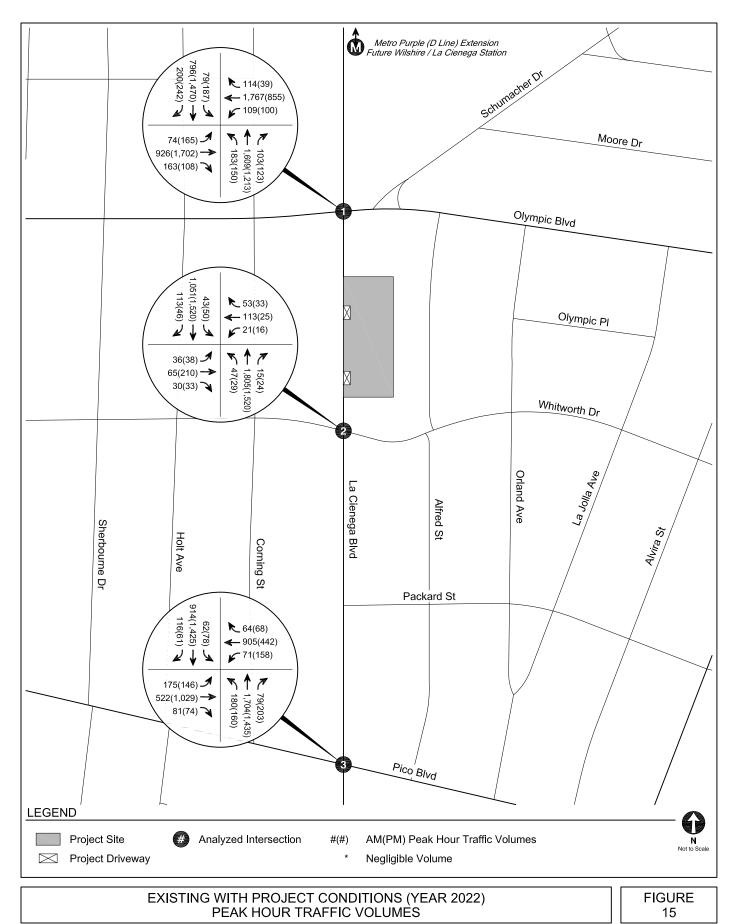
**Traffic Volumes**. The Project-only morning and afternoon peak hour traffic volumes described in Chapter 3 and shown in Figure 14 were added to the Future without Project (Year 2026) morning and afternoon peak hour traffic volumes shown in Figure 11. The resulting volumes are illustrated in Figure 16 and represent Future with Project Conditions after development of the Project in Year 2026.

**Intersection LOS.** Table 13 summarizes the results of the Future without Project Conditions and Future with Project Conditions during the weekday morning and afternoon peak hours for the study intersections. As shown, Intersection #2, La Cienega Boulevard & Whitworth Drive, would operate at LOS B or better during both the morning and afternoon peak hours under both Future without Project (Year 2026) Conditions and Future with Project (Year 2026) Conditions. The remaining two study intersections are anticipated to operate at LOS E of F during both the morning and afternoon peak hours under both Future without Project (Year 2026) Conditions are anticipated to operate at LOS E of F during both the morning and afternoon peak hours under both Future without Project (Year 2026) Conditions and Future without Project (Year 2026) Conditions and Future without Project (Year 2026) Conditions.

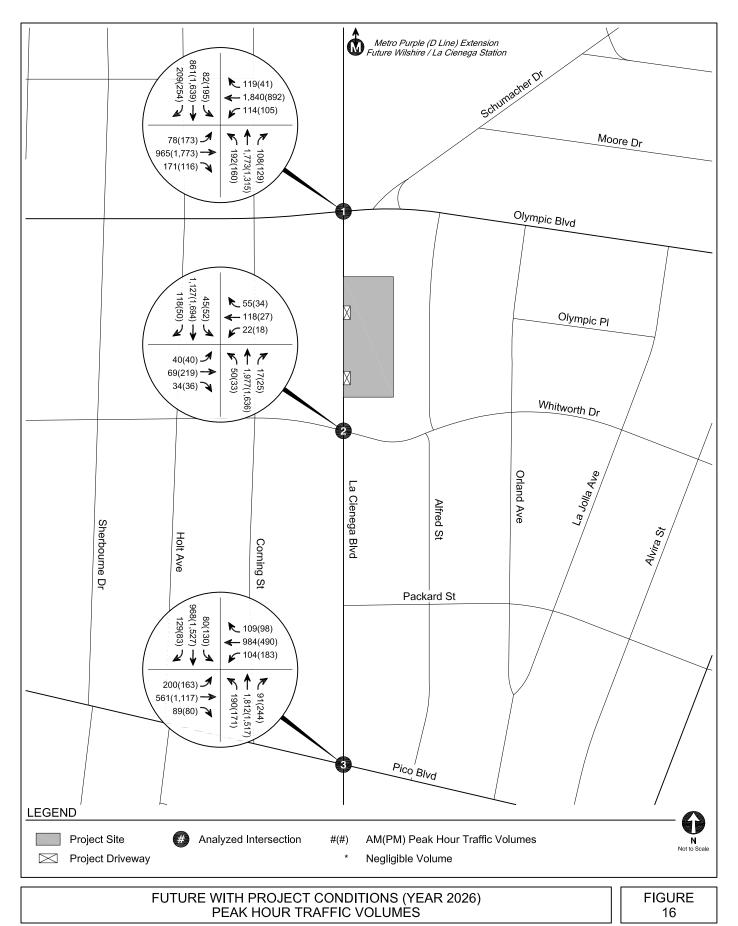
#### INTERSECTION QUEUING ANALYSIS

The study intersections and Project driveways were also analyzed to determine whether the lengths of intersection turning lanes could accommodate vehicle queue lengths. The queue lengths were estimated using Synchro software, which reports the 95<sup>th</sup> percentile queue length, in vehicles, for each approach lane, which can be converted into linear distance by multiplying vehicle lengths by 25 feet. The reported queues are calculated using the HCM signalized intersection methodology. Detailed queuing analysis worksheets are provided in Appendix E.









Level of Service	Description	Delay [a] Signalized Intersections
A	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used.	≤ 10
В	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.	> 10 and ≤ 20
С	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.	> 20 and ≤ 35
D	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.	> 35 and ≤ 55
E	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.	> 55 and ≤ 80
F	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.	> 80

#### TABLE 11 INTERSECTION LEVEL OF SERVICE

#### Notes:

Source: *Highway Capacity Manual, 6th Edition* (Transportation Research Board, 2016). [a] Measured in seconds.

# TABLE 12EXISTING CONDITIONS (YEAR 2022)INTERSECTION LEVELS OF SERVICE

No	Intersection	Peak Hour	Existing C	conditions	-	ith Project itions
		i cak noui	Delay [a]	LOS	Delay [a]	LOS
1.	La Cienega Boulevard &	AM	56.2	E	57.5	E
	Olympic Boulevard	PM	80.8	F	85.1	F
2.	La Cienega Boulevard &	AM	7.7	A	7.8	A
	Whitworth Drive	PM	9.7	A	9.9	A
3.	La Cienega Boulevard &	AM	49.9	D	51.1	D
	Pico Boulevard	PM	60.0	E	60.4	E

#### Notes:

Delay is measured in seconds per vehicle. LOS = Level of Service.

[a] Intersection analysis based on HCM 6th Edition Signalized methodology, which calculates the average intersection delay, in seconds, for each vehicle passing through the intersection. The resulting average delay represents the measure of effectiveness of the traffic signal.

#### TABLE 13 FUTURE CONDITIONS (YEAR 2026) INTERSECTION LEVELS OF SERVICE

No	Intersection	Peak Hour	Future with Cond	out Project itions		th Project itions
		i eak noui	Delay [a]	LOS	Delay [a]	LOS
1.	La Cienega Boulevard &	AM	70.0	E	71.6	E
	Olympic Boulevard	PM	106.5	F	112.2	F
2.	La Cienega Boulevard &	AM	8.0	A	8.1	A
	Whitworth Drive	PM	10.3	B	10.6	B
3.	La Cienega Boulevard &	AM	64.3	E	67.1	E
	Pico Boulevard	PM	76.9	E	79.8	E

#### Notes:

Delay is measured in seconds per vehicle. LOS = Level of Service.

[a] Intersection analysis based on HCM 6th Edition Signalized methodology, which calculates the average intersection delay, in seconds, for each vehicle passing through the intersection. The resulting average delay represents the measure of effectiveness of the traffic signal.

## Section 5C Residential Street Cut-Through Analysis

This section summarizes the residential street cut-through analysis for the Project. The objective of the residential street cut-through analysis is to determine potential increases in average daily traffic volumes on designated Local Streets, as classified in the City's General Plan, that can be identified as cut-through trips generated by the Project and that can adversely affect the character and function of those streets. Per Section 3.5.2 of the TAG, cut-through trips are defined as those that feature travel along a Local Street with residential land-use frontage, as an alternative to a higher classification street segment, to access a destination that is not within the neighborhood in which the Local Street is located.

Section 3.5.2 of the TAG provides a list of questions to assess whether the Project would negatively affect residential streets. The daily trips generated by the Project are not projected to lead to trip diversion from the adjacent and nearby streets to alternative routes along residential Local Streets that are not located adjacent to the Project Site or that provide direct access to the Project driveways; nor is the Project projected to add a substantial amount of automobile traffic to congested Arterial Streets that could potentially cause a shift to residential Local Streets; nor is there a nearby local residential street that provides a viable alternative route to the Project Site. Thus, the Project is not required to conduct a Local Residential Street Cut-Through Analysis and no residential Local Streets would be considered to be excessively burdened by the Project. Thus, no corrective measures are recommended or required.

## Section 5D Construction Impact Analysis

This section summarizes the construction schedule and construction impact analysis for the Project. The construction impact analysis relates to the temporary impacts that may result from the construction activities associated with the Project and was performed in accordance with Section 3.4, Project Construction, of the TAG.

#### **CONSTRUCTION EVALUATION CRITERIA**

Section 3.4.3 of the TAG identifies the following three types of in-street construction constraints that require further analysis to assess the effects of Project construction on the existing pedestrian, bicycle, transit, or vehicle circulation:

- 1. Temporary transportation constraints potential effects on the transportation system
- 2. Temporary loss of access potential effects on visitors entering and leaving sites
- 3. Temporary loss of bus stops or rerouting of bus lines potential effects on bus travelers

The factors to be considered include the magnitude and duration of the temporary loss of access and transportation facilities, the potential inconvenience caused to users of the transportation system, and consideration for public safety. Construction activities could potentially interfere with pedestrian, bicycle, transit, or vehicle circulation and accessibility to adjoining areas. As detailed in Section 3.4.4 of the TAG, the proposed construction plans should be reviewed to determine whether construction activities would require any of the following actions:

- Closure of streets, sidewalk, or lanes
- Blockage of 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

#### PROPOSED CONSTRUCTION SCHEDULE

The Project is anticipated to be constructed over a 32-month period, with completion anticipated in Year 2026. Peak haul truck activity occurs during the shoring/excavation phase and peak worker activity occurs during the rough and finish phase. These two phases of construction were studied in greater detail. Project construction would not overlap with the Los Angeles Department of Water and Power's recent plans to conduct infrastructure improvements along La Cienega Boulevard adjacent to the Project Site.

#### SHORING / EXCAVATION PHASE

With the implementation of the Construction Management Plan, which is described in more detail below, it is anticipated that almost all haul truck activity to and from the Project Site would occur outside of the morning and afternoon peak hours. In addition, as discussed in more detail in the following section, worker trips to and from the Project Site would also occur outside of the peak hours. Therefore, no peak hour construction traffic constraints are expected during the shoring / excavation phase of construction.

Haul trucks would travel on approved truck routes designated within the City and take the most direct route to the appropriate freeway ramps. The haul route will be reviewed by the City.

#### Shoring / Excavation Phase Trip Generation

Based on projections compiled for the Project, it is anticipated that a maximum of 125 truckloads per workday, based on an anticipated haul truck capacity of 14 cubic yards, would be required during this phase. Thus, up to 250 daily truck trips (125 inbound, 125 outbound) are forecasted to occur during the shoring / excavation phase, with approximately 42 trips per hour (21 inbound, 21 outbound) uniformly over a typical six-hour off-peak hauling period.

In addition, a maximum of 35 daily construction workers are anticipated during the shoring / excavation period. The 35 construction workers would result in 70 one-way vehicle trips (35 inbound, 35 outbound) to and from the Project Site on a daily basis. It is anticipated that the majority of workers would arrive on-site prior to the weekday morning commuter peak hour and leave prior to or after the afternoon commuter peak hour. Construction-related peak hour trip generation from trucks and workers would be substantially less than the Project trip generation estimates in Table 5. Therefore, no peak hour construction traffic constraints are expected during the shoring / excavation phase of construction.

#### **ROUGH AND FINISH PHASE**

During the rough and finish phase, parking for construction workers would generally be provided on-site or in local public parking facilities until the parking structure is built to grade. Restrictions against workers parking in the public ROW in the vicinity of (or adjacent to) the Project Site would be identified as part of the Construction Management Plan. Construction materials storage and truck staging would generally be contained on-site or in the parking lane along the Project frontage on La Cienega Boulevard.

The traffic constraints associated with construction workers depends on the number of construction workers employed during various phases of construction, as well as the travel mode and travel time of the workers. In general, the hours of construction typically require workers to be on-site before the weekday morning commuter peak period and allow them to leave before or after the afternoon commuter peak period (i.e., arrive at the site prior to 7:00 AM and depart before 4:00 PM or after 6:00 PM). Therefore, most, if not all, construction worker trips would occur outside of the typical weekday commuter peak periods.

According to construction projections prepared for the Project, the rough and finish phase would employ the most construction workers, with a maximum of 150 workers per day. The estimated number of daily vehicle trips associated with the construction workers is approximately 300 one-way trips (150 inbound and 150 outbound trips), but nearly all of those trips would occur outside of the peak hours, as described above. As such, the rough and finish phase of Project construction is not expected to cause a peak hour traffic constraint at any of the study intersections.

#### POTENTIAL CONSTRAINTS ON ACCESS, TRANSIT, AND PARKING

Project construction is not expected to create hazards for roadway travelers, bus riders, or parkers, so long as commonly practiced safety procedures for construction are followed. Such procedures and other measures (e.g., to address temporary traffic control, lane closures, sidewalk closures, etc.) have been incorporated into the Construction Management Plan.

#### <u>Access</u>

Construction activities are expected to be primarily contained within the Project Site boundaries. However, it is expected that construction fences may encroach into the public ROW (e.g., sidewalks and roadways) adjacent to the Project Site. The adjacent curb lane on La Cienega Boulevard, which serves as a parking lane during off-peak hours, may be temporarily closed throughout the construction period. Temporary traffic controls would be provided to direct traffic around any closures as required in the Construction Management Plan and emergency access would not be impeded.

The use of the public ROW would require temporary re-routing of pedestrian and bicycle traffic. The Construction Management Plan would include measures to ensure pedestrian and bicycle safety along the affected sidewalks, bicycle facilities, and temporary walkways (e.g., use of lightduty barriers and cones, use of directional signage, maintaining continuous and unobstructed pedestrian paths, and/or providing overhead covering).

#### <u>Transit</u>

There are no existing bus stops located adjacent to the Project Site and, thus, no temporary relocation of any bus stop is anticipated due to the construction of the Project.

#### Parking

The adjacent parking lane along La Cienega Boulevard is anticipated to be used for staging, deliveries, and/or crane placement during construction. Thus, construction activities would potentially result in the temporary loss of up to 18 public parking spaces.

#### CONSTRUCTION MANAGEMENT PLAN

A detailed Construction Management Plan, including street closure information, a detour plan, haul routes, and a staging plan would be prepared and submitted to the City for review and approval prior to commencing construction. The Construction Management Plan would formalize how construction would be carried out and identify specific actions that would be required to reduce effects on the surrounding community. The Construction Management Plan shall be based on the nature and timing of the specific construction activities and other projects in the vicinity of the Project Site, and shall include, but not be limited to, the following elements, as appropriate:

- Advance bilingual notification of adjacent property owners and occupants of upcoming construction activities, including durations and daily hours of operation.
- Temporary pedestrian, bicycle, and vehicular traffic controls during all construction activities on La Cienega Boulevard to ensure traffic safety on the public ROW. These controls shall include, but not be limited to, flag people trained in pedestrian and bicycle safety.
- Scheduling of construction activities to reduce the effect on traffic flow on surrounding arterial streets.
- Spacing of trucks so as to discourage a convoy effect.
- Containment of construction activity within the Project Site boundaries to the extent feasible.
- Safety precautions for pedestrians and bicyclists through such measures as alternate routing and protection barriers shall be implemented as appropriate.
- Scheduling of construction-related deliveries, haul trips, etc., to occur outside the commuter peak hours.
- Maintenance of a log, available on the job site at all times, documenting the dates of hauling and the number of trips (i.e., trucks) per day.
- 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.

It is likely that construction management plans would also be submitted by the Related Projects for approval by the City prior to the start of construction activities. As part of the LADOT and/or Los Angeles Department of Building and Safety established review process of construction management plans, potential overlapping construction activities and proposed haul routes would be reviewed to minimize the impacts of cumulative construction activities on any particular roadway.

## Section 5E Parking Analysis

This section provides an analysis of the proposed parking and the potential parking impacts of the Project.

#### PARKING SUPPLY

The Project would provide a total of 426 vehicle parking spaces within one subterranean and three above-grade levels and a total of 184 (164 long-term and 20 short-term) bicycle parking spaces on-site.

#### VEHICLE PARKING CODE REQUIREMENTS

Section 12.24.A4 of the LAMC identifies the following parking rates for residential and commercial developments:

#### <u>Residential</u>

- < 3 Habitable Rooms: 1 space / dwelling unit
- = 3 Habitable Rooms: 1.5 spaces / dwelling unit
- > 3 Habitable Rooms: 2 spaces / dwelling unit

#### Commercial (Restaurant)

• 10 spaces / 1,000 sf

As shown in Table 14, based on the rates above, the Project would be required to provide a total of 538 vehicle parking spaces. However, the Project qualifies for TOC Tier 3 designation, as defined in the TOC Guidelines, which supersedes the LAMC requirements. Therefore, residential parking may be provided at a rate of 0.5 spaces / dwelling per Section v.i.2.a.i.4 of the TOC Guidelines, and

ground-floor non-residential parking may be reduced by up to 30% of the required vehicle parking per Section v.i.2.e.iii of the TOC Guidelines. Also shown in Table 14, based on the applicable reduced parking rates and parking reductions, the Project would be required to provide a minimum of 198 vehicle parking spaces.

#### **BICYCLE PARKING CODE REQUIREMENTS**

LAMC Section 12.21.A.16 details the long-term and short-term bicycle parking requirements for new developments, which are summarized in Table 15. As shown, the Project would require a total of 152 long-term and 19 short-term bicycle parking spaces. The Project's proposed 164 long-term and 20 short-term bicycle parking spaces would satisfy the LAMC requirements for on-site bicycle parking supply.

## TABLE 14CODE VEHICLE PARKING REQUIREMENTS

STANDARD CODE PARKING ANALYSIS [a]							
Land Use     Size     Parking Rate     Total Space							
Residential	44 du	100 cm / 1 du	44				
< 3 habitable rooms (studio) = 3 habitable rooms (1 bedroom)	44 du 146 du	1.00 sp / 1 du 1.50 sp / 1 du	44 219				
> 3 habitable rooms (2+ bedrooms)	100 du	2.00 sp / 1 du	200				
Commercial (Restaurant)	7,500 sf	10.00 sp / 1,000 sf	75				
Total Standard Code Parking Requirement							

TOC PARKING ANALYSIS							
Land Use	Size	Parking Rate	Total Spaces				
Residential [b]	290 du	0.50 sp / 1 du	145				
Commercial (Restaurant)	7,500 sf	10.00 sp / 1,000 sf	75				
[c] 30% Reduction in Commercial Requirement for TOC Tier 3							
Total TOC Parking Requirement							

Notes:

- [a] Parking rates per Section 12.21.A4(a-c) of the Los Angeles Municipal Code.
- [b] Residential parking requirement per the TOC Affordable Housing Incentive Program for projects located in a TOC Tier 3 area.
- [c] Per the TOC Guidelines, non-residential uses of a mixed-use development located in a TOC Tier 3 area may reduce up to 30% of the required vehicle parking.

## TABLE 15 CODE BICYCLE PARKING REQUIREMENTS

Project	Size	-		ort-Term irement [a]	Total Short-Term Bicycle Spaces	-	ong-T Rate	erm Parking [a]	Total Long-Term Bicycle Spaces
Residential									
1-25 units	25 du	1.00 sp	/	10 du	3	1.00 sp	/	1 du	25
26-100 units	75 du	1.00 sp	/	15 du	5	1.00 sp	/	1.5 du	50
101-200 units	100 du	1.00 sp	/	20 du	5	1.00 sp	/	2 du	50
201+ units	90 du	1.00 sp	/	40 du	2	1.00 sp	/	4 du	23
Subtotal - Residential	290 du				15				148
Commercial - Restaurant	7,500 sf	1.00 sp	1	2,000 sf	4	1.00 sp	/	2,000 sf	4
Total	Total Bicycle Parking Required				19				152

Notes:

[a] Bicycle parking rates per Los Angeles Municipal Code Section 12.21.A16(a).

## Chapter 6 Summary and Conclusions

This study was undertaken to analyze the potential transportation impacts of the Project on the transportation system. The following summarizes the results of this analysis:

- The Project is located at 1050 La Cienega Boulevard.
- The Project proposes a total of 290 apartment units, including 29 affordable units, and 7,500 sf commercial uses and is anticipated to be completed in Year 2026.
- Vehicular access would be provided on La Cienega Boulevard.
- The Project is estimated to generate 130 morning peak hour trips and 138 afternoon peak hour trips.
- The Project would be consistent with the City's plans, programs, ordinances, and polices and would not result in any geometric design hazard impacts.
- The Project would not result in VMT impacts and would not require mitigation.
- The Project provides adequate internal circulation to accommodate vehicular, pedestrian, and bicycle traffic without impeding through traffic movements on City streets.
- The addition of Project trips would not adversely affect any residential Local Streets.
- Construction traffic would be generated outside of the commuter morning and afternoon peak hours to the extent feasible and would be substantially less than the traffic generated by operation of the Project. A Construction Management Plan would be prepared to ensure that construction constraints are minimized.
- The Project would provide 426 vehicle parking spaces within one subterranean and three above-grade levels and a total of 184 (164 long-term and 20 short-term) bicycle parking spaces on-site in accordance with the requirements of the LAMC.

### References

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Highway Capacity Manual, 6<sup>th</sup> Edition, Transportation Research Board, 2016.

*Interim Guidance for Freeway Safety Analysis*, Los Angeles Department of Transportation, May 2020.

Los Angeles Municipal Code, City of Los Angeles.

*Mobility Plan 2035, An Element of the General Plan,* Los Angeles Department of City Planning, September 2016.

*Plan for a Healthy Los Angeles: A Health and Wellness Element of the General Plan,* Los Angeles Department of City Planning, March 2015.

*Quantifying Greenhouse Gas Mitigation Measures*, California Air Pollution Control Officers Association, 2010.

*SCAG Regional Travel Demand Model and 2012 Model Validation*, Southern California Association of Governments, March 2016.

### References, cont.

State of California Senate Bill 743, Steinberg, 2013.

*Technical Advisory on Evaluating Transportation Impacts in CEQA,* Governor's Office of Planning and Research, December 2018.

*Transit Oriented Communities Affordable Housing Incentive Program Guidelines (TOC Guidelines)*, Los Angeles Department of City Planning, Revised February 26, 2018.

Transportation Assessment Guidelines, Los Angeles Department of Transportation, July 2020.

*Trip Generation Manual, 9th Edition*, Institute of Transportation Engineers, 2012.

*Trip Generation Manual, 11<sup>th</sup> Edition,* Institute of Transportation Engineers, 2021.

Vision Zero: Eliminating Traffic Deaths in Los Angeles by 2025, City of Los Angeles, August 2015.

Wilshire Community Plan, Los Angeles Department of City Planning, Revised September 2016.

Appendix A

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: 1050 La Cienega

Project Address: 1050 La Cienega Blvd, Los Angeles, CA 90035

Project Description: The Project proposes the construction of a mixed-use development comprised of 290 apartment units, including 29 affordable housing units,

and 7,500 square feet of commercial uses. Parking would be provided in one subterranean and three above ground levels with access via La Cienega Boulevard.

LADOT Project Case Number: <u>CEN22-53109</u> Project Site Plan attached? (*Required*) I Yes I No

#### II. TRANSPORTATION DEMAND MANAGEMENT (TDM) MEASURES

Select any of the following TDM measures, which may be eligible as a Project Design Feature<sup>1</sup>, that are being considered for this project:

List any other TDM measures (e.g. bike share kiosks, unbundled parking, microtransit service, etc.) below that are also being considered and would require LADOT staff's determination of its eligibility as a TDM measure. LADOT staff will make the final determination of the TDM measure's eligibility for this project.

## 1 Unbundled Parking 4

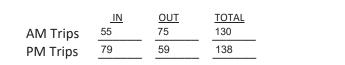
2 \_\_\_\_\_ 5 \_\_\_\_ 3 \_\_\_\_ 6

#### III. TRIP GENERATION

Trip Generation Rate(s) Source: ITE 10th Edition / Other ITE 11th Ed.

<b>Trip Generation Adjustment</b> (Exact amount of credit subject to approval by LADOT)	Yes	No
Transit Usage		
Existing Active or Previous Land Use		$\checkmark$
Internal Trip		
Pass-By Trip		
Transportation Demand Management (See above)		

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



NET Daily Vehicle Trips (DVT)						
DVT (ITE ed.)						
<u>2,101</u>	_ DVT (VMT Calculator ver. <u>1.3</u> )					

<sup>&</sup>lt;sup>1</sup> At this time Project Design Features are only those measures that are also shown to be needed to comply with a local ordinance, affordable housing incentive program, or State law.

<sup>&</sup>lt;sup>2</sup>Select if reduced parking supply is pursued as a result of a parking incentive as permitted by the City's Bicycle Parking Ordinance, State Density Bonus Law, or the City's Transit Oriented Community Guidelines.



#### IV. STUDY AREA AND ASSUMPTIONS

Project Buildout Year: 2026 Ambient Growth Rate: 1.0 % Per Yr.

Related Projects List, researched by the consultant and approved by LADOT, attached? (Required) 🔳 Yes 🗆 No

STUDY INTERSECTIONS and/or STREET SEGMENTS:

(May be subject to LADOT revision after access, safety, and circulation evaluation.)

- 1 La Cienega Blvd & Olympic Blvd
- \_\_\_\_\_ 4 \_\_\_\_\_
- 2
   La Cienega Blvd & Whitworth Dr
   5

   3
   La Cienega Blvd & Pico Blvd
   6

Provide a separate list if more than six study intersections and/or street segments.

Is this Project located on a street within the High Injury Network? 

Yes 
No

If a study intersection is located within a ¼-mile of an adjacent municipality's jurisdiction, signature approval from said municipality is required prior to MOU approval.

#### V. ACCESS ASSESSMENT

- a. Does the project exceed 1,000 net DVT? 
  Yes 
  No
- b. 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
- c. 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

#### VI. ACCESS ASSESSMENT CRITERIA

If Yes to any of the above questions a., b., or c., complete Attachment C.1: Access Assessment Criteria.

#### VII. SITE PLAN AND MAP OF STUDY AREA

Please note that the site plan should also be submitted to the Department of City Planning for cursory review.

Does the attached site plan and/or map of study area show	Yes	No	Not Applicable
Each study intersection and/or street segment			
*Project Vehicle Peak Hour trips at each study intersection			
*Project Vehicle Peak Hour trips at each project access point	7		
*Project trip distribution percentages at each study intersection			
Project driveways designed per LADOT MPP 321 (show widths and directions or lane assignment)			
Pedestrian access points and any pedestrian paths			
Pedestrian loading zones			
Delivery loading zone or area			
Bicycle parking onsite			
Bicycle parking offsite (in public right-of-way)			1

\*For mixed-use projects, also show the project trips and project trip distribution by land use category.



City of Los Angeles Transportation Assessment MOU LADOT Project Case No: CEN22-53109

#### VIII. FREEWAY SAFETY ANALYSIS SCREENING

Will the project add 25 or more trips to any freeway off-ramp in either the AM or PM peak hour? 
Yes 
No

Provide a brief explanation or graphic identifying the number of project trips expected to be added to the nearby freeway off-ramps serving the project site. If Yes to the question above, a freeway ramp analysis is required.

#### IX. CONTACT INFORMATION

Name:	Gibson Transportation Consulting, Inc.	1050 La Cienega, LLC
Address:	555 W. 5th Street, Suite 3375, Los Angeles, CA 90013	429 Santa Monica Divid, Suite 700, Santa Monica, CA 90401
Phone Nu	imber: (213) 683-0088	(412) 322-9809
E-Mail:	Imullarkey-williams@gibsontrans.com	etung@carmelpartners.com

Approved by:	x Europeration	03-15-2022 x	Eiem Hunt LADOT Representative	3/16/2022 **Date
Adjacent Municipality:		Approved by:	Representative	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.

#### Attachment C.1: Access Assessment Criteria



#### **Access Assessment Criteria**

This Criteria 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: 1050 La Cienega

Project Address: 1050 La Cienega Blvd, Los Angeles, CA 90035

Project Description:

and 7,500 square feet of commercial uses. Parking would be provided in one subterranean and three above ground levels with access via La Cienega Boulevard.

LADOT Project Case Number: CEN22-53109

#### II. PEDESTRIAN/ PERSON TRIP GENERATION

Source of Pedestrian/Person Trip Generation Rate(s)? MMT Calculator hITE 10<sup>th</sup> Edition Other:

	Land Use	Size/Unit	Daily Person Trips
Desmand	Further analysis to be provided in the Transportation Assessment Report		
Proposed			
	7	<i>ōtal new trips:</i> h	

Pedestrian/Person trip generation table including a description of the proposed land uses, trip credits, person trip assumptions, comparison studies used for reference, etc. attached? Yes VNo

#### III. PEDESTRIAN ATTRACTORS INVENTORY

Attach Pedestrian Map for the area (1,320 foot radius from edge of the project site) depicting:

- site pedestrian entrance(s)
- Existing or proposed passenger loading zones
- pedestrian generation/distribution values
  - Geographic Distribution: N  $\frac{25}{8}$  % S  $\frac{25}{8}$  % E  $\frac{25}{8}$  % W  $\frac{25}{8}$  % h
- transit boarding and alighting of transit stops (should include Metro rail stations; Metro, DASH, and



other municipal bus stops)

- Key pedestrian destinations with hours of operation:
  - schools (school times)
  - o government offices with a public counter or meeting room
  - o senior citizen centers
  - recreation centers or playgrounds
  - o public libraries
  - o medical centers or clinics
  - o child care facilities
  - o post offices
  - o places of worship
  - o grocery stores
  - o other facilities that attract pedestrian trips
- pedestrian walking routes to key destinations from project site

**Note:** Pedestrian Count Summary, Bicycle Count Summary, Manual Traffic Count Summary will need to be attached to the Transportation Assessment

#### IV. FACILITIES INVENTORY

Is a High Injury Network street located within 1,320 foot radius from the edge of the project site? ☑ Yes □ No If yes, list streets and include distance from the project:

La Cienega Blvd south of Whitworth Drive	at <u>110</u> (feet)
	at(feet)
	at(feet)
	at(feet)

Attach Radius Map for the area (1,320 foot radius from edge of the project site) depicting the following existing and proposed facilities:

- transit stops
- bike facilities
- traffic control devices for controlled crossings
- uncontrolled crosswalks
- location of any missing, damaged or substandard sidewalks

For a reference of planned facilities, see the <u>Transportation Assessment Support Map</u>



#### **Crossing Distances**

Does the project property have frontage along an arterial street (designated as either an Avenue or Boulevard?)

✓ Yes □ No

If yes, provide the distance between the crossing control devices (e.g. signalized crosswalk, or controlled midblock crossing) along any arterial within 1,320 feet of the property.

670	(feet) at Olympic Blvd (La Cienega to Orlando)	(feet) at
790	(feet) at La Cienega Blvd (Olympic to Whitworth)	(feet) at
	(feet) at	(feet) at

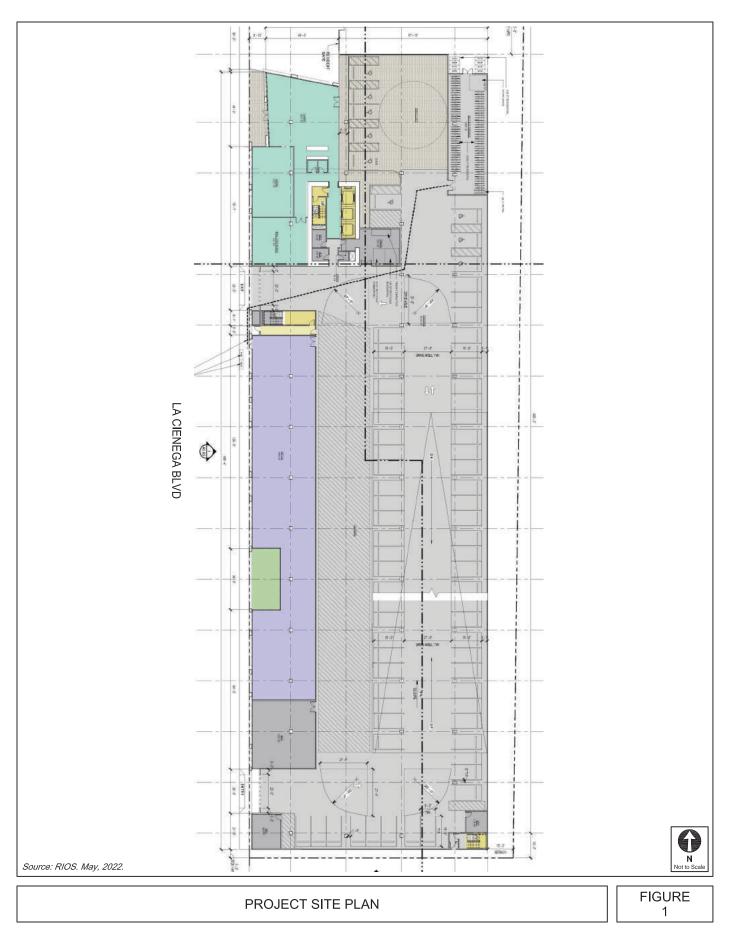
#### V. Project Construction

Will the project require any	construction a	ctivity within the	city right-of-way?	🗹 Yes 🛛	□ No
------------------------------	----------------	--------------------	--------------------	---------	------

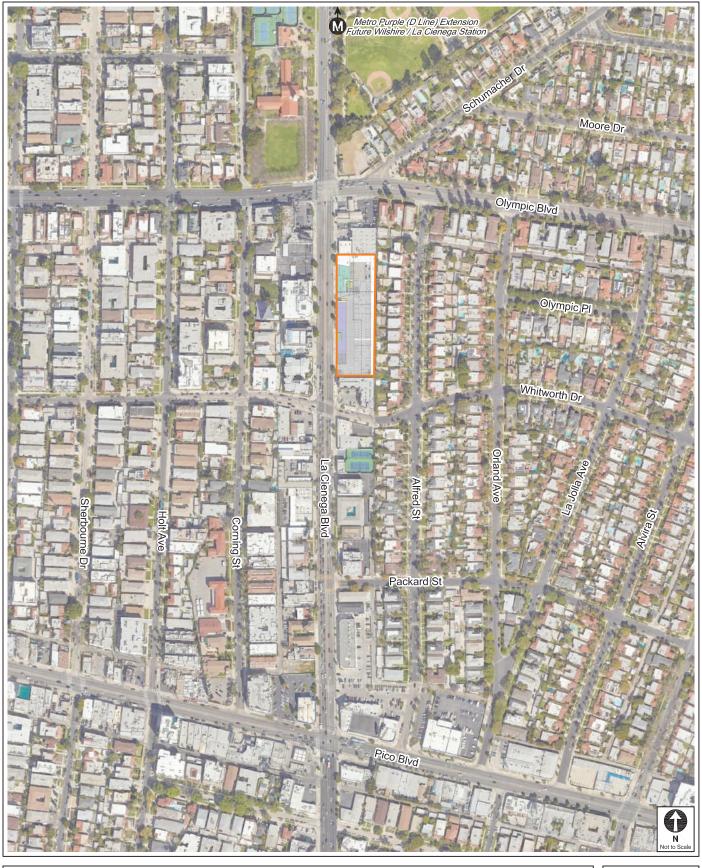
If yes, will the project require temporary closure of any of the following city facilities?

- ✓ sidewalk
  - bike lane
- ✓ parking lane
  - travel lane
  - bus stop
  - bicycle parking (racks or corrals)
  - bike share or other micro-mobility station
  - car share station
  - parklet
  - other: \_\_\_\_\_



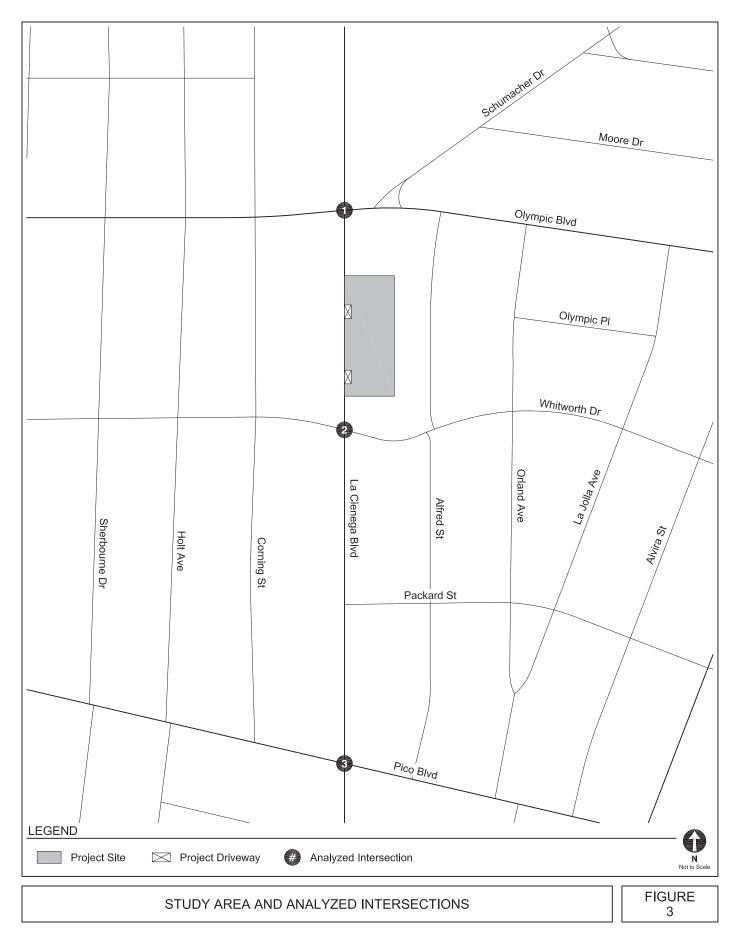






PROJECT SITE LOCATION







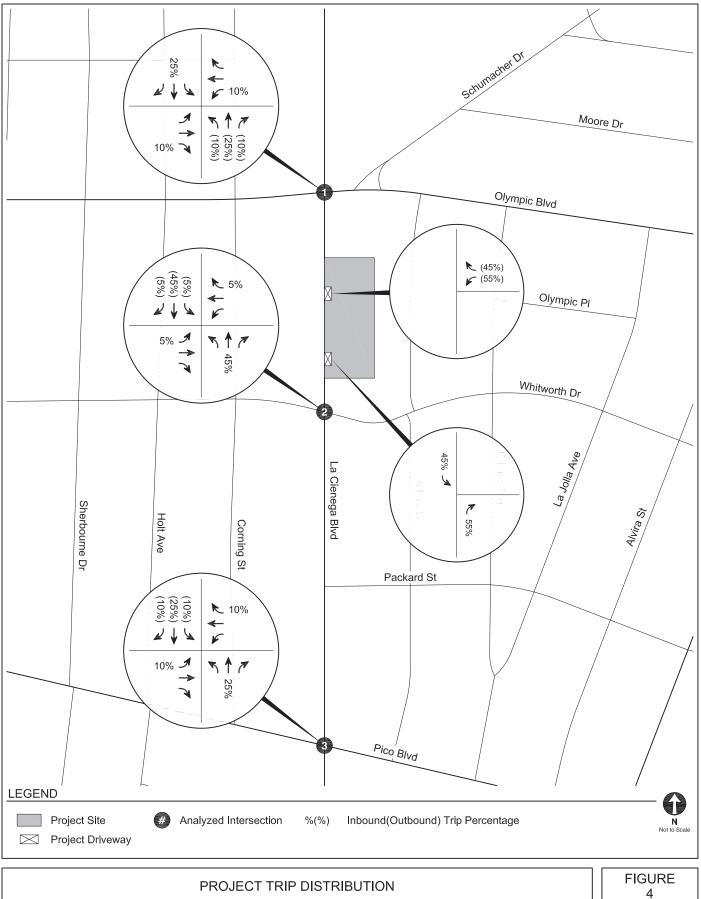


 TABLE 1

 PROJECT VEHICLE TRIP GENERATION ESTIMATES

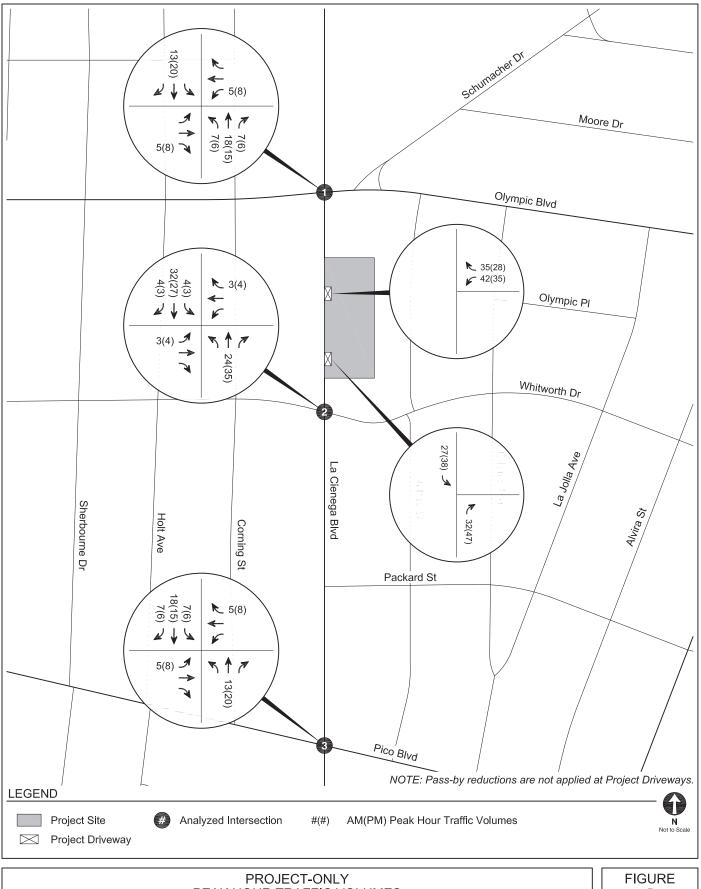
Land Use	Land Rate	Morning Peak Hour			Afternoon Peak Hour			
		Kale	In	Out	Total	In	Out	Total
Trip Generation Rates [a]								
Multifamily Housing (High-Rise)	222	per du	34%	66%	0.27	56%	44%	0.32
Affordable Family (Within TPA)	[b]	per du	37%	63%	0.49	56%	44%	0.35
High-Turnover (Sit-Down) Restaurant	932	per ksf	55%	45%	9.57	61%	39%	9.05
Proposed Project								
Multifamily Housing (High-Rise)	222	261 du	24	46	70	47	37	84
Affordable Family (Within TPA)	[b]	29 du	5	9	14	6	4	10
High-Turnover (Sit-Down) Restaurant Internal Capture Reduction - 10% [c] Transit/Walk Reduction - 10% [d] Pass-By Reduction - 20% [e]	932	7.500 ksf	40 (4) (4) (6)	32 (3) (3) (6)	72 (7) (7) (12)	41 (4) (4) (7)	27 (3) (2) (4)	68 (7) (6) (11)
TOTAL NEW PROJECT TRIPS		55	75	130	79	59	138	

Notes:

du: dwelling unit ksf: 1,000 square feet

- [a] Source: Transportation Assessment Guidelines (TAG), Los Angeles Department of Transportation (LADOT), July 2020 and Trip Generation Manual, 11th Edition, Institute of Transportation Engineers (ITE), 2021.
- [b] Per LADOT's Transportation Assessment Guidelines, residential or mixed-use developments inside a Transit Priority Area (TPA) which include Affordable Housing units are eligible to use a City-specific trip generation rate based on vehicle trip count data collected at affordable housing sites in the City of Los Angeles in 2016.
- [c] Internal capture reductions account for person trips made between distinct land uses within a mixed-use development (i.e., between residential and restaurant).
- [d] The Project Site is located within 0.25 miles of Metro Local bus stops serving Line 28 and Line 105; therefore, a 10% transit reduction was applied to account for transit usage and walking visitor arrivals.
- [e] Pass-by reductions account for Project trips made by drivers already passing by on La Cienega Boulevard for a different primary trip purpose.





PROJECT-ONLY PEAK HOUR TRAFFIC VOLUMES

5





#### TABLE 2 RELATED PROJECTS LIST

						Trij	p Generation	[a]	Trip Generation [a]							
No.	Project	Address	Use	Daily		rning Peak F			rnoon Peak							
				Duily	In	Out	Total	In	Out	Total						
1.	Mixed-Use	5935 W Pico Boulevard	124 residential units, 3,100 sf retail, and 2,000 sf restaurant	687	17	47	64	43	20	63						
2.	Mixed-Use	6132 W Pico Boulevard	100 residential units and 14,000 sf retail	807	5	34	39	47	30	77						
3.	Residential	6055 W Pico Boulevard	125 residential units and 4,140 sf retail	313	(2)	24	22	16	4	20						
4.	Medical Office Building	656 S San Vicente Boulevard	140,305 sf medical office and 5,000 sf retail	3,552	234	70	304	113	269	382						
5.	6075-6099 Pico Blvd Mixed-Use Project	6075 W Pico Boulevard	110 hotel rooms, 45 residential units, 3,800 sf restaurant, and 2,500 sf retail	1,367	15	27	42	43	27	70						
6. [b]	843 S Sherbourne Drive	843 S Sherbourne Drive	56 eldercare units	124	2	2	4	5	5	10						
7. [b]	1233 S Bedford Street	1233 S Bedford Street	9 condominium units	41	1	2	3	2	2	4						
8. [b]	825 S Holt Avenue	825 S Holt Avenue	80 eldercare units	177	3	3	6	7	7	14						
9. [b]	1415 1/2 S Robertson Boulevard	1415 1/2 S Robertson Boulevard	65 residential units and 3,000 sf commercial	617	22	31	53	31	21	52						
10. [b]	1049 S Holt Avenue	1049 S Holt Avenue	15 residential units (2 affordable units)	67	1	5	6	4	2	6						
11. [b]	1047 S Corning Street	1047 S Corning Street	12 residential units (2 affordable units)	53	1	4	5	3	2	5						
12. [b]	1255 S La Cienega Boulevard	1255 S La Cienega Boulevard	30 residential units (3 affordable units) and 1,098 sf commercial	253	9	14	23	14	8	22						
13. [b]	911-913 S Shenandoah Street	911-913 S Shenandoah Street	14 residential units (2 affordable)	62	1	4	5	4	2	6						
14. [b]	6001 W Pico Boulevard	6001 W Pico Boulevard	48 residential units (5 affordable) and 1,000 sf commercial	323	11	18	29	16	12	28						

Notes:

sf: square feet

[a] Related project information provided by the Los Angeles Department of Transportation in January 2022, Department of City Planning, and recent traffic studies prepared in the area. This list includes known development projects within one-half mile (2,460 foot) radius of the Project Site.

[b] Trip Generation estimates developed using Trip Generation Manual, 11th Edition, Institute of Transportation Engineers, 2021 and LADOT's Transportation Assessment Guidelines.

### TABLE 3 FREEWAY OFF-RAMP SCREENING PROCE

Freeway Off-Ramp	Peak Hour	Project Traffic	Meets Screening Criteria? [a]	
Interstate 10 Eastbound [b]				
Off-ramp to La Cienega Boulevard	AM PM	6 8	NO NO	
Off-ramp to Cadillac Avenue / Venice Boulevard	AM PM	6 8	NO NO	

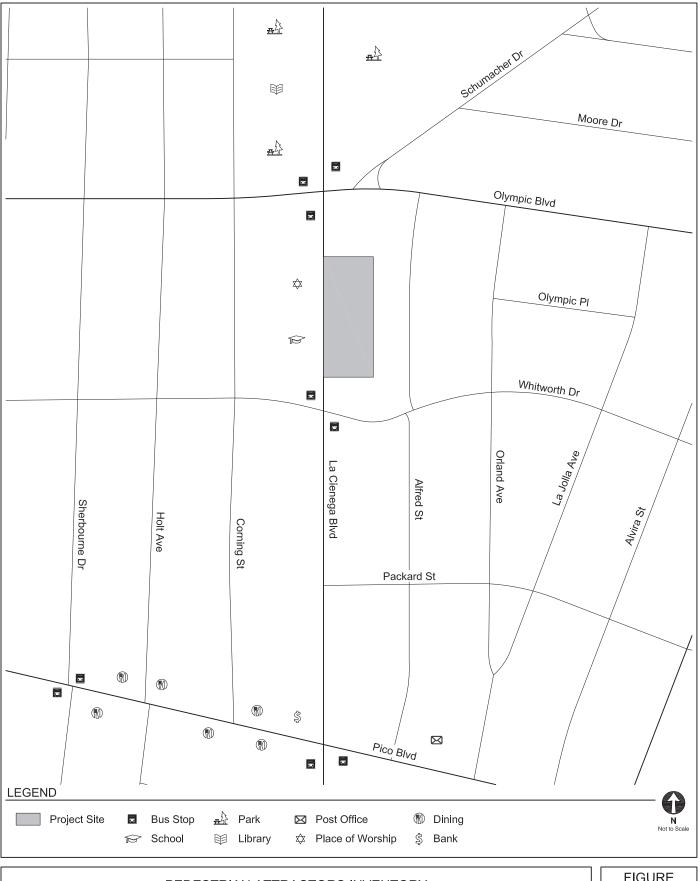
Notes:

[a] Based on *Interim Guidance for Freeway Safety Analysis* (LADOT, 2020), a transportation assessment for a development project must include analysis of any freeway off-ramp where a project adds 25 or more peak hour trips.

[b] 10% of incoming trips were assumed to travel southbound on State Route 110 to the Project Site via an off-ramp to 9th Street.

[c] 10% of incoming trips were assumed to travel northbound on State Route 110 to the Project Site via an off-ramp to 9th Street.

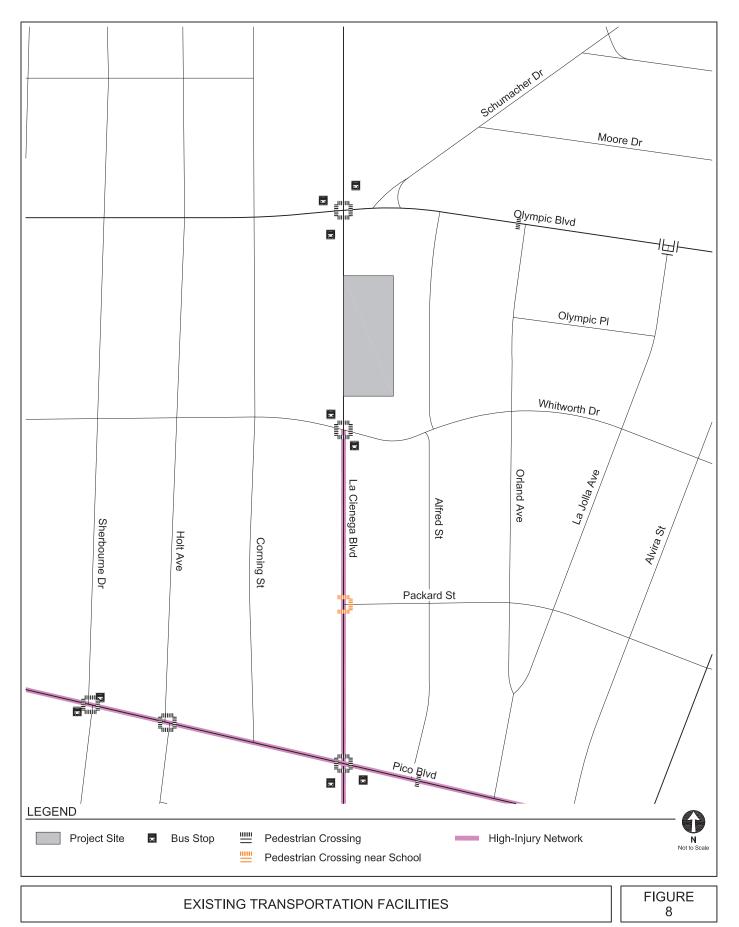




PEDESTRIAN ATTRACTORS INVENTORY

FIGURE 7







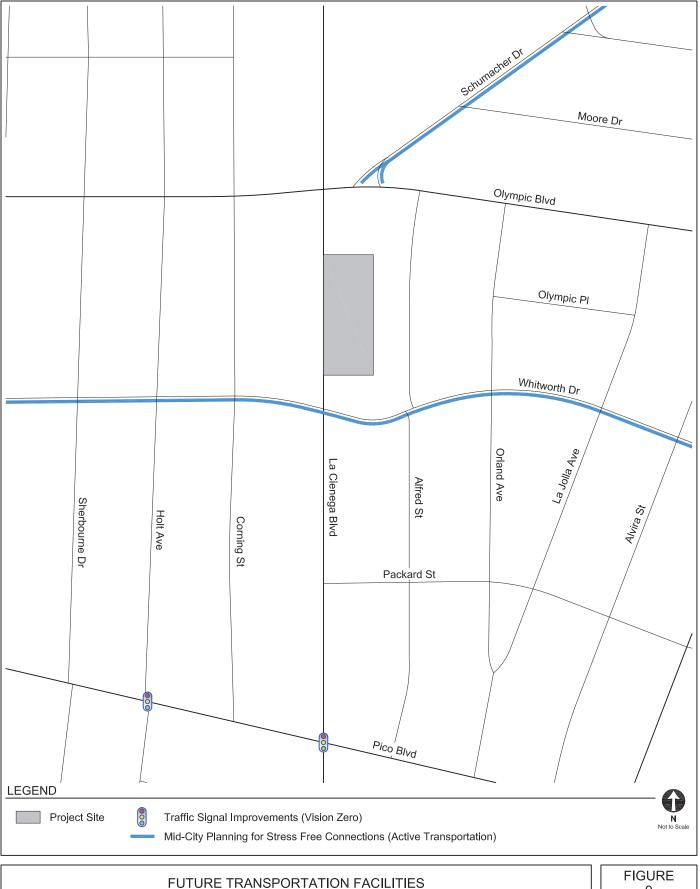


FIGURE 9

# **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	Existing Land	l Use		Project Screening S	ummary
Project: 1050 La Cienega Boulevard	Land Use Type	Value Ur	nit DU 📥		
Scenario:     www       Address:     1050 S LA CIENEGA BLVD, 90035     Q				Existing Land Use	Proposed
E S S BURBANK CHARDLER C				<b>O</b> Daily Vehicle Trips	<b>2,101</b> Daily Vehicle Trips
COLORADO				<b>O</b> Daily VMT	<b>13,340</b> Daily VMT
Los to the second secon				Tier 1 Screening Cri	teria
BEVERY B B RULEY B B B B B B B B B B B B B B B B B B B	Click here to add a single custom land use type (	will be included in the at	oove list)	Project will have less residential unit to existing residential units & is with mile of a fixed-rail station.	
The Part of the Pa	Proposed Project	Land Use		Tier 2 Screening Cri	teria
Service State Stat	Land Use Type Housing   Affordable Housing - Family		nit DU 📥	The net increase in daily trips < 250	trips 2,101 Net Daily Trips
Is the project replacing an existing number of	Retail   High-Turnover Sit-Down Restaurant Housing   Multi-Family Housing   Affordable Housing - Family	7.5 ksf 261 DU 29 DU		The net increase in daily VMT $\leq 0$	13,340 Net Daily VMT
residential units with a smaller number of residential units AND is located within one-half mile of a fixed-rail or fixed-guideway transit				The proposed project consists of on land uses ≤ 50,000 square feet total.	-
● Yes ● No				The proposed project is requi VMT analysis.	red to perform
o res o No	Click here to add a single custom land use type (	will be included in the at	pove list)		

Measuring the Miles

## 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 nonexclusive 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:	Lauren Mullarkey-Williams
Title:	Associate
Company:	Gibson Transportation Consulting, Inc.
Address:	555 W. 5th Street, Suite 3375, Los Angeles, CA 90013
Phone:	(213) 683-0088
Email Address:	Imullarkey-williams@gibsontrans.com
Date:	

# Trip Generation Manual, 11<sup>th</sup> Edition *(ITE, 2021) Trip Generation Rates*

# Land Use: 222 Multifamily Housing (High-Rise)

## Description

High-rise multifamily housing includes apartments, townhouses, and condominiums. Each building has more than 10 floors of living space. Access to individual dwelling units is through an outside building entrance, a lobby, elevators, and a set of hallways.

Multifamily housing (low-rise) (Land Use 220), multifamily housing (mid-rise) (Land Use 221), offcampus student apartment (high-rise) (Land Use 227), and high-rise residential with ground-floor commercial (Land Use 232) are related land uses.

## Land Use Subcategory

Data are presented for two subcategories for this land use: (1) not close to rail transit and (2) close to rail transit. A site is considered close to rail transit if the walking distance between the residential site entrance and the closest rail transit station entrance is ½ mile or less.

## **Additional Data**

For the 12 sites for which both the number of residents and the number of occupied dwelling units were available, there were an average of 1.6 residents per occupied dwelling unit.

For the 26 sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 98 percent of the total dwelling units were occupied.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

For the 12 sites for which data were provided for both occupied dwelling units and residents, there was an average of 1.6 residents per occupied dwelling unit.

For the 26 sites for which data were provided for both occupied dwelling units and total dwelling units, an average of 98 percent of the units were occupied.

It is expected that the number of bedrooms and number of residents are likely correlated to the trips generated by a residential site. To assist in future analysis, trip generation studies of all multifamily housing should attempt to obtain information on occupancy rate and on the mix of residential unit sizes (i.e., number of units by number of bedrooms at the site complex).

The sites were surveyed in the 1980s, the 2000s, and the 2010s in California, District of Columbia, Maryland, New Jersey, New York, Ontario (CAN), Oregon, Pennsylvania, and Virginia.

## **Source Numbers**

105, 168, 169, 237, 321, 356, 818, 862, 901, 910, 949, 963, 964, 966, 967, 1056, 1057, 1076, 1077



# Multifamily Housing (High-Rise) Not Close to Rail Transit (222)

### Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

### Setting/Location: General Urban/Suburban

Number of Studies: 45

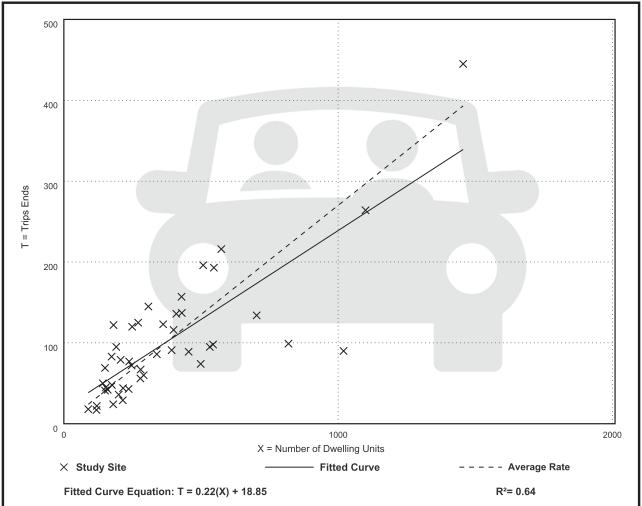
Avg. Num. of Dwelling Units: 372

Directional Distribution: 34% entering, 66% exiting

## Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.27	0.09 - 0.67	0.11

## **Data Plot and Equation**





# Multifamily Housing (High-Rise) Not Close to Rail Transit (222)

### Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

### Setting/Location: General Urban/Suburban

Number of Studies: 45

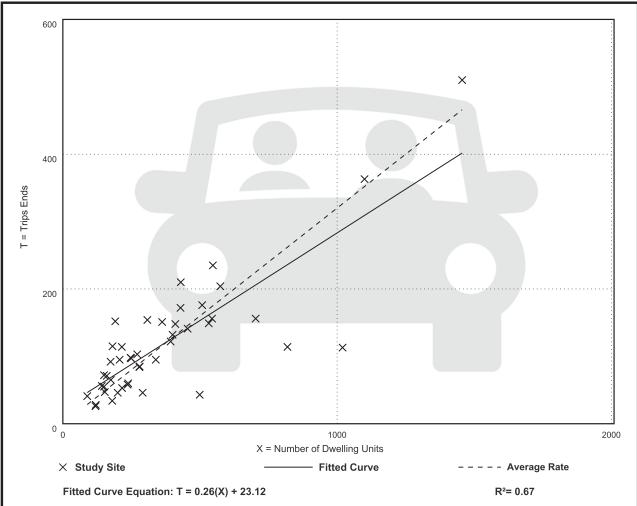
Avg. Num. of Dwelling Units: 372

Directional Distribution: 56% entering, 44% exiting

## Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.32	0.09 - 0.80	0.13

## **Data Plot and Equation**





# Land Use: 932 High-Turnover (Sit-Down) Restaurant

### Description

This land use consists of sit-down, full-service eating establishments with a typical duration of stay of 60 minutes or less. This type of restaurant is usually moderately priced, frequently belongs to a restaurant chain, and is commonly referred to as casual dining. Generally, these restaurants serve lunch and dinner; they may also be open for breakfast and are sometimes open 24 hours a day. These restaurants typically do not accept reservations. A patron commonly waits to be seated, is served by wait staff, orders from a menu, and pays after the meal.

Some facilities offer carry-out for a small proportion of its customers. Some facilities within this land use may also contain a bar area for serving food and alcoholic drinks.

Fast casual restaurant (Land Use 930), fine dining restaurant (Land Use 931), fast-food restaurant without drive-through window (Land Use 933), and fast-food restaurant with drive-through window (Land Use 934) are related uses.

### **Additional Data**

Users should exercise caution when applying statistics during the AM peak periods, as the sites contained in the database for this land use may or may not be open for breakfast. In cases where it was confirmed that the sites were not open for breakfast, data for the AM peak hour of the adjacent street traffic were removed from the database.

If the restaurant has outdoor seating, its area is not included in the overall gross floor area. For a restaurant that has significant outdoor seating, the number of seats may be more reliable than GFA as an independent variable on which to establish a trip generation rate.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), California, Florida, Georgia, Indiana, Kentucky, Massachusetts, Minnesota, New Hampshire, New Jersey, New York, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Texas, Vermont, and Wisconsin.

### **Source Numbers**

126, 269, 275, 280, 300, 301, 305, 338, 340, 341, 358, 384, 424, 432, 437, 438, 444, 507, 555, 577, 589, 617, 618, 728, 868, 884, 885, 903, 927, 939, 944, 961, 962, 977, 1048



# High-Turnover (Sit-Down) Restaurant (932)

### Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 37

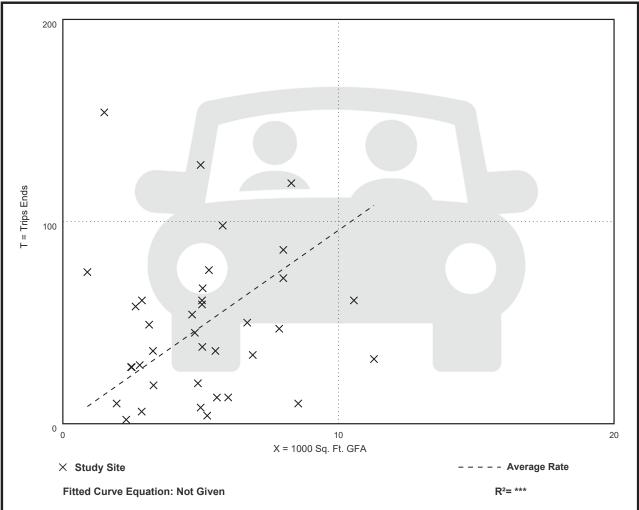
Avg. 1000 Sq. Ft. GFA: 5

Directional Distribution: 55% entering, 45% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.57	0.76 - 102.39	11.61

## **Data Plot and Equation**





# High-Turnover (Sit-Down) Restaurant (932)

### Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 104

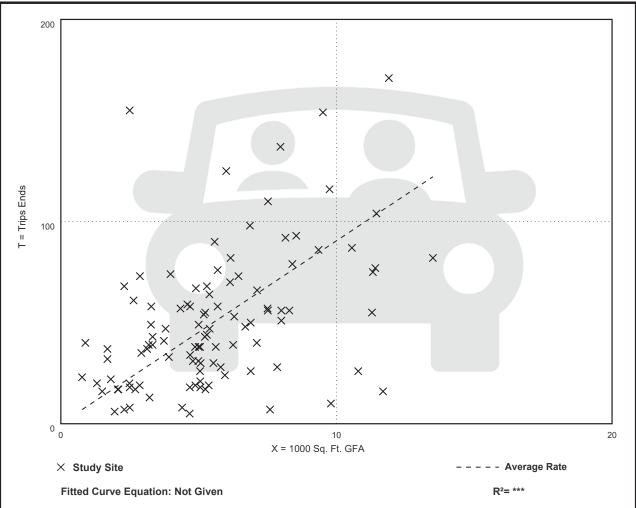
Avg. 1000 Sq. Ft. GFA: 6

Directional Distribution: 61% entering, 39% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.05	0.92 - 62.00	6.18

## **Data Plot and Equation**



Appendix B

Traffic Volume Data

## **Turning Movement Count Report AM**

Location ID:

North/South: East/West:

PHF

La Cienega Boulevard Olympic Boulevard

0.929

1

Date: 03/01/22 City: Los Angeles, CA

0.907

0.940

	S	outhbound	d	I	Nestbound	d	1	Vorthbound	d		Eastbound	1	]
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	Т	L	R	Т	L	R	Т	L	R	Т	L	TOLAIS.
7:00	24	212	10	20	303	31	11	256	54	26	83	11	1041
7:15	30	183	4	13	316	16	16	306	50	22	120	17	1093
7:30	44	239	7	12	385	22	17	318	56	32	134	14	1280
7:45	52	203	12	22	388	33	27	394	41	86	212	23	1493
8:00	52	195	20	21	370	20	34	404	33	42	228	14	1433
8:15	50	180	10	22	418	31	20	351	41	22	232	19	1396
8:30	51	192	23	27	384	12	20	358	37	40	169	17	1330
8:45	34	164	21	37	479	33	15	373	53	43	236	19	1507
9:00	52	198	27	30	344	43	26	359	24	36	193	17	1349
9:15	41	179	16	34	309	21	36	322	40	28	227	26	1279
9:30	31	208	24	27	264	33	26	327	40	29	169	18	1196
9:45	26	218	17	22	304	14	21	305	40	27	174	22	1190
Total Volume:	487	2371	191	287	4264	309	269	4073	509	433	2177	217	15587
Approach %	16%	78%	6%	6%	88%	6%	6%	84%	10%	15%	77%	8%	
Peak Hr Begin:	8:00												
PHV	187	731	74	107	1651	96	89	1486	164	147	865	69	5666

Prepared by City Count, LLC. (www.citycount.com)

0.923

0.844

## **Turning Movement Count Report PM**

Location ID:

North/South: East/West:

PHF

La Cienega Boulevard Olympic Boulevard

0.928

1

Date: 03/01/22 City: Los Angeles, CA

0.920

0.975

	S	outhbound	d	١	Nestbound	d	٨	Vorthbound	d		Eastbouna	1	
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	Т	L	R	Т	L	R	Т	L	R	Т	L	TOLAIS.
15:00	54	281	53	6	177	32	23	265	28	38	295	23	1275
15:15	42	250	42	8	191	19	36	296	27	50	262	20	1243
15:30	62	275	44	9	179	21	24	271	26	42	294	20	1267
15:45	51	245	55	11	235	17	54	255	25	37	352	17	1354
16:00	68	279	39	11	213	17	28	266	24	24	368	28	1365
16:15	46	243	47	15	225	19	35	287	24	18	340	34	1333
16:30	46	315	38	8	186	18	22	252	36	16	369	30	1336
16:45	56	286	42	7	218	22	30	258	31	19	381	34	1384
17:00	52	331	38	8	168	19	25	246	28	25	407	37	1384
17:15	58	340	46	11	178	22	26	295	31	28	336	44	1415
17:30	54	286	31	9	169	13	29	251	39	23	371	46	1321
17:45	55	285	35	11	161	22	35	303	29	24	335	34	1329
Total Volume:	644	3416	510	114	2300	241	367	3245	348	344	4110	367	16006
Approach %	14%	75%	11%	4%	87%	9%	9%	82%	9%	7%	85%	8%	
Peak Hr Begin:	16:30												
PHV	212	1272	164	34	750	81	103	1051	126	88	1493	145	5519

Prepared by City Count, LLC. (www.citycount.com)

0.909

0.876

Leg:	No	rth	Ec	ast	South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	12	0	5	1	5	0	12	1
7:15	2	1	4	1	6	2	2	2
7:30	11	0	5	1	5	1	19	0
7:45	19	0	10	1	11	0	25	1
8:00	10	2	7	0	4	0	12	1
8:15	12	0	8	0	6	0	20	1
8:30	17	0	14	0	5	1	9	0
8:45	7	0	6	0	7	0	8	0
9:00	12	0	10	0	6	0	12	0
9:15	2	0	5	1	7	1	6	0
9:30	0	0	5	0	1	0	13	0
9:45	5	0	8	0	5	0	12	1

# Pedestrian/Bicycle Count Report

Leg:	No	rth	E	ast	South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
15:00	8	0	3	2	5	0	12	0
15:15	7	0	7	1	5	0	16	0
15:30	11	0	10	0	8	1	33	0
15:45	21	0	11	0	4	0	41	0
16:00	8	0	13	0	6	0	13	0
16:15	11	0	9	0	10	0	7	0
16:30	11	2	13	0	15	0	16	0
16:45	5	0	12	1	8	0	9	1
17:00	13	0	15	0	11	0	18	2
17:15	9	0	9	2	4	0	6	0
17:30	10	0	9	0	7	0	17	1
17:45	6	1	13	0	9	0	16	1

## **Turning Movement Count Report AM**

Location ID: North/South:

East/West:

La Cienega Boulevard Whitworth Drive

2

Date: 03/01/22 City: Los Angeles, CA

	S	outhbound	d	١	Nestbound	d	٢	Vorthbound	d		Eastbound		]
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	Т	L	R	Т	L	R	Т	L	R	Т	L	TOLAIS.
7:00	3	258	1	3	4	0	1	298	7	6	1	2	584
7:15	4	211	1	9	12	3	0	380	6	3	2	3	634
7:30	9	269	5	11	14	4	1	380	14	8	7	5	727
7:45	43	229	16	10	42	5	3	449	13	8	14	6	838
8:00	36	229	11	14	25	7	5	427	5	7	23	12	801
8:15	14	223	4	12	25	4	5	408	12	5	17	8	737
8:30	14	226	3	10	22	3	5	389	7	6	13	6	704
8:45	16	222	12	11	41	6	5	459	18	12	12	6	820
9:00	14	256	2	13	31	3	1	344	13	11	8	7	703
9:15	14	211	4	12	17	7	4	382	6	7	14	10	688
9:30	14	261	6	7	11	2	4	351	8	10	11	7	692
9:45	5	249	4	4	14	7	6	356	8	9	10	6	678
Total Volume:	186	2844	69	116	258	51	40	4623	117	92	132	78	8606
Approach %	6%	92%	2%	27%	61%	12%	1%	97%	2%	30%	44%	26%	
Peak Hr Begin:	7:30												
PHV	102	950	36	47	106	20	14	1664	44	28	61	31	3103
PHF		0.944			0.759			0.926			0.714		0.926

Prepared by City Count, LLC. (www.citycount.com)

## **Turning Movement Count Report PM**

Location ID: North/South:

East/West:

La Cienega Boulevard Whitworth Drive

2

Date: 03/01/22 City: Los Angeles, CA

	S	outhbound	d	١	Nestbound	d	٨	Vorthbound	d		Eastbouna	1	
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	Т	L	R	Т	L	R	Т	L	R	Т	L	Totals.
15:00	25	288	20	2	8	4	6	302	9	8	32	14	718
15:15	36	287	15	8	9	1	5	328	13	11	41	15	769
15:30	33	278	22	6	9	1	5	318	14	15	28	14	743
15:45	45	261	25	9	15	3	8	276	11	8	44	6	711
16:00	41	292	31	10	9	2	13	327	12	8	40	2	787
16:15	12	275	28	5	7	1	9	315	10	9	49	4	724
16:30	5	324	11	7	4	2	9	305	11	8	44	5	735
16:45	14	314	11	6	7	0	4	279	8	14	42	8	707
17:00	11	334	9	11	3	5	4	299	9	8	54	9	756
17:15	12	377	12	2	4	5	4	331	6	5	52	5	815
17:30	10	295	13	6	8	4	7	288	1	10	40	10	692
17:45	5	304	7	6	7	0	6	384	9	6	38	6	778
Total Volume:	249	3629	204	78	90	28	80	3752	113	110	504	98	8935
Approach %	6%	89%	5%	40%	46%	14%	2%	95%	3%	15%	71%	14%	
Peak Hr Begin:	17:00												
PHV	38	1310	41	25	22	14	21	1302	25	29	184	30	3041
PHF		0.866			0.803			0.845			0.856		0.933

Prepared by City Count, LLC. (www.citycount.com)

Leg:	No	rth	Ec	ast	So	uth	W	est
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	2	0	3	1	3	0	4	1
7:15	5	0	4	1	6	0	3	0
7:30	3	1	3	0	3	1	5	0
7:45	28	4	1	2	16	0	12	0
8:00	16	0	3	0	4	1	3	0
8:15	5	0	2	0	4	1	3	1
8:30	5	0	2	0	3	0	2	0
8:45	6	1	6	0	4	0	2	0
9:00	4	0	6	0	1	0	3	1
9:15	2	0	1	0	2	0	2	0
9:30	5	0	0	0	3	0	4	0
9:45	6	1	2	0	8	0	3	0

# Pedestrian/Bicycle Count Report

Leg:	No	rth	E	ast	So	uth	W	'est
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
15:00	1	0	0	1	12	1	3	0
15:15	10	0	0	0	1	1	2	0
15:30	10	0	2	0	6	0	14	0
15:45	24	0	1	0	2	0	14	0
16:00	3	0	0	0	5	0	4	0
16:15	4	0	2	0	6	0	3	0
16:30	1	0	1	0	1	0	5	0
16:45	3	0	2	0	2	1	5	1
17:00	7	0	0	0	4	0	6	1
17:15	6	2	1	0	2	0	1	2
17:30	3	1	1	0	2	1	2	1
17:45	2	0	2	0	0	0	8	0

## **Turning Movement Count Report AM**

Location ID:

PHF

North/South: La East/West: Pi

3

La Cienega Boulevard Pico Boulevard

0.931

Date: 03/01/22 City: Los Angeles, CA

0.960

0.978

	S	outhboun	d		Nestbound	d	٨	Vorthbound	d		Eastbound	1	
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	Т	L	R	Т	L	R	Т	L	R	Т	L	TOLAIS.
7:00	10	225	4	8	212	37	11	278	46	2	50	43	926
7:15	10	226	3	4	186	31	16	368	42	15	49	48	998
7:30	10	231	3	5	283	26	16	377	42	8	83	32	1116
7:45	18	238	9	21	218	16	19	405	41	20	109	35	1149
8:00	32	197	14	12	210	18	12	400	39	26	124	32	1116
8:15	26	206	11	11	221	18	26	360	42	12	127	49	1109
8:30	25	195	16	10	197	14	17	414	46	18	128	42	1122
8:45	14	210	8	11	191	14	32	398	42	22	112	36	1090
9:00	22	227	8	7	195	27	20	332	32	20	118	46	1054
9:15	22	191	14	17	201	32	27	333	40	18	114	46	1055
9:30	13	224	15	30	151	35	10	324	35	24	126	53	1040
9:45	16	241	4	16	164	41	8	330	29	22	128	47	1046
Total Volume:	218	2611	109	152	2429	309	214	4319	476	207	1268	509	12821
Approach %	7%	89%	4%	5%	84%	11%	4%	86%	10%	10%	64%	26%	
Peak Hr Begin:	7:45												
PHV	101	836	50	54	846	66	74	1579	168	76	488	158	4496

Prepared by City Count, LLC. (www.citycount.com)

0.954

0.947

## **Turning Movement Count Report PM**

Location ID:

North/South: East/West:

PHF

3

La Cienega Boulevard Pico Boulevard

0.926

Date: 03/01/22 City: Los Angeles, CA

0.920

0.977

	S	outhbound	d	١	Nestbound	1	٨	Vorthboun	d		Eastbound	1	
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	Т	L	R	Т	L	R	Т	L	R	Т	L	TOLAIS.
15:00	22	221	16	13	108	38	25	295	38	13	177	20	986
15:15	22	268	12	11	98	42	65	326	31	14	189	34	1112
15:30	17	235	12	12	114	36	40	311	33	23	211	41	1085
15:45	38	254	16	12	122	39	61	280	30	33	210	40	1135
16:00	32	256	8	10	124	46	43	295	30	17	205	39	1105
16:15	17	256	13	16	121	47	69	285	28	19	194	38	1103
16:30	5	276	14	19	105	48	50	281	41	19	205	34	1097
16:45	17	276	20	15	118	47	45	257	23	16	200	24	1058
17:00	16	295	17	14	114	32	52	279	30	12	231	27	1119
17:15	8	289	17	12	102	34	29	328	36	19	210	33	1117
17:30	16	334	14	11	99	36	40	289	36	13	249	34	1171
17:45	8	319	15	16	73	37	57	345	38	21	213	27	1169
Total Volume:	218	3279	174	161	1298	482	576	3571	394	219	2494	391	13257
Approach %	6%	89%	5%	8%	67%	25%	13%	79%	9%	7%	80%	13%	
Peak Hr Begin:	17:00												
PHV	48	1237	63	53	388	139	178	1241	140	65	903	121	4576

Prepared by City Count, LLC. (www.citycount.com)

0.886

0.906

Leg:	No	rth	Ec	ast	So	uth	W	est
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	9	0	7	1	6	3	7	0
7:15	7	0	7	0	2	1	6	0
7:30	17	0	10	0	1	1	4	1
7:45	7	1	6	1	2	0	4	1
8:00	2	1	2	0	6	0	4	0
8:15	8	0	6	0	6	1	6	0
8:30	8	1	10	2	3	3	7	0
8:45	11	0	5	0	8	0	6	0
9:00	15	0	9	0	4	1	5	1
9:15	22	0	12	0	11	0	10	0
9:30	16	0	6	0	7	0	7	0
9:45	15	3	4	0	4	1	6	0

# Pedestrian/Bicycle Count Report

Leg:	No	rth	E	ast	So	uth	W	est
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
15:00	24	1	7	0	7	0	11	1
15:15	20	0	16	0	14	0	13	0
15:30	14	0	8	1	11	0	7	0
15:45	14	0	9	0	4	1	18	0
16:00	24	0	9	0	7	1	15	0
16:15	19	1	5	0	13	1	7	0
16:30	12	0	6	0	8	2	13	0
16:45	11	2	7	0	18	4	11	4
17:00	13	4	9	2	7	2	2	0
17:15	12	0	7	0	13	2	3	0
17:30	18	0	10	0	6	2	5	2
17:45	6	0	5	3	7	4	3	0

## **Turning Movement Count Report AM**

Location ID: North/South:

La Cienega Boulevard

19

East/West:

Olympic Boulevard

Date: 10/12/17 Los Angeles, CA City:

	S	outhbound	d	١	Nestbound	1	1	Vorthboun	d		Eastbound	1	
	1	2	3	4	5	6	7	8	9	10	11	12	Totala
Movements:	R	Т	L	R	Т	L	R	Т	L	R	Т	L	Totals:
7:00	37	265	7	11	480	30	15	278	44	36	98	12	500
7:15	33	212	10	12	599	23	8	250	32	23	136	18	602
7:30	44	202	11	24	531	35	10	228	27	16	200	15	607
7:45	17	206	7	25	476	56	11	234	23	15	203	18	766
8:00	32	171	10	41	496	58	9	224	32	18	228	21	732
8:15	44	174	9	28	535	34	10	232	37	26	289	21	825
8:30	31	172	20	45	561	23	7	211	36	21	256	23	796
8:45	20	173	19	41	466	40	4	235	21	19	246	22	900
9:00	25	170	15	41	482	29	13	218	29	21	248	31	844
9:15	28	174	12	33	413	44	8	205	32	29	233	21	839
9:30	30	178	15	30	422	31	8	205	29	39	241	17	775
9:45	43	190	16	30	401	40	7	200	36	44	207	22	774
Total Volume:	384	2287	151	361	5862	443	110	2720	378	307	2585	241	15829
Approach %	14%	81%	5%	5%	88%	7%	3%	85%	12%	10%	83%	8%	
Peak Hr Begin:	8:30												
PHV	104	689	66	160	1922	136	32	869	118	90	983	97	5266
PHF		0.963			0.882			0.980			0.975		1.463

Prepared by City Count, LLC. (www.citycount.com)

## **Turning Movement Count Report PM**

Location ID: North/South:

La Cienega Boulevard

19

East/West:

Olympic Boulevard

Date: 10/12/17 Los Angeles, CA City:

	S	outhbound	d	١	Vestbound	1	٨	Vorthbound	d		Eastbound		
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	Т	L	R	Т	L	R	Т	L	R	Т	L	TOLAIS.
15:00	31	221	16	23	270	51	15	201	19	42	361	37	1287
15:15	27	233	28	16	251	28	22	198	22	23	431	17	1296
15:30	36	231	43	5	244	40	17	186	39	23	387	32	1283
15:45	43	283	40	14	250	28	21	215	31	24	402	28	1379
16:00	45	240	30	18	269	33	18	197	25	31	462	32	1400
16:15	42	308	29	12	243	44	11	225	27	30	407	19	1397
16:30	29	261	37	9	264	38	21	231	34	29	470	10	1433
16:45	18	301	43	12	244	27	33	252	42	24	439	18	1453
17:00	46	248	30	14	286	42	24	229	36	47	465	20	1487
17:15	35	363	38	6	289	45	24	340	39	30	370	17	1596
17:30	32	247	34	9	312	46	45	255	30	25	468	15	1518
17:45	21	286	29	6	259	37	52	275	45	33	391	17	1451
Total Volume:	405	3222	397	144	3181	459	303	2804	389	361	5053	262	16980
Approach %	10%	80%	10%	4%	84%	12%	9%	80%	11%	6%	89%	5%	
Peak Hr Begin:	16:45												
PHV	131	1159	145	41	1131	160	126	1076	147	126	1742	70	6054
PHF		0.823			0.907			0.837			0.911		0.948

Prepared by City Count, LLC. (www.citycount.com)

	No	rth	Ec	ast	So	uth	W	est
Leg:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	4	0	4	0	4	0	0	0
7:15	5	0	4	1	2	0	0	0
7:30	8	0	10	0	10	0	0	0
7:45	4	0	2	1	3	1	0	0
8:00	7	0	10	1	12	1	0	1
8:15	14	0	12	3	15	0	1	0
8:30	9	0	6	0	11	0	0	0
8:45	15	0	14	0	12	1	0	0
9:00	8	0	8	0	9	0	1	0
9:15	10	0	10	0	8	0	1	0
9:30	5	0	15	1	12	1	0	0
9:45	17	0	8	1	6	2	0	0

# Pedestrian/Bicycle Count Report

	No	rth	Ec	ast	So	uth	W	est
Leg:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
15:00	6	1	9	1	12	1	1	0
15:15	2	0	1	0	11	1	5	0
15:30	19	0	7	0	8	1	5	1
15:45	14	0	5	1	3	0	7	1
16:00	9	0	4	0	3	1	0	0
16:15	9	1	6	1	12	2	0	0
16:30	7	1	11	1	18	2	0	1
16:45	21	0	17	1	7	1	0	0
17:00	15	0	8	0	9	1	1	0
17:15	13	0	14	2	14	0	0	0
17:30	14	0	8	0	9	0	0	0
17:45	21	0	12	0	9	2	0	0

## **Turning Movement Count Report AM**

Location ID:

North/South: La

4

East/West:

La Cienega Boulevard Pico Boulevard Date: 11/27/18 City: Los Angeles, CA

rd

		Southboun	d		Westbound	d	Northbound		Eastbound				
	1	2	3	4	5	6	7	8	9	10	11	12	Tota
Movements:	R	Т	L	R	Т	L	R	Т	L	R	Т	L	Tota
7:00	46	272	6	24	262	20	7	252	51	40	75	5	106
7:15	38	237	7	9	327	22	17	297	62	39	87	11	11
7:30	49	248	3	17	318	19	22	282	62	33	129	14	119
7:45	57	232	4	26	255	16	21	330	81	18	174	17	123
8:00	52	225	13	23	299	17	24	289	61	32	149	22	120
8:15	42	237	7	23	293	32	21	341	63	35	144	19	12
8:30	31	253	8	33	276	39	27	377	66	25	146	12	12
8:45	32	213	9	45	259	42	30	323	64	26	142	21	12
9:00	33	216	15	30	277	26	23	314	59	35	137	18	11
9:15	26	228	14	19	253	35	27	323	49	32	122	24	11
9:30	31	241	14	14	242	28	23	350	37	41	105	21	114
9:45	28	283	11	19	207	34	23	356	51	36	95	13	11
Total Volume:	465	2885	111	282	3268	330	265	3834	706	392	1505	197	142
Approach %	13%	83%	3%	7%	84%	9%	6%	80%	15%	19%	72%	9%	
Арргодсті %	13%	03%	5%	/%	04%	9%	0%	80%	13%	19%	12%	9%	
Peak Hr Begin:	7:45												

PHV	182	947	32	105	1123	104	93	1337	271	110	613	70	4987
PHF		0.991			0.957			0.905			0.949		0.964

Prepared by City Count, LLC. (www.citycount.com)

## **Turning Movement Count Report PM**

Location ID: 4 North/South: La Cienega Boulevard

East/West: Pico Boulevard

Date: 11/27/18

City: Los Angeles, CA

	S	outhbound	d	I	Westbound Northbound		Eastbound						
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	Т	L	R	Т	L	R	Т	L	R	Т	L	TOLAIS.
15:00	15	215	13	14	133	50	37	247	54	39	224	17	1058
15:15	14	249	14	14	133	47	35	308	48	30	196	13	1101
15:30	20	238	11	8	129	43	35	246	27	48	263	24	1092
15:45	29	251	13	6	145	47	29	330	39	37	223	25	1174
16:00	37	278	14	12	141	57	48	237	43	46	230	22	1165
16:15	20	289	19	16	114	36	48	277	46	29	258	16	1168
16:30	17	278	13	9	136	39	54	254	42	36	248	19	1145
16:45	27	316	18	6	145	35	56	324	50	27	217	11	1232
17:00	22	272	18	4	130	43	42	283	38	28	243	14	1137
17:15	21	341	20	16	124	25	42	314	49	43	209	20	1224
17:30	16	340	15	7	128	45	67	310	42	38	232	16	1256
17:45	16	349	19	9	124	48	62	373	50	27	215	18	1310
Total Volume:	254	3416	187	121	1582	515	555	3503	528	428	2758	215	14062
Approach %	7%	89%	5%	5%	71%	23%	12%	76%	12%	13%	81%	6%	
Peak Hr Begin:	17:00												
PHV	75	1302	72	36	506	161	213	1280	179	136	899	68	4927
PHF		0.943			0.971			0.862			0.964		0.940

Prepared by City Count, LLC. (www.citycount.com)

## Pedestrian/Bicycle Count Report

_	North		Ec	ist	South		W	est
Leg:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	6	2	6	0	4	0	8	0
7:15	8	0	8	1	1	1	2	0
7:30	7	1	8	1	2	1	3	1
7:45	10	2	5	1	7	1	3	0
8:00	7	0	3	0	3	0	9	1
8:15	15	0	8	0	6	0	2	1
8:30	9	0	5	2	5	1	4	0
8:45	10	0	9	2	8	1	8	4
9:00	14	0	7	0	10	2	9	1
9:15	15	1	9	1	3	0	5	0
9:30	17	1	6	3	3	1	9	1
9:45	11	1	12	2	2	0	12	0

	North		East		South		West	
Leg:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
15:00	23	1	12	1	14	2	22	2
15:15	22	1	22	1	11	1	12	2
15:30	27	0	9	2	19	3	7	0
15:45	18	2	16	1	16	1	15	0
16:00	20	2	20	2	19	1	16	1
16:15	23	0	10	2	19	0	21	1
16:30	14	1	8	1	18	1	9	0
16:45	17	2	16	2	25	3	13	1
17:00	22	1	8	1	23	1	12	2
17:15	14	2	13	2	15	0	18	0
17:30	15	1	13	1	19	1	9	0
17:45	16	1	16	0	8	2	11	1

Appendix C

CEQA T-1 Plans, Policies, Programs Consistency Worksheet

## **Plans, Policies and Programs Consistency Worksheet**

The worksheet provides a structured approach to evaluate the threshold T-1 question below, that asks whether a project conflicts with a program, plan, ordinance or policy addressing the circulation system. The intention of the worksheet is to streamline the project review by highlighting the most relevant plans, policies and programs when assessing potential impacts to the City's circulation system.

Threshold T-1: Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities?

This worksheet does not include an exhaustive list of City policies, and does not include community plans, specific plans, or any area-specific regulatory overlays. The Department of City Planning project planner will need to be consulted to determine if the project would obstruct the City from carrying out a policy or program in a community plan, specific plan, streetscape plan, or regulatory overlay that was adopted to support multimodal transportation options or public safety. LADOT staff should be consulted if a project would lead to a conflict with a mobility investment in the Public Right of Way (PROW) that is currently undergoing planning, design, or delivery. This worksheet must be completed for all projects that meet the Section I. Screening Criteria. For description of the relevant planning documents, **see Attachment D.1**.

For any response to the following questions that checks the box in bold text ((i.e. Yes or No), further analysis is needed to demonstrate that the project does not conflict with a plan, policy, or program.

## I. SCREENING CRITERIA FOR POLICY ANALYSIS

If the answer is 'yes' to any of the following questions, further analysis will be required:

Does the project require a discretionary action that requires the decision maker to find that the project would substantially conform to the purpose, intent and provisions of the General Plan?

✓ Yes □No

Is the project known to directly conflict with a transportation plan, policy, or program adopted to support multimodal transportation options or public safety?

☐ Yes ☑ No

Is the project required to or proposing to make any voluntary modifications to the public right-of-way (i.e., dedications and/or improvements in the right-of-way, reconfigurations of curb line, etc.)?

□Yes 🗹 No

## **II. PLAN CONSISTENCY ANALYSIS**

## A. Mobility Plan 2035 PROW Classification Standards for Dedications and Improvements

These questions address potential conflict with:



*Mobility Plan 2035 Policy 2.1* – Adaptive Reuse of Streets. Design, plan, and operate streets to serve multiple purposes and provide flexibility in design to adapt to future demands.

**Mobility Plan 2035 Policy 2.3** – Pedestrian Infrastructure. Recognize walking as a component of every trip, and ensure high quality pedestrian access in all site planning and public right-of-way modifications to provide a safe and comfortable walking environment.

*Mobility Plan 2035 Policy 3.2 – People with Disabilities. Accommodate the needs of people with disabilities when modifying or installing infrastructure in the public right-of-way.* 

### Mobility Plan 2035 Street Designations and Standard Roadway Dimensions

A.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? Yes No

A.2 If **A.1 is yes**, is the project required to make additional dedications or improvements to the Public Right of Way as demonstrated by the street designation.

A.3 If **A.2 is yes**, is the project making the dedications and improvements as necessary to meet the designated dimensions of the fronting street (Boulevard I, and II, or Avenue I, II, or III)?

🗌 Yes 🗌	No	√N/A
---------	----	------

If the answer is to **A.1 or A.2 is NO, or to A.1, A.2 and A.3. is YES**, then the project does not conflict with the dedication and improvement requirements that are needed to comply with the Mobility Plan 2035 Street Designations and Standard Roadway Dimensions.

A.4 If the answer to A.3. is NO, is the project applicant asking to waive from the dedication standards?  $\square$  Yes  $\square$  No  $\checkmark$ N/A

Lists any streets subject to dedications or voluntary dedications and include existing roadway and sidewalk widths, required roadway and sidewalk widths, and proposed roadway and sidewalk width or waivers.

Frontage 1 Existing PROW'/Curb' : Existing	100/70 <sub>Required</sub> 100/70	_Proposed_100/70
Frontage 2 Existing PROW'/Curb' : Existing	Required	_Proposed
Frontage 3 Existing PROW'/Curb' : Existing	Required	_Proposed
Frontage 4 Existing PROW'/Curb' : Existing	Required	_Proposed



If the answer to **A.4 is NO**, the project is inconsistent with Mobility Plan 2035 street designations and must file for a waiver of street dedication and improvement.

If the answer to **A.4 is YES**, additional analysis is necessary to determine if the dedication and/or improvements are necessary to meet the City's mobility needs for the next 20 years. The following factors may contribute to determine if the dedication or improvement is necessary:

Is the project site along any of the following networks identified in the City's Mobility Plan?

- Transit Enhanced Network
- Bicycle Enhanced Network
- Bicycle Lane Network
- Pedestrian Enhanced District
- Neighborhood Enhanced Network

To see the location of the above networks, see Transportation Assessment Support Map.<sup>1</sup>

Is the project within the service area of Metro Bike Share, or is there demonstrated demand for micromobility services?

If the project dedications and improvements asking to be waived are necessary to meet the City's mobility needs, the project may be found to conflict with a plan that is adopted to protect the environment.

### B. Mobility Plan 2035 PROW Policy Alignment with Project-Initiated Changes

### **B.1 Project-Initiated Changes to the PROW Dimensions**

These questions address potential conflict with:

*Mobility Plan 2035 Policy 2.1* – Adaptive Reuse of Streets. Design, plan, and operate streets to serve multiple purposes and provide flexibility in design to adapt to future demands.

**Mobility Plan 2035 Policy 2.3** – Pedestrian Infrastructure. Recognize walking as a component of every trip, and ensure high quality pedestrian access in all site planning and public right-of-way modifications to provide a safe and comfortable walking environment.

*Mobility Plan 2035 Policy 3.2* – People with Disabilities. Accommodate the needs of people with disabilities when modifying or installing infrastructure in the public right-of-way.

*Mobility Plan 2035 Policy 2.10* – *Loading Areas. Facilitate the provision of adequate on and offsite street loading areas.* 

Mobility Plan 2035 Street Designations and Standard Roadway Dimensions

<sup>&</sup>lt;sup>1</sup> LADOT Transportation Assessment Support Map <u>https://arcg.is/fubbD</u>



B.1 Does the project physically modify the curb placement or turning radius and/or physically alter the sidewalk and parkways space that changes how people access a property?

Examples of physical changes to the public right-of-way include:

- widening the roadway,
- narrowing the sidewalk,
- adding space for vehicle turn outs or loading areas,
- removing bicycle lanes, bike share stations, or bicycle parking
- modifying existing bus stop, transit shelter, or other street furniture
- paving, narrowing, shifting or removing an existing parkway or tree well

**Yes √**No

### **B.2 Driveway Access**

These questions address potential conflict with:

*Mobility Plan 2035 Policy 2.10* – *Loading Areas. Facilitate the provision of adequate on and offsite street loading areas.* 

**Mobility Plan 2035 Program PL.1. Driveway Access.** Require driveway access to buildings from non-arterial streets or alleys (where feasible) in order to minimize interference with pedestrian access and vehicular movement.

*Citywide Design Guidelines - Guideline 2*: Carefully incorporate vehicular access such that it does not degrade the pedestrian experience.

### Site Planning Best Practices:

- Prioritize pedestrian access first and automobile access second. Orient parking and driveways toward the rear or side of buildings and away from the public right-of-way. On corner lots, parking should be oriented as far from the corner as possible.
- Minimize both the number of driveway entrances and overall driveway widths.
- Do not locate drop-off/pick-up areas between principal building entrances and the adjoining sidewalks.
- Orient vehicular access as far from street intersections as possible.
- Place drive-thru elements away from intersections and avoid placing them so that they create a barrier between the sidewalk and building entrance(s).
- Ensure that loading areas do not interfere with on-site pedestrian and vehicular circulation by separating loading areas and larger commercial vehicles from areas that are used for public parking and public entrances.

B.2 Does the project add new driveways along a street designated as an Avenue or a Boulevard that conflict with LADOT's Driveway Design Guidelines (See Sec. 321 in the Manual of Policies and Procedures) by any of the following:

- locating new driveways for residential properties on an Avenue or Boulevard, and access is otherwise possible using an alley or a collector/local street, or
- locating new driveways for industrial or commercial properties on an Avenue or Boulevard and access is possible along a collector/local street, or



- the total number of new driveways exceeds 1 driveway per every 200 feet<sup>2</sup> along on the Avenue or Boulevard frontage, or
- locating new driveways on an Avenue or Boulevard within 150 feet from the intersecting street, or
- locating new driveways on a collector or local street within 75 feet from the intersecting street, or
- locating new driveways near mid-block crosswalks, requiring relocation of the mid-block crosswalk



If the answer to **B.1 and B.2 are both NO**, then the project would not conflict with a plan or policies that govern the PROW as a result of the project-initiated changes to the PROW.

### **Impact Analysis**

If the answer to either **B.1 or B.2 are YES**, City plans and policies should be reviewed in light of the proposed physical changes to determine if the City would be obstructed from carrying out the plans and policies. The analysis should pay special consideration to substantial changes to the Public Right of Way that may either degrade existing facilities for people walking and bicycling (e.g., removing a bicycle lane), or preclude the City from completing complete street infrastructure as identified in the Mobility Plan 2035, especially if the physical changes are along streets that are on the High Injury Network (HIN). The analysis should also consider if the project is in a Transit Oriented Community (TOC) area, and would degrade or inhibit trips made by biking, walking and/ or transit ridership. The streets that need special consideration are those that are included on the following networks identified in the Mobility Plan 2035, or the HIN:

- Transit Enhanced Network
- Bicycle Enhanced Network
- Bicycle Lane Network
- Pedestrian Enhanced District
- Neighborhood Enhanced Network
- High Injury Network

To see the location of the above networks, see Transportation Assessment Support Map.<sup>3</sup>

Once the project is reviewed relevant to plans and policies, and existing facilities that may be impacted by the project, the analysis will need to answer the following two questions in concluding if there is an impact due to plan inconsistency.

B.2.1 Would the physical changes in the public right of way or new driveways that conflict with LADOT's Driveway Design Guidelines degrade the experience of vulnerable roadway users such as modify, remove, or otherwise negatively impact existing bicycle, transit, and/or pedestrian infrastructure?



<sup>&</sup>lt;sup>2</sup> for a project frontage that exceeds 400 feet along an Avenue or Boulevard, the incremental additional driveway above 2 is more than 1 driveway for every 400 additional feet.

<sup>&</sup>lt;sup>3</sup> LADOT Transportation Assessment Support Map <u>https://arcg.is/fubbD</u>



B.2.2 Would the physical modifications or new driveways that conflict with LADOT's Driveway Design Guidelines preclude the City from advancing the safety of vulnerable roadway users?

Yes 🗌	No	√	N/A
-------	----	---	-----

If either of the answers to either **B.2.1 or B.2.2 are YES**, the project may conflict with the Mobility Plan 2035, and therefore conflict with a plan that is adopted to protect the environment. If either of the answers to both **B.2.1. or B.2.2. are NO**, then the project would not be shown to conflict with plans or policies that govern the Public Right-of-Way.

### **C. Network Access**

### C. 1 Alley, Street and Stairway Access

These questions address potential conflict with:

*Mobility Plan Policy 3.9* Increased Network Access: Discourage the vacation of public rights-ofway.

C.1.1 Does the project propose to vacate or otherwise restrict public access to a street, alley, or public stairway?

	Yes	√	No
--	-----	---	----

C.1.2 If the answer to C.1.1 is Yes, will the project provide or maintain public access to people walking and biking on the street, alley or stairway?

Yes 🗌	No	1	N/A
-------	----	---	-----

### C.2 New Cul-de-sacs

These questions address potential conflict with:

*Mobility Plan 2035 Policy 3.10* Cul-de-sacs: Discourage the use of cul-de-sacs that do not provide access for active transportation options.

C.2.1 Does the project create a cul-de-sac or is the project located adjacent to an existing cul-de-sac?

C.2.2 If yes, will the cul-de-sac maintain convenient and direct public access to people walking and biking to the adjoining street network?

Yes No V/A

If the answers to either C.1.2 or C.2.2 are YES, then the project would not conflict with a plan or policies that ensures access for all modes of travel. If the answer to either C.1.2 or C.2.2 are NO, the project may conflict with a plan or policies that governs multimodal access to a property. Further analysis must assess to the degree that pedestrians and bicyclists have sufficient public access to the transportation network.



### **D.** Parking Supply and Transportation Demand Management

These questions address potential conflict with:

*Mobility Plan 2035 Policy 3.8* – Bicycle Parking, Provide bicyclists with convenient, secure and well maintained bicycle parking facilities.

**Mobility Plan 2035 Policy 4.8** – Transportation Demand Management Strategies. Encourage greater utilization of Transportation Demand Management Strategies to reduce dependence on single-occupancy vehicles.

*Mobility Plan 2035 Policy 4.13* – Parking and Land Use Management: Balance on-street and offstreet parking supply with other transportation and land use objectives.

D.1 Would the project propose a supply of onsite parking that exceeds the baseline amount<sup>4</sup> as required in the Los Angeles Municipal Code or a Specific plan, whichever requirement prevails?

Yes 🗸 No

D.2 If the answer to D.1. is YES, would the project propose to actively manage the demand of parking by independently pricing the supply to all users (e.g. parking cash-out), or for residential properties, unbundle the supply from the lease or sale of residential units?

Yes	No	$\checkmark$	N/A
-----	----	--------------	-----

If the answer to **D.2.** is **NO** the project may conflict with parking management policies. Further analysis is needed to demonstrate how the supply of parking above city requirements will not result in additional (induced) drive-alone trips as compared to an alternative that provided no more parking than the baseline required by the LAMC or Specific Plan. If there is potential for the supply of parking to result in induced demand for drive-alone trips, the project should further explore transportation demand management (TDM) measures to further off-set the induced demands of driving and vehicle miles travelled (VMT) that may result from higher amounts of on-site parking. The TDM measures should specifically focus on strategies that encourage dynamic and context-sensitive pricing solutions and ensure the parking is efficiently allocated, such as providing real time information. Research has demonstrated that charging a user cost for parking or providing a 'cash-out' option in return for not using it is the most effective strategy to reduce the instances of drive-alone trips and increase non-auto mode share to further reduce VMT. To ensure the parking is efficiently managed and reduce the need to build parking for future uses, further strategies should include sharing parking with other properties and/or the general public.

D.3. Would the project provide the minimum on and off-site bicycle parking spaces as required by Section 12.21 A.16 of the LAMC?



<sup>&</sup>lt;sup>4</sup> The baseline parking is defined here as the default parking requirements in section 12.21 A.4 of the Los Angeles Municipal Code or any applicable Specific Plan, whichever prevails, for each applicable use not taking into consideration other parking incentives to reduce the amount of required parking.



D.4. Does the Project include more than 25,000 square feet of gross floor area construction of new non-residential gross floor?

☐ Yes 🖌 No

D.5 If the answer to D.4. is YES, does the project comply with the City's TDM Ordinance in Section 12.26 J of the LAMC?



If the answer to **D.3. or D.5. is NO** the project conflicts with LAMC code requirements of bicycle parking and TDM measures. If the project includes uses that require bicycle parking (Section 12.21 A.16) or TDM (Section 12.26 J), and the project does not comply with those Sections of the LAMC, further analysis is required to ensure that the project supports the intent of the two LAMC sections. To meet the intent of bicycle parking requirements, the analysis should identify how the project commits to providing safe access to those traveling by bicycle and accommodates storing their bicycle in locations that demonstrates priority over vehicle access.

Similarly, to meet the intent of the TDM requirements of Section 12.26 J of the LAMC, the analysis should identify how the project commits to providing effective strategies in either physical facilities or programs that encourage non-drive alone trips to and from the project site and changes in work schedule that move trips out of the peak period or eliminate them altogether (as in the case in telecommuting or compressed work weeks).

### E. Consistency with Regional Plans

This section addresses potential inconsistencies with greenhouse gas (GHG) reduction targets forecasted in the Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP) / Sustainable Communities Strategy (SCS).

E.1 Does the Project or Plan apply one the City's efficiency-based impact thresholds (i.e. VMT per capita, VMT per employee, or VMT per service population) as discussed in Section 2.2.3 of the TAG?

✓ Yes □No

E.2 If the Answer to E.1 is YES, does the Project or Plan result in a significant VMT impact?

E.3 If the Answer to E.1 is NO, does the Project result in a net increase in VMT?

✓ Yes □No □ N/A

If the Answer to E.2 or E.3 is NO, then the Project or Plan is shown to align with the long-term VMT and GHG reduction goals of SCAG's RTP/SCS.

E.4 If the Answer to E.2 or E.3 is YES, then further evaluation would be necessary to determine whether such a project or land use plan would be shown to be consistent with VMT and GHG reduction goals of the SCAG RTP/SCS. For the purpose of making a finding that a project is consistent with the GHG reduction targets forecasted in the SCAG RTP/SCS, the project analyst should consult Section 2.2.4 of the Transportation Assessment Guidelines (TAG). Section 2.2.4 provides the methodology for evaluating a land use project's cumulative impacts to VMT, and the appropriate reliance on SCAG's most recently adopted RTP/SCS in reaching that conclusion.



The analysis methods therein can further support findings that the project is consistent with the general use designation, density, building intensity, and applicable policies specified for the project area in either a sustainable communities strategy or an alternative planning strategy for which the State Air Resources Board, pursuant to Section 65080(b)(2)(H) of the Government Code, has accepted a metropolitan planning organization's determination that the sustainable communities strategy or the alternative planning strategy would, if implemented, achieve the greenhouse gas emission reduction targets.

### References

BOE Street Standard Dimensions S-470-1 http://eng2.lacity.org/techdocs/stdplans/s-400/S-470-1 20151021 150849.pdf

LADCP <u>Citywide Design Guidelines</u>. <u>https://planning.lacity.org/odocument/f6608be7-d5fe-4187-bea6-</u>20618eec5049/Citywide Design Guidelines.pdf

LADOT Transportation Assessment Support Map <a href="https://arcg.is/fubbD">https://arcg.is/fubbD</a>

Mobility Plan 2035 <u>https://planning.lacity.org/odocument/523f2a95-9d72-41d7-aba5-1972f84c1d36/Mobility\_Plan\_2035.pdf</u>

SCAG. Connect SoCal, 2020-2045 RTP/SCS, https://www.connectsocal.org/Pages/default.aspx

# ATTACHMENT D.1: CITY PLAN, POLICIES AND GUIDELINES

<u>The Transportation Element of the City's General Plan, Mobility Plan 2035</u>, established the "Complete Streets Design Guide" as the City's document to guide the operations and design of streets and other public rights-of-way. It lays out a vision for designing safer, more vibrant streets that are accessible to people, no matter what their mode choice. As a living document, it is intended to be frequently updated as City departments identify and implement street standards and experiment with different configurations to promote complete streets. The guide is meant to be a toolkit that provides numerous examples of what is possible in the public right-of-way and that provides guidance on context-sensitive design.

The <u>Plan for A Healthy Los Angeles</u> (March 2015) includes policies directing several City departments to develop plans that promote active transportation and safety.

The <u>City of Los Angeles Community Plans, which make up the Land Use Element of the City's General Plan</u>, guide the physical development of neighborhoods by establishing the goals and policies for land use. The 35 Community Plans provide specific, neighborhood-level detail for land uses and the transportation network, relevant policies, and implementation strategies necessary to achieve General Plan and community-specific objectives.

The stated goal of <u>Vision Zero</u> is to eliminate traffic-related deaths in Los Angeles by 2025 through a number of strategies, including modifying the design of streets to increase the safety of vulnerable road users. Extensive crash data analysis is conducted on an ongoing basis to prioritize intersections and corridors for implementation of projects that will have the greatest effect on overall fatality reduction. The City designs and deploys <u>Vision Zero Corridor Plans</u> as part of the implementation of Vision Zero. If a project is proposed whose site lies on the High Injury Network (HIN), the applicant should consult with LADOT to inform the project's site plan and to determine appropriate improvements, whether by funding their implementation in full or by making a contribution toward their implementation.

The <u>Citywide Design Guidelines</u> (October 24, 2019) includes sections relevant to development projects where improvements are proposed within the public realm. Specifically, Guidelines one through three provide building design strategies that support the pedestrian experience. The Guidelines provide best practices in designing that apply in three spatial categories of site planning, building design and public right of way. The Guidelines should be followed to ensure that the project design supports pedestrian safety, access and comfort as they access to and from the building and the immediate public right of way.

The City's <u>Transportation Demand Management (TDM) Ordinance (LA Municipal Code 12.26.J)</u> requires certain projects to incorporate strategies that reduce drive-alone vehicle trips and improve access to destinations and services. The ordinance is revised and updated periodically and should be reviewed for application to specific projects as they are reviewed.

The City's <u>LAMC Section 12.37 (Waivers of Dedication and Improvement)</u> requires certain projects to dedicate and/or implement improvements within the public right-of-way to meet the street designation standards of the Mobility Plan 2035.

The Bureau of Engineering (BOE) <u>Street Standard Dimensions S-470-1</u> provides the specific street widths and public right of way dimensions associated with the City's street standards.

Appendix D

VMT Analysis Worksheets

# **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	Existing Lan	d Use	Project Screening Sum	mary
Project: 1050 La Cienega Boulevard Scenario: WW	Land Use Type Housing   Single Family	Value Unit	Existing	
Address: 1050 S LA CIENEGA BLVD, 90035			Land Use Prop	posed
CHARDER CHARDER			-	<b>101</b> ehicle Trips
A COMADO				<b>,340</b> ly VMT
HOLYNOOD BEAL			Tier 1 Screening Criteria	1
BEVERLY B BEVERLY B MILINIAR MILINIAR BURGATIONAL (2) JULI MILINIARIARIARIARIARIARIARIARIARIARIARIARIARI	Click here to add a single custom land use type	(will be included in the above list)	Project will have less residential units con to existing residential units & is within on mile of a fixed-rail station.	
ADAMAS EST	Proposed Project	Land Use	Tier 2 Screening Criteria	1
RODEO AND LUTHER KING JR 4197	Land Use Type Housing   Affordable Housing - Family	Value Unit - 29 DU 🔶	The net increase in daily trips < 250 trips	2,101 Net Daily Trips
ls the project replacing an existing number of residential units with a smaller number of	Retail   High-Turnover Sit-Down Restaurant Housing   Multi-Family Housing   Affordable Housing - Family	7.5 ksf 261 DU 29 DU	The net increase in daily VMT ≤ 0	13,340 Net Daily VMT
residential units AND is located within one-half mile of a fixed-rail or fixed-guideway transit			The proposed project consists of only ret land uses ≤ 50,000 square feet total.	ail 7.500 ksf
● Yes ● No			The proposed project is required to VMT analysis.	to perform
	Click here to add a single custom land use type	(will be included in the above list)	¢	

Measuring the Miles

# **CITY OF LOS ANGELES VMT CALCULATOR Version 1.3**



# **Project Information**



	Proposed
Re	tail   High- 🗕
Ho	using   Mi
110	

Value Unit

Select each section to show ind Use I to denote if the TDM s		roposed project or is a	mitigation strateg	
Max Home Based TD Max Work Based TDI		Proposed Project No No	With Mitigation No No	
A	Parking			
B	Transit			
	cation & Encou	ıragement		
	mmute Trip Re	ductions		
E	E Shared Mobility			
F	Bicycle Infrastr	ucture		
Implement/Improve On-street Bicycle Facility Proposed Prj Mitigation	Select Proposed Prj c	or Mitigation to include	this strategy	
Include Bike Parking Per LAMC Proposed Prj Mitigation	Select Proposed Prj c	or Mitigation to include	this strategy	
Include Secure Bike Parking and Showers Proposed Prj Mitigation	Select Proposed Prj c	or Mitigation to include	this strategy	
G Neig	Jhborhood Enh	ancement		

**TDM Strategies** 

# **Analysis Results**

Proposed Project	With
<b>1,852</b>	<b>1,852</b>
Daily Vehicle Trips	Daily Vehicle Trips
<b>11,780</b>	<b>11,780</b>
Daily VMT	Daily VMT
<b>4.7</b> Houseshold VMT per Capita	<b>4.7</b> Houseshold VMT
N/A	N/A
Work VMT	Work VMT
per Employee	per Employee
Significant	/MT Impact?
Household: No	Household: No
Threshold = 6.0	Threshold = 6.0
15% Below APC	15% Below APC
Work: N/A	Work: N/A
Threshold = 7.6	Threshold = 7.6
15% Below APC	15% Below APC



### CITY OF LOS ANGELES VMT CALCULATOR Report 1: Project & Analysis Overview

Date: May 9, 2022 Project Name: 1050 La Cienega Boulevard Project Scenario: Project Address: 1050 S LA CIENEGA BLVD, 90035



	Project Informa	tion	
Land	Use Type	Value	Units
	Single Family	0	DU
	Multi Family	261	DU
Housing	Townhouse	0	DU
	Hotel	0	Rooms
	Motel		Rooms
	Family	29	DU
Affordable Housing	Senior	0	DU
inoruable nousing	Special Needs		DU
	Permanent Supportive	0	DU
	General Retail		ksf
	Furniture Store		ksf
	Pharmacy/Drugstore		ksf
	Supermarket	0.000	ksf
	Bank		ksf
	Health Club	0.000	ksf
Retail	High-Turnover Sit-Down	7.500	ksf
	Restaurant		
	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
0))/00	Medical Office	0.000	ksf
	Light Industrial	0.000	ksf
Industrial	Manufacturing	0.000	ksf
	Warehousing/Self-Storage	0.000	ksf
	University		Students
	High School	0	Students
School	Middle School		Students
	Elementary	0	Students
	Private School (K-12)	0	Students
Other		0	Trips

	Analysis Res	sults	
	Total Employees:	30	
	Total Population:	679	
Propose	ed Project	With M	itigation
1,852	Daily Vehicle Trips	1,852	Daily Vehicle Trips
11,780	Daily VMT	11,780	Daily VMT
4.7	Household VMT per Capita	4.7	Household VMT per Capita
N/A	Work VMT per Employee	N/A	Work VMT per Employee
	Significant VMT	Impact?	
	APC: Centr	al	
	Impact Threshold: 15% Belo	ow APC Average	
	Household = 6	5.0	
	Work = 7.6		
Propose	ed Project	With M	itigation
VMT Threshold	Impact	VMT Threshold	Impact
Household > 6.0	No	Household > 6.0	No
Work > 7.6	N/A	Work > 7.6	N/A

### 6

Date: May 9, 2022 Project Name: 1050 La Cienega Boulevard Project Scenario: Project Address: 1050 S LA CIENEGA BLVD, 90033

TDM Strategy Inputs				
Stra	tegy Type	Description	Proposed Project	Mitigations
Reduce parking supply		City code parking provision (spaces)	538	538
		Actual parking provision (spaces)	426	426
	Unbundle parking	Monthly cost for parking (\$)	\$25	\$25
Parking	Parking cash-out	Employees eligible (%)	0%	0%
Price workplace parking	Price workplace	Daily parking charge (\$)	\$0.00	\$0.00
		Employees subject to priced parking (%)	0%	0%
	Residential area parking permits	Cost of annual permit (\$)	\$0	\$0

#### (cont. on following page)

TDN	Strategy Inputs,	Cont.	
Strategy Type	Description	Proposed Project	Mitigations

		Reduction in headways (increase in frequency) (%)	0%	0%
	Reduce transit headways	Existing transit mode share (as a percent of total daily trips) (%)	0%	0%
Transit		Lines within project site improved (<50%, >=50%)	0	0
	Implement neighborhood shuttle	Degree of implementation (low, medium, high)	0	0
	neignaornaoù snattie	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
Education &	Voluntary travel behavior change program	Employees and residents participating (%)	0%	0%
Encouragement	Promotions and marketing	Employees and residents participating (%)	0%	0%

#### (cont. on following page)

Strate	еду Туре	Description	Proposed Project	Mitigations
	Required commute trip reduction program	Employees participating (%)	0%	0%
	Alternative Work Schedules and	Employees participating (%)	0%	0%
	Telecommute Program	Type of program	0	
Commute Trip Reductions		Degree of implementation (low, medium, high)	0	0
	vanpool or shuttle	Employees eligible (%)	0%	0%
		Employer size (small, medium, large)	0	0
	Ride-share program	Employees eligible (%)	0%	0%
	Car share	Car share project setting (Urban, Suburban, All Other)	0	0
Shared Mobility	Bike share	Within 600 feet of existing bike share station - OR- implementing new bike share station (Yes/No)	0	0
	School carpool program	Level of implementation (Low, Medium, High)	0	0

#### (cont. on following page)

	TDM	Strategy Inputs,	Cont.		
Strat	еду Туре	Description	Proposed Project	Mitigations	
	Implement/Improve on- street bicycle facility	Provide bicycle facility along site (Yes/No)	0	0	
Bicycle	Include Bike parking per LAMC	Meets City Bike Parking Code (Yes/No)	Yes	Yes	
innasu ucture	Include secure bike parking and showers	Includes indoor bike parking/lockers, showers, & repair station (Yes/No)	0	0	
	Traffic calming	Streets with traffic calming improvements (%)	0%	0%	
Neighborhood	improvements	Intersections with traffic calming improvements (%)	0%	0%	
Enhancement	Pedestrian network improvements	Included (within project and connecting off- site/within project only)	0	0	

# CITY OF LOS ANGELES VMT CALCULATOR

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Report 3: TDM Outputs

Date: May 9, 2022 Project Name: 1050 La Cienega Boulevard Project Scenario: Project Address: 1050 S LA CIENEGA BLVD, 90035 **B** 

				TDM	l Adjustm	ents by T	rip Purpo	se & Stra	tegy					
							: Suburbar							
			ased Work luction Mitigated		ased Work action Mitigated		ased Other luction Mitigated		ased Other action Mitigated		Based Other luction Mitigated		Based Other action Mitigated	Source
	Reduce parking supply	1	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	
	Unbundle parking	3%	3%	0%	0%	3%	3%	0%	0%	0%	0%	0%	0%	-
Parking	Parking cash-out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Parking sections
0	Price workplace parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1 - 5
	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%	
	Reduce transit headways	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Transit sections 1 - 3
Transit	Implement neighborhood shuttle	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%	1
Education &	Voluntary travel behavior change program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Education &
Encouragement	Promotions and marketing	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	Encouragemer sections 1 - 2
	Required commute trip reduction program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Commute Trip Reductions	Alternative Work Schedules and Telecommute Program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	<ul> <li>TDM Strategy Appendix,</li> <li>Commute Trip Reductions</li> </ul>
	Employer sponsored vanpool or shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	sections 1 - 4
	Ride-share program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	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%	TDM Strategy
Shared Mobility	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%	Mobility sections
,	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%	

#### TDM Adjustments by Trip Purpose & Strategy, Cont.

	Place type: Suburban Center													
			ased Work		Home Based Work Attraction		ised Other		ised Other	Non-Home Based Other				
		Prod	luction	Attr			Production Attraction		action	Production		Attraction		Source
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
	Implement/ Improve													
Bicycle	on-street bicycle	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
	facility													Appendix, Bicycle
Infrastructure	Include Bike parking	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	Infrastructure
innastructure	per LAMC	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	sections 1 - 3
	Include secure bike	0.0%		0.0%		0.0%		0.0%		0.0%		0.0%		Sections 1 - 5
	parking and showers	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	
	Traffic calming	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
Neighborhood Enhancement	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%	Appendix,
	Pedestrian network	0.0%		0.0%		0.0%		0.0%		0.0%		0.0%		Neighborhood
	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%	Enhancement

	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	14%	14%	11%	11%	14%	14%	11%	11%	11%	11%	11%	11%	
MAX. TDM EFFECT	14%	14%	11%	11%	14%	14%	11%	11%	11%	11%	11%	11%	

#### = Minimum (X%, 1-[(1-A)\*(1-B)...])

	where X%=									
PLACE	urban	75%								
TYPE	compact infill	40%								
MAX:	suburban center	20%								
	suburban	1.5%								

Note: (1-(1-A)\*(1-B)...]) retlects 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**

Date: May 9, 2022 Project Name: 1050 La Cienega Boulevard Project Scenario: Project Address: 1050 S LA CIENEGA BLVD, 90035



### Report 4: MXD Methodology

	MXD Methodology - Project Without TDM											
	Unadjusted VMT	MXD VMT										
Home Based Work Production	258	-15.9%	217	6.3	1,625	1,367						
Home Based Other Production	716	-34.1%	472	4.9	3,508	2,313						
Non-Home Based Other Production	546	-3.1%	529	7.0	3,822	3,703						
Home-Based Work Attraction	44	-31.8%	30	8.0	352	240						
Home-Based Other Attraction	827	-31.0%	571	6.9	5,706	3,940						
Non-Home Based Other Attraction	293	-3.8%	282	6.3	1,846	1,777						

### MXD Methodology with TDM Measures

		Proposed Project		Project	Project with Mitigation Measures				
	TDM Adjustment Project Trips Project VMT		Project VMT	TDM Adjustment	Mitigated Trips	Mitigated VMT			
Home Based Work Production	-13.6%	187	1,181	-13.6%	187	1,181			
Home Based Other Production	-13.6%	408	1,998	-13.6%	408	1,998			
Non-Home Based Other Production	-11.0%	471	3,297	-11.0%	471	3,297			
Home-Based Work Attraction	-11.0%	27	214	-11.0%	27	214			
Home-Based Other Attraction	-11.0%	508	3,508	-11.0%	508	3,508			
Non-Home Based Other Attraction	-11.0%	251	1,582	-11.0%	251	1,582			

MXD VMT Methodology Per Capita & Per Employee											
	Total Population:	679									
	Total Employees: 30										
	APC: Central										
	Proposed Project	Project with Mitigation Measures									
Total Home Based Production VMT	3,179	3,179									
Total Home Based Work Attraction VMT	214	214									
Total Home Based VMT Per Capita	4.7	4.7									
Total Work Based VMT Per Employee	N/A	N/A									

Appendix E

HCM Analysis Worksheets

# HCM 6th Signalized Intersection Summary 1: La Cienega & Olympic

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	<u>۲</u>	<u>ተተ</u> ኑ		ሻ	<u></u> ↑↑₽		<u> </u>	<u></u> ↑↑₽		<u> </u>	<u></u> ↑↑₽	
Traffic Volume (veh/h)	74	926	157	103	1767	114	175	1590	95	79	782	200
Future Volume (veh/h)	74	926	157	103	1767	114	175	1590	95	79	782	200
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	80	1007	171	112	1921	124	190	1728	103	86	850	217
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	96	1707	289	274	2448	157	268	1547	92	158	1116	283
Arrive On Green	0.39	0.39	0.39	0.07	0.50	0.50	0.09	0.31	0.31	0.06	0.27	0.27
Sat Flow, veh/h	206	4395	745	1781	4902	315	1781	4928	293	1781	4059	1030
Grp Volume(v), veh/h	80	779	399	112	1332	713	190	1193	638	86	712	355
Grp Sat Flow(s),veh/h/ln	206	1702	1736	1781	1702	1814	1781	1702	1818	1781	1702	1685
Q Serve(g_s), s	21.0	21.8	21.9	4.3	38.6	38.9	8.9	37.7	37.7	4.1	23.0	23.2
Cycle Q Clear(g_c), s	46.6	21.8	21.9	4.3	38.6	38.9	8.9	37.7	37.7	4.1	23.0	23.2
Prop In Lane	1.00		0.43	1.00		0.17	1.00		0.16	1.00		0.61
Lane Grp Cap(c), veh/h	96	1322	674	274	1700	906	268	1069	571	158	936	463
V/C Ratio(X)	0.83	0.59	0.59	0.41	0.78	0.79	0.71	1.12	1.12	0.54	0.76	0.77
Avail Cap(c_a), veh/h	96	1322	674	396	1700	906	326	1069	571	283	936	463
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.3	29.1	29.1	21.1	24.7	24.8	29.8	41.2	41.2	32.8	39.9	40.0
Incr Delay (d2), s/veh	54.3	1.9	3.8	1.0	3.7	6.9	5.5	65.2	74.5	2.9	5.8	11.5
Initial Q Delay(d3),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
%ile BackOfQ(95%),veh/In	7.0	14.2	14.9	3.3	22.5	24.9	7.6	35.9	39.9	3.4	15.6	16.5
Unsig. Movement Delay, s/veh		01.0		00.4		01 7	05.0	404.4		05.7	45 7	54.4
LnGrp Delay(d),s/veh	109.6	31.0	32.9	22.1	28.4	31.7	35.3	106.4	115.6	35.7	45.7	51.4
LnGrp LOS	F	С	С	С	С	С	D	F	F	D	D	<u> </u>
Approach Vol, veh/h		1258			2157			2021			1153	
Approach Delay, s/veh		36.6			29.1			102.6			46.7	
Approach LOS		D			С			F			D	
Timer - Assigned Phs		2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s		65.3	16.5	38.2	13.3	52.0	11.8	42.9				
Change Period (Y+Rc), s		* 5.4	* 5.4	* 5.2	* 5.5	* 5.4	* 5.2	* 5.2				
Max Green Setting (Gmax), s		* 56	* 15	* 33	* 16	* 35	* 15	* 33				
Max Q Clear Time (g_c+I1), s		40.9	10.9	25.2	6.3	48.6	6.1	39.7				
Green Ext Time (p_c), s		11.7	0.2	4.2	0.2	0.0	0.1	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			56.2									
HCM 6th LOS			E									

#### Notes

# HCM 6th Signalized Intersection Summary 2: La Cienega & Whitworth

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		<b>4</b> >			- <del>4</del> >		- ሽ	<u></u> ↑↑₽		<u>۲</u>	<u></u> ↑↑₽	
Traffic Volume (veh/h)	33	65	30	21	113	50	47	1780	15	39	1017	109
Future Volume (veh/h)	33	65	30	21	113	50	47	1780	15	39	1017	109
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	36	71	33	23	123	54	51	1935	16	42	1105	118
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	93	142	57	62	168	69	390	3943	33	218	3537	377
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.75	0.75	0.75	0.75	0.75	0.75
Sat Flow, veh/h	292	979	392	121	1159	473	456	5223	43	226	4685	500
Grp Volume(v), veh/h	140	0	0	200	0	0	51	1261	690	42	803	420
Grp Sat Flow(s),veh/h/ln	1663	0	0	1754	0	0	456	1702	1863	226	1702	1780
Q Serve(g_s), s	0.0	0.0	0.0	3.0	0.0	0.0	3.6	13.0	13.0	8.0	6.8	6.8
Cycle Q Clear(g_c), s	6.8	0.0	0.0	9.8	0.0	0.0	10.5	13.0	13.0	21.0	6.8	6.8
Prop In Lane	0.26	0	0.24	0.11	0	0.27	1.00	0570	0.02	1.00	0570	0.28
Lane Grp Cap(c), veh/h	291	0	0	299	0	0	390	2570	1406	218	2570	1344
V/C Ratio(X)	0.48	0.00	0.00	0.67	0.00	0.00	0.13	0.49	0.49	0.19	0.31	0.31
Avail Cap(c_a), veh/h	888	0	0	940	0	0	390	2570	1406	218	2570	1344
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.44	0.44	0.44	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.7	0.0	0.0	37.0	0.0	0.0	5.2	4.3	4.3	8.4	3.5	3.5
Incr Delay (d2), s/veh	1.2	0.0	0.0	2.6	0.0	0.0	0.3	0.3	0.5	2.0	0.3	0.6
Initial Q Delay(d3),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
%ile BackOfQ(95%),veh/In	5.2	0.0	0.0	7.8	0.0	0.0	0.6	5.3	5.9	0.8	3.3	3.6
Unsig. Movement Delay, s/veh	37.0	0.0	0.0	39.6	0.0	0.0	5.5	4.6	4.8	10.2	3.9	11
LnGrp Delay(d),s/veh	37.0 D	0.0			0.0 A	0.0				10.3		4.1
LnGrp LOS	D	A	A	D		A	A	A	A	В	A	<u> </u>
Approach Vol, veh/h		140			200			2002			1265	
Approach Delay, s/veh		37.0			39.6			4.7			4.2	
Approach LOS		D			D			А			А	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		71.9		18.1		71.9		18.1				
Change Period (Y+Rc), s		* 4		5.0		* 4		5.0				
Max Green Setting (Gmax), s		* 34		47.0		* 34		47.0				
Max Q Clear Time (g_c+I1), s		15.0		8.8		23.0		11.8				
Green Ext Time (p_c), s		13.9		0.9		6.7		1.3				
Intersection Summary												
HCM 6th Ctrl Delay			7.7									
HCM 6th LOS			А									

Notes

# HCM 6th Signalized Intersection Summary 3: La Cienega & Pico

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۳.	<b>≜</b> ⊅		ሻ	<b>↑</b> 1≽		٦.	<u>ተ</u> ተጮ		٦.	<u>ተተ</u> ኑ	
Traffic Volume (veh/h)	169	522	81	71	905	58	180	1690	79	54	895	108
Future Volume (veh/h)	169	522	81	71	905	58	180	1690	79	54	895	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	184	567	88	77	984	63	196	1837	86	5 <b>9</b>	973	117
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	212	1047	162	304	930	60	224	2416	113	102	1474	177
Arrive On Green	0.12	0.34	0.34	0.05	0.27	0.27	0.13	0.48	0.48	0.32	0.32	0.32
Sat Flow, veh/h	1781	3084	477	1781	3391	217	1781	4999	234	232	4620	554
Grp Volume(v), veh/h	184	326	329	77	516	531	196	1250	673	59	716	374
Grp Sat Flow(s),veh/h/ln	1781	1777	1784	1781	1777	1831	1781	1702	1828	232	1702	1771
Q Serve(g_s), s	12.2	17.8	17.9	3.6	32.9	32.9	13.0	36.0	36.1	21.9	21.8	21.9
Cycle Q Clear(g_c), s	12.2	17.8	17.9	3.6	32.9	32.9	13.0	36.0	36.1	38.3	21.8	21.9
Prop In Lane	1.00		0.27	1.00		0.12	1.00		0.13	1.00		0.31
Lane Grp Cap(c), veh/h	212	603	606	304	487	502	224	1645	883	102	1086	565
V/C Ratio(X)	0.87	0.54	0.54	0.25	1.06	1.06	0.87	0.76	0.76	0.58	0.66	0.66
Avail Cap(c_a), veh/h	267	603	606	460	487	502	267	1645	883	102	1086	565
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95
Uniform Delay (d), s/veh	51.9	32.0	32.1	28.8	43.5	43.6	51.5	25.3	25.4	52.2	35.2	35.3
Incr Delay (d2), s/veh	20.8	1.0	1.0	0.4	57.1	56.5	23.1	3.4	6.2	20.6	3.0	5.7
Initial Q Delay(d3),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
%ile BackOfQ(95%),veh/In	10.9	12.4	12.5	2.9	30.8	31.5	11.6	21.3	23.5	4.3	14.4	15.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.7	33.0	33.1	29.2	100.6	100.1	74.6	28.7	31.5	72.7	38.2	41.0
LnGrp LOS	E	С	С	С	F	F	E	С	С	E	D	D
Approach Vol, veh/h		839			1124			2119			1149	
Approach Delay, s/veh		41.8			95.5			33.8			40.9	
Approach LOS		D			F			С			D	
Timer - Assigned Phs	1	2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s	19.7	43.4	18.9	38.0		63.1	11.1	45.9				
Change Period (Y+Rc), s	4.6	5.1	4.6	5.1		5.1	4.6	5.1				
Max Green Setting (Gmax), s	18.0	31.7	18.0	32.9		54.3	17.0	33.9				
Max Q Clear Time (g_c+I1), s	15.0	40.3	14.2	34.9		38.1	5.6	19.9				
Green Ext Time (p_c), s	0.2	0.0	0.2	0.0		11.8	0.1	3.5				
Intersection Summary												
HCM 6th Ctrl Delay			49.9									
HCM 6th LOS			D									

# HCM 6th Signalized Intersection Summary 1: La Cienega & Olympic

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	- ሽ	<u></u> ↑↑₽		<u> </u>	<u></u> ↑↑₽		- ሽ	ተተጮ		<u> </u>	ተተኈ	
Traffic Volume (veh/h)	165	1702	100	92	855	39	144	1198	117	187	1450	242
Future Volume (veh/h)	165	1702	100	92	855	39	144	1198	117	187	1450	242
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	1070	No	1070	1070	No	1070	1070	No	1070	1070	No	1070
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h Peak Hour Factor	179 0.92	1850 0.92	109 0.92	100 0.92	929 0.92	42 0.92	157 0.92	1302 0.92	127 0.92	203 0.92	1576 0.92	263 0.92
Percent Heavy Veh, %	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Cap, veh/h	279	1890	111	177	2470	111	202	1309	128	236	1294	215
Arrive On Green	0.38	0.38	0.38	0.06	0.49	0.49	0.08	0.28	0.28	0.10	0.29	0.29
Sat Flow, veh/h	579	4932	290	1781	5008	226	1781	4730	461	1781	4409	733
Grp Volume(v), veh/h	179	1275	684	100	631	340	157	937	492	203	1215	624
Grp Sat Flow(s), veh/h/ln	579	1702	1818	1781	1702	1830	1781	1702	1787	1781	1702	1738
Q Serve(g_s), s	33.4	44.4	44.6	3.8	13.8	13.9	7.5	33.0	33.0	9.6	35.2	35.2
Cycle Q Clear(g_c), s	34.1	44.4	44.6	3.8	13.8	13.9	7.5	33.0	33.0	9.6	35.2	35.2
Prop In Lane	1.00		0.16	1.00		0.12	1.00		0.26	1.00		0.42
Lane Grp Cap(c), veh/h	279	1304	697	177	1679	903	202	942	494	236	999	510
V/C Ratio(X)	0.64	0.98	0.98	0.56	0.38	0.38	0.78	0.99	0.99	0.86	1.22	1.22
Avail Cap(c_a), veh/h	279	1304	697	300	1679	903	283	942	494	283	999	510
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.6	36.5	36.6	27.8	18.9	18.9	31.8	43.3	43.3	31.0	42.4	42.4
Incr Delay (d2), s/veh	10.9	20.2	29.8	2.8	0.6	1.2	8.6	28.1	39.2	19.8	106.7	116.7
Initial Q Delay(d3),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
%ile BackOfQ(95%),veh/In	9.3	29.3	33.4	3.1	9.4	10.2	6.6	24.2	27.1	9.2	43.0	45.8
Unsig. Movement Delay, s/veh		F/ 7	/ / A	20 (	10 /	20.1	40.4	71 /	00 (	50.0	140 1	150.1
LnGrp Delay(d),s/veh	44.5 D	56.7 E	66.4 E	30.6 C	19.6 В	20.1 C	40.4 D	71.4 E	82.6 F	50.9 D	149.1 F	159.1
LnGrp LOS Approach Vol, veh/h	D	2138	E	C	1071	C	D	1586	Г	D	г 2042	F
Approach Vol, ven/n Approach Delay, s/veh		2138 58.8			20.8			71.8			2042 142.4	
Approach LOS		-			20.8 C			-			142.4 F	
		E						Ł				
Timer - Assigned Phs		2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s		64.6 * E 4	15.0 * E 4	40.4 * E 2	13.2 * E E	51.4 * E.4	17.0 * E 2	38.4 * E 2				
Change Period (Y+Rc), s		* 5.4 * 54	* 5.4	* 5.2	* 5.5	* 5.4	* 5.2	* 5.2				
Max Green Setting (Gmax), s Max Q Clear Time (q_c+11), s		* 56 15.9	* 15 9.5	* 33	* 16 5.8	* 35	* 15 11.6	* 33 35.0				
Green Ext Time (p_c), s		7.9	9.5	37.2 0.0	5.8 0.1	46.6 0.0	0.2	35.0 0.0				
		1.7	0.2	0.0	0.1	0.0	0.2	0.0				
Intersection Summary			00.0									
HCM 6th Ctrl Delay			80.8									
HCM 6th LOS			F									

Notes

# HCM 6th Signalized Intersection Summary 2: La Cienega & Whitworth

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			- ↔		ሻ	<u></u> ↑↑₽		<u>۲</u>	<u> ተተኑ</u>	
Traffic Volume (veh/h)	34	210	33	16	25	29	29	1484	24	47	1493	43
Future Volume (veh/h)	34	210	33	16	25	29	29	1484	24	47	1493	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	1070	No	4070	4070	No	1070	1070	No	4070	1070	No	1070
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	228	36	17	27	32	32	1613	26	51	1623	47
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	74	291	44 0.21	95	143	137	244	3597	58	250	3544	103
Arrive On Green	0.21 143	0.21 1420	0.21 212	0.21 222	0.21 695	0.21 667	0.69 297	0.69 5176	0.69 83	0.69 306	0.69 5100	0.69
Sat Flow, veh/h												148
Grp Volume(v), veh/h	301	0	0	76	0	0	32	1061	578	51	1083	587
Grp Sat Flow(s),veh/h/ln	1776	0	0	1585	0 0.0	0	297	1702	1855	306	1702	1844
Q Serve( $g_s$ ), s	8.4 14.5	0.0 0.0	0.0 0.0	0.0 3.3	0.0	0.0 0.0	4.9 17.7	12.4 12.4	12.4 12.4	8.0 20.4	12.8 12.8	12.8 12.8
Cycle Q Clear(g_c), s Prop In Lane	0.12	0.0	0.0	3.3 0.22	0.0	0.0	1.00	12.4	0.04	20.4	12.0	0.08
Lane Grp Cap(c), veh/h	409	0	0.12	374	0	0.42	244	2366	1289	250	2366	1281
V/C Ratio(X)	409 0.74	0.00	0.00	0.20	0.00	0.00	0.13	0.45	0.45	0.20	0.46	0.46
Avail Cap(c_a), veh/h	964	0.00	0.00	857	0.00	0.00	244	2366	1289	250	2366	1281
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.55	0.55	0.55	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.1	0.0	0.00	29.7	0.0	0.0	10.1	6.1	6.1	10.6	6.1	6.1
Incr Delay (d2), s/veh	2.6	0.0	0.0	0.3	0.0	0.0	0.6	0.3	0.6	1.8	0.6	1.2
Initial Q Delay(d3),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
%ile BackOfQ(95%),veh/In	10.6	0.0	0.0	2.5	0.0	0.0	0.6	6.1	6.7	1.1	7.1	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.7	0.0	0.0	30.0	0.0	0.0	10.7	6.4	6.7	12.4	6.8	7.3
LnGrp LOS	D	А	А	С	А	А	В	А	А	В	А	А
Approach Vol, veh/h		301			76			1671			1721	
Approach Delay, s/veh		36.7			30.0			6.6			7.1	
Approach LOS		D			С			А			А	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		66.5		23.5		66.5		23.5				
Change Period (Y+Rc), s		* 4		5.0		* 4		5.0				
Max Green Setting (Gmax), s		* 34		47.0		* 34		47.0				
Max Q Clear Time (g_c+I1), s		19.7		16.5		22.4		5.3				
Green Ext Time (p_c), s		9.8		1.9		8.6		0.5				
Intersection Summary												
HCM 6th Ctrl Delay			9.7									
HCM 6th LOS			А									

Notes

# HCM 6th Signalized Intersection Summary 3: La Cienega & Pico

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۳.	<b>∱</b> î≽		ሻ	<b>↑</b> 1≽		ሻ	<u>ተ</u> ተጮ		ሻ	<u>ተተ</u> ኑ	
Traffic Volume (veh/h)	138	1029	74	158	442	60	160	1415	203	72	1410	55
Future Volume (veh/h)	138	1029	74	158	442	60	160	1415	203	72	1410	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	150	1118	80	172	480	65	174	1538	221	78	1533	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	179	950	68	215	848	114	203	2287	328	128	1789	70
Arrive On Green	0.10	0.28	0.28	0.09	0.27	0.27	0.11	0.51	0.51	0.35	0.35	0.35
Sat Flow, veh/h	1781	3363	241	1781	3147	424	1781	4511	647	272	5042	197
Grp Volume(v), veh/h	150	590	608	172	270	275	174	1160	599	78	1035	558
Grp Sat Flow(s),veh/h/ln	1781	1777	1827	1781	1777	1794	1781	1702	1754	272	1702	1835
Q Serve(g_s), s	9.9	33.9	33.9	8.3	15.7	15.9	11.5	30.6	30.7	30.1	33.8	33.8
Cycle Q Clear(g_c), s	9.9	33.9	33.9	8.3	15.7	15.9	11.5	30.6	30.7	42.6	33.8	33.8
Prop In Lane	1.00		0.13	1.00	.=	0.24	1.00		0.37	1.00		0.11
Lane Grp Cap(c), veh/h	179	502	516	215	479	483	203	1726	889	128	1208	651
V/C Ratio(X)	0.84	1.18	1.18	0.80	0.56	0.57	0.86	0.67	0.67	0.61	0.86	0.86
Avail Cap(c_a), veh/h	267	502	516	312	487	492	267	1726	889	128	1208	651
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	0.86	0.86
Uniform Delay (d), s/veh	53.0	43.1	43.1	31.9	37.8	37.8	52.2	22.1	22.1	46.8	35.9	35.9
Incr Delay (d2), s/veh	13.9	98.5	98.6	8.9	1.5	1.5	18.9	2.1	4.1	17.0	6.9	12.0
Initial Q Delay(d3),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
%ile BackOfQ(95%),veh/In	8.8	40.9	42.0	7.3	11.4	11.6	10.3	18.2	19.3	5.4	20.9	23.4
Unsig. Movement Delay, s/veh	66.9	141.5	141.6	40.8	39.2	39.3	71.1	24.2	26.2	63.8	42.8	47.9
LnGrp Delay(d),s/veh	00.9 E	141.5 F	141.0 F	40.0 D	39.2 D		/1.1 E	24.Z C	20.2 C	03.0 E		
LnGrp LOS	E		F	D		D	<u> </u>		C	<u> </u>	D	<u> </u>
Approach Vol, veh/h		1348			717			1933			1671	
Approach Delay, s/veh		133.3 F			39.6 D			29.1 C			45.5 D	
Approach LOS		F			U			C			U	
Timer - Assigned Phs	1	2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s	18.2	47.7	16.6	37.4		65.9	15.1	39.0				
Change Period (Y+Rc), s	4.6	5.1	4.6	5.1		5.1	4.6	5.1				
Max Green Setting (Gmax), s	18.0	31.7	18.0	32.9		54.3	17.0	33.9				
Max Q Clear Time (g_c+l1), s	13.5	44.6	11.9	17.9		32.7	10.3	35.9				
Green Ext Time (p_c), s	0.2	0.0	0.2	2.9		13.5	0.2	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			60.0									
HCM 6th LOS			E									

# HCM 6th Signalized Intersection Summary 1: La Cienega & Olympic

05/13/2022
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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	<u> </u>	<u></u> ↑↑₽		- ሻ	<u></u> ↑↑₽		<u>٦</u>	<u>ተተ</u> ኑ		<u>۲</u>	<u></u> ↑↑₽	
Traffic Volume (veh/h)	74	926	163	109	1767	114	183	1609	103	79	796	200
Future Volume (veh/h)	74	926	163	109	1767	114	183	1609	103	79	796	200
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	80	1007	177	118	1921	124	199	1749	112	86	865	217
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	95	1682	295	271	2432	156	271	1556	99	158	1121	280
Arrive On Green	0.38	0.38	0.38	0.07	0.50	0.50	0.10	0.32	0.32	0.06	0.28	0.28
Sat Flow, veh/h	206	4370	767	1781	4902	315	1781	4904	314	1781	4075	1017
Grp Volume(v), veh/h	80	784	400	118	1332	713	199	1213	648	86	722	360
Grp Sat Flow(s),veh/h/ln	206	1702	1732	1781	1702	1814	1781	1702	1814	1781	1702	1687
Q Serve(g_s), s	20.4	22.1	22.2	4.5	38.9	39.2	9.3	38.1	38.1	4.1	23.4	23.6
Cycle Q Clear(g_c), s	46.2	22.1	22.2	4.5	38.9	39.2	9.3	38.1	38.1	4.1	23.4	23.6
Prop In Lane	1.00	1010	0.44	1.00	1/00	0.17	1.00	1000	0.17	1.00	00/	0.60
Lane Grp Cap(c), veh/h	95	1310	667	271	1689	900	271	1080	575	158	936	464
V/C Ratio(X)	0.84 95	0.60	0.60 667	0.44	0.79	0.79	0.73 323	1.12 1080	1.13 575	0.54 283	0.77 936	0.78
Avail Cap(c_a), veh/h HCM Platoon Ratio	95 1.00	1310 1.00	1.00	392 1.00	1689 1.00	900 1.00	323 1.00		1.00	1.00	930	464 1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.6	29.5	29.5	21.5	25.0	25.1	29.6	41.0	41.0	32.8	40.0	40.1
Incr Delay (d2), s/veh	56.5	29.5	4.0	1.1	3.8	7.1	6.9	68.0	77.3	2.9	40.0	12.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.1	0.0
%ile BackOfQ(95%),veh/ln	7.1	14.4	15.1	3.5	22.7	25.1	7.9	36.9	40.9	3.4	15.9	16.8
Unsig. Movement Delay, s/ver		17.7	13.1	5.5	22.1	20.1	1.7	50.7	чU.7	J. <del>T</del>	13.7	10.0
LnGrp Delay(d),s/veh	112.0	31.5	33.5	22.6	28.8	32.2	36.5	109.0	118.3	35.7	46.1	52.1
LnGrp LOS	F	C	C	C	20.0 C	C	D	F	F	D	D	02.1 D
Approach Vol, veh/h	•	1264	<u> </u>		2163	<u> </u>		2060	•	D	1168	
Approach Delay, s/veh		37.2			29.6			104.9			47.2	
Approach LOS		D			C			F			D	
			2	4		4	7				D	
Timer - Assigned Phs Phs Duration (G+Y+Rc), s		2 64.9	3 16.9	4 38.2	5 13.3	6 51.6	7 11.8	43.3				
Change Period (Y+Rc), s		* 5.4	* 5.4	* 5.2	* 5.5	* 5.4	* 5.2	* 5.2				
Max Green Setting (Gmax), s		* 56	* 15	* 33	* 16	* 35	* 15	* 33				
Max Q Clear Time (g_c+I1), s		41.2	11.3	25.6	6.5	48.2	6.1	40.1				
Green Ext Time (p_c), s		11.5	0.2	4.1	0.3	0.0	0.1	0.0				
Intersection Summary												
			675									
HCM 6th Ctrl Delay HCM 6th LOS			57.5 E									
			L									

Notes

# HCM 6th Signalized Intersection Summary 2: La Cienega & Whitworth

05/13/2022
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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		ф —			- <del>4</del> >			<u>ተተ</u> ጮ		<u>۲</u>	<u></u> ↑↑₽	
Traffic Volume (veh/h)	36	65	30	21	113	53	47	1805	15	43	1051	113
Future Volume (veh/h)	36	65	30	21	113	53	47	1805	15	43	1051	113
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	1070	No	1070	1070	No	1070	1070	No	1070	1070	No	1070
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	39	71	33	23	123	58	51	1962	16	47	1142	123
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2 97	2 140	2 56	2 62	2 168	2 74	2 375	2 3931	2 32	2 213	2 3521	2 379
Cap, veh/h Arrive On Green	97 0.15	0.15	0.15	0.15	0.15	0.15	0.75	0.75	32 0.75	0.75	0.75	0.75
Sat Flow, veh/h	310	949	378	118	1136	498	438	5224	43	220	4680	504
Grp Volume(v), veh/h	143	949		204	0		430 51	1278	700	47	830	435
Grp Sat Flow(s), veh/h/ln	1637	0	0	1752	0	0 0	438	1702	1863	220	1702	435
Q Serve( $g_s$ ), s	0.0	0.0	0.0	2.9	0.0	0.0	430 3.9	13.4	13.4	9.7	7.2	7.2
Cycle Q Clear(q_c), s	7.1	0.0	0.0	10.0	0.0	0.0	11.1	13.4	13.4	23.1	7.2	7.2
Prop In Lane	0.27	0.0	0.23	0.11	0.0	0.28	1.00	13.4	0.02	1.00	1.2	0.28
Lane Grp Cap(c), veh/h	293	0	0.23	303	0	0.20	375	2561	1401	213	2561	1339
V/C Ratio(X)	0.49	0.00	0.00	0.67	0.00	0.00	0.14	0.50	0.50	0.22	0.32	0.32
Avail Cap(c_a), veh/h	880	0.00	0.00	939	0.00	0.00	375	2561	1401	213	2561	1339
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.43	0.43	0.43	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.6	0.0	0.0	36.9	0.0	0.0	5.5	4.4	4.4	9.0	3.6	3.6
Incr Delay (d2), s/veh	1.3	0.0	0.0	2.6	0.0	0.0	0.3	0.3	0.5	2.4	0.3	0.6
Initial Q Delay(d3),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
%ile BackOfQ(95%),veh/In	5.4	0.0	0.0	7.9	0.0	0.0	0.6	5.5	6.0	1.0	3.5	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.9	0.0	0.0	39.5	0.0	0.0	5.8	4.7	5.0	11.4	4.0	4.3
LnGrp LOS	D	А	А	D	А	А	А	А	А	В	А	A
Approach Vol, veh/h		143			204			2029			1312	
Approach Delay, s/veh		36.9			39.5			4.8			4.4	
Approach LOS		D			D			А			А	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		71.7		18.3		71.7		18.3				
Change Period (Y+Rc), s		* 4		5.0		* 4		5.0				
Max Green Setting (Gmax), s		* 34		47.0		* 34		47.0				
Max Q Clear Time (g_c+I1), s		15.4		9.1		25.1		12.0				
Green Ext Time (p_c), s		13.9		0.9		5.9		1.3				
Intersection Summary												
HCM 6th Ctrl Delay			7.8									
HCM 6th LOS			А									

Notes

# HCM 6th Signalized Intersection Summary 3: La Cienega & Pico

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	<u>۲</u>	<b>∱1</b> ≱		<u> </u>	<b>∱</b> ⊅		- ሽ	<u> ተተ</u> ጮ		<u> </u>	<u>ተተ</u> ጮ	
Traffic Volume (veh/h)	175	522	81	71	905	64	180	1704	79	62	914	116
Future Volume (veh/h)	175	522	81	71	905	64	180	1704	79	62	914	116
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	190	567	88	77	984	70	196	1852	86	67	993	126
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	218	1057	164	307	923	66	224	2400	111	100	1449	183
Arrive On Green	0.12	0.34	0.34	0.05	0.27	0.27	0.13	0.48	0.48	0.32	0.32	0.32
Sat Flow, veh/h	1781	3084	477	1781	3365	239	1781	5001	232	229	4589	581
Grp Volume(v), veh/h	190	326	329	77	520	534	196	1260	678	67	736	383
Grp Sat Flow(s),veh/h/ln	1781	1777	1784	1781	1777	1827	1781	1702	1829	229	1702	1766
Q Serve(g_s), s	12.6	17.7	17.8	3.6	32.9	32.9	13.0	36.7	36.8	20.8	22.7	22.7
Cycle Q Clear(g_c), s	12.6	17.7	17.8	3.6	32.9	32.9	13.0	36.7	36.8	37.9	22.7	22.7
Prop In Lane	1.00		0.27	1.00		0.13	1.00		0.13	1.00		0.33
Lane Grp Cap(c), veh/h	218	609	612	307	487	501	224	1634	878	100	1075	558
V/C Ratio(X)	0.87	0.54	0.54	0.25	1.07	1.07	0.87	0.77	0.77	0.67	0.68	0.69
Avail Cap(c_a), veh/h	267	609	612	464	487	501	267	1634	878	100	1075	558
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95
Uniform Delay (d), s/veh	51.7	31.7	31.8	28.7	43.5	43.6	51.5	25.8	25.8	53.8	35.8	35.9
Incr Delay (d2), s/veh	22.0	0.9	0.9	0.4	59.7	59.2	23.1	3.6	6.6	29.4	3.4	6.4
Initial Q Delay(d3),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
%ile BackOfQ(95%),veh/ln	11.3	12.3	12.4	2.9	31.3	32.0	11.6	21.7	24.0	5.1	14.9	16.0
Unsig. Movement Delay, s/veh		22.4	20.7	20.2	100.0	100 7	74/	20.2	22.4	02.2	20.2	40.0
LnGrp Delay(d),s/veh	73.7	32.6	32.7	29.2	103.2	102.7	74.6	29.3	32.4	83.2	39.2	42.3
LnGrp LOS	E	C	С	С	F	F	E	C	С	F	D	D
Approach Vol, veh/h		845			1131			2134			1186	
Approach Delay, s/veh		41.9			97.9			34.5			42.7	
Approach LOS		D			F			С			D	
Timer - Assigned Phs	1	2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s	19.7	43.0	19.3	38.0		62.7	11.1	46.2				
Change Period (Y+Rc), s	4.6	5.1	4.6	5.1		5.1	4.6	5.1				
Max Green Setting (Gmax), s	18.0	31.7	18.0	32.9		54.3	17.0	33.9				
Max Q Clear Time (g_c+I1), s	15.0	39.9	14.6	34.9		38.8	5.6	19.8				
Green Ext Time (p_c), s	0.2	0.0	0.2	0.0		11.5	0.1	3.5				
Intersection Summary												
HCM 6th Ctrl Delay			51.1									
HCM 6th LOS			D									

# HCM 6th Signalized Intersection Summary 1: La Cienega & Olympic

03/13/2022	05/13	3/2022
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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	- ሽ	<u>ተተ</u> ኑ		<u> </u>	<u></u> ↑↑₽			<u> ተተ</u> ጮ		<u> </u>	<u></u> ↑↑₽	
Traffic Volume (veh/h)	165	1702	108	100	855	39	150	1213	123	187	1470	242
Future Volume (veh/h)	165	1702	108	100	855	39	150	1213	123	187	1470	242
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	179	1850	117	109	929	42	163	1318	134	203	1598	263
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	279	1878	118	177	2470	111	207	1303	132	235	1286	211
Arrive On Green	0.38	0.38	0.38	0.06	0.49	0.49	0.08	0.28	0.28	0.10	0.29	0.29
Sat Flow, veh/h	579	4909	310	1781	5008	226	1781	4709	479	1781	4420	724
Grp Volume(v), veh/h	179	1281	686	109	631	340	163	953	499	203	1229	632
Grp Sat Flow(s),veh/h/ln	579	1702	1815	1781	1702	1830	1781	1702	1784	1781	1702	1740
Q Serve(g_s), s	33.4	44.7	45.0	4.2	13.8	13.9	7.7	33.2	33.2	9.6	34.9	34.9
Cycle Q Clear(g_c), s	34.0	44.7	45.0	4.2	13.8	13.9	7.7	33.2	33.2	9.6	34.9	34.9
Prop In Lane	1.00		0.17	1.00		0.12	1.00		0.27	1.00		0.42
Lane Grp Cap(c), veh/h	279	1302	694	177	1679	903	207	942	494	235	991	506
V/C Ratio(X)	0.64	0.98	0.99	0.61	0.38	0.38	0.79	1.01	1.01	0.86	1.24	1.25
Avail Cap(c_a), veh/h	279	1302	694	299	1679	903	283	942	494	283	991	506
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.6	36.7	36.8	27.9	18.9	18.9	31.7	43.4	43.4	31.0	42.5	42.5
Incr Delay (d2), s/veh	10.9	21.4	31.3	3.4	0.6	1.2	9.9	32.2	43.4	20.2	117.1	127.1
Initial Q Delay(d3),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
%ile BackOfQ(95%),veh/In	9.3	29.7	33.8	3.4	9.4	10.2	7.0	25.2	28.1	9.2	44.9	47.8
Unsig. Movement Delay, s/veh		FO 1	(0.0	01.0	10 (	00.1	41 /		0/ 0	F1 0	150 (	1/0 /
LnGrp Delay(d),s/veh	44.5	58.1	68.0	31.3	19.6	20.1	41.6	75.6	86.8	51.3	159.6	169.6
LnGrp LOS	D	E	E	С	B	С	D	F	F	D	F	F
Approach Vol, veh/h		2146			1080			1615			2064	
Approach Delay, s/veh		60.1			20.9			75.6			152.0	
Approach LOS		E			С			E			F	
Timer - Assigned Phs		2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s		64.6	15.3	40.1	13.3	51.3	17.0	38.4				
Change Period (Y+Rc), s		* 5.4	* 5.4	* 5.2	* 5.5	* 5.4	* 5.2	* 5.2				
Max Green Setting (Gmax), s		* 56	* 15	* 33	* 16	* 35	* 15	* 33				
Max Q Clear Time (g_c+I1), s		15.9	9.7	36.9	6.2	47.0	11.6	35.2				
Green Ext Time (p_c), s		7.9	0.2	0.0	0.2	0.0	0.2	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			85.1									
HCM 6th LOS			F									

#### Notes

# HCM 6th Signalized Intersection Summary 2: La Cienega & Whitworth

03/13/2022	05/13	3/2022
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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			\$		٦	ተተቡ		٦	ተተኈ	
Traffic Volume (veh/h)	38	210	33	16	25	33	29	1520	24	50	1520	46
Future Volume (veh/h)	38	210	33	16	25	33	29	1520	24	50	1520	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	1070	No	1070	1070	No	1070	1070	No	1070	1070	No	1070
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h Peak Hour Factor	41 0.92	228 0.92	36 0.92	17 0.92	27 0.92	36 0.92	32 0.92	1652 0.92	26 0.92	54 0.92	1652 0.92	50 0.92
Percent Heavy Veh, %	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Cap, veh/h	79	291	43	92	139	150	237	3583	56	241	3523	107
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.69	0.69	0.69	0.69	0.69	0.69
Sat Flow, veh/h	161	1399	209	209	669	719	288	5178	81	295	5093	154
Grp Volume(v), veh/h	305	0	0	80	0	0	32	1086	592	54	1104	598
Grp Sat Flow(s), veh/h/ln	1769	0	0	1597	0	0	288	1702	1856	295	1702	1843
Q Serve( $g_s$ ), s	9.0	0.0	0.0	0.0	0.0	0.0	5.1	13.0	13.0	9.1	13.3	13.3
Cycle Q Clear(g_c), s	14.8	0.0	0.0	3.5	0.0	0.0	18.5	13.0	13.0	22.1	13.3	13.3
Prop In Lane	0.13		0.12	0.21		0.45	1.00		0.04	1.00		0.08
Lane Grp Cap(c), veh/h	414	0	0	381	0	0	237	2355	1284	241	2355	1275
V/C Ratio(X)	0.74	0.00	0.00	0.21	0.00	0.00	0.14	0.46	0.46	0.22	0.47	0.47
Avail Cap(c_a), veh/h	960	0	0	860	0	0	237	2355	1284	241	2355	1275
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.54	0.54	0.54	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.0	0.0	0.0	29.6	0.0	0.0	10.5	6.3	6.3	11.3	6.3	6.3
Incr Delay (d2), s/veh	2.6	0.0	0.0	0.3	0.0	0.0	0.6	0.4	0.6	2.1	0.7	1.2
Initial Q Delay(d3),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
%ile BackOfQ(95%),veh/In	10.7	0.0	0.0	2.6	0.0	0.0	0.6	6.4	7.0	1.3	7.5	8.3
Unsig. Movement Delay, s/vel		0.0	0.0	20.0	0.0	0.0	11 0	6 6	60	10/	7.0	74
LnGrp Delay(d),s/veh LnGrp LOS	36.6 D	0.0 A	0.0 A	29.9 C	0.0 A	0.0 A	11.2 В	6.6 A	6.9 A	13.4 B	7.0 A	7.6
•	D	305	A	C	80	A	D	1710	A	D	1756	<u> </u>
Approach Vol, veh/h Approach Delay, s/veh		305			29.9			6.8			7.4	
		50.0 D			29.9 C			0.0 A			7.4 A	
Approach LOS					C						A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		66.3		23.7		66.3		23.7				
Change Period (Y+Rc), s		* 4		5.0		* 4		5.0				
Max Green Setting (Gmax), s		* 34		47.0		* 34		47.0				
Max Q Clear Time (g_c+I1), s Green Ext Time (p_c), s		20.5 9.5		16.8 2.0		24.1 7.6		5.5 0.5				
		7.0		2.0		7.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			9.9									
HCM 6th LOS			А									

Notes

# HCM 6th Signalized Intersection Summary 3: La Cienega & Pico

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۳	<b>∱</b> î≽		٦	<b>↑</b> 1≽		٦	ተተኈ		٦	ተተኈ	
Traffic Volume (veh/h)	146	1029	74	158	442	68	160	1435	203	78	1425	61
Future Volume (veh/h)	146	1029	74	158	442	68	160	1435	203	78	1425	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	159	1118	80	172	480	74	174	1560	221	85	1549	66
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	188	950	68	216	818	125	203	2290	324	126	1780	76
Arrive On Green	0.11	0.28	0.28	0.09	0.26	0.26	0.11	0.51	0.51	0.35	0.35	0.35
Sat Flow, veh/h	1781	3363	241	1781	3088	474	1781	4520	639	267	5022	214
Grp Volume(v), veh/h	159	590	608	172	275	279	174	1174	607	85	1050	565
Grp Sat Flow(s),veh/h/ln	1781	1777	1827	1781	1777	1785	1781	1702	1755	267	1702	1832
Q Serve(g_s), s	10.5	33.9	33.9	8.3	16.2	16.3	11.5	31.2	31.3	29.5	34.5	34.6
Cycle Q Clear(g_c), s	10.5	33.9	33.9	8.3	16.2	16.3	11.5	31.2	31.3	42.5	34.5	34.6
Prop In Lane	1.00		0.13	1.00		0.27	1.00		0.36	1.00		0.12
Lane Grp Cap(c), veh/h	188	502	516	216	470	473	203	1724	889	126	1207	649
V/C Ratio(X)	0.85	1.18	1.18	0.80	0.58	0.59	0.86	0.68	0.68	0.68	0.87	0.87
Avail Cap(c_a), veh/h	267	502	516	312	487	489	267	1724	889	126	1207	649
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.85	0.85	0.85
Uniform Delay (d), s/veh	52.7	43.1	43.1	32.1	38.4	38.4	52.2	22.3	22.3	48.6	36.1	36.2
Incr Delay (d2), s/veh	15.8	98.5	98.6	8.8	1.7	1.8	18.9	2.2	4.2	22.2	7.5	12.9
Initial Q Delay(d3),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
%ile BackOfQ(95%),veh/In	9.4	40.9	42.0	7.3	11.7	11.8	10.3	18.5	19.7	6.0	21.3	23.9
Unsig. Movement Delay, s/veh			1 1 1 (	10.0	10.1	10.0	74.4	045	04.4	70.0	40.7	10.1
LnGrp Delay(d),s/veh	68.5	141.5	141.6	40.8	40.1	40.2	71.1	24.5	26.6	70.8	43.7	49.1
LnGrp LOS	E	F	F	D	D	D	E	С	С	E	D	<u> </u>
Approach Vol, veh/h		1357			726			1955			1700	
Approach Delay, s/veh		133.0			40.3			29.3			46.8	
Approach LOS		F			D			С			D	
Timer - Assigned Phs	1	2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s	18.2	47.6	17.2	36.9		65.9	15.1	39.0				
Change Period (Y+Rc), s	4.6	5.1	4.6	5.1		5.1	4.6	5.1				
Max Green Setting (Gmax), s	18.0	31.7	18.0	32.9		54.3	17.0	33.9				
Max Q Clear Time (g_c+I1), s	13.5	44.5	12.5	18.3		33.3	10.3	35.9				
Green Ext Time (p_c), s	0.2	0.0	0.2	2.9		13.4	0.2	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			60.4									
HCM 6th LOS			E									

# HCM 6th Signalized Intersection Summary 1: La Cienega & Olympic

04/12/2022
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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	<u> </u>	<u>ተተ</u> ኑ		ሻ	<u></u> ↑↑₽		<u> </u>	<u></u> ↑↑₽		<u> </u>	<u></u> ↑↑₽	
Traffic Volume (veh/h)	78	965	165	108	1840	119	184	1751	100	82	845	209
Future Volume (veh/h)	78	965	165	108	1840	119	184	1751	100	82	845	209
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1 00	1.00	1.00	1.00	1.00	1.00	1 00	1.00	1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	1070	No	1070	1070	No	1070	1070	No	1070	1070	No	1070
Adj Sat Flow, veh/h/ln	1870 85	1870 1049	1870 179	1870 117	1870 2000	1870 129	1870 200	1870 1903	1870 109	1870 89	1870 918	1870
Adj Flow Rate, veh/h Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	227 0.92
Percent Heavy Veh, %	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Cap, veh/h	88	1689	288	263	2431	156	262	1568	90	159	1124	277
Arrive On Green	0.38	0.38	0.38	0.07	0.50	0.50	0.10	0.32	0.32	0.06	0.28	0.28
Sat Flow, veh/h	190	4391	748	1781	4903	315	1781	4941	282	1781	4086	1007
Grp Volume(v), veh/h	85	813	415	117	1386	743	200	1309	703	89	764	381
Grp Sat Flow(s), veh/h/ln	190	1702	1736	1781	1702	1814	1781	1702	1820	1781	1702	1689
Q Serve(g_s), s	17.5	23.2	23.2	4.5	41.5	42.0	9.3	38.1	38.1	4.2	25.2	25.3
Cycle Q Clear(q_c), s	46.2	23.2	23.2	4.5	41.5	42.0	9.3	38.1	38.1	4.2	25.2	25.3
Prop In Lane	1.00		0.43	1.00		0.17	1.00		0.16	1.00		0.60
Lane Grp Cap(c), veh/h	88	1309	668	263	1688	899	262	1080	577	159	936	465
V/C Ratio(X)	0.97	0.62	0.62	0.44	0.82	0.83	0.76	1.21	1.22	0.56	0.82	0.82
Avail Cap(c_a), veh/h	88	1309	668	384	1688	899	314	1080	577	283	936	465
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.2	29.8	29.9	21.8	25.7	25.8	30.0	41.0	41.0	32.9	40.7	40.7
Incr Delay (d2), s/veh	88.1	2.2	4.3	1.2	4.6	8.6	8.8	104.4	112.9	3.1	7.8	14.9
Initial Q Delay(d3),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
%ile BackOfQ(95%),veh/In	8.3	15.0	15.7	3.5	24.2	27.0	8.1	45.6	50.3	3.5	17.0	18.2
Unsig. Movement Delay, s/veh		00.4	0.1.0		00.4			445.0	450.0	05.0	10 5	(
LnGrp Delay(d),s/veh	145.3	32.1	34.2	23.0	30.4	34.4	38.8	145.3	153.9	35.9	48.5	55.6
LnGrp LOS	F	C	С	С	С	С	D	F	F	D	D	<u> </u>
Approach Vol, veh/h		1313			2246			2212			1234	
Approach Delay, s/veh		40.1			31.3			138.4			49.8	_
Approach LOS		D			С			F			D	
Timer - Assigned Phs		2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s		64.9	16.9	38.2	13.3	51.6	11.8	43.3				
Change Period (Y+Rc), s		* 5.4	* 5.4	* 5.2	* 5.5	* 5.4	* 5.2	* 5.2				
Max Green Setting (Gmax), s		* 56	* 15	* 33	* 16	* 35	* 15	* 33				
Max Q Clear Time (g_c+I1), s		44.0	11.3	27.3	6.5	48.2	6.2	40.1				_
Green Ext Time (p_c), s		9.9	0.2	3.4	0.2	0.0	0.1	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			70.0									
HCM 6th LOS			E									

Notes

# HCM 6th Signalized Intersection Summary 2: La Cienega & Whitworth

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			- ↔		٦	<u>ተተ</u> ኑ		٦	<u>ተ</u> ተኈ	
Traffic Volume (veh/h)	37	69	34	22	118	52	50	1948	17	41	1091	114
Future Volume (veh/h)	37	69	34	22	118	52	50	1948	17	41	1091	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	40	75	37	24	128	57	54	2117	18	45	1186	124
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	96	140	60	63	174	72	359	3916	33	189	3521	368
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.75	0.75	0.75	0.75	0.75	0.75
Sat Flow, veh/h	300	936	398	123	1157	480	420	5222	44	189	4695	491
Grp Volume(v), veh/h	152	0	0	209	0	0	54	1380	755	45	860	450
Grp Sat Flow(s),veh/h/ln	1633	0	0	1759	0	0	420	1702	1862	189	1702	1782
Q Serve(g_s), s	0.0	0.0	0.0	2.6	0.0	0.0	4.4	15.3	15.4	11.9	7.6	7.6
Cycle Q Clear(g_c), s	7.6	0.0	0.0	10.2	0.0	0.0	12.1	15.3	15.4	27.2	7.6	7.6
Prop In Lane	0.26 296	0	0.24 0	0.11	0	0.27 0	1.00	2553	0.02 1397	1.00 189	2553	0.28
Lane Grp Cap(c), veh/h V/C Ratio(X)	290 0.51	0 0.00	0.00	309 0.68	0.00	0.00	359 0.15	2553 0.54	0.54	0.24	2553 0.34	1336 0.34
Avail Cap(c_a), veh/h	880	0.00	0.00	940	0.00	0.00	359	2553	1397	189	2553	1336
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.33	0.33	0.33	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.6	0.00	0.00	36.8	0.0	0.00	5.8	4.7	4.7	10.5	3.8	3.8
Incr Delay (d2), s/veh	1.4	0.0	0.0	2.6	0.0	0.0	0.3	0.3	0.5	2.9	0.4	0.7
Initial Q Delay(d3),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
%ile BackOfQ(95%),veh/ln	5.7	0.0	0.0	8.1	0.0	0.0	0.7	5.9	6.5	1.1	3.7	4.1
Unsig. Movement Delay, s/veh		0.0	0.0	0.1	0.0	0.0	0.7	0.7	0.0		0.7	
LnGrp Delay(d), s/veh	37.0	0.0	0.0	39.4	0.0	0.0	6.1	5.0	5.2	13.4	4.1	4.4
LnGrp LOS	D	A	A	D	A	A	A	A	A	В	A	A
Approach Vol, veh/h		152			209			2189			1355	
Approach Delay, s/veh		37.0			39.4			5.1			4.5	
Approach LOS		D			D			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s	_	71.5	_	18.5	_	71.5	_	18.5	_	_	_	
Change Period (Y+Rc), s		* 4		5.0		* 4		5.0				
Max Green Setting (Gmax), s		* 34		47.0		* 34		47.0				
Max Q Clear Time $(q_c+11)$ , s		17.4		9.6		29.2		12.2				
Green Ext Time (p_c), s		13.4		1.0		3.6		1.3				
Intersection Summary												
HCM 6th Ctrl Delay			8.0									
HCM 6th LOS			A									

Notes

# HCM 6th Signalized Intersection Summary 3: La Cienega & Pico

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ľ	<b>≜</b> ⊅		ľ	<b>∱1</b> ≱		1	ተተቡ		1	ተተኈ	
Traffic Volume (veh/h)	194	558	89	100	980	100	190	1798	89	70	949	121
Future Volume (veh/h)	194	558	89	100	980	100	190	1798	89	70	949	121
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	211	607	97	109	1065	109	207	1954	97	76	1032	132
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	239	1069	170	306	892	91	235	2335	116	85	1368	175
Arrive On Green	0.13	0.35	0.35	0.06	0.27	0.27	0.13	0.47	0.47	0.30	0.30	0.30
Sat Flow, veh/h	1781	3070	490	1781	3254	333	1781	4983	247	205	4584	585
Grp Volume(v), veh/h	211	351	353	109	581	593	207	1333	718	76	766	398
Grp Sat Flow(s),veh/h/ln	1781	1777	1782	1781	1777	1810	1781	1702	1826	205	1702	1765
Q Serve(g_s), s	14.0	19.2	19.3	5.2	32.9	32.9	13.7	41.1	41.3	14.9	24.4	24.5
Cycle Q Clear(g_c), s	14.0	19.2	19.3	5.2	32.9	32.9	13.7	41.1	41.3	35.8	24.4	24.5
Prop In Lane	1.00		0.27	1.00		0.18	1.00		0.14	1.00		0.33
Lane Grp Cap(c), veh/h	239	619	621	306	487	496	235	1595	856	85	1016	527
V/C Ratio(X)	0.88	0.57	0.57	0.36	1.19	1.19	0.88	0.84	0.84	0.89	0.75	0.76
Avail Cap(c_a), veh/h	267	619	621	452	487	496	267	1595	856	85	1016	527
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.94	0.94	0.94
Uniform Delay (d), s/veh	51.1	31.8	31.8	28.9	43.5	43.6	51.2	27.9	27.9	57.5	38.1	38.1
Incr Delay (d2), s/veh	25.9	1.2	1.2	0.7	105.6	105.9	25.1	5.4	9.7	67.6	4.9	9.2
Initial Q Delay(d3),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
%ile BackOfQ(95%),veh/In	12.6	13.2	13.3	4.1	41.4	42.2	12.3	24.3	27.1	7.0	16.0	17.3
Unsig. Movement Delay, s/veh		00.0	00.0	00 (	1 10 1	140 5	7/ 0	00.0	07 (	105 1	40.0	47.0
LnGrp Delay(d),s/veh	76.9	33.0	33.0	29.6	149.1	149.5	76.3	33.2	37.6	125.1	43.0	47.3
LnGrp LOS	E	C	С	С	F	F	E	С	D	F	D	D
Approach Vol, veh/h		915			1283			2258			1240	
Approach Delay, s/veh		43.1			139.1			38.6			49.4	_
Approach LOS		D			F			D			D	
Timer - Assigned Phs	1	2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s	20.4	40.9	20.7	38.0		61.3	11.8	46.9				
Change Period (Y+Rc), s	4.6	5.1	4.6	5.1		5.1	4.6	5.1				
Max Green Setting (Gmax), s	18.0	31.7	18.0	32.9		54.3	17.0	33.9				
Max Q Clear Time (g_c+l1), s	15.7	37.8	16.0	34.9		43.3	7.2	21.3				
Green Ext Time (p_c), s	0.1	0.0	0.1	0.0		9.0	0.2	3.6				
Intersection Summary												
HCM 6th Ctrl Delay			64.3									
HCM 6th LOS			E									

# HCM 6th Signalized Intersection Summary 1: La Cienega & Olympic

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	- ሽ	<u></u> ↑↑₽		<u> </u>	<u></u> ↑↑₽		ሻ	<u>ተተ</u> ኑ		<u>۲</u>	<u></u> ↑↑₽	
Traffic Volume (veh/h)	173	1773	108	97	892	41	154	1298	123	195	1616	254
Future Volume (veh/h)	173	1773	108	97	892	41	154	1298	123	195	1616	254
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1 00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	1870	No 1870	1870	1870	No 1870	1870	1870	No 1870	1070	1870	No 1870	1070
Adj Sat Flow, veh/h/ln Adj Flow Rate, veh/h	1870	1870	1870	1870	970	45	1870	1870	1870 134	212	1870	1870 276
Peak Hour Factor	0.92	0.927	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Cap, veh/h	264	1867	113	175	2449	113	210	1312	125	242	1305	203
Arrive On Green	0.38	0.38	0.38	0.06	0.49	0.49	0.08	0.28	0.28	0.10	0.29	0.29
Sat Flow, veh/h	555	4923	298	1781	5001	232	1781	4743	450	1781	4455	694
Grp Volume(v), veh/h	188	1331	713	105	660	355	167	1013	532	212	1339	694
Grp Sat Flow(s), veh/h/ln	555	1702	1817	1781	1702	1829	1781	1702	1789	1781	1702	1745
Q Serve(g_s), s	38.9	45.5	45.5	4.1	14.7	14.8	7.9	33.2	33.2	10.1	35.1	35.1
Cycle Q Clear(g_c), s	40.4	45.5	45.5	4.1	14.7	14.8	7.9	33.2	33.2	10.1	35.1	35.1
Prop In Lane	1.00		0.16	1.00		0.13	1.00		0.25	1.00		0.40
Lane Grp Cap(c), veh/h	264	1291	689	175	1667	896	210	942	495	242	997	511
V/C Ratio(X)	0.71	1.03	1.04	0.60	0.40	0.40	0.80	1.08	1.08	0.88	1.34	1.36
Avail Cap(c_a), veh/h	264	1291	689	298	1667	896	283	942	495	283	997	511
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.4	37.2	37.2	28.0	19.4	19.4	31.7	43.4	43.4	30.9	42.4	42.4
Incr Delay (d2), s/veh	15.2	33.2	43.7	3.3	0.7	1.3	10.8	51.7	62.2	23.0	161.2	173.1
Initial Q Delay(d3), 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
%ile BackOfQ(95%),veh/In	10.4	33.3	37.8	3.3	9.9	10.8	7.2	29.3	32.4	9.8	55.1	58.9
Unsig. Movement Delay, s/veh	51.5	70.5	81.0	31.2	20.1	20.7	42.4	95.1	105.6	53.8	203.6	215.6
LnGrp Delay(d),s/veh LnGrp LOS	51.5 D	70.5 F	81.0 F	31.2 C	20.1 C	20.7 C	42.4 D	95.1 F	105.6 F	53.8 D	203.6 F	215.0 F
Approach Vol, veh/h	D	2232	Г	C	1120	C	D	1712	Г	D	2245	F
Approach Delay, s/veh		72.2			21.3			93.2			193.2	
Approach LOS		72.2 E			21.3 C			75.2 F			195.2 F	
Timer - Assigned Phs		2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s		64.2 * E 4	15.5	40.3 * E 2	13.3	50.9 * E 4	17.4 * F 2	38.4 * F 2				
Change Period (Y+Rc), s		* 5.4 * 54	* 5.4	* 5.2	* 5.5	* 5.4	* 5.2	* 5.2				
Max Green Setting (Gmax), s		* 56	* 15	* 33	* 16	* 35	* 15	* 33				
Max Q Clear Time (g_c+l1), s Green Ext Time (p_c), s		16.8 8.4	9.9 0.2	37.1 0.0	6.1 0.2	47.5 0.0	12.1 0.2	35.2 0.0				
		0.4	0.2	0.0	0.2	0.0	0.2	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			106.5									
HCM 6th LOS			F									

Notes

# HCM 6th Signalized Intersection Summary 2: La Cienega & Whitworth

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4		ሻ	<u></u> ↑↑₽		<u>۲</u>	<u>ተተ</u> ጮ	
Traffic Volume (veh/h)	36	219	36	18	27	30	33	1598	25	49	1664	47
Future Volume (veh/h)	36	219	36	18	27	30	33	1598	25	49	1664	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	1.00	1 00	1.00	1.00	1 00	1.00	1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach Adj Sat Flow, veh/h/ln	1870	No 1870	1870	1870	No 1870	1870	1870	No 1870	1870	1870	No 1870	1870
Adj Sat Flow, ven/h/h	39	238	39	20	29	33	36	1737	27	53	1870	51
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	76	302	47	102	143	132	207	3551	55	223	3500	99
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.69	0.69	0.69	0.69	0.69	0.69
Sat Flow, veh/h	145	1409	219	245	667	614	247	5179	80	271	5105	144
Grp Volume(v), veh/h	316	0	0	82	0	0	36	1141	623	53	1206	654
Grp Sat Flow(s), veh/h/ln	1773	0	0	1526	0	0	247	1702	1856	271	1702	1844
Q Serve(g_s), s	9.0	0.0	0.0	0.0	0.0	0.0	7.5	14.3	14.3	10.3	15.5	15.5
Cycle Q Clear(g_c), s	15.3	0.0	0.0	3.5	0.0	0.0	23.0	14.3	14.3	24.6	15.5	15.5
Prop In Lane	0.12		0.12	0.24		0.40	1.00		0.04	1.00		0.08
Lane Grp Cap(c), veh/h	425	0	0	377	0	0	207	2334	1272	223	2334	1265
V/C Ratio(X)	0.74	0.00	0.00	0.22	0.00	0.00	0.17	0.49	0.49	0.24	0.52	0.52
Avail Cap(c_a), veh/h	963	0	0	840	0	0	207	2334	1272	223	2334	1265
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.46	0.46	0.46	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.7	0.0	0.0	29.1	0.0	0.0	12.5	6.7	6.7	12.5	6.9	6.9
Incr Delay (d2), s/veh	2.6	0.0	0.0	0.3	0.0	0.0	0.8	0.3	0.6	2.5	0.8	1.5
Initial Q Delay(d3),s/veh	0.0 11.0	0.0	0.0 0.0	0.0 2.6	0.0 0.0	0.0	0.0 0.8	0.0 6.7	0.0 7.3	0.0 1.3	0.0 8.5	0.0 9.4
%ile BackOfQ(95%),veh/In Unsig. Movement Delay, s/veh		0.0	0.0	2.0	0.0	0.0	0.0	0.7	1.3	1.3	0.0	9.4
LnGrp Delay(d), s/veh	36.3	0.0	0.0	29.4	0.0	0.0	13.3	7.0	7.3	15.0	7.7	8.4
LnGrp LOS	50.5 D	A	A	27.4 C	A	A	B	7.0 A	7.5 A	B	Α	A.
Approach Vol, veh/h	D	316		<u> </u>	82		D	1800		D	1913	
Approach Delay, s/veh		36.3			29.4			7.3			8.1	
Approach LOS		D			С			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		65.7		24.3		65.7		24.3				
Change Period (Y+Rc), s		* 4		5.0		* 4		5.0				
Max Green Setting (Gmax), s		* 34		47.0		* 34		47.0				
Max Q Clear Time (g_c+I1), s		25.0		17.3		26.6		5.5				
Green Ext Time (p_c), s		7.1		2.0		6.2		0.5				
Intersection Summary												
HCM 6th Ctrl Delay			10.3									
HCM 6th LOS			В									
HCM 6th Ctrl Delay												

Notes

# HCM 6th Signalized Intersection Summary 3: La Cienega & Pico

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	٦	<b>∱</b> î≽		٦	<b>↑</b> ĵ≽		٦	<u>ተተ</u> ጮ		ሻ	<u>ተተ</u> ኑ	
Traffic Volume (veh/h)	155	1113	80	180	487	87	171	1497	241	120	1512	77
Future Volume (veh/h)	155	1113	80	180	487	87	171	1497	241	120	1512	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	168	1210	87	196	529	95	186	1627	262	130	1643	84
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	197	950	68	233	810	145	214	2205	353	109	1684	86
Arrive On Green	0.11	0.28	0.28	0.10	0.27	0.27	0.12	0.50	0.50	0.34	0.34	0.34
Sat Flow, veh/h	1781	3362	241	1781	3012	539	1781	4435	711	240	4974	254
Grp Volume(v), veh/h	168	639	658	196	311	313	186	1247	642	130	1124	603
Grp Sat Flow(s),veh/h/ln	1781	1777	1827	1781	1777	1773	1781	1702	1742	240	1702	1825
Q Serve(g_s), s	11.1	33.9	33.9	9.4	18.6	18.8	12.3	34.9	35.2	24.5	39.1	39.2
Cycle Q Clear(g_c), s	11.1	33.9	33.9	9.4	18.6	18.8	12.3	34.9	35.2	40.6	39.1	39.2
Prop In Lane	1.00		0.13	1.00		0.30	1.00		0.41	1.00		0.14
Lane Grp Cap(c), veh/h	197	502	516	233	478	477	214	1692	866	109	1152	618
V/C Ratio(X)	0.85	1.27	1.28	0.84	0.65	0.66	0.87	0.74	0.74	1.19	0.98	0.98
Avail Cap(c_a), veh/h	267	502	516	312	487	486	267	1692	866	109	1152	618
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.80	0.80	0.80
Uniform Delay (d), s/veh	52.4	43.1	43.1	31.4	38.9	38.9	51.8	23.9	24.0	54.5	39.2	39.2
Incr Delay (d2), s/veh	17.7	137.5	138.5	14.3	3.0	3.1	21.2	2.9	5.7	138.5	18.6	27.1
Initial Q Delay(d3),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
%ile BackOfQ(95%),veh/In	9.9	49.8	51.3	8.6	13.3	13.4	11.0	20.6	21.9	12.7	25.5	28.8
Unsig. Movement Delay, s/veh		100 F	101 F		11.0	12.0	70.1	2/ 0	20.7	102.0	F7 0	(/ )
LnGrp Delay(d),s/veh	70.1	180.5 F	181.5 F	45.7	41.9	42.0	73.1	26.8	29.7	193.0	57.8	66.3
LnGrp LOS	E		F	D	D	D	E	C	С	F	1057	<u> </u>
Approach Vol, veh/h		1465			820			2075			1857	
Approach Delay, s/veh		168.3			42.8			31.9			70.0	
Approach LOS		F			D			С			E	
Timer - Assigned Phs	1	2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s	19.0	45.7	17.8	37.4		64.8	16.2	39.0				
Change Period (Y+Rc), s	4.6	5.1	4.6	5.1		5.1	4.6	5.1				
Max Green Setting (Gmax), s	18.0	31.7	18.0	32.9		54.3	17.0	33.9				
Max Q Clear Time (g_c+I1), s	14.3	42.6	13.1	20.8		37.2	11.4	35.9				
Green Ext Time (p_c), s	0.2	0.0	0.2	3.1		12.2	0.3	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			76.9									
HCM 6th LOS			E									

# HCM 6th Signalized Intersection Summary 1: La Cienega & Olympic

05/13/2022
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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۳.	<u>ተተ</u> ኑ		ሻ	<u>ተተ</u> ኑ		ሻ	<u>ተተ</u> ኈ		٦.	<u>ተ</u> ተጮ	
Traffic Volume (veh/h)	78	965	171	114	1840	119	192	1773	108	82	861	209
Future Volume (veh/h)	78	965	171	114	1840	119	192	1773	108	82	861	209
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	85	1049	186	124	2000	129	209	1927	117	89	936	227
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	1663	294	260	2415	155	265	1577	95	159	1129	273
Arrive On Green	0.38	0.38	0.38	0.07	0.49	0.49	0.10	0.32	0.32	0.06	0.27	0.27
Sat Flow, veh/h	190	4363	773	1781	4903	315	1781	4923	298	1781	4104	992
Grp Volume(v), veh/h	85	818	417	124	1386	743	209	1331	713	89	776	387
Grp Sat Flow(s),veh/h/ln	190	1702	1731	1781	1702	1814	1781	1702	1817	1781	1702	1692
Q Serve(g_s), s	16.8	23.5	23.5	4.8	41.8	42.3	9.7	38.4	38.4	4.2	25.7	25.8
Cycle Q Clear(g_c), s	45.7	23.5	23.5	4.8	41.8	42.3	9.7	38.4	38.4	4.2	25.7	25.8
Prop In Lane	1.00	1000	0.45	1.00	4 / 77	0.17	1.00	1001	0.16	1.00	001	0.59
Lane Grp Cap(c), veh/h	87	1298	660	260	1677	893	265	1091	582	159	936	465
V/C Ratio(X)	0.98	0.63	0.63	0.48	0.83	0.83	0.79	1.22	1.23	0.56	0.83	0.83
Avail Cap(c_a), veh/h	87	1298	660	381	1677	893	312	1091	582	283	936	465
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.4	30.2	30.3	22.3	26.1	26.2	29.8	40.8	40.8	32.9	40.8	40.9
Incr Delay (d2), s/veh	91.7	2.3	4.6	1.4	4.8	8.9	10.9	107.4	116.2	3.1	8.4	15.8
Initial Q Delay(d3),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
%ile BackOfQ(95%),veh/In	8.4	15.2	15.9	3.8	24.4	27.2	8.6	46.7	51.5	3.5	17.4	18.6
Unsig. Movement Delay, s/veh		22.4	24.0	22.2	20.0	<u>ЭГ 1</u>	40.0	140.0	157.0	25.0	40.0	F/ 7
LnGrp Delay(d),s/veh	149.0	32.6	34.8	23.7	30.9	35.1	40.8	148.2	157.0	35.9	49.2	56.7
LnGrp LOS	F	C	С	С	C	D	D	F	F	D	D	<u> </u>
Approach Vol, veh/h		1320			2253			2253			1252	
Approach Delay, s/veh		40.8			31.9			141.0			50.6	
Approach LOS		D			С			F			D	
Timer - Assigned Phs		2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s		64.5	17.3	38.2	13.4	51.1	11.8	43.6				
Change Period (Y+Rc), s		* 5.4	* 5.4	* 5.2	* 5.5	* 5.4	* 5.2	* 5.2				
Max Green Setting (Gmax), s		* 56	* 15	* 33	* 16	* 35	* 15	* 33				
Max Q Clear Time (g_c+l1), s		44.3	11.7	27.8	6.8	47.7	6.2	40.4				
Green Ext Time (p_c), s		9.7	0.2	3.2	0.2	0.0	0.1	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			71.6									
HCM 6th LOS			E									

Notes

# HCM 6th Signalized Intersection Summary 2: La Cienega & Whitworth

05/13/2022
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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4		<u>٦</u>	<u>ተተ</u> ጮ		<u>۲</u>	<u></u> ↑↑₽	
Traffic Volume (veh/h)	40	69	34	22	118	55	50	1977	17	45	1127	118
Future Volume (veh/h)	40	69	34	22	118	55	50	1977	17	45	1127	118
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	1070	No	4070	1070	No	1070	1070	No	4070	4070	No	4070
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	43	75	37	24	128	60	54	2149	18	49	1225	128
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2 99	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h		138	58	63	173	76	346	3907	33	184	3513	367
Arrive On Green	0.15 317	0.15 908	0.15 384	0.15 121	0.15 1141	0.15 498	0.75 403	0.75 5223	0.75 44	0.75 183	0.75 4696	0.75
Sat Flow, veh/h												491
Grp Volume(v), veh/h	155	0	0	212	0	0	54	1400	767	49	888	465
Grp Sat Flow(s),veh/h/ln	1609	0	0	1759	0	0	403	1702	1862	183	1702	1782
Q Serve( $g_s$ ), s	0.0 7.9	0.0	0.0	2.4 10.3	0.0 0.0	0.0	4.7 12.8	15.8 15.8	15.9 15.9	14.1	8.0 8.0	8.0
Cycle Q Clear(g_c), s Prop In Lane	0.28	0.0	0.0 0.24	0.11	0.0	0.0 0.28	12.8	10.0	0.02	30.0 1.00	8.0	8.0 0.28
Lane Grp Cap(c), veh/h	295	0	0.24	312	0	0.20	346	2547	1393	1.00	2547	1333
V/C Ratio(X)	0.52	0.00	0.00	0.68	0.00	0.00	0.16	0.55	0.55	0.27	0.35	0.35
Avail Cap(c_a), veh/h	873	0.00	0.00	940	0.00	0.00	346	2547	1393	184	2547	1333
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.31	0.31	0.31	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.6	0.0	0.0	36.7	0.0	0.0	6.0	4.9	4.9	11.3	3.9	3.9
Incr Delay (d2), s/veh	1.4	0.0	0.0	2.6	0.0	0.0	0.3	0.3	0.5	3.5	0.4	0.7
Initial Q Delay(d3),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
%ile BackOfQ(95%),veh/In	5.8	0.0	0.0	8.2	0.0	0.0	0.7	6.0	6.6	1.3	3.9	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.0	0.0	0.0	39.3	0.0	0.0	6.3	5.1	5.3	14.8	4.2	4.6
LnGrp LOS	D	А	А	D	А	А	А	А	А	В	А	А
Approach Vol, veh/h		155			212			2221			1402	
Approach Delay, s/veh		37.0			39.3			5.2			4.7	
Approach LOS		D			D			А			А	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		71.3		18.7		71.3		18.7				
Change Period (Y+Rc), s		* 4		5.0		* 4		5.0				
Max Green Setting (Gmax), s		* 34		47.0		* 34		47.0				
Max Q Clear Time $(g_c+I1)$ , s		17.9		9.9		32.0		12.3				
Green Ext Time (p_c), s		13.2		1.0		1.6		1.4				
Intersection Summary												
HCM 6th Ctrl Delay			8.1									
HCM 6th LOS			А									

Notes

# HCM 6th Signalized Intersection Summary 3: La Cienega & Pico

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	٦	<b>≜</b> ⊅		٦	<b>↑</b> ĵ≽		٦	ተተጮ		٦	ተተኈ	
Traffic Volume (veh/h)	200	561	89	104	984	109	190	1812	91	80	968	129
Future Volume (veh/h)	200	561	89	104	984	109	190	1812	91	80	968	129
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	217	610	97	113	1070	118	207	1970	99	87	1052	140
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	244	1074	170	309	885	97	235	2318	116	83	1346	179
Arrive On Green	0.14	0.35	0.35	0.06	0.27	0.27	0.13	0.47	0.47	0.30	0.30	0.30
Sat Flow, veh/h	1781	3072	488	1781	3228	356	1781	4980	250	201	4559	606
Grp Volume(v), veh/h	217	352	355	113	589	599	207	1345	724	87	785	407
Grp Sat Flow(s),veh/h/ln	1781	1777	1783	1781	1777	1806	1781	1702	1825	201	1702	1761
Q Serve(g_s), s	14.4	19.3	19.4	5.4	32.9	32.9	13.7	41.9	42.2	13.7	25.3	25.4
Cycle Q Clear(g_c), s	14.4	19.3	19.4	5.4	32.9	32.9	13.7	41.9	42.2	35.4	25.3	25.4
Prop In Lane	1.00		0.27	1.00		0.20	1.00		0.14	1.00		0.34
Lane Grp Cap(c), veh/h	244	621	623	309	487	495	235	1584	850	83	1005	520
V/C Ratio(X)	0.89	0.57	0.57	0.37	1.21	1.21	0.88	0.85	0.85	1.05	0.78	0.78
Avail Cap(c_a), veh/h	267	621	623	452	487	495	267	1584	850	83	1005	520
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.93	0.93
Uniform Delay (d), s/veh	50.9	31.6	31.7	28.8	43.5	43.6	51.2	28.3	28.4	58.1	38.7	38.8
Incr Delay (d2), s/veh	26.9	1.2	1.2	0.7	111.7	112.3	25.1	5.9	10.6	109.4	5.6	10.5
Initial Q Delay(d3),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
%ile BackOfQ(95%),veh/In	12.9	13.2	13.3	4.3	42.7	43.5	12.3	24.8	27.8	8.8	16.6	18.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.8	32.9	32.9	29.5	155.3	155.8	76.3	34.2	39.0	167.5	44.4	49.2
LnGrp LOS	E	С	С	С	F	F	E	С	D	F	D	D
Approach Vol, veh/h		924			1301			2276			1279	
Approach Delay, s/veh		43.4			144.6			39.6			54.3	
Approach LOS		D			F			D			D	
Timer - Assigned Phs	1	2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s	20.4	40.5	21.1	38.0		60.9	12.0	47.1				
Change Period (Y+Rc), s	4.6	5.1	4.6	5.1		5.1	4.6	5.1				
Max Green Setting (Gmax), s	18.0	31.7	18.0	32.9		54.3	17.0	33.9				
Max Q Clear Time (g_c+I1), s	15.7	37.4	16.4	34.9		44.2	7.4	21.4				
Green Ext Time (p_c), s	0.1	0.0	0.1	0.0		8.4	0.2	3.6				
Intersection Summary												
HCM 6th Ctrl Delay			67.1									
HCM 6th LOS			E									

# HCM 6th Signalized Intersection Summary 1: La Cienega & Olympic

05/13/2022
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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	<u>۲</u>	<u></u> ↑↑₽		- ከ	<u></u> ↑↑₽		<u>٦</u>	<u>ተተ</u> ኈ		<u>۲</u>	<u></u> ↑↑₽	
Traffic Volume (veh/h)	173	1773	116	105	892	41	160	1315	129	195	1639	254
Future Volume (veh/h)	173	1773	116	105	892	41	160	1315	129	195	1639	254
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	1.00	1 0 0	1.00	1.00	1.00	1.00	1.00	1 0 0	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	1070	No	1070	1070	No	1070	1070	No	1070	1070	No	1070
Adj Sat Flow, veh/h/ln Adj Flow Rate, veh/h	1870 188	1870 1927	1870 126	1870 114	1870 970	1870 45	1870 174	1870 1429	1870 140	1870 212	1870 1782	1870 276
Peak Hour Factor	0.92	0.927	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	264	1855	121	176	2449	113	215	1308	128	242	1295	199
Arrive On Green	0.38	0.38	0.38	0.07	0.49	0.49	0.09	0.28	0.28	0.10	0.29	0.29
Sat Flow, veh/h	555	4898	319	1781	5001	232	1781	4728	463	1781	4465	686
Grp Volume(v), veh/h	188	1337	716	114	660	355	174	1029	540	212	1355	703
Grp Sat Flow(s), veh/h/ln	555	1702	1813	1781	1702	1829	1781	1702	1787	1781	1702	1747
Q Serve(g_s), s	38.9	45.4	45.4	4.4	14.7	14.8	8.3	33.2	33.2	10.1	34.8	34.8
Cycle Q Clear(g_c), s	40.3	45.4	45.4	4.4	14.7	14.8	8.3	33.2	33.2	10.1	34.8	34.8
Prop In Lane	1.00		0.18	1.00		0.13	1.00		0.26	1.00		0.39
Lane Grp Cap(c), veh/h	264	1289	687	176	1667	896	215	942	494	242	987	507
V/C Ratio(X)	0.71	1.04	1.04	0.65	0.40	0.40	0.81	1.09	1.09	0.88	1.37	1.39
Avail Cap(c_a), veh/h	264	1289	687	298	1667	896	283	942	494	283	987	507
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.4	37.3	37.3	28.0	19.4	19.4	31.5	43.4	43.4	30.9	42.6	42.6
Incr Delay (d2), s/veh	15.2	35.2	45.9	4.0	0.7	1.3	12.4	57.8	68.0	23.0	174.0	186.3
Initial Q Delay(d3),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
%ile BackOfQ(95%),veh/In	10.4	33.8	38.3	3.6	9.9	10.8	7.7	30.6	33.6	9.8	57.5	61.5
Unsig. Movement Delay, s/veh LnGrp Delay(d),s/veh	51.5	72.5	83.2	32.0	20.1	20.7	44.0	101.2	111.4	53.8	216.6	228.9
LIGIP Delay(d), siven	51.5 D	72.5 F	03.Z F	32.0 C	20.1 C	20.7 C	44.0 D	F	F	55.6 D	210.0 F	220.9 F
Approach Vol, veh/h	D	2241	I	C	1129	C	D	1743	1	D	2270	
Approach Delay, s/veh		74.2			21.5			98.7			205.2	
Approach LOS		F 14.2			21.5 C			70.7 F			203.2 F	
			0			,	7					_
Timer - Assigned Phs		2	3	4	12.2	6	17 4	8				
Phs Duration (G+Y+Rc), s		64.2 * E 4	15.8	40.0 * E 2	13.3	50.8 * E 4	17.4 * r 2	38.4 * E 2				
Change Period (Y+Rc), s Max Green Setting (Gmax), s		* 5.4 * 56	* 5.4 * 15	* 5.2 * 33	* 5.5 * 16	* 5.4 * 35	* 5.2 * 15	* 5.2 * 33				
Max Q Clear Time $(g_c+11)$ , s		16.8	10.3	36.8	6.4	47.4	12.1	35.2				
Green Ext Time (p_c), s		8.4	0.2	0.0	0.4	47.4	0.2	0.0				
4 = 7		0.4	0.2	0.0	0.2	0.0	0.2	0.0				
Intersection Summary			446.5									
HCM 6th Ctrl Delay			112.2									
HCM 6th LOS			F									

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

# HCM 6th Signalized Intersection Summary 2: La Cienega & Whitworth

05/13/2022
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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4		٦	<u>ተተ</u> ኑ		٦	<u>ተተ</u> ኑ	
Traffic Volume (veh/h)	40	219	36	18	27	34	33	1636	25	52	1694	50
Future Volume (veh/h)	40	219	36	18	27	34	33	1636	25	52	1694	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	1070	No	4070	1070	No	4070	1070	No	1070	4070	No	1070
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	43	238	39	20	29	37	36	1778	27	57	1841	54
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2 81	2	2 47	2 100	2 140	2 144	2	2 3537	2 54	2 215	2	2 102
Cap, veh/h Arrive On Green	81 0.22	302 0.22	47 0.22	0.22	0.22	0.22	200	3537 0.68	54 0.68	0.68	3480 0.68	
Sat Flow, veh/h	163	1389	215	232	645	663	0.68 239	0.08 5182	0.08	260	0.08 5098	0.68 149
Grp Volume(v), veh/h	320	0	0	86	0	0	36	1168	637	57	1229	666
Grp Sat Flow(s),veh/h/ln	1767 9.5	0.0	0 0.0	1540 0.0	0.0	0 0.0	239 7.9	1702	1856 14.9	260 12.2	1702 16.1	1843 16.2
Q Serve(g_s), s Cycle Q Clear(g_c), s	9.5 15.5	0.0	0.0	3.7	0.0	0.0	24.1	14.9 14.9	14.9	27.1	16.1	16.2
Prop In Lane	0.13	0.0	0.0	0.23	0.0	0.0	1.00	14.9	0.04	1.00	10.1	0.08
Lane Grp Cap(c), veh/h	429	0	0.12	384	0	0.43	200	2324	1267	215	2324	1258
V/C Ratio(X)	429	0.00	0.00	0.22	0.00	0.00	0.18	0.50	0.50	0.27	0.53	0.53
Avail Cap(c_a), veh/h	959	0.00	0.00	844	0.00	0.00	200	2324	1267	215	2324	1258
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.44	0.44	0.44	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.5	0.0	0.0	29.0	0.0	0.0	13.1	6.9	6.9	13.5	7.1	7.1
Incr Delay (d2), s/veh	2.6	0.0	0.0	0.3	0.0	0.0	0.9	0.3	0.6	3.0	0.9	1.6
Initial Q Delay(d3),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
%ile BackOfQ(95%),veh/In	11.1	0.0	0.0	2.8	0.0	0.0	0.8	6.9	7.6	1.5	8.8	9.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.1	0.0	0.0	29.3	0.0	0.0	14.0	7.2	7.5	16.5	8.0	8.7
LnGrp LOS	D	А	А	С	А	А	В	А	А	В	А	А
Approach Vol, veh/h		320			86			1841			1952	
Approach Delay, s/veh		36.1			29.3			7.5			8.5	
Approach LOS		D			С			А			А	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		65.4		24.6		65.4		24.6				
Change Period (Y+Rc), s		* 4		5.0		* 4		5.0				
Max Green Setting (Gmax), s		* 34		47.0		* 34		47.0				
Max Q Clear Time (g_c+I1), s		26.1		17.5		29.1		5.7				
Green Ext Time (p_c), s		6.4		2.1		4.3		0.5				
Intersection Summary												
HCM 6th Ctrl Delay			10.6									
HCM 6th LOS			В									

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

# HCM 6th Signalized Intersection Summary 3: La Cienega & Pico

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	<b>≜</b> ⊅		<u>۲</u>	<b>≜</b> ⊅		ሻ	<u></u> ↑↑₽		<u> </u>	<u> ተተኑ</u>	
Traffic Volume (veh/h)	163	1117	80	183	490	98	171	1517	244	130	1527	83
Future Volume (veh/h)	163	1117	80	183	490	98	171	1517	244	130	1527	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	177	1214	87	199	533	107	186	1649	265	141	1660	90
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	206	950	68	236	784	157	214	2199	352	106	1670	90
Arrive On Green	0.12	0.28	0.28	0.10	0.27	0.27	0.12	0.50	0.50	0.34	0.34	0.34
Sat Flow, veh/h	1781	3363	241	1781	2951	590	1781	4437	709	234	4957	269
Grp Volume(v), veh/h	177	641	660	199	320	320	186	1263	651	141	1139	611
Grp Sat Flow(s),veh/h/ln	1781	1777	1827	1781	1777	1764	1781	1702	1743	234	1702	1822
Q Serve(g_s), s	11.7	33.9	33.9	9.6	19.4	19.5	12.3	35.7	36.1	23.4	40.0	40.1
Cycle Q Clear(g_c), s	11.7	33.9	33.9	9.6	19.4	19.5	12.3	35.7	36.1	40.4	40.0	40.1
Prop In Lane	1.00		0.13	1.00		0.33	1.00		0.41	1.00		0.15
Lane Grp Cap(c), veh/h	206	502	516	236	472	469	214	1687	864	106	1147	614
V/C Ratio(X)	0.86	1.28	1.28	0.84	0.68	0.68	0.87	0.75	0.75	1.33	0.99	0.99
Avail Cap(c_a), veh/h	267	502	516	312	487	484	267	1687	864	106	1147	614
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.79	0.79	0.79
Uniform Delay (d), s/veh	52.1	43.0	43.1	31.5	39.5	39.5	51.8	24.3	24.4	54.9	39.7	39.7
Incr Delay (d2), s/veh	19.5	139.1	140.1	14.8	3.6	3.8	21.2	3.1	6.0	192.6	22.2	31.0
Initial Q Delay(d3),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
%ile BackOfQ(95%),veh/In	10.5	50.1	51.7	8.7	13.8	13.8	11.0	21.0	22.5	15.2	26.5	29.9
Unsig. Movement Delay, s/veh	71.6	182.1	183.2	46.3	43.1	43.3	73.1	27.4	30.4	247.6	61.8	70.7
LnGrp Delay(d),s/veh	71.0 E	102.1 F	103.2 F	40.3 D	43.1 D		73.1 E	27.4 C	30.4 C	247.0 F	01.0 E	
LnGrp LOS			<b></b>	D		D	L		C	Г		<u> </u>
Approach Vol, veh/h		1478			839			2100			1891 70 F	
Approach Delay, s/veh		169.4 F			43.9 D			32.4 C			78.5	
Approach LOS		F			U			C			E	
Timer - Assigned Phs	1	2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s	19.0	45.5	18.4	37.0		64.6	16.4	39.0				
Change Period (Y+Rc), s	4.6	5.1	4.6	5.1		5.1	4.6	5.1				
Max Green Setting (Gmax), s	18.0	31.7	18.0	32.9		54.3	17.0	33.9				
Max Q Clear Time (g_c+l1), s	14.3	42.4	13.7	21.5		38.1	11.6	35.9				
Green Ext Time (p_c), s	0.2	0.0	0.2	3.1		11.8	0.2	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			79.8									
HCM 6th LOS			E									

Int Delay, s/veh	6.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		<b>^</b>			<b>^</b>
Traffic Vol, veh/h	45	36	1863	0	0	1192
Future Vol, veh/h	45	36	1863	0	0	1192
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage,	# 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	49	39	2025	0	0	1296

Major/Minor	Minor1	Μ	lajor1	M	ajor2	
Conflicting Flow All	2543	1013	0	-	-	-
Stage 1	2025	-	-	-	-	-
Stage 2	518	-	-	-	-	-
Critical Hdwy	5.74	7.14	-	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	-	-	-	-
Pot Cap-1 Maneuver	~ 47	203	-	0	0	-
Stage 1	55	-	-	0	0	-
Stage 2	514	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuve	r ~47	203	-	-	-	-
Mov Cap-2 Maneuve	r 50	-	-	-	-	-
Stage 1	55	-	-	-	-	-
Stage 2	514	-	-	-	-	-
Approach	WB		NB		SB	

Approach	WB	NB	SB	
HCM Control Delay, s	256.1	0	0	
HCM LOS	F			

Minor Lane/Major Mvmt	NBTWBLn1	SBT		
	NDIVUDLIII	301		
Capacity (veh/h)	- 75	-		
HCM Lane V/C Ratio	- 1.174	-		
HCM Control Delay (s)	- 256.1	-		
HCM Lane LOS	- F	-		
HCM 95th %tile Q(veh)	- 6.6	-		
Notes				
~: Volume exceeds capacity	\$: Delay exc	eeds 300s	+: Computation Not Defined	*: All major volume in platoon

ExP AM 1:00 pm 04/12/2022

Int Delay, s/veh	5.6						
Movement	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations	Y		朴朴			441	
Traffic Vol, veh/h	0	0	1863	34	27	1210	
Future Vol, veh/h	0	0	1863	34	27	1210	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Stop	Stop	Free	Free	Free	Free	
RT Channelized	-	None	-	None	-	None	
Storage Length	0	-	-	-	-	-	
Veh in Median Storage	,# 0	-	0	-	-	0	
Grade, %	0	-	0	-	-	0	
Peak Hour Factor	92	92	92	92	92	92	
Heavy Vehicles, %	2	2	2	2	2	2	
Mvmt Flow	0	0	2025	37	29	1315	

Major/Minor	Minor1	Ν	1ajor1	Ν	/lajor2			
Conflicting Flow All	2628	1031	0	0	2062	0		
Stage 1	2044	-	-	-	-	-		
Stage 2	584	-	-	-	-	-		
Critical Hdwy	5.74	7.14	-	-	5.34	-		
Critical Hdwy Stg 1	6.64	-	-	-	-	-		
Critical Hdwy Stg 2	6.04	-	-	-	-	-		
Follow-up Hdwy	3.82	3.92	-	-	3.12	-		
Pot Cap-1 Maneuver	42	198	-	-	116	-		
Stage 1	53	-	-	-	-	-		
Stage 2	475	-	-	-	-	-		
Platoon blocked, %			-	-		-		
Mov Cap-1 Maneuve		198	-	-	116	-		
Mov Cap-2 Maneuve	r 20	-	-	-	-	-		
Stage 1	53	-	-	-	-	-		
Stage 2	34	-	-	-	-	-		

Approach	WB	NB	SB
HCM Control Delay, s	0	0	14.1
HCM LOS	А		

Minor Lane/Major Mvmt	NBT	NBRWE	3Ln1	SBL	SBT
Capacity (veh/h)	-	-	-	116	-
HCM Lane V/C Ratio	-	-	-	0.253	-
HCM Control Delay (s)	-	-	0	46.2	13.4
HCM Lane LOS	-	-	А	E	В
HCM 95th %tile Q(veh)	-	-	-	0.9	-

Int Delay, s/veh	1.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		<b>^</b>			<b>^</b>
Traffic Vol, veh/h	35	28	1547	0	0	1622
Future Vol, veh/h	35	28	1547	0	0	1622
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage,	# 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	30	1682	0	0	1763

Major/Minor	Minor1	Μ	lajor1	Ма	ijor2	
Conflicting Flow All	2387	841	0	-	-	-
Stage 1	1682	-	-	-	-	-
Stage 2	705	-	-	-	-	-
Critical Hdwy	5.74	7.14	-	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	-	-	-	-
Pot Cap-1 Maneuver	58	264	-	0	0	-
Stage 1	91	-	-	0	0	-
Stage 2	410	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuve	r 58	264	-	-	-	-
Mov Cap-2 Maneuve	r 80	-	-	-	-	-
Stage 1	91	-	-	-	-	-
Stage 2	410	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	73.2	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 116	-
HCM Lane V/C Ratio	- 0.59	-
HCM Control Delay (s)	- 73.2	-
HCM Lane LOS	- F	-
HCM 95th %tile Q(veh)	- 2.9	-

Int Delay, s/veh	5.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	۰¥		<b>**</b>			411₽
Traffic Vol, veh/h	0	0	1547	47	39	1618
Future Vol, veh/h	0	0	1547	47	39	1618
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage	,# 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	1682	51	42	1759

Major/Minor	Minor1	Ν	lajor1	Ν	/lajor2			
Conflicting Flow All	2496	867	0	0	1733	0		
Stage 1	1708	-	-	-	-	-		
Stage 2	788	-	-	-	-	-		
Critical Hdwy	5.74	7.14	-	-	5.34	-		
Critical Hdwy Stg 1	6.64	-	-	-	-	-		
Critical Hdwy Stg 2	6.04	-	-	-	-	-		
Follow-up Hdwy	3.82	3.92	-	-	3.12	-		
Pot Cap-1 Maneuver	50	254	-	-	171	-		
Stage 1	87	-	-	-	-	-		
Stage 2	371	-	-	-	-	-		
Platoon blocked, %			-	-		-		
Mov Cap-1 Maneuve		254	-	-	171	-		
Mov Cap-2 Maneuve	r -	-	-	-	-	-		
Stage 1	87	-	-	-	-	-		
Stage 2	0	-	-	-	-	-		

Approach	WB	NB	SB
HCM Control Delay, s	0	0	10.7
HCM LOS	А		

Minor Lane/Major Mvmt	NBT	NBRWE	3Ln1	SBL	SBT
Capacity (veh/h)	-	-	-	171	-
HCM Lane V/C Ratio	-	-	-	0.248	-
HCM Control Delay (s)	-	-	0	32.9	10.2
HCM Lane LOS	-	-	А	D	В
HCM 95th %tile Q(veh)	-	-	-	0.9	-

Int Delay, s/veh	10.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		<b>^</b>			<b>^</b>
Traffic Vol, veh/h	45	36	2041	0	0	1275
Future Vol, veh/h	45	36	2041	0	0	1275
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage	,# 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	49	39	2218	0	0	1386

Major/Minor	Minor1	N	lajor1	M	ajor2	
Conflicting Flow All	2772	1109	0	-	-	-
Stage 1	2218	-	-	-	-	-
Stage 2	554	-	-	-	-	-
Critical Hdwy	5.74	7.14	-	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	-	-	-	-
Pot Cap-1 Maneuver	~ 35	175	-	0	0	-
Stage 1	~ 41	-	-	0	0	-
Stage 2	492	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	~ 35	175	-	-	-	-
Mov Cap-2 Maneuver	~ 37	-	-	-	-	-
Stage 1	~ 41	-	-	-	-	-
Stage 2	492	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	\$ 433.4		0		0	
HCM LOS	F					
Minor Lane/Major Mvi	mt	NBTW	'BLn1	SBT		
Capacity (veh/h)		-	57	-		
HCM Lane V/C Ratio			1 545	-		

· Volumo ovcoods conocity		dc 200c	Computation Not Defined	*: All major volume in plateon	
Notes					
HCM 95th %tile Q(veh)	- 8	-			
HCM Lane LOS	- F	-			
HCM Control Delay (s)	-\$ 433.4	-			
HCM Lane V/C Ratio	- 1.545	-			

-: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined \*: All major volume in platoon

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Int Delay, s/veh	7.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		朴朴			411₽
Traffic Vol, veh/h	0	0	2041	34	27	1293
Future Vol, veh/h	0	0	2041	34	27	1293
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage	, # 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	2218	37	29	1405

Major/Minor	Minor1	Ν	/lajor1	N	/lajor2	
Conflicting Flow All	2857	1128	0	0	2255	0
Stage 1	2237	-	-	-	-	-
Stage 2	620	-	-	-	-	-
Critical Hdwy	5.74	7.14	-	-	5.34	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	-	-	3.12	-
Pot Cap-1 Maneuver	32	170	-	-	93	-
Stage 1	40	-	-	-	-	-
Stage 2	454	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuve		170	-	-	93	-
Mov Cap-2 Maneuve	r -	-	-	-	-	-
Stage 1	40	-	-	-	-	-
Stage 2	0	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	19.9
HCM LOS	А		

Minor Lane/Major Mvmt	NBT	NBRWE	3Ln1	SBL	SBT
Capacity (veh/h)	-	-	-	93	-
HCM Lane V/C Ratio	-	-	-	0.316	-
HCM Control Delay (s)	-	-	0	60.6	19
HCM Lane LOS	-	-	Α	F	С
HCM 95th %tile Q(veh)	-	-	-	1.2	-

Int Delay, s/veh	1.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		<b>^</b>			<b>^</b>
Traffic Vol, veh/h	35	28	1668	0	0	1801
Future Vol, veh/h	35	28	1668	0	0	1801
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage,	,# 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	30	1813	0	0	1958

Major/Minor	Minor1	Μ	ajor1	Ma	ijor2	
Conflicting Flow All	2596	907	0	-	-	-
Stage 1	1813	-	-	-	-	-
Stage 2	783	-	-	-	-	-
Critical Hdwy	5.74	7.14	-	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	-	-	-	-
Pot Cap-1 Maneuver	44	239	-	0	0	-
Stage 1	75	-	-	0	0	-
Stage 2	373	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuve	r 44	239	-	-	-	-
Mov Cap-2 Maneuve	r 66	-	-	-	-	-
Stage 1	75	-	-	-	-	-
Stage 2	373	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	103.1	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 97	-
HCM Lane V/C Ratio	- 0.706	-
HCM Control Delay (s)	- 103.1	-
HCM Lane LOS	- F	-
HCM 95th %tile Q(veh)	- 3.6	-

Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		<b>**</b>			441
Traffic Vol, veh/h	0	0	1668	47	39	1797
Future Vol, veh/h	0	0	1668	47	39	1797
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage,	,# 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	1813	51	42	1953

Major/Minor	Minor1	N	lajor1	Ν	/lajor2	
Conflicting Flow All	2704	932	0	0	1864	0
Stage 1	1839	-	-	-	-	-
Stage 2	865	-	-	-	-	-
Critical Hdwy	5.74	7.14	-	-	5.34	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	-	-	3.12	-
Pot Cap-1 Maneuver	38	230	-	-	147	-
Stage 1	72	-	-	-	-	-
Stage 2	337	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuve		230	-	-	147	-
Mov Cap-2 Maneuve	r 63	-	-	-	-	-
Stage 1	72	-	-	-	-	-
Stage 2	337	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0.8
HCM LOS	А		

Minor Lane/Major Mvmt	NBT	NBRWE	3Ln1	SBL	SBT
Capacity (veh/h)	-	-	-	147	-
HCM Lane V/C Ratio	-	-	-	0.288	-
HCM Control Delay (s)	-	-	0	39.1	0
HCM Lane LOS	-	-	Α	E	Α
HCM 95th %tile Q(veh)	-	-	-	1.1	-